The role of minimum wages in South Africa's agricultural sector

by

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DECLARATION

I, Netshivhodza Thivhalemi Michael, declares that **'The role of minimum wages in South Africa's agricultural sector'** is my own work and that all the sources I have used or quoted have been indicated and fully acknowledged by means of complete references in the text and in the Bibliography.

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ABSTRACT

Income inequality is prevalent in both developed and developing countries. In all of these countries there are workers who are highly paid while others are given very low wages. The disgruntled low-paid workers in these countries usually force their governments to intervene in the labour market and introduce the redistributive policies like the minimum wage policy. Governments usually accede to these demands of low-paid workers because they do not want to invite political troubles. That led to an increase in the number of countries using minimum wage policy as redistributive mechanism in the late 20th century and the beginning of the 21st century.

Minimum wage policy is, however, a very controversial issue. Supporters of minimum wages regard the policy as ideal because it provides social protection to un-unionised and low-paid workers with little or no bargaining power. The opponents of the policy on the other hand argue that wages in the labour market should be determined by the forces of demand and supply. It is argued that wages that are artificially determined lead to the rationing of jobs and displacement of the very same low-paid workers that the policy is intended to protect, as employers are forced to replace unskilled workers with skilled workers and machines.

South Africa's agricultural sector workers were among some of the least paid workers in the country. Employers were able to exploit these workers because they were not protected by any labour legislation that workers in other sectors were afforded. Farm workers were only protected by common law. It was only in the 1990s that labour legislations like Basic Conditions of Employment Act, Labour Relations Act, Employment Equity Act, Extension of Security Act and Tenure Act and Skills Development Act were extended to the agricultural sector in an attempt to protect the working conditions of the agricultural sector workers and that prompted the Minister of Labour to instruct the Director-General of Labour to conduct the necessary investigations to see if it could be necessary to introduce minimum standard of employment in the sector, including minimum wages. That led to the adoption of Sectoral Determination 8 of 2003 which introduced sectoral minimum wage in the sector. The sectoral minimum wage which came into effect in 2003 was increased

annually by the rate of inflation plus one per cent. It was only in 2013, after the Western Cape farm workers went on strike for higher wages, that the minimum wage was raised by 52 per cent. As argued by the opponents of minimum wages, job losses occurred among unskilled workers.

The implementation of minimum wage policy in the agricultural sector was problematic, as the policy was not properly complied with due to several compliance concerns. Apart from there being insufficient inspectors to monitor and investigate cases of non-compliance, inspectors were under-trained and under-equipped. Fines imposed on offenders were too small, which further encouraged disregard for the policy.

KEY TERMS

Key terms:

Basic Conditions of Employment Act, Sectoral Determination Act 8, sectoral minimum wages, Wage Commission, agricultural sector, farm workers, national minimum wage, vulnerable workers, poverty and unskilled workers

LIST OF ABBREVIATIONS/ ACRONYMS

AoA	Agreement on Agriculture
AWAB	Agricultural Wages Advisory Board
BCEA	Basic Condition of Employment Act
BOT	Balance of Trade
CASP	Comprehensive Agricultural Support Programme
COSATU	Congress of South African Trade Union
CPI	Consumer Price Index
ECC	Employment Conditions Commission
EEA	Employment Equity Act
ESTA	Extension of Security of Tenure Act
EU	European Union
FTE	Full-time employment
GDP	Gross Domestic Product
GEIS	General Export Incentive Scheme
GWAB	General Wages Advisory Board
ILO	International Labour Organisation
KES	Kenyan Shillings
LFS	Labour Force Survey
LRA	Labour Relations Act
MC	Marginal Cost
NAMC	National Agricultural Marketing Council
NDP	National Development Plan
NMW	National Minimum Wage
NREGS	National Rural Employment Guarantee Scheme
OECD	Organisation for Economic Co-operation and
	Development
OJT	On-the-job training
PAETA	Primary Agricultural Education and Training Association
PPP	Purchasing Power Parity
QLFS	Quarterly Labour Force Survey
SDA	Skills Development Act

Sectoral education and training association
Trade Development and Cooperation Agreement
United Kingdom
United States of America
World Trade Organisation

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CHAPTER 1

INTRODUCTION

Most countries use minimum wage legislation as a tool for reducing income inequality between the rich and the poor, and to reduce poverty among the low-paid workers. They try to achieve these goals by raising the wages of the working poor towards or above poverty line (Devereux 2005: 1). There is, however, no general agreement regarding the role played by minimum wages as a tool for reducing income inequality and poverty among the working poor.

The monopsony case argues that employers of vulnerable workers usually set their wage levels much lower than the market rate and this pushes the low-paid workers into poverty. The supporters of the policy believe that the authorities should protect the low-paid workers by introducing minimum wages. They believe that forcing the monopsonist to pay a minimum wage would not only lead to an increase in wages of the working poor, but that it would also lead to an increase in employment in those sectors where minimum wages are introduced (Edward & Gilman 1999: 21). The employment levels in such sectors will continue to rise as long as the minimum wage is still below the equilibrium wage rate. Employment will only begin to drop if minimum wages could be set at the levels which are above the equilibrium wage rate (Jones 1997: 25).

The standard competitive model, on the other hand, argues that minimum wage policy hurts the very same low-paid workers whom it is intended to help. They hold that minimum wages make employers lay off the least skilled, least experienced and least educated workers. Employers are forced to lay off these workers because the economic value of their work is lower than the value of their work (Stigler 1946: 358). This makes employers employ qualified and skilled workers who are more productive and reject workers with lower productivity (Schuldt *et al.* 2012: 265). Employers again replace the less productive workers with capital intensive methods of production (Saayman & Middelberg 2014: 344).

In developing countries where there is usually perfect mobility of workers between the formal and informal sectors, workers who lose their jobs in the formal sector tend to search for employment in the informal sector where wages are not affected by minimum wage policy. This only helps to depress wages in the sector even further and the situation of the people employed in the sector becomes even worse (Jones 1997: 22).

Opponents of minimum wages argue that even workers who retain their jobs do not all benefit from the minimum wage policy either, because most employers do not comply with the policy. Most employers are encouraged to cheat because they realise that the chances of being detected are very low, as enforcement is poor. This is most relevant in developing countries where the inspectors are unable to conduct regular inspections due to resource constraints (Jones 1997).

1.1 Background information

Unlike most African countries, South Africa experienced a smooth transition from apartheid to the new democratic government in 1994. For the past 23 years the country had undergone considerable political, social and economic changes. The new democratic government, however, continued to experience a number of daunting challenges like high levels of poverty and crime. Over 51 per cent of South Africans were living below the poverty line in 2016. Poverty was mainly caused by high levels of unemployment and low wages. The official unemployment rate for South Africa is currently standing at 27.7 per cent (Menon 2017). The expanded unemployment rate is even higher at 36.6 per cent (Daily Maverick 2017).

The challenging aspect of poverty is that it is not only confined to unemployed people. There are also a large number of people who are living in poverty despite the fact that they are working. The main cause of poverty among these people is low pay. About 6.7 million South African workers earned wages, which were below the working poverty line of R4 317 per month while 4.6 million earned below R2 500 per

month in 2016. This made South African society to be one of the highly unequal societies in the world. The high level of inequality is made more evident by the Gini coeffient, which the World Bank estimated to be between 0.66 and 0.70 in 2016 (National Treasury 2016).

1.2 Problem statement

South Africa's agricultural sector workers were among the workers whose lives were seriously disadvantaged by the low pay they had received. These workers were poorly paid both before and after the democratic government came to power in 1994. In 1986, for instance, the average income for farm workers was R104 per month, benefit in-kind included. In 1992, it was R225,25 per month (Weideman 2004: 335). About 77 per cent of South Africa's agricultural sector workers were paid only R322 per month in 2001 (Department of Labour 2010: 35). The trend has continued because currently the sectoral minimum wage in this sector is R2 778,83 per month, which is still much lower than the working poor poverty line of R4 317 per month (Free State Agriculture 2017).

The low wage levels made it difficult for farm workers to meet their basic needs and those of their dependants. Farm workers could not even afford nutritious food for their children. This made most children of farm workers to be stunted and underweight (Visser & Ferrer 2015).

The low pay and poor treatment which farm workers received from their employers was partly due to the fact that most of these workers were not trade union members. Their rights as workers were also not protected by labour laws. Instead, their rights were only protected by common law. It was only in the 1990s that government introduced some laws in the sector with the intention of improving the working and living conditions of the farm workers. Legislation like the Basic Conditions of Employment Act, the Agricultural Labour Act, the Labour Relations Act, the Employment Equity Act, the Skills Development Act and the Extension of Security

and Tenure Act were either introduced or extended to the agricultural sector to protect the vulnerable workers (Grub 2005).

Government's intervention did not do much to rescue the working poor from poverty and the state of poverty worsened in the sector instead. The worsening state of poverty among the agricultural sector workers made the Minister of Labour to give directives to the Director-General of the Department of Labour to conduct investigations to determine if it would be possible to introduce minimum standards of employment in the sector, including minimum wages. This led to the introduction of sectoral minimum wage in the sector, which came into effect in 2003 (Bhorat *et al.* 2014). The minimum wage, which in the beginning was about 17 per cent, was to be increased annually by the inflation rate plus one percent (Department of Labour 2003). The sectoral minimum wage was again increased by 52 per cent in 2013 after the Western Cape farm workers went on strike for higher pay in 2012 (Business Day Live 2013).

It is, however, not certain to how the sectoral minimum wages have affected employment of both skilled and unskilled workers in the agricultural sector. It is not clear if minimum wages in the sector led to an increase in both wages and employment of low-paid workers as predicted by the monopsony model or whether it led to a replacement of these vulnerable workers by skilled workers and machines as predicted by the standard competitive model.

This study is intended to investigate the employment effect of minimum wages on agricultural sector workers. It is intended to determine whether minimum wages led to an increase in employment of unskilled workers as predicted by the supporters of the wage policy or whether it has made employers in the sector to replace unskilled workers with skilled workers and machines as predicted by the standard competitive model.

1.3 Aims of the study

Given the lack of clear understanding of what actually happens to employment after the introduction or raising of minimum wages, which are used in most countries (both developed and developing) as a tool to support decent work goals and to strengthen the social protection floor and reduce poverty among the working poor, the aim of this study is to provide an overview of the theory and implications of minimum wages globally and in South Africa's agricultural sector.

The sub-objectives are as follows:

- To examine the theory of minimum wages;
- To look at the implications of minimum wages globally;
- To see if minimum wage policy made employers of the farming sector prefer skilled workers and machines over unskilled workers as predicted by the standard competitive model; and
- To find out if the minimum wage policy has been implemented and enforced properly in South Africa's farming sector.

1.4 Research questions

The crucial questions that should be answered are as follows:

- Why were minimum wages introduced in the agricultural sector and what effect did they have on employment?
- What effect did they have on the use of skilled labour and machines in the agricultural sector?
- What effect did minimum wages have on employment globally?
- Were minimum wages properly implemented and enforced in South Africa's agricultural sector?

1.5 Delineation

The research will focus on the working poor and skilled workers in the agricultural sector of South Africa from 2002. This is the period before the introduction of sectoral minimum wage in the agricultural sector and 2005, which is the period after minimum wage has been introduced. It will also focus on 2012, a year before the minimum wage was raised by 52 per cent and 2015, the period after minimum wage was raised by 52 per cent and 2015, the period after minimum wage was raised by a high percentage.

The purpose is to look at what happened before the introduction or the increase of the minimum wages in terms of employment of the low-paid workers in the sector. With regard to the employment of skilled workers, the research will focus on 2012, the period before the minimum wage was raised by 52 per cent and 2015, the period after the minimum wage was increased by a high percentage.

The study will also focus on how minimum wages were enforced in the sector after the introduction in 2003 and after the increase of 2013. It will also look at how mechanisation was influenced by the minimum wage policies from 2002 to 2014.

1.6 Research methodology

The research methodology used in the study is descriptive in nature. Only secondary data was used in the research. Secondary data analysis takes place when researchers use data, which has already been produced by others (Matthews & Ross 2010: 285). McCaston (2005: 1) describes the process as the analysis of data that has been gathered by someone else; for example, researchers, institutions, other NGOs et cetera, for purposes different from the one currently considered.

Sources of secondary data are official statistics, scholarly journals, literature review articles, trade union journals and reference books (McCaston 2005: 2). The main advantage of secondary data is that it enables a researcher to tap into extensive data sets, often drawn from large representative samples that are well beyond the resources of an individual researcher (Robson 1993: 360).

Secondary data analysis also has disadvantages. The following are some of the disadvantages of secondary data analysis relevant to this study:

- It is not always consistent with the needs of the researcher;
- A researcher using secondary data has no control over the quality of data since he/she did not collect it (Matthews & Ross 2010: 287);
- A person reviewing secondary data could easily be overwhelmed by the volume of the available data. She/he should therefore be careful in selecting data relevant to his/her study;
- It is usually difficult to determine the quality of some of the available secondary data;
- Sources may conflict with one another; and
- The goals and purposes of the original researcher may potentially bias the study of the current researcher (McCaston 2005: 10).

Data used in this study came mainly from Statistics South Africa's reports such as the Labour Force Survey (LFS) and Quarterly Labour Force Survey (QLFS). In 2008, the Labour Force Survey was replaced by Quarterly Labour Force Survey, which was conducted four times per year. Both the LFS and QLFS were designed to measure labour market activities. They provided information on a variety of issues relating to the labour market like the level and pattern of unemployment as well as the industrial and occupational structure of the economy. The design of the questionnaire used in this study was in line with the requirements set by international bodies like the International Labour Organisation (Statistics South Africa 2005: i).

Data used in the research was also sourced from scholarly journals and other literature review articles. Scholarly journals are journals which generally contain reports of original research written by experts in the field. Articles in scholarly journals usually undergo a peer review where experts in the field review the content of the article for accuracy, originality and relevance (McCaston 2005: 2).

The search for data was done both manually and electronically. Electronic searches were done on the Unisa electronic database, which focuses on economics such as Epscohost, Emerald, Proquest, SAep et cetera. Data was also sourced from Google

Scholar and websites such as PLAAS, Statistics South Africa and University of the Witwatersrand. Searches for LFS and QLFS releases were done on Statistics South Africa's website. Most material on farm workers in South Africa was found on the PLAAS website. Scholarly journals were downloaded from the University of South Africa electronic database.

Bibliographies of scholarly journals were also searched for more relevant journal articles on the topic. Relevant articles found were downloaded from the Unisa database and other websites. Journal articles, which the researcher could not find on his own, were requested from the subject librarian of the Unisa Library.

1.7 Significance of the study

The study will clarify if indeed minimum wages make employers replace unskilled workers, whose services have become more expensive as a result of the policy, with skilled workers and machines as predicted by the opponents of the wage policy. It will also reveal if the policy has increased the employment of the working poor as predicted by the supporters of the policy. The results of the study will guide policy makers on the merits of minimum wage policy in the agricultural sector.

The investigation will also indicate if employers of agricultural sector workers have complied with the minimum wage policy or not. It will analyse which factors forced employers to comply with the policy. In cases where employers have not complied, the authorities will know the reasons why the employers have not complied, reasons for this will be advanced. Proper understanding of the reasons why employers have not complied with the policy will enable the authorities to know which steps to take to enforce compliance.

The research will also enable policy-makers to understand the relevance of minimum wage policy and how it should be implemented. It will enable them to understand the extent to which minimum wages should be raised in the farming sector in particular

and in the country in general. Through this study policy-makers will be guided as to when minimum wages may be raised by higher percentages and when it will be disastrous to do so.

1.8 Overview of chapters

The study is divided into five chapters. Chapter 1 provides an introduction where the two opposing theories concerning minimum wages are presented. The introduction is followed by background information in which the poverty situation of farm workers is presented in detail. The reasons which make farm workers to continue to live in poverty and government's intervention strategy are also highlighted in the chapter. This is followed by the problem statement to be investigated in the study. Research objectives, which stipulate what needs to be achieved in the study, are also stated in the chapter. This is followed by the research questions, delineation of the study, the research methodology and significance of the study.

Chapter 2 focuses on the theoretical debate between the supporters of minimum wages and those who are against labour market intervention. The chapter starts with an overview of how wages are formed in a competitive labour market. This is then followed by a brief description of the origin of minimum wages. The discussion about government's intervention in the labour market follows subsequent to this. Then the argument of the supporters of labour market intervention and the counterarguments raised by the opponents of minimum wages are discussed.

Chapter 3 presents a global perspective of minimum wages. The chapter looks at the implementation of minimum wages in both developed and developing countries. The aim of this chapter is to determine the extent to which the working poor in countries that have applied minimum wages benefit from the policy. It will also focus on whether minimum wages assisted in reducing income inequality and alleviating poverty in countries where they have been implemented. Brief background information of countries which have implemented minimum wages is given in section

two of this chapter. Information is arranged according to economic sectors, namely primary, secondary and tertiary sectors. In section three, the role of minimum wage policy, as a tool for helping the vulnerable workers, is analysed. The analysis is intended to determine if minimum wages have succeeded in reducing income inequality and poverty in those countries.

Chapter 4 deals with sectoral minimum wages in South Africa's agricultural sector. The chapter starts by looking at the poverty levels in South Africa in general and then in the agricultural sector in particular. The first part of the chapter deals with the main causes of poverty in South Africa. It is then followed by the description of South Africa's agricultural sector, the characteristics of agricultural sector workers, the social and economic conditions, government's intervention and the criteria used to determine minimum wages in the sector. The research methodology is discussed thereafter and this is followed by an analysis of the minimum wage theory and its relevance to South Africa's agricultural sector. The analysis of how minimum wage policy has been implemented in the agricultural sector follows thereafter.

Chapter 5 contains the findings, recommendations and the conclusion of the study. The chapter opens with the introduction, which gives an overview of the state of poverty in South Africa's agricultural sector. This is followed by a summary of findings on employment and enforcement both globally and in South Africa's agricultural sector. A summary of contributions, suggestions for further research and recommendations conclude the chapter.

CHAPTER 2

THE MINIMUM WAGE DEBATE

2.1 Introduction

Redistributive policies are those policies that are intended to improve the living conditions of the disadvantaged members of the society. Minimum wage policy is one of those policies that is aimed at improving the living conditions of the working poor (Boadway & Cuff 2001: 554). Devereux (2005: 899) adds that mandated minimum wages are labour market interventions, which are implemented to reduce income inequality. It has a welfare objective of reducing poverty among the poorest and the most vulnerable workers by raising their wages towards the poverty line or the average wage existing in that particular sector.

The disgruntled workers, who are dissatisfied by the wages that have been decided by the market forces of demand and supply, put pressure on the government to protect them from being exploited by their employers. They put pressure on the government to introduce minimum wages that would make it possible for them to meet their most basic needs. Governments usually accede to these demands because they do not want to invite political troubles (Gillis *et al.* 1996: 240).

The introduction of minimum wages for the low-paid workers is an attractive policy option from a poverty reduction point of view. Supporters of minimum wage argue that it reaches the poor segment of the economically active population and that it does not cost government anything since the cost is borne entirely by the private sector. They see it as a transformative policy in that it provides social protection to those workers who are ununionised, exploited and have little bargaining power with regard to their employers.

The sectors in which wages are lowest usually have poor working conditions, negligible benefits and low job security. This means on top of the meagre wages that these workers receive, they also receive poor treatment. Fair wages in such sectors

provide partial compensation for the absence of job-related social protection, which better paid employers enjoy (Devereux 2005: 200).

The minimum wage, however, is a very controversial issue. Those who are against it argue that labour market interventions, if effectively enforced, improve the wages and working conditions of the workers who remain employed. They maintain that raising wages artificially leads to the rationing of jobs and displacement of the low-paid workers, that the minimum wage is intended to help, especially when it is pegged at a level that is higher than the market-clearing wage. The higher the new minimum wage rate, the greater the negative effect it will have on employment. The minimum wage rate of US\$10.00 per hour, for example, will have more negative employment effects than it would have when it was US\$6.50 per hour (Brown & Johnson 2006: 7).

The workers who lose their jobs become worse off because they will no longer earn even the meagre wages they used to receive while they were still employed. The welfare gains of those who manage to retain their jobs are offset by the significant welfare losses of those who lose their jobs when the minimum wages are introduced or raised. This means, instead of bringing relief to the poor, minimum wage legislation makes their situation even worse (Gillis *et al.* 1996: 240).

This chapter focuses on the theoretical debate of those who support minimum wages and those who are against labour market intervention. The chapter starts by providing an overview of how wages are determined in a competitive labour market. This is followed by a brief description of the origin of minimum wage. The discussion about the intervention of the government in the labour market follows subsequent to this. The argument of those who support labour market intervention will be discussed immediately after the government's intervention. The counterarguments raised by the opponents of minimum wages will then be discussed and this will be followed by the conclusion.

2.2 Wage determination in the labour market

The neoclassical economists argue that the labour market is just like any other market in that the employers and the employees come together in a voluntary contract through inducements that they offer one another. Both the employers and the employees believe that their situations will be improved by the relationship; otherwise they would not bother to join in. In the labour market, the workers take up employment, which is most attractive to them at that particular time, given the available alternatives. The terms like wages and other working conditions that the workers receive will depend on the interplay of demand and supply (Murphey 1996: 80).

If the workers are unwilling to work at a particular wage rate, the employers respond by offering a higher wage rate to persuade them to supply their labour. The employer can also choose to use capital instead of labour or go out of business if he feels that both inputs are unaffordable (Moore *et al.* 2009: 23).

The basic competitive model is based on the following assumptions:

- The labour market has many identical firms;
- Workers in this market are homogenous;
- Workers are paid more to persuade them to supply more labour;
- The value of the last unit of labour or the marginal product of labour declines as labour increases; and
- Labour is the only input used in the production process.

These assumptions lead to a positively sloping supply curve and a negatively sloping demand curve, which illustrate an inverse relationship between the wage rate and the number of workers employed in the market. Although the market supply curve has a positively sloping curve, individual firms are faced with horizontally sloping supply curves. These horizontally sloping supply curves indicate that each firm is small enough that it can employ workers without affecting the equilibrium wage (Zavodney 1998: 19).

The labour market demand curve is the horizontal sum of the marginal revenue product, which are the demand curves of individual firms. The marginal revenue product to which is also referred as the marginal benefit is obtainable by multiplying the marginal physical product of labour by the price of the product (Lipsey 1975: 348).

To determine if it will be profitable for the firm operating under the conditions of perfect competition to employ additional units of labour, a worker is remunerated in accordance with his productivity. This indicates that, under competition, every worker is paid in accordance with the value of his marginal product (Stigler 1946: 358).

The marginal revenue product of a worker is compared with his wage rate, which is also referred to as the marginal cost. Wages in excess of marginal revenue product lead to losses for the firm and this will eventually force the employer out of business (Schuldt *et al.* 2012: 260). If the marginal revenue product is greater than the marginal cost, which is also referred to as the wage rate, it is profitable for the firm to employ additional units of labour. The employment of additional workers will continue up to the point where the last unit of labour employed adds as much to the firm as it does to cost. This means labour, just like any other productive factor, is paid its marginal physical product (Lipsey 1975: 350).

Wages, which are above the marginal revenue product, prevent employment which would otherwise happen if wages were equal to or less than the marginal revenue product (Bronfenbrenner 1950: 299). Stigler (1946: 358) adds that the number of jobs in the business is not fixed by the level of business; it varies with the cost of labour inputs. If the cost of labour input is higher, the business will employ fewer workers but if the cost is lower, the firm will manage to employ more workers.

The explanation above will be clearly illustrated by the following practical example. Let us assume that there is a firm, which is producing and making the total revenue product of R1 000 and employs 100 workers. If this firm employs an extra worker and the total revenue product of the firm increases from R1 000 to R1 005, it means the firm's marginal revenue is only R5, 00. This is the revenue contributed by the last worker employed by the firm.

Because the contribution made to the firm by the last worker employed is R5, 00, it will be profitable for the firm to pay this worker a wage which is lower than R5, 00. Let us say the firm will give this additional worker R3, 00. In this case, the firm gains R2, 00 from the extra worker while the worker gains R3, 00. Both the firm and the employee make money. However, if the firm could pay this extra worker the wage rate, which is above R5,00, say R7,00 per hour, the firm will lose R2,00 for every hour the employee works. To avoid this loss, the company simply does not employ the extra worker (Schuldt *et al.* 2012: 260).

Together, the labour market supply and labour market demand curves determine the market clearing wage (Zavodney 1998: 19). The labour supply curve gives the total number of hours that the workers are willing to work at a given wage rate. A positively sloping labour supply curve indicates that workers will be prepared to work fewer hours at a lower wage and that they will be prepared to work more hours at a higher wage rate. The labour market demand curve, on the other hand, represents the total number of hours that employers are willing and able to employ at a given wage rate. At a higher wage rate employers are willing and able to employ fewer workers, and at a lower rate they are willing and able to employ more workers. Equilibrium occurs at the point where demand for and supply of labour are equal. It is at this point where the wage rate and the quantity of labour demanded are determined (Borjas 2005: 164).

The explanation above can be illustrated by Figure 2.1 below.

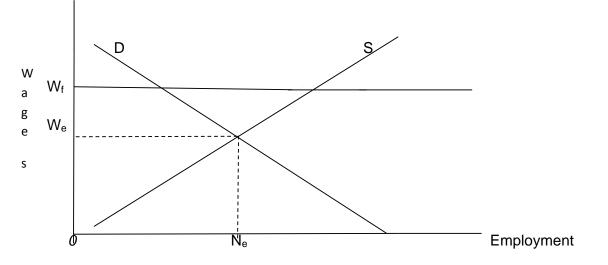


Figure 2.1 The equilibrium condition in a competitive labour market

Equilibrium is determined by the interaction of demand for labour represented, which is represented by D and supply of labour, which is represented by symbol S in Figure 2.1 above. The equilibrium level of employment is N_e while the equilibrium wage rate is W_e .

If the wage rate could be increased from W_e to W_f , more people would be prepared to offer their labour than what the firms are willing and able to hire. This leads to inefficiency because some employers are not willing to pay W_f which is higher than the equilibrium wage. As a result, some workers will lose their jobs if the wage rate is at W_f (Dehejia *et al.* 2008: 485). Coons (1996: 17) adds that at an artificially high price, sellers supply more than what buyers are prepared to buy, thereby creating unnecessary surplus.

Source: Dehejia et al. 2008: 485.

2.3 Government's intervention in the labour market

Supporters of minimum wages argue that a free market economic system encourages employers to exploit their vulnerable workers. These employers usually give their workers very little wages that condemn the recipients into a deeper state of poverty. They do this because their aim in business is to make as much profit as possible. They do not care about the well-being of the workers who are responsible for generating the profit. The prevalent exploitation makes it necessary for the poor workers to be protected by minimum wage legislation. The pressure groups force the government to intervene in the labour market and introduce or raise minimum wage as a way of protecting the poor workers from exploitation (Schuldt *et al.* 2012: 262).

A government that resists this strongly backed demand raised by the well-organised pressure groups is inviting political trouble. This indicates that minimum wage legislation has been used as a political tool to buy votes (Schuldt *et al.* 2012: 262). Governments end up acceding to the demands of these pressure groups and introduce minimum wages for fear of political ramifications (Gillis *et al.* 1996: 240).

Minimum wage is a labour market's legislation, which has been created to protect the workers from being exploited by their employers. It can be described as a wage, which is high enough to enable the workers to afford the necessities of life like food, clothes, housing, education and recreation, taking into consideration the economic and cultural development of his or her country (ILO 1992: 11). Addison and Blackburn (1999: 393) support this view when they point out that the principal aim of the minimum wage is to improve the economic conditions of the low-paid workers.

2.4 Origins of minimum wage legislation

The minimum wage as a labour market institution is used in many countries of the world today. Countries like Australia and New Zealand were the first to pass minimum wage regulations in the 1890s. Among the larger nations, Britain and the United States of America were the first countries to introduce minimum wage legislation. The United States of America passed the Owen Keating Act in 1916. This

Act set the minimum wage limit of age 14 for work in the factories. It also established an eight-hour day and created a national 48-hour working week. In 1918, the Congress passed minimum wage legislation, which protected women and children in the District of Columbia (Congressional Digest 2003).

In Britain, the Wages Councils were first introduced in 1909 to protect the wages of the working poor in the sweated trades. The system of the Wages Councils was responsible for setting minimum wage rates in different industries. By the early 1990s there were 26 Wages Councils in Britain, which set minimum wages for 2.5 million workers. Until 1983, Wages Councils set a range of minimum wages, which were differentiated by age, occupation and region. From 1986 a single rate was set and the minimum wages determined by the Wages Councils were done away with in August 1993 in the government's Trade Union Reform and Employment Rights Bill. That left Britain with neither a formal nor an informal system on minimum wages (Machin & Manning 1996: 668). The introduction of minimum wages in the United Kingdom sparked the waves of twentieth century wage regulations around the world (Deakin & Green 2009: 205).

The founding members of the International Labour Organisation (ILO) realised early on that there was a need to improve the working conditions of the poorly paid workers by giving them an adequate living wage. The governing body instructed the International Labour Organisation (ILO) to conduct an enquiry into existing systems of fixing minimum wages, especially in industries where employers or workers were either unorganised or insufficiently organised. This resulted in the adoption of the minimum wage fixing machinery conventions (ILO 1992: 2). A total of 116 member states in both developed and developing countries ratified one or both conventions of the International Labour Organisation (ILO) on minimum wage fixing. Many more countries established minimum wage fixing procedures, even those that did not ratify the relevant conventions (Eyraud & Saget 2005: 1).

Most African countries had been conducting minimum wages since the colonial period. Jones (1997) listed about 16 African countries that had minimum wage

legislation in 1975. Some of the African countries that had minimum wage legislation in 1975 are countries like Ghana, Gabon and Botswana. In most of these countries the real value of the minimum wage reached a peak in the early 1970s, but it started falling gradually since then (Devereux 2005: 904).

2.5 The case for minimum wages

There is a continuous debate about whether minimum wage legislation is helping to alleviate poverty among the low-paid workers or not. Proponents like Card and Krueger (1994) hold the view that positive effects are achievable from minimum wages with very little side-effects. These new economists point out that those who criticise minimum wages base their arguments on unrealistic assumptions of the perfect market like:

- Labour markets are perfectly competitive;
- Workers are homogenous;
- Workers are perfectly mobile; and
- Workers have complete knowledge about job opportunities that are available.

They argue that relaxing any of these assumptions would yield more positive interpretations of the potential benefits of a minimum wage (Boadway & Cuff 2001: 554). The proponents of minimum wage legislation base their arguments on the following models which are discussed below:

2.5.1 The bargaining power theory and minimum wages

The bargaining power model argues that an individual worker lacks bargaining power regarding wages. This theory focuses on the urgency and weakness an individual feels when searching for employment. It also focuses on the plight of someone, a job seeker, during the time when the economy is in recession. Since many people live from pay cheque to pay cheque, most job seekers are usually desperate to such an extent that they are more willing to accept much lower wages, which condemn them into deeper poverty. The employer is in need of a worker, but not necessarily this particular worker. The employer needs workers, but he does not necessarily need

this particular one. His need for an employee is not even that urgent. He could even carry on without this new employee. This puts the employer in a much stronger position than the job seeker. An employer like this one is in a much stronger position, which enables him to pay much lower wages to his employees. In such situations, governments should intervene and introduce minimum wages to protect these vulnerable workers. The thinking behind the minimum wage laws is that the employer should not be allowed to pay less than the specified minimum wages. It is only when employers are forced to pay the stipulated minimum wages that workers will be protected (Murphey 1996: 84).

2.5.2 The monopsony model with complete and incomplete coverage

a. The monopsony model with complete coverage

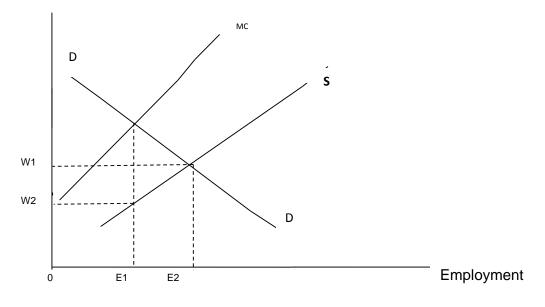
Labour monopsony exists when there is only one purchaser of labour services (Levin-Waldman 2001: 24). In a monopsony with complete coverage, there is usually one firm or one industry that employs labour. This particular firm or industry has a monopsony power and this gives them the power to determine what the wage should be. Firms under monopsony do not just follow the wage rate that has been determined by the invisible hand of the market forces. They possess the market power, which enables them to set wages at the levels that are lower than the market rate (Edwards & Gilman 1999: 21). These firms usually set very low wages, which continue to make the low-paid workers worse off. The vulnerable workers are forced to accept the much lower wages offered by these firms because they are the only firms willing to employ low-paid workers. They do not have an option of offering their services elsewhere. For these workers employment by the monopsonist is an alternative to unemployment (Murphey 1996: 82).

But unlike what happens in the competitive labour market, where it is believed that an increase in minimum wage usually leads to job losses, the increase in minimum wage under monopsony is believed to have a positive effect in terms of employment. The introduction of minimum wage legislation would bring workers nearer to the market wage rate, which is good for the working poor. The only negative effect will be a cut in employer profits as opposed to a reduction in employment as it is predicted by the neoclassical economists (Edwards & Gilman 1999: 21).

Card and Krueger (1995) added to this by pointing out that the filling of vacancies is costly to the firms. Some firms might even run with a stock of unfilled vacancies because it is costly to fill them. It might also be desirable to pay higher wages to attract new recruits who might otherwise be reluctant to join the labour market when the wages are too low. The minimum wage might make it possible for these vacancies to be filled because it makes those jobs more attractive to the job seekers (Edwards & Gilman 1999: 21).

As the legal minimum wage is pushed even higher, the number of workers that the firm wishes to employ increases until the legal minimum reaches what the wage would have been under the competitive labour market. If the minimum wage could be pushed even higher than it could have been under the competitive labour market employment begins to decrease (Levin-Waldman 2001: 24). The monopsonist situation can be illustrated by Figure 2.2 below.





Source: Jones 1997: 25.

Wages

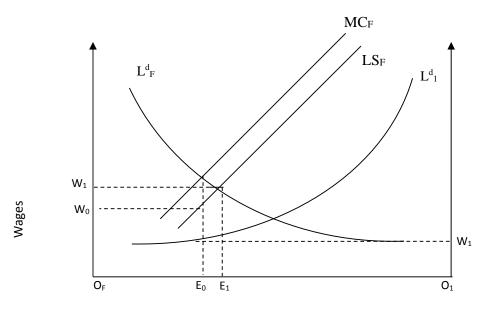
The monopsonists minimise costs by hiring workers up to the point where marginal cost of labour (MC) is equal to their demand for labour (D). This happens at point E_1 in Figure 2.2 above. When minimum wage is introduced, the monopsonist becomes a price-taker and he will now be forced to pay a wage rate of W_1 . A higher minimum wage of W_1 leads to an increase in employment from E_1 to E_2 as more and more people are attracted into the labour market. However, if the minimum wage could be set at a point higher than W_1 , employment would be reduced to below the competitive level of E_1 (Jones 1997: 3).

b. Incomplete coverage

In a dualistic economy, the monopsony model is to some extent intricate. For simplicity reasons it will be assumed that only firms in the covered sector could enjoy monopsony power. It is easy to imagine a situation where employers in the covered sector could enjoy monopsony power while employers in the uncovered sector remain competitive. That situation could arise in cases where workers have invested in skills that are not easily transferred across firms, for example, a small number of workers in a developing economy have been trained to be computer programmers in C++. They are motivated by the fact that the salaries of such programmers are higher, about five times higher than the average salary. These workers are, however, faced with one serious challenge. The challenge that these workers have is that there are few large companies that employ programmers and all of them are based in the capital city. If there is a surplus of these programmers, it is possible that the firms that employ the programmers might possess some monopsony power, which makes it possible for the employers to pay them (programmers) way below their marginal products. This is made possible by the fact that all the trained programmers prefer to work for the bigger companies as opposed to working for any other firm. These workers do not care much about the fact that their wages are below their marginal products because they are still earning much more than they would if they were employed by any of the smaller firms in the area (Jones 1997: 23).

The situation is only feasible in a situation where there is a surplus of C++ programmers because if there were a shortage, any firm could poach its rival programmers by offering them higher wages than they are earning in their respective firms. In the situation where some firms have monopsony power the introduction of a minimum wage will raise employment in the non-competitive sector (Jones 1997: 5). This is because more people are prepared to offer their labour if remunerations are higher. The explanation above is further illustrated by Figure 2.3 below.

Figure 2.3 The effects of minimum wage legislation in a dualistic labour market with flexible wages and partial labour mobility (monopsony case)



Source: Jones 1997: 23.

Before the introduction of minimum wage legislation firms in the non-competitive sector have employed fewer workers. They employ workers up to the point where marginal cost of labour (MC) is equal to demand for labour (D). In the figure above, firms in the non-competitive sector have employed E_0 and pay their workers W_0 before the introduction of minimum wage legislation. With the introduction of minimum wage of W_1 the number of workers employed in the non-competitive sector increases from O_fE_0 to O_fE_1 . But if the minimum wage could be raised to a level which is higher than W_1 , employment would decrease to a level which is even below E_0 . This is an indication that the introduction of or an increase in minimum wage raises the level of employment, but only to a certain level (Jones 1997: 5).

Many economists regard the monopsony case as something that could not be applied in the real world. However, a number of research studies conducted in the recent past found that a higher minimum wage led to an increase in employment. Card and Krueger (1994), for example, examined the level of employment in the fast food restaurants before and after the minimum wage increase in New Jersey's restaurants. They compared the level of employment in New Jersey's restaurants with that of similar fast food restaurants in Pennsylvania where the minimum wage remained unchanged. They discovered that employment in New Jersey increased after the minimum wage increase when compared to that of Pennsylvania where minimum wage remained unchanged. This happened despite the fact that by the time the minimum wage was raised in New Jersey, the economy of that state had just entered a recession (Jones 1997: 4).

The monopsony model differs from the competitive model in that it allows for a number of increases in the minimum wages, which result in increases as opposed to decreases in employment. However, both models agree that raising the legal minimum wage to a point that is above the competitive levels would lead to a reduction as opposed to an increase in the employment level (Brown & Johnson 2006: 8).

2.5.3 The classic paradigm of labour supply and demand and minimum wages

Dehejia *et al.* (2008: 492) hold that minimum wages do not necessarily lead to unemployment. This is the case even under the classic labour supply and demand model. The logic behind the generally accepted belief that the introduction of minimum wage leads to an increase in unemployment comes from the theory of price floors. This model of demand and supply holds that as prices increase, consumers would be willing to consume less of the product of which the price had gone up. Suppliers, on the contrary, would be willing to supply more and in that way, there would be a mismatch between demand and supply (Dehejia *et al.* 2008: 488).

The classic paradigm of labour supply and demand need not imply that minimum wage laws lead to unemployment. This is because the labour supply curve differs from the supply curve of the commodity market. The labour supply curve may be sloping either upward or downward, depending on the balance of two effects, namely the substitution effect and the income effect (Dehejia *et al.* 2008: 488).

The substitution effect holds that as wages increase, workers are willing to give up most of their leisure time for this higher wage. They are prepared to work more hours in order to earn more income. In other words, they are prepared to substitute leisure for work so that they can earn more. This effect causes the labour supply curve to be sloping upward (Dehejia *et al.* 2008: 488).

The income effect holds that as wages increase, a worker who works a given number of hours receives a higher income. The worker whose income has gone up will choose to consume more leisure time and work fewer hours. The income effect therefore causes the labour supply curve to bend backwards. This shows that the labour supply curve can slope in either direction, depending on which of the two effects is dominant at a particular wage level. If the income effect is the one that is dominant, the introduction of a minimum wage will move the economy from a low to a high equilibrium wage. At the same time, an increase in the minimum wage may decrease rather than increase unemployment. This will be clearly illustrated in Figure 2.4 below.

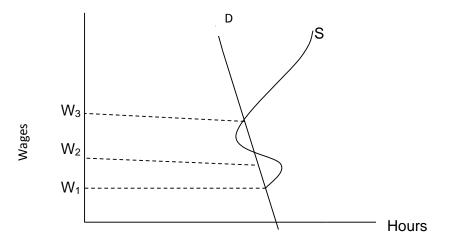


Figure 2.4 The potential equilibrium wages

Source: Dehejia et al. 2008: 488.

Three potential market equilibrium wages are denoted by W_1 , W_2 and W_3 respectively. The equilibrium with price W_2 is unstable. This is because if wages were slightly higher, the excess demand would be expected to raise the wages to W3. On the other hand, if wages were slightly lower, the surplus supply of labour would be expected to decrease the wages. The introduction of a minimum wage could move the market to a higher equilibrium (Dehejia *et al.* 2008: 488).

Let us assume that the equilibrium wage is W_1 . If the new law sets the minimum wage between W_2 and W_3 , the only remaining market equilibrium will be W_3 . If employers comply with the new law and pay the new minimum wage, labour demand will be greater than labour supply. The excess demand for labour will push the wages up to W_3 . What is evident here is that there is no unemployment in that equilibrium (W_3) after the introduction of the minimum wage legislation. According to this model, minimum wage legislation can actually lead to a decrease rather than an increase in unemployment (Dehejia *et al.* 2008: 488).

Let us assume again that the minimum wage has been set between W_1 and W_2 . At this level, there is high-level unemployment as supply of labour for labour is greater than demand. Most of the people would like to work at this price. The employers

cannot decrease wages to accommodate the unemployed workers, as doing that would be against the law. However, if the minimum wage could be increased to between W_2 and W_3 , there would be an excess demand for labour and that would push the wage rate up to W_3 . At the new wage rate of W_3 there would be no unemployment (Dehejia *et al.* 2008: 488).

2.5.4 Efficiency wage model and the minimum wage

If a firm pays its workers higher wages than its competitors the behaviour of the workers improves. These workers know that they are receiving higher wages than they would receive elsewhere. This motivates them to work harder in order to preserve their positions, as the cost associated with losing those jobs is higher. They will work hard and avoid shirking at all cost. Workers who are earning higher wages also have an incentive to improve their skills so that the value of their labour could match the higher wages that they receive. Workers who earn higher wages are able to maintain themselves well and this makes them to be physically healthy and strong. Healthy workers are full of energy and this makes them to be more productive than sick people (Devereux 2005: 903).

The increase in productivity leads to an increase in the demand for labour. The reason for this is because an increase in labour productivity leads to an increase in the marginal product of labour. The employers will continue to employ more workers as long as the marginal revenue product of the last unit of labour employed is above or equal to the marginal cost of labour, which is also the wage rate. The demand curve for labour will shift outward and to the right as a result (Devereux 2005: 903).

The introduction of minimum wage will produce the same results of increasing labour productivity, as the workers who are now earning higher wages will work harder and avoid shirking to protect their positions (Brown & Johnson 2006: 8). The higher minimum wage will also encourage the managers to provide on-the-job training and to use the employees more efficiently in an attempt to increase their productivity (Devereux 2005: 903). This means mandated minimum wage legislation also serves

as an investment in higher productivity and economic growth (Bell 1995). Employers also benefit because the cost of higher wages are offset by the savings in monitoring costs. This means the increase in the minimum wage has a positive inducement because it motivates the workers to do their work with great determination without being supervised (Levin-Waldman 2001: 25).

This makes the proponents of legal minimum wage to argue that it leads to increased employment, as employers are more willing to employ productive workers. The employers will prefer to employ low skilled workers who are now more productive. The increase in the demand for labour will also lead to an increase in the wage rate and this is a positive step towards poverty alleviation (Brown & Johnson 2006: 8).

2.5.5 Minimum wages and aggregate demand

The macroeconomic model argues that a higher minimum wage will offer low-wage workers more purchasing power, which will enable them to demand more goods and services. In other words, minimum wage will stimulate aggregate demand in the economy. The increased aggregate demand will motivate businesses to produce more goods and services because there is higher demand for their products. For them to produce more goods and services they will be forced to employ more people who are unemployed. The increase in the demand for labour will also lead to an increase in labour wages across the board. This means that the quantity of labour demanded is determined by the productivity of labour as opposed to the price of labour itself. The proponents of minimum wage believe that an increase in minimum wage will definitely lead to long-term benefits for the economy as a whole (Levin-Waldman 2001: 18).

It is also believed that higher minimum wage will lead to fewer labour strikes because there will not be good enough reason for workers to go on strike. Higher wages therefore have a stabilising effect and because the economy as a whole would have more money to spend there is a limit of how depressed wages can become. The macroeconomic model assumes that policy is needed to ensure that workers are paid reasonably high wages. The fact that wages are determined by firms that possess market power makes it necessary for workers to have institutions like unions and statutory minimum wages to counteract the power of firms (Levin-Waldman 2001: 18).

Sectors that pay low wages are also characterised by poor working conditions, little benefits, no maternity leave, no holiday entitlement, redundancy pay, no pensions and lack of job security. The introduction or raising of legal minimum wage helps to compensate workers for their poor working conditions (Devereux 2005: 903).

2.6 The case against minimum wages

The opponents of minimum wage legislation argue that the legal minimum wage compounds instead of alleviates poverty among the low-paid workers whom the minimum wage is intended to help. They argue that minimum wage legislation will create disemployment amongst the working poor. Bardhan and Udry (1999) have pointed out that the problem becomes even worse if the rate is set above the market clearing equilibrium. Those who are against the minimum wage legislation base their argument on the following theories listed below:

2.6.1 The standard competitive model with complete and incomplete coverage

The neoclassical economists argue that economic systems are plagued by inefficiencies that stem from well-intentioned, inexpert interferences with the forces of demand and supply. Coons (1996: 17) argues that at an artificially high price, sellers supply more than what buyers are prepared to buy, thereby creating a surplus. One such interference is the introduction of legal minimum wage in the labour market. The idea of such a minimum wage is to alter the distribution of income at the lower end of the spectrum in the hope that poverty will be alleviated among the working poor.

The neoclassical economists argue that these interferences hurt those whom they are designed to help. They point out that minimum wage legislation leads to effects that are contrary to the objectives that the policy-makers intend to achieve (Sesinyi 1998: 4). Rama (2001: 878) holds the view that the jobs that are most likely to be lost due to minimum wage increases are those of the working poor who are relatively the least skilled, least educated and least experienced. This is so because the economic value of their work or the value of the marginal product to the employer is much lower when compared to that of skilled, educated and experienced workers. This makes the employers to keep in employment the qualified individuals with higher productivity levels and reject the workers with lower productivity levels (Schuldt *et al.* 2012: 265).

Following the minimum wage increase from US\$0,75 to US\$1,00, the US Department of Labour tracked the unemployment effect it had on both non-white and white teenagers. They found that between 1954 and 1959, the unemployment rate for the non-white male teenagers, who were relatively less productive, had increased from 6 percent to 24 percent. The unemployment rate among white teenagers, on the other hand, had increased from 5 percent to 15 percent between 1954 and 1956 (Schuldt *et al.* 2012: 265).

Stigler (1946: 358) confirms this example when he points out that workers whose services are worth less than the minimum wage are laid off. The minimum wage therefore puts the unskilled, inexperienced and uneducated workers like the teenagers and the disabled in a great danger of being priced out of their jobs (Brown & Johnson 2006: 8).

Minimum wages have had the undesirable result of reducing the demand for unskilled workers even in countries where coverage and compliance are high. The effect occurs because employers prefer to keep in employment skilled workers whose wages increase by smaller percentages by the minimum wages. This means those whose wages increase by a bigger proportion will most likely lose their jobs (Jones 1997: 2).

In an attempt to reduce the high labour cost the employers may change the way they compensate workers. They may increase the wage up to the required minimum, but cut back on non-wage benefits like medical benefits, vacation benefits, reduce leave days et cetera. These factors reduce the disemployment effect, but it also represents the real cost borne by the low-paid workers (Brown & Johnson 2006: 6).

In developing countries, the negative effects of minimum wages are more than in developed countries where workers are usually protected from adverse demand shocks by things like unemployment insurance. In developing countries where workers do not have such benefits, those who are displaced from employment have only two options, namely:

- To go and seek employment in the uncovered sector; or
- Become unemployed and continue to search for employment in the covered sector.

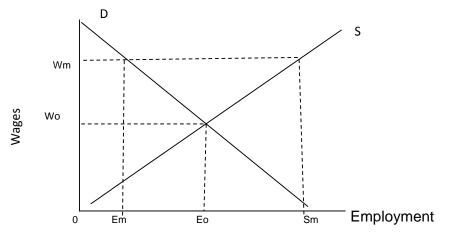
Most of the unskilled workers in developing countries have little or no savings to fall back on during the period in which they are unemployed. This means the poor workers who become unemployed cannot remain unemployed for a longer period of time. The displaced workers are most likely to take up jobs in the informal sector. This move will depress wages even further when the supply of labour in that sector increases without a corresponding increase in demand (Jones 1997: 2).

To evaluate the full impact of minimum wages in developing countries, it is crucial to look at both the covered and the uncovered sectors of the economy. The reason being that in these countries there is a large number of people who are engaged in both formal and informal sector employment. In these countries, there is also a large number of people who are engaged in non-wage activities (Jones 1997: 3).

a. Minimum wages where there is complete coverage

When assessing the effect of minimum wages in developing countries, both formal and informal sectors should be scrutinized because they both employ more workers. The effect of minimum wage legislation where there is complete coverage is illustrated in Figure 2.5 below.

Figure 2.5 The employment effects of a minimum wages in a competitive labour market with complete coverage



Source: Jones 1997: 23.

This model assumes that there is a competitive labour market with homogenous workers. Employment levels are determined by the interaction between demand and supply. Before the introduction of the minimum wage, Eo workers are employed at a wage rate of Wo. In this labour market, all workers possess the same skills and effort levels, and this makes them perfect substitutes. With the introduction of the wage floor all employers pay the minimum wage, which means that there is a complete coverage. After the introduction of minimum wage the new wage becomes Wm, which is well above the competitive level. This makes employment levels to drop to E_m . The proportional decline in employment (E_m - E_o) is equal to the proportional increase in wage (W_m - W_o) multiplied by the elasticity of demand. From Figure 2.5

above, it is apparent that excess supply of labour results from an increase in minimum wage from W_o to W_m .

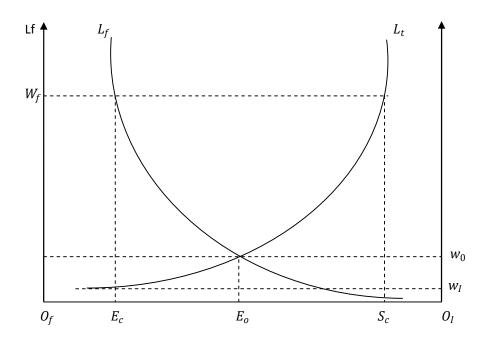
The excess supply of labour, however, cannot be interpreted as the rise in unemployment. Unemployment refers to the number of people who are currently not employed, but are actively searching for work. Unless all of the unemployed people believe that they stand a chance of finding employment, some would stop searching. This means that the number of unemployed people will somehow be lower than the surplus of EmSm. However, what is certain is that the level of unemployment will rise after the introduction of minimum wage, which is above the equilibrium wage (Jones 1997: 3).

b. The minimum wage where there is incomplete coverage

In the developing world, there is a large number of workers who earn their living through non-wage activities. These people earn their living through activities such as self-employment, informal sector work and domestic services. This makes it necessary to also apply a model in which coverage is incomplete when examining the effects of labour market intervention in developing countries. In this model, it is assumed that there is perfect mobility of labour across the formal and informal sectors, and all workers are identical and paid the same wage. The fact that there is no wage differential between the two sectors makes workers to be unconcerned about whether they are employed in the formal or informal sectors. This makes the level of employment to be the same between the formal and the informal sectors (Jones 1997: 4).

Then the legal minimum wage, which is above the competitive level, is introduced in the formal sector only. This leads to the rationing of jobs in the formal sector. There is now an excess supply of labour as more and more people who want to work in the formal sector are unable to find employment in that sector. Most of those people who lose their jobs in the formal sector will search for employment in the informal sector where the wage rate has remained unchanged. This will depress the informal sector wages even further, making people in the informal sector worse off (Jones 1997: 22). The explanation above is illustrated by Figure 2.6 below.

Figure 2.6 The effects of wage floor in a dualistic labour market with incomplete coverage



Source: Jones 1997: 22.

The wages in both the formal and informal sectors are equal at W_0 . At the wage rate of W_0 , E_0 workers are employed in both the formal and informal sectors. Then the minimum wage, which is above the competitive level, is introduced in the formal sector only. Because of minimum wage, the wage rate in the formal sector increases to W_f . At this higher minimum wage some workers who want to work in the formal sector are unable to find employment. There is now an excess supply of labour of S_cE_c . These are the workers who are unable to find employment in the formal sector. If all of these workers could find employment in the informal sector, employment in that sector could increase from 0_1E_0 to 0_1E_c . This will force the wage rate to decrease from W_0 to W_1 . The introduction of legal minimum wage has led to a wage differential of ($W_f - W_1$) and a decrease in formal sector employment from E_0 to E_c . On the contrary, a high minimum wage has led to an increase in the informal sector employment from O_1E_0 to O_1E_c .

The minimum wage effect is different in cases where there is no mobility of labour between the formal and the informal sectors. If the minimum wage is introduced in the situation where there is no mobility of labour between the formal and informal sectors, the imposition of a high minimum wage in the formal sector will lead to an increase in unemployment in that particular sector only. The workers who lose their jobs in the formal sector will not search for employment in the informal sector, as there is no mobility of labour between the two sectors. The supply of the informal sector workers will not change due to an increase in formal sector minimum wage. The level of employment in the informal sector will not change (Jones 1997: 4).

The underlying factor both in the situations where there is complete and incomplete coverage is that an increase in minimum wage leads to excess supply of labour. If the workers who lose their jobs in the formal sector could search for employment in the informal sector, they would depress wages in the informal sector, thereby making life among the informal sector workers worse off (Brown & Johnson 2006: 4).

2.6.2 The substitution model and the minimum wage

Incorporating workers with different skill levels into the basic competitive model yields the prediction that minimum wage legislation will lower employment among low-skilled workers and possibly even among skilled workers. If the minimum wage is raised to a point above the equilibrium wage level of low-skilled workers, but below the wage level of skilled workers, the ratio of skilled to unskilled workers will change. Firms may reduce the employment of unskilled workers and leave the number of skilled workers unchanged (Zavodney 1998: 20). This is supported by Welch (1974: 292) who points out that if those who earned less than the minimum wage were substitutes, the employers would replace them in favour of those whose relative costs have not increased or increased the least.

If firms substituted skilled workers for unskilled workers, the market wage for skilled workers would rise. Such a wage rise will also dampen the increase in the number of skilled workers employed. The total employment effect could not be positive in the substitution model because the wages of at least one or possibly both types of workers will increase and the increases in the wages will lead to a drop in employment (Zavodney 1998: 20).

2.6.3 Minimum wages and on-the-job training

Opponents of legal minimum wage argue that it raises barriers to people with little or no work experience in finding the initial employment that would provide experience and on-the-job training that would enable them to earn higher wages in future (Brown & Johnson 2006: 4). On-the-job training refers to the training which offers young workers basic skills, strengthens motivation and fosters attitudes that enable them to be more productive. On-the-job training enhances human capital development which leads to an increased earning (Hashimoto 1981: 24).

These attributes are assets or capital because those who acquire them become more productive over time. These attributes resemble machines and other physical capital. Human capital, unlike physical capital, cannot be separated from a person who owns it. This makes human capital different from physical capital because, unlike the physical capital, human capital cannot be sold.

Any worker, whether highly trained and experienced or not, owns some human capital. However, the more experienced and knowledgeable a person is, the more human capital that person possesses. These are the persons who are more productive and this enables them to earn higher incomes than those who are less knowledgeable and experienced.

Human capital is acquired through schooling and on-the-job training (OJT). However, most of the skills which make a person more productive are acquired through work experience (Hashimoto 1981: 14). A young person who enters the labour market at a particular time will not earn much because he does not as yet have more job experience and as a result he is not very productive. However, as he accumulates more experience and becomes more productive, his earnings rise as well. This means on-the-job training plays a pivotal role in increasing the earnings of young workers (Hashimoto 1981: 15). These workers' earnings increase because their productivity has increased. A worker's wage depends on how much he is worth. A worker who is more productive earns more than the worker who contributes less to the company (Schuldt *et al.* 2012: 260).

Some jobs offer on-the-job training (OJT) through formal training programmes, but many jobs require little or no formal training programmes. The absence of on-the-job training, however, does not mean that a worker cannot acquire human capital on the job. A learning-by-experience process still takes place in these jobs through informal instruction, observations, experimentation et cetera. An inexperienced worker is allowed to observe the experienced workers operate complicated machines; he may even be allowed to operate those machines sometimes. In this way, the inexperienced worker is in the learning process. These opportunities are valuable because they enable the inexperienced worker to acquire valuable skills and knowledge to enable him to be productive. On-the-job training can therefore be viewed as a process of investment in human capital.

Such investments entail costs that arise directly from the use of skilled manpower and the firm's machines for the purpose of instruction as well as through the provision of work environments which are conducive to learning (Hashimoto 1981: 15). The costs also arise from the fact that an inexperienced worker is allowed to waste raw materials, produce defective products and cause additional wear and tear to machines and equipment. The worker attains his benefits in the form of increased earning power. The employer, on the other hand, attains his benefits through the increased productivity of the trained worker. This means both the worker and the employer benefit from on-the-job training. The worker has every incentive to bear the high training cost because he can take his productive skills and experience elsewhere if he wants to. He pays the high training cost by allowing himself to be paid a lower wage. The explanation above is illustrated in Figure 2.7 below, which focuses on training as the sole factor responsible for growth of earnings.

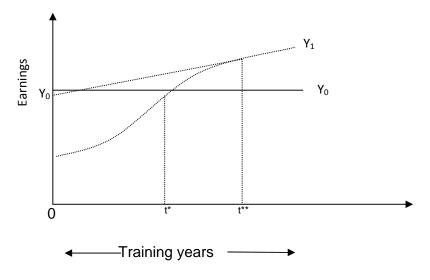


Figure 2.6 Relationship between training and earnings

The horizontal line Y_0 represents the earning schedule that the worker would receive when he has not received any training. The no training schedule indicates that the worker's earnings do not change; it remains the same year after year.

The schedule Y₁ shows the earning profile when there is some on-the-job training in the early years of employment. Earnings in the early years of employment are lower than no training earnings. This means that the worker bears some of the training costs by accepting lower wages than he would be if no training were provided.

Source: Hashimoto 1981: 17.

Earnings grow as learning accumulates (increases). Eventually it overtakes Y_0 as on-the-job training (OJT) decreases and the worker continues to collect returns on the accumulated investment. The investment does not end at the overtaking time t^{*}. It continues until time t^{**}. Before t^{**} the worker's earning capacity is constantly growing as is indicated by the dotted Y_1 , reflecting the ever accumulating potentially recoupable returns to the previous investments (Hashimoto 1981: 18).

An effective mandatory minimum wage reduces the amount of on-the-job training and prevents the growth of young workers' earning capacity in the following three ways:

- Mandatory minimum wage causes some workers to lose their jobs. This means that mandatory minimum wage leads to increased unemployment. The laid off workers will therefore lose an opportunity to on-the-job training;
- The minimum wages also make those who remain employed to lose an opportunity of on-the-job training. Workers pay for their training in the sense that, by the time they still receive on-the-job training, they are prepared to accept the lower wages that they would otherwise not receive if they were not receiving training (Hashimoto 1981:18); and
- Minimum wages render unskilled workers unemployable, as employers prefer skilled workers who are most productive (Schuldt *et al.* 2012: 265).

To comply with the increased minimum wage, employers will raise money wages for those who receive less than the minimum wage but the increased minimum wage itself does little to improve productivity. Employers will respond to increased minimum wages by reducing the amounts of on-the-job training given to workers, thereby reducing their potential of earning higher wages in future. This condemns the low-paid workers to everlasting poverty (Hashimoto 1981: 22).

2.6.4 The price effect model and the minimum wage

The basic competitive model with only one or two types of workers holds that prices are not affected by increases in minimum wages. In an attempt to counter the higher production cost firms respond by reducing the employment of less skilled workers. However, the decline in employment is most likely to cause total output to decrease, as fewer workers are now engaged in the production process. A decrease in output creates a situation where demand exceeds supply and this will cause prices to rise. An increase in prices of the products being produced makes the decline in employment less severe but it is unlikely that the increase in price will completely offset the decline in employment.

The extent to which price will change depend on how elastic the demand and supply curves are. If the demand curve is inelastic or vertical, employment will not be severely affected by the rise in minimum wage. The employers in this case will manage to shift the higher minimum wage burden to the consumers by raising the prices of the products produced. This is made possible by the fact that a bigger change in price leads to a smaller than proportional change in quantity demanded (Zavodney 1998: 21).

Two studies have found that restaurant prices tend to rise as minimum wage increases. The research on price effects of minimum wage increases focused on the restaurant industry because they mostly employ low-wage workers. Card and Krueger (1995) found that prices of restaurants foods increased after the minimum wage had increased. They also found that the number of people employed in those restaurants had gone up after the minimum wage increased. They discovered that prices had increased more quickly in cities where there was a high number of workers covered by the minimum wage. Aaronson (2001) also found that restaurant prices increased when the minimum wage increased. Both studies indicated that price increases were equal to the increase in labour cost brought about by the minimum wage increase.

However, if the demand curve is elastic or near horizontal, more jobs are likely to be lost in response to the increase in minimum wage to the level above the equilibrium wage rate. The price increases in this case cannot eliminate the negative effect of minimum wage on employment completely. The firms are not be able to shift the burden of higher minimum wage to the consumer because a small increase in the price of goods produced leads to a greater than proportional change in quantity demanded (Zavodney 1998: 21).

There is evidence which shows that prices do not change in response to the increase in minimum wage. Katz and Krueger (1992), for example, did not find any evidence of relative price increases at the Texas fast food restaurants after the minimum wage was raised in that state. Card (1992) found that fast food prices rose at the same rate in California and in compared areas after the minimum wage had increased in that state.

Even if prices increase when minimum wage increases, they cannot offset the disemployment effect, which results from such an increase. This is because demand in the restaurant industry is not perfectly inelastic. It then becomes difficult for the restaurant owners to shift the whole minimum wage increase burden to the consumers (Zavodney 1998: 21).

If low-income people are primary purchasers of the goods produced by the minimum wage workers, the rise in prices will have a negative effect on the very same people whom the minimum wage is intended to help (Freeman 1996: 245). Those whose wages are not increased by the minimum wages, like the informal sector workers and those who happen to lose their jobs because of the minimum wage, are made worse off by the higher prices that they should now pay (Brown & Johnson 2006: 7).

2.6.5 The endogeneity model and minimum wages

The endogeneity model holds that the raising of minimum wage may depend on the expected employment effect it might have on low-paid workers. In most countries, minimum wages are determined by politicians who are most likely concerned about the potential negative effects it may have on their chances of being re-elected

(Zavodney 1998: 24). Schuldt *et al.* (2012: 265) confirm this when they point out that politicians use the desperation of the poverty stricken and poor to buy their votes.

They may choose not to raise the minimum wage if they believe that the disemployment effect will be large or if it will greatly reduce businesses' profits. This means when introducing or raising the minimum wage they make sure that it does not raise workers' wages above the competitive level for fear that it will lead to job losses among the working poor whom it is meant to help. In most cases they choose to raise the minimum wage if the negative effects are expected to be minimal, especially when the economy is doing well and the average wages are increasing (Zavodney 1998: 24).

This shows that the timing for introducing or raising the minimum wage depends on the prevailing economic conditions as opposed to the likely impact that it will have on poverty alleviation. When the governor of Connecticut, for example, approved the US\$0, 88 increases in that state's minimum wage in 1987 he observed that the economy was performing well and that the employers could afford it at that particular time (Zavodney 1998: 24).

The commission that determines the minimum wages in California refused to increase the state's minimum wage in 1993 because they realised that any increase would further damage the state's economy, which was already not doing well at the time. The New Jersey state legislature and governor approved a US\$0.90 minimum wage increase to be implemented in 1992, but before the new minimum wage could become effective, the economy went into a recession. The authorities had to put into effect only part of the scheduled increase for fear that the economic situation would become worse. This indicates that minimum wage increases are carried out only when economic conditions are favourable. If minimum wage increases are intended to happen only when they will have less economic effect, they cannot show the real impact that they have in the economy. Those who are against minimum wage argue that this is the main reason, which makes it difficult for researchers to find the actual negative employment effect of minimum wage increases (Zavodney 1998: 24).

2.6.6 The efficiency wage model: a response

Opponents of minimum wage argue that the efficiency wage theory cannot explain cases where high wage rates are found in industries that are not even making above average profit. They maintain that the efficiency wage theory is able to re-describe aspects of labour market behaviour, but it is failing to explain it. A good example is this one of shirking and monitoring. They do not believe that high-wage rates can act as substitutes for the cost of supervision. Employees would avoid their duties if they could, even when they were earning higher wages. This means employers will still face the cost of supervision and monitoring even when they are paying higher wages to their employees (Zavodney 1998: 24).

A variety of researchers reviewed by (Edward 1990) have found that workers do not shirk or disobey because they do not want to work. Instead, they shirk or disobey because they want to get round the inefficiencies generated by the rules that actually hamper productivity. This means they shirk and disobey so that they could be more productive.

There is a variety of norms and values concerning the obligation to work, which encourage workers to participate willingly in the production process. Relations in the workplace are determined mainly by power and bargaining. The implication here is that the relationship between wages and motivation to work is more complex than what efficiency wage theories can actually explain (Edwards & Gilman 1999: 23).

The opponents of minimum wage again do not agree with the assertion that increased income will lead to better health and to a greater individual efficiency. They argue that if nutrition has an important effect on efficiency and productivity, direct provision of meals to the workers will be a better solution than increasing wages (Harris 2001: 199).

2.6.7 Minimum wages and aggregate demand

Contrary to common belief by the proponents of minimum wage that it raises aggregate demand, the opponents hold a totally different view. They maintain that an increased contribution to total demand by people who benefit from the increased minimum wage is offset by the reduction of demand by those who now pay higher prices for goods and services. They argue that even Dr John Maynard Keynes, who was one of the greatest economists of the twentieth century, did not agree that increase in wages leads to an increase in aggregate demand. On the contrary, he believed that wage increases would lead to a decrease in real demand. The opponents of minimum wage believe that the real increase in aggregate demand will be because of an increase in real wages. The increase in real wages is a benefit obtainable from the economy, which is expanding and growing more efficiently (Levin-Waldman 2001: 18).

2.6.8 Minimum wages and the target group

The main reason for minimum wages is to reduce poverty among the working poor. The opponents of minimum wage argue that it is an ineffective tool for dealing with poverty, especially when most of the minimum wage workers are distributed equally across the family income distribution. That is to say, while minimum wage workers could be earning low wages, other wage earners in the family could be earning much higher wages. Minimum wage workers may be teenagers living with parents, married women with working husbands, single women or single men without children in their households (Even & Macpherson 1996: 77).

This means instead of helping the poor, minimum wage helps people from the middle and high income families and people with no children to support. This led Cain (1996: 54) to conclude that minimum wage increases are ineffective tools for raising a vulnerable worker from poverty because most beneficiaries are part-time workers, students or people holding down second jobs in order to supplement the incomes of their households' earners. Those who actually live in absolute poverty

are not employed in those jobs even though those are the jobs for which they would qualify (Even & Macpherson 1996: 68).

2.6.9 Additional theories

The proponents of minimum wages argue that firms try to offset an increase in the higher wage cost brought about by the minimum wage by cutting other costs like fringe benefits and training. If firms could manage to offset the minimum wage increases by reducing other costs, they might not reduce employment. According to the opponents of minimum wages, this theory does not appear to be correct because low-wage employees receive relatively less in fringe benefits and training. Alpert (1986) found that restaurant workers received approximately twenty percent of the fringe benefits received by other workers elsewhere. He also found that the restaurants slightly reduced fringe benefits after the minimum wage had been raised in the 1970s. Katz and Krueger (1992) did not find any evidence that Texas fast food restaurants affected by minimum wage increases reduced fringe benefits after the raising of minimum wages.

One other thing that makes it difficult for minimum wages to alleviate poverty is lack of compliance by the firms that employ minimum wage workers. Firms are most likely to evade minimum wage legislation if the possibilities of being detected are lower or if the costs of compliance are higher. In many developing countries, minimum wage laws are not effective because of poor enforcement by the authorities. Poor enforcement usually occurs because of poor administration and the inability of the authorities to conduct regular inspections on firms that employ minimum wage workers. Firms are also encouraged to cheat if the distortionary costs of minimum wage are higher. Such situations usually arise when the minimum wages are well above the market equilibrium (Jones 1997: 1). In the case of Trinidad and Tobago where minimum wage was introduced in 1998 it was found that 33 percent of the firms did not comply (Devereux 2005: 902). The weakness of enforcement capabilities again became evident in Indonesia in 1994 after minimum wage was increased in that country. The increase in minimum wage was very high and the period that was allowed to implement it was very short. Many firms did not comply with the higher minimum wage because they could not afford it or they were unwilling to comply. That led to the eruption of wildcat strikes from the minimum wage employees in that country (Rama 2001: 868).

One other way of evading minimum wage legislation is if employers employ illegal aliens. The illegal immigrants are in no position to report the employers who do not comply with the law or policy. Raising the minimum wage will therefore lead to an increase in illegal immigrants, as the employers prefer them over the citizens of the country (Sesinyi 1998: 19).

The opponents of minimum wage argue that the best way to alleviate poverty among the poor is to create conditions that will make it easier for them to be employed. It is only when they are employed that they will learn and acquire the necessary skills that will make their services most sought after by the employers. This will put them in a better position to earn higher wages that will enable them to overcome poverty. Those in authorities should not make it expensive for employers to give the low skilled person a job (Cain 1996: 53).

2.7 Conclusion

It is true that the working poor need to be pulled out of poverty, but there is just no agreement as to how this can be achieved. The policy-makers make use of legal minimum wage legislation as one of the strategies to alleviate poverty among the working poor. However, it is not certain as to whether minimum wage legislation does indeed alleviate poverty among the working poor whom the minimum wage legislation is intended to help. Proponents of minimum wage policy argue that it is the best poverty alleviation strategy because besides increasing the buying power of the low-paid workers it also leads to an increase in employment and productivity. The opponents, on the other hand, argue that it leads to job losses in the covered

sector, as employers substitute low-paid workers with skilled workers or capital. The displaced workers end up searching for jobs in the uncovered sector, thereby depressing wages in that sector even further as supply of labour becomes greater than demand.

CHAPTER 3

A GLOBAL PERSPECTIVE OF MINIMUM WAGES

3.1 Introduction

Minimum wages are a nearly universal policy instrument used by the majority of countries in all regions of the world. It is only in the Middle and Eastern countries where minimum wages are not common (ILO 2009: 1). Its proponents see this policy as the relevant tool that could make a major contribution to social justice by improving the living conditions of the working poor (Belser & Rani 2012: 46). It has the potential to increase the number of workers with access to decent wages and reduce the pay gap between men and women in both developed and developing countries. The levels to which minimum wages are raised also determine the extent to which income inequality is reduced. It is believed that the higher minimum wage levels are more effective in reducing income inequality and alleviating poverty among the working poor than low minimum wages. Countries with higher minimum wages are therefore also countries with reduced income inequality (ILO 2009: 7)

During the late 20th and beginning of the 21st centuries there have been clear indications of a more vigorous use of minimum wage policies in both developed and developing countries. Minimum wage levels have been increased in both industrialised and less industrialised countries. In an average country, for instance, the monthly minimum wage expressed in purchasing power parity (ppp) has increased from US\$178 to US\$235. This is contrary to earlier periods where the real value of minimum wages tended to increase more slowly or even declined.

Another indication of the renewed importance of minimum wage legislation was a sudden increase in the number of states that ratified the Minimum Wage-Fixing Convention No. 131 of 1970. At the moment, a total of 119 member states have ratified either Convention No. 131 of 1970 or the earlier Minimum Wage-Fixing Machinery Convention No. 26 of 1928 (ILO 2009: 2).

The renewed importance of minimum wages is associated with various economic and social developments, namely:

- The relatively high economic growth in the last decade that happened in many countries was accompanied by an increase in the number of people classified as vulnerable workers, especially those in part-time, temporary or casual employment, and other more low paying jobs. In such instances minimum wage policy was seen as an effective policy for addressing low rates of pay and poverty; and
- The widening income inequality, which occurred in many countries, encouraged policy-makers to consider minimum wages as having the potential to reduce income inequality. Concerns about high inflation and the erosion of the purchasing power of wages, especially of the low-paid and vulnerable workers, also played a role. Timely adjustments of minimum wages reflecting consumer price increases were considered as helping the low-paid and vulnerable workers maintain their living standards (ILO 2009: 3).

This encouraged both the developed and developing countries to introduce a minimum wage policy as a tool to reduce income inequality and alleviate poverty. In some of the countries, the implementation of a minimum wage policy led to massive job losses among the working poor as predicted by the neoclassical economists (Schuldt *et al.* 2012: 265). In Ghana, for instance, the government's 1991 decision to increase minimum wage levels led to massive job losses and bankruptcies, especially among small and medium-sized enterprises.

In other countries, however, the introduction or raising of the minimum wage levels did not only increase wages of the vulnerable working poor, but it also led to an increase in employment in the formal sector (Jones 1997: 10). A good example is that of New Jersey's restaurants where an increase in the minimum wage level led to an increase rather than a decrease in employment as predicted by the neoclassical economists (Card & Krueger 1994: 792).

Countries reviewed in the study, namely the United States of America, the United Kingdom, Costa Rica, India, Ghana, Kenya, Malawi, and Botswana provide a global perspective from the major regions of the world, namely; North America, South America, Europe, Asia and the African continent. The aim of this chapter is to determine the extent to which the working poor in countries, which have applied minimum wages benefited from the policy. It will also focus on whether minimum wages have assisted in reducing income inequality and alleviating poverty in countries where they have been implemented. A brief background of countries that have implemented minimum wage policies will be discussed in section two of this chapter. This information is arranged according to economic sectors, namely primary, secondary and tertiary sectors. In section three, the role of a minimum wage policy, as a poverty alleviation tool, will be analysed to find out whether minimum wages have succeeded in reducing income inequality and poverty in those countries. This will be followed by the conclusion.

3.2 The primary sector

3.2.1 Minimum wages in Kenya's primary sector

3.2.1.1 The institutions for wage-floor setting

In Kenya, the minimum wage policy was part of the national policies, which were adopted before independence. Kenya introduced a minimum wage policy for the first time in 1946. Initially the policy was applied in Nairobi, then in Mombasa and Kimusu. Later it spread to other industrial towns of Kenya (Amsden: 1971). The main purpose of such a policy was to reduce poverty and to promote the living conditions of the vulnerable workers (Andalon & Pages 2008: 5).

The Regulation of Wages and Conditions of Employment Act guided Kenyan minimum wage policy. Two wage boards made recommendations on the wages that could be published each year on May 1. These boards also made recommendations on the employment conditions of workers. The two wage boards were the Agricultural Wages Advisory Board (AWAB) and the General Wages Advisory Board (GWAB) (Andalon & Pages 2008: 5). The Agricultural Wages Advisory Board

(AWAB) set statutory wage floors for agricultural sector workers while the General Wages Advisory Board (GWAB) set minimum wages for workers in other industries who were not covered by the specific wage boards.

These boards were made up of representatives from the Department of Labour, the Central Organisation of Trade Unions and the Federation of Kenyan Employers. An independent member who was usually a labour industry expert chaired them. The boards had advisory status only because the ministry of labour could modify their recommendations prior to consultations (Andalon & Pages 2008: 29). The involvement of social partners in wage setting in this instance was indirect because the ultimate decision about minimum wage levels lay with the government. The government, in this instance, was not bound to follow the recommendations of the other social partners (ILO 2009: 9).

Within the agricultural sector or the general order, minimum wages differed by age, location and occupation. Minimum wages in Kenya were received by workers who were 18 years and older. The policy did not apply to workers who were younger than 18 years. The purpose here was to discourage the employment of children.

They also distinguished three different urban areas with different minimum wage levels. The three geographical areas were Nairobi and Mombasa, other municipalities and other towns. Within the same occupation and location minimum wages varied in accordance with the workers' skills levels and city size. Workers with better skills, for instance, received higher minimum wages than those with fewer skills, as can be seen in Table 3.1 below.

Table 3.1: Basic minimum wage levels in the agricultural sector of Kenya, 1998-2004, indicated in Kenyan shillings (KES)

Type of employee	2000	2001	2002	2003	2004
UNSKILLED EMPLOYEES	1.428	1.537	1.642	1.888	2.096
18 years and above					
STOCK HERDSMAN AND WATCHMAN	1.648	1.772	1.896	2.180	2.420
18 years and above					
SEMI-SKILLED EMPLOYEE	1.629	1.751	1.874	2.155	2.392
House servant or cook					
Tractor driver	1.809	1.9945	2.081	2.393	2.656
Lorry driver or car driver	2.249	2.249	2.406	2.767	3.701
SKILLED EMPLOYEE	2.574	2.767	2.961	3.405	3.780
Farm foreman					
Farm clerk	2.574	2.767	2.961	3.405	3.780
Section foreman	1.667	1.792	1.917	2.205	2.448
Farm artisan	1.707	1.835	1.963	2.257	2.505
Combined harvester driver	1.993	2.142	2.292	2.636	2.926
AVERAGE	1.777	1.910	2.199	2.529	2.870

Source: Andalon and Pages 2008: 29.

The unskilled workers of 18 years and above, for example, received minimum wages of 2 096 Kenyan shillings (KES) in 2004 while farm supervisors and farm artisans, who fell under skilled and semi-skilled employees, received 3,780 Kenyan shillings (KES). In the year 2000, the stockmen, herdsmen and security guards (unskilled workers) received minimum wages of 1,648 Kenyan shillings while the tractor drivers (semi-skilled) received minimum wages of 1,809 Kenyan shillings in the same year. This confirmed that the skilled and semi-skilled workers received higher minimum wages as compared to unskilled workers (Andalon & Pages 2008: 29). The purpose for minimum wages for skilled, semi-skilled and unskilled workers was to ensure that all workers received a just share of the fruits of progress (ILO 2009: 1).

3.2.1.2 Minimum wage policy and compliance in Kenya

Minimum wages in Kenya suffered from inadequate enforcement. The majority of employers did not comply with minimum wage policy. About 24 per cent of the salaried workers in the agricultural sector and 17 per cent of the salaried workers in the non-agricultural activities in urban areas, for instance, earned monthly wages, which were below the stipulated minimum wages. The Kenyan government also paid wages that were below the stipulated minimum wages (Andalon & Pages 2008: 32). Omolo and Omitti (2004) asserted that the Kenyan government did not adhere to minimum wage regulations.

The level of non-compliance was higher among the workers in the highly skilled occupations such as tractor drivers, salesmen and caretakers where it reached 68 per cent in 1999. The levels of non-compliance were also higher among the unskilled workers in the agricultural sector. In 1999, the level of non-compliance with regards to minimum wages in Kenya's agricultural sector was 29 per cent among the unskilled workers and only 10 per cent among the skilled workers. Among the unskilled workers, the level of non-compliance was highest among the young workers of 18-25 years of age as compared to the older workers of 26-45 years. For the young unskilled workers of 18-25 years, 41 per cent received wages which were below minimum wage levels as compared to only 20 per cent of the 26-45 year olds (Andalon & Pages 2008: 35).

Among the different types of workers, non-compliance was similar for men and women in the agricultural sector, but it was slightly higher for women where it was 29 per cent relative to the 27 per cent for men. The level of non-compliance was higher among the less educated and young workers of 18 to 25 years old (Andalon & Pages 2008: 32). The following were reasons for non-compliance with minimum wage legislation in Kenya:

• There were many different categories of minimum wages and that made it difficult for workers and firms to know which ones applied to them;

- Minimum wages were set at a very high level relative to the median wage, especially the rates for semi-skilled and more skilled workers; and
- The classification of occupations used for minimum wages was outdated. Many occupations were therefore no longer relevant for the current requirements of the labour market (Andalon & Pages 2008: 18).

3.2.1.3 The effect of minimum wages on employment share

Levin-Waldman (2001) suggested that minimum wages be set at the median of the unskilled labour wages. In Kenya, most minimum wages in the urban areas were far above the median of the unskilled labour wages. According to the 1998/9 levels, there were eighteen minimum wages that were above 70 per cent of the median wage for all workers (Andalon & Pages 2008: 11).

Minimum wages in the agricultural sector raised the wages of low educated employees and women to levels, which were much higher than the economic value of their work or the value of their marginal product. This made labour to be more expensive relative to the contribution made to the respective firms. Some employers of the vulnerable workers were forced to lay off some of their workers. Therefore, the higher levels of minimum wages led to job losses in the agricultural sector of Kenya.

It is estimated that a 10-percentage point increase of minimum wage to a median wage led to a decline in the share of formal sector employment by between 1.1 to 5.5 percentage points. It also led to an increase in the share of self-employment by between 2.7 and 5.9 percentage points as people who lost their jobs in the formal sector sought employment in the informal sector (Andalon & Pages 2008: 18).

This confirmed the standard competitive model with incomplete coverage, which maintained that a high-level increase in minimum wages would lead to a decrease in formal sector employment and to an increase in informal sector employment (Jones 1997: 3). This means people who lose employment in the formal sector found refuge in the informal sector. The informal sector therefore acted as a buffer between employment in the formal sector and unemployment. If there were no corresponding increase in demand for informal sector workers, one could conclude that the increase in labour supply in the sector led to a decrease in wage levels. This means an increase in minimum wages worsened rather than improved the situation of the working poor (Jones 1997: 12).

3.2.2 Minimum wages in Malawi's primary sector

3.2.2.1 Background of minimum wage policy in Malawi

In Malawi, the government intervened in the labour market through the pursuit of a minimum wage policy long before independence. The official National Wages and Salaries Policy came into existence in 1969 and it had the following objectives:

- To keep the wages of unskilled and semi-skilled workers under control. The purpose was to keep the wages lower in order to encourage the establishment and expansion of job opportunities in the farming estates. The Malawian government wanted to increase the number of people who had paid jobs; and
- The government also wanted to keep inflation in the domestic economy under control. That was to be achieved through wage restraints and stabilisation of labour costs in order to maintain the country's competitiveness in international markets (Livingstone 1995: 729).

The National Wages and Salaries Policy of 1969 was reinforced by the Wage and Restraint Committee of 1971. According to this policy, any employer wishing to raise his employees' wages by more than 5 per cent had to apply to the Wages and Salaries Restraint Committee for approval. This was an indication that Malawi was determined to pursue a low wage policy. The low-wage policy was also reflected in a long period of wage stability, which prevailed in Malawi throughout the 1970s (Livingstone 1995: 730).

The low-wage policy was, however, disturbed by increasing inflation in the 1980s. Consumer inflation, for instance, increased from an average annual rate of about 7.5 per cent in the 1970s to about 18 per cent in the 1980s. This made the workers to demand high minimum wages in line with the rising inflation. The demand for high minimum wages in line with increasing cost of living left the Malawian authorities with no option other than acceding to workers' demands. The rising cost of living, therefore, made minimum wages to be increased by higher percentages in both rural and urban areas of Malawi. This means the rising cost of living made Malawi to abandon the low wage policy that they had pursued in the 1960s and 1970s. The information in Table 3.2 below illustrates this change in policy.

Table 3.2: Trends in minimum wages in Blantyre and other ruralareas

Year	Blantyre	Percentage Rural areas		Percentage	
		increase (%)		increase (%)	
1965	35	-	21	_	
1966	38	9.1	23	9.5	
1973	40	5.3	25	9	
1980	45	12.5	30	20	
1981	70	55.6	50	67	
1982	81	16	58	16	
1987	111	37	77	33	
1989	217	95	174	126	
1992	260	20	209	20.1	

Source: Livingstone 1995: 730.

In the 1960s and 1970s, minimum wages increased by smaller percentages in both the urban and rural areas of Malawi as it is observed in Table 3.2 above. In 1966, minimum wage levels in Blantyre increased by 9.1 per cent and in 1973 it increased by only 5.3 per cent. In rural areas, minimum wages increased by 9.5 per cent in 1966 while it increased by only 9 per cent 1973. This confirmed that the Malawian authorities were determined to keep labour costs as low as possible.

The situation, however, changed in the 1980s in response to the high inflation rates, which compelled workers to demand high minimum wages in line with the increasing cost of living. This led to a higher increase in minimum wages in 1981 and 1989 respectively as can be seen in Table 3.2 above. In 1981 and 1989, for instance, minimum wage levels in Blantyre increased by 55.6 per cent and 95 per cent respectively. In rural areas, the minimum wages increased by 67 per cent in 1981 and by 126 per cent in 1989. The 1980s' high minimum wage increases confirmed that Malawi had abandoned the low wage policy, which they had pursued in the 1960s and 1970s (Livingstone 1995: 734)

3.2.2.2 Minimum wage policy and compliance

The main limitation of the effectiveness of the minimum wage policy in Malawi was that few people were engaged in paid employment. In 1987, for example, paid employees in both the formal and informal sectors were 549 000, which was only 16 per cent of the total workforce of Malawi at the time. Formal sector wage employment during the same period was 406 000, which represented only 12 per cent of the total workforce of Malawi. The difference between 549 000 and 406 000 represented wage employment in small-holder agriculture, in rural non-farming activities and urban informal sectors, which were not covered by minimum wage legislation (Livingstone 1995: 736).

A large number of salaried workers received wages that were below the stipulated minimum wages. The workers who received the lowest wage rates were those in the tobacco estates. In 1990, for example, when the rural minimum wage was 45 Malawian Kwacha per month, 59 per cent of workers in the tobacco estates earned wages that were below 33.3 Malawian Kwacha, while 90 per cent received wages that were below 50 Malawian Kwacha. In the sugar estates, the proportion of workers receiving less than 33.33 Malawian Kwacha in 1990 was 37 per cent (Livingstone 1995: 735).

Another challenge in Malawi was that within the tobacco estates a large proportion of the workforce employed in the burley tobacco estates consisted of tenants who were not even remunerated through wages for their labour. Unfortunately, it was in that area where the majority of the people in Malawi were employed (Livingstone 1995: 737). To the tenants working in the burley tobacco farms minimum wages were actually irrelevant because they did not apply to them.

The coverage of minimum wage legislation referred only to that fraction of the population for whom the policy was legally guaranteed, namely the formal sector (Cunningham 2007: 19). Minimum wage policy was properly implemented in the government sector, large estates and by large urban employers, but together they only accounted for less than 8 per cent of the total labour force in Malawi. Some of the large estates managed to even pay their employees' wages, which were higher than the statutory minimum wages. The higher minimum wages paid by the bigger estates were somewhat helpful in that they encouraged neighbouring estates to also pay high minimum wages (Livingstone 1995: 737).

3.2.2.3 Effects of the minimum wage policy on employment

There is evidence, which suggested that the increases in minimum wages, which had occurred in May 1989, led to a reduction in the number of people employed in the tea estates. The Ministry of Labour also found that the number of working days in the tea estates was reduced following the May 1989 minimum wage increase. They found that, over the four quarters after March 1989, the period when minimum wage levels increased by 95 per cent in Blantyre and 126 per cent in rural areas, the number of days worked on the tea estates had decreased by 17 per cent.

In the tobacco estates, the figure was 11 per cent lower than it was in the four quarters preceding the raising of the statutory minimum wages. In contrast, the number of working days in the sugar estates was 2 per cent higher than it was in the four quarters before raising the minimum wage levels (Livingstone 1995: 738). This was an indication that minimum wage policy had created a distortion in terms of promoting equality in income (Cunningham 2007: 20). Instead of promoting income equality, it made the situation of the working poor worse since most of them lost their jobs following minimum wage increases. This seemed to be a confirmation of the argument raised by the opponents of minimum wages that the policy led to job losses among the working poor whom it was intended to help (Stigler 1946: 358).

3.2.3 Minimum wage legislation in the agricultural sector of Mexico

3.2.3.1 The institutions for minimum wage setting

The federal labour law of Mexico defined minimum wages as the least amount payable to a worker for services rendered during one day. The law did not state the number of hours that the worker should work to earn the daily minimum. However, it set the maximum number of eight hours per day for the workers working day shift, a maximum of seven hours for the workers working night shift, and seven-and-a-half hours for workers working mixed shifts. Hours above the legal maximum per day were considered to be overtime and had to be paid accordingly at a higher rate. The law also stated that if a worker earned a minimum wage, the employer was also expected to pay the employee's portion of payroll taxes such as social security. This meant minimum wage referred to the after payroll tax wage.

The 1962 wage policy established minimum wages for three categories of workers in Mexico, namely general, agricultural and professional workers. The professional

workers' minimum wage consisted of 86 different minimums and applied to workers in specific occupations. The category for workers in the agricultural sector included all workers in the country's agricultural sector workers while the general minimum wages applied to all other workers. Each of these categories differed by their regions. This implied that Mexico, just like other developing countries, had a sectoral minimum wage system.

In 1962, there were 111 minimum wage regions in Mexico, each with its own committee. Each committee consisted of representatives from the trade unions, employers and government. The regional committees submitted suggestions for minimum wage rate, which could be adopted by the National Minimum Wage Commission. This commission had authority over all proposed minimum wage levels in that it could adopt or reject the suggested wage rate.

In 1976, the National Minimum Wage Commission started simplifying the minimum wage structure in Mexico. It gradually eliminated the distinction between the general worker's minimum wage and the agricultural worker's minimum wage, and equalised the general worker's minimum wage across regions. The restructuring of minimum wages was followed by the policy on reducing minimum wages in relation to the average wage ratio between 1970 and 1990. The ratio declined from 0.34 per cent in 1970 to 0.30 per cent in 1980 and 0.18 per cent in 1990 (Feliciano 1998: 167).

3.2.3.2 The effect of the reduced minimum wage on employment

Those who are against minimum wage policy are of the view that the policy leads to job losses of the very same people whom it is intended to help. The people who end up losing their jobs as the minimum wage level increases, are the uneducated and the less skilled (Schuldt *et al.* 2012: 265). The employers tend to prefer the services of skilled and experienced workers over those of less skilled workers. The reason is that the services of the less skilled and less educated are now more expensive while

their marginal products are lower when compared to those of the skilled workers (Schuldt *et al.* 2012: 265).

If minimum wage increases lead to job losses among the less skilled workers, minimum wage decreases should lead to an increase in the employment of these vulnerable workers. On the other hand, minimum wage decreases should lead to a decrease in the employment of the more skilled workers whose services have now become more expensive relative to those of the less skilled workers (Brown 1988: 136).

The outcomes for Mexico seemed to confirm the argument of the neoclassical economists that higher minimum wages would lead to job losses among the vulnerable and less skilled workers whom it was intended to help. That was because, when minimum wage levels were higher, very few less skilled female workers were employed, as their services were more expensive compared to the contributions made to the employing firms. In contrast with this trend, more skilled male workers were employed at the time when minimum wage levels were higher. However, as minimum wage levels decreased from the 1970s to the 1990s, the employment of the less skilled female workers between the ages of 15 and 64 increased, while the employment of skilled male workers decreased (Feliciano 1998: 178). These results were the confirmation that employers preferred the services of skilled workers only when minimum wage levels were lower.

3.3 The secondary sector

3.3.1 Minimum wages in India's secondary sector

3.3.1.1 Background of the wage-floor policy in India

India was one of the first developing countries to introduce minimum wage legislation in 1948. The introduction of a minimum wage policy was triggered by the following factors:

- An increase in the number of factories and wage earners in India in the first half of the twentieth century;
- A growing number of industrial unrests and strikes of workers who were dissatisfied with their slave wages; and
- The adoption by the international labour organisation in 1928 of Convention number 26 on minimum wage-fixing in trades where no effective bargaining took place or where minimum wages were extremely low (Belser & Rani 2012:46).

The central government set minimum wages in companies operating under a railway administration or major ports or any corporation established by the central government. All other rates were set by the states, which were assisted by the Tripartite Advisory Boards. The Tripartite Advisory Boards included representatives from government, employers and workers. The number of workers covered by minimum wages was determined by the number of scheduled employment and was decided upon at state level.

The original Minimum Wage Act of 1948 forced states to protect workers from 13 identified sectors where employees were considered most exploited. These were workers who were not covered by collective bargaining. The law also empowered the state governments to expand the list where necessary. There were more than 300 different sectors, which were covered by minimum wages in one or more of the Indian states (Belser & Rani 2012: 47).

The central government determined 48 minimum wage rates for different job categories. The various state governments set minimum wage rates for 1 123-job categories among the sectors scheduled in the Act. This meant that India had 1 171 different minimum wage rates. That made India to be a country with multiple minimum wage rates, which varied across states as well as across jobs within a

state. India, therefore, had sectoral and occupational minimum wages as opposed to a single national minimum (Belser & Rani 2012: 48).

International experience had proven that relatively simple systems were more effective than complex systems. It was found that multiple rates were difficult to communicate and enforce, especially when both workers and employers were not sure as to which rates were applicable to them (Belser & Rani 2012: 49). Cunningham (2007) concluded that it was better to design a simple system, which could be understood by all rather than attempting to address the heterogeneous needs of the labour force.

Policy-makers in India discussed the possibility of simplifying and extending the coverage of minimum wages to the whole labour force. A step was taken in 2003 when the Central Advisory Board constituted a working group, which led to the introduction of a non-binding national minimum wage floor. Initially, the national minimum wage rate was set at 66 Indian Rupee (Rs66). In 2011, the non-binding national minimum wage (Rs115) per day (Belser & Rani 2012: 49).

3.3.1.2 Minimum wage legislation and compliance

In 2004 and 2005, the level of non-compliance with minimum wage legislation was the highest in India. About 73 million wageworkers received wages that were below the stipulated minimum wages (Belser & Rani: 2012). Female workers and people residing in rural areas were most likely to earn wages that were below the stipulated minimum, while male workers and people living in urban areas earned more.

The situation became slightly better in 2009-10 as the level of non-compliance decreased from 73 million to 61.1 million. More male workers received minimum wages in 2009-10 than in 2004-05. More workers were still receiving wages, which were below the stipulated minimum wages in India's agricultural sector (Belser & Rani 2012: 51). This can be seen in Table 3.3 below.

Area	Rural (%)		Urban (%)		
Gender	Male	Female	Male	Female	
Himachal Pradesh	0.8	0.6	0.0	0.0	
Chandigarh	20.8		26.0		
Uttaranchal	5.0	1.9	55.9	58.2	
Haryana	11.6	19.3	3.8	88.3	
Delhi	6.0	12.1	0.0	22.3	
Rajasthan	0.1	0.0	0.0	0.0	
Urunachal Pradesh	0.2	0.0	0.0	0.0	
Manipur	1.3	1.2	1.8	0.6	
Mizoram	1.7	10.9	0.0	3.3	
Megalaya	17.1	29.5	33.3		
Orissa					
Gujurat	14.0	36.9	11.6	43.1	
Maharashtra	39.0	55.5	22.6	22.6	
Andhra Pradesh	41.1	53.7	29.2	58.7	
Karnataka	0.0	0.0	6.8		
Kerala	0.6	5.3	0.0	10.4	
Andaman and Nicobar Islands	1.2	0.0			

Table 3.3: Minimum wage legislation and non-compliance in India'ssecondary sector

Source: Belser and Rani 2012: 52.

From Table 3.3 above it is clear that non-compliance with minimum wage legislation was particularly higher in Maharashtra, Andhra Pradesh and Uttaranchal. In Uttaranchal, the level of non-compliance was higher in urban areas for both male and female workers where it was 55.9 and 58.2 per cent respectively. The level of non-compliance was much higher for women in both urban and rural areas as indicated in Table 3.3 above. In Maharashtra, for example, the level of non-compliance for female employees in rural areas was 55.5 per cent. In Andhra

Pradesh, it was 53.7 per cent in rural areas and 58.7 per cent in urban areas. In Haryana, 88.3 per cent of female employees received wages that were below the stipulated minimum wage levels.

However, there were some states where the compliance level was higher in both rural and urban areas. In Arunachal Pradesh, for instance, only 0.2 per cent of rural male workers received wages that were below the stipulated minimum wage levels. In the rural area of Karnataka, there was no worker who was paid below the stipulated minimum wage rates (Belser & Rani 2012: 52).

3.3.1.3 The role of the National Rural Employment Guarantee Scheme on minimum wages

The National Rural Employment Guarantee Scheme (NREGS) was introduced to promote the employment level among the unemployed rural majority of India. It also promoted better pay, as workers employed by NREGS were paid wages that were equivalent to the minimum wages or above. It provided a guarantee of 100 days of employment per household in the rural areas. All rural people who were willing to work registered with the rural council, which gave them the job cards. After receiving the job cards, a household could demand work at any time. After the household's expression of its willingness to work, employment had to be provided within 15 days of such expression. The majority of the people who were unemployed ended up finding employment in the National Rural Employment Guarantee Schemes. Between 2009 and 2010, about 52 million households were provided with employment. The additional employment created under NREGS had reduced underemployment and unemployment, and this created labour shortages in the rural and urban areas of India. It also curbed the movement of people from rural to urban areas, as there were then plenty of jobs in the countryside (Belser & Rani 2012: 59).

Wages under NREGS were linked to the statutory minimum wages of the agricultural sector workers. Later they were linked to India's non-binding national minimum wage rate. This made people to prefer to work for NREGS as opposed to those employers

who paid wages that were below the stipulated minimum wage levels. This led to labour shortages, especially for the employers who paid wages below the national minimum wages (Belser & Rani 2012: 64).

The labour shortages created by the NREGS programme made it possible for the low-paid workers to demand higher wages. They demanded wages that were at the same level as the national minimum wage or above. The labour shortages brought about by the implementation of NREGS forced employers to pay higher wages as demanded by the workers. The NREGS programme therefore had reduced the level of non-compliance with minimum wages (Belser & Rani 2012: 64).

3.3.2 Minimum wage policy in Ghana's secondary sector

3.3.2.1 Background of minimum wages in Ghana

Just like other African countries, Ghana increased its minimum wages to record levels during the first half of the 1970s. Between 1970 and 1975 the value of minimum wage levels increased by more than 40 per cent for workers in the private sector and by more than 80 per cent for workers in the public sector. The high minimum wage levels were in response to higher inflation rates, which made workers to demand higher wages in line with the increasing cost of living (Jones 1997: 7). This meant the adjustment of minimum wages in Ghana was tied to the inflation rate (Cunningham 2007: 20). From 1975 onwards, however, the government's attitude towards minimum wages changed in response to the other budgetary and political crises. The government was faced with a growing debt problem and because of that, it allowed the real value of minimum wages to be eroded by rising inflation in both the private and public sectors. By 1985, the value of minimum wages in Ghana had fallen to less than a third of what they were in 1975.

The position of the government regarding minimum wage legislation, however, changed in the early 1990s. In August 1991, for example, the Ghanaian government announced a new daily minimum wage, which increased the old wage floor in real terms by over 25 per cent. The purpose of that legislation was to raise the income

and purchasing power of the vulnerable low-income workers. Both the trade union movements and Ghana's Employers Association supported this legislation, which came into effect at the period when inflation was falling. This law was expected to be more biting, as it came about at the time when the inflation rate was declining (Jones 1997: 7).

3.3.2.2 Minimum wage policy and compliance in Ghana

The majority of firms in the manufacturing sector of Ghana complied with minimum wage legislation. Most of the workers in the formal sector earned wages that were either equal to or above the legal minimum wage levels. The majority of non-production, union and skilled workers earned wages that were above the stipulated minimum wages. Low-skilled workers, however, were most likely to earn incomes that were below the legal minimum wages. The majority of workers in the informal sector also earned wages that were far below the legal minimum wages. However, there were some informal sector firms which paid their workers minimum wages (Jones 1997: 8).

3.3.2.3 Minimum wage effect on employment

There is strong evidence that indicates that minimum wage increases in Ghana had a negative effect on employment. Due to the increases in minimum wage levels Ghana experienced massive job losses in the 1970s and 1980s. The 1991 minimum wage increase, in particular, led to a drop in manufacturing employment by about 5 to 6 per cent. However, the impact of minimum wage increases was not the same for all Ghanaian firms. The results from the cross-sectional analysis indicated that firms who complied with the legislation laid off about 2.5 per cent more workers than firms who evaded the legislation (Jones 1997: 10).

It is, however, not all firms, which laid workers off due to an increase in minimum wage levels. There was some evidence that showed that bigger firms increased employment after minimum wage increases. These results supported the

monopsony theory, which maintains that the introduction of minimum wage would raise the level of employment in the non-competitive sector (Jones 1997: 7).

The increase in Ghana's minimum wages led to an increase in informal sector employment. This was an indication that workers who had lost their jobs in the formal sector sought employment in the informal sector (Jones 1997: 10). If it were to be assumed that there was no simultaneous increase in the demand for informal sector workers, one could conclude that the rise in the level of employment in that sector led to a decrease in wage levels. This meant the Ghanaian minimum wage legislation had an adverse effect on reducing the wages of the most vulnerable workers in the informal sector (Jones 1997: 12).

Another possible effect of minimum wage legislation was a decline in female employment. In most developing countries, women are discriminated against in the labour market. In cases where the labour costs have increased, employers are most likely to lay off female workers ahead of male workers. The increase in minimum wages in Ghana, however, had no negative effect on the employment of female workers. It was discovered that more women entered the labour market instead after the fall of formal sector employment, which was mainly dominated by male workers (Jones 1997: 10).

3.3.3 Minimum wage legislation in Botswana's secondary sector

3.3.3.1 The background of minimum wage policy in Botswana

Minimum wage legislation was first introduced in Botswana in 1974. The main aim of the introduction of minimum wage legislation, just like in other countries, was to protect the vulnerable workers from being exploited by their employers. In Botswana, the government determined minimum wage levels. The government believed that the employers could take advantage of urban unemployment and push wages to unacceptable low levels, thereby making the situation for the vulnerable poor workers worse. The legal minimum wages were further seen as most relevant for Botswana because trade unions in that country were considered very weak. The weaker trade unions at the time made minimum wages the most relevant tool to protect the low-paid workers from being exploited by their employers (Sesinyi 1998: 8).

To ensure that both the employed and the unemployed were protected, minimum wage levels were set at very low levels. The authorities were afraid that high minimum wage levels could lead to the following negative consequences:

- Job losses amongst the working poor; and
- The significant slowdown in the creation of employment for any category of workers.

The authorities were also afraid that the high minimum wages would make it difficult for Botswana's businesses to compete with imports and sell successfully in foreign markets. They were also concerned that higher minimum wages could increase production costs, which would eventually make Botswana's products more expensive and uncompetitive in the global market (Sesinyi 1998: 11).

Another measure that was taken to protect the employed and the unemployed people of Botswana was the introduction of differentiated minimum wages. The authorities were concerned that some businesses could be unable to pay higher minimum wages. Botswana therefore looked at the enterprise's capacity to pay (Eyrand & Saget 2005: 38). At first, there were two minimum wages in Botswana, which covered five sectors in the economy. These sectors were building, construction, exploration, quarrying and manufacturing.

In 1985, there were five separate wage rates for the different categories of unskilled workers. Minimum wages for the unskilled workers ranged from 56 Thebe (Botswana's currency) per hour in the construction and other sectors to 37 Thebe per hour for night watchmen. The minimum wages, which were differentiated according to sector, confirmed that Botswana had sectoral minimum wages (Sesinyi 1998: 6). From 1985 onwards, the trend was towards a harmonisation of minimum

wages. The authorities wanted the people of Botswana to enjoy the benefits of a single minimum or only a few minimums. Those in the authorities realised that the single minimum wage or a few minimum wages were less confusing to the employers. They also realised that a single minimum or a few minimums would be most effective in reducing wage inequality and poverty among the working poor rather than the confusing multiple minimums (EI Hamidi & Terrell 2001: 3).

3.3.3.2 Minimum wage policy and compliance in Botswana

The Department of Labour and Social Security was responsible for enforcing minimum wage policy in Botswana. The Department took into consideration payment in-kind when assessing compliance with minimum wage legislation. The workers also had the right to demand payment in cash as opposed to payment in-kind.

Inspections to check compliance were supposed to be done twice per year. However, inspections in Botswana were not conducted regularly; they were either conducted once per year or not conducted at all due to the lack of resources (Sesinyi 1998: 9). Poor inspections in Botswana were caused by the fact that the country had insufficient funds to enforce minimum wages effectively. Benassi (2011: 14) asserted that labour inspections were not always carried out in many countries because they were costly and that governments did not always invest enough funds in financing them. The ILO (2009) concluded that labour inspector offices were often understaffed, underequipped and undertrained. These limitations made it difficult for inspectors to carry out their inspection work successfully in Botswana. In Botswana, the work of the inspectors entailed the following:

- The distribution of inspection forms to both the management and staff;
- Discussions between the department's officials and the workers;
- Department officials requesting the employers to pay the correct minimum and back pay the workers from April in cases where workers were paid below minimum wage levels; and
- To lay charges against employers who refused to comply (Sesinyi 1998: 9).

There was a high level of non-compliance with minimum wage levels in the manufacturing sector just like it was the case in other sectors. Lack of compliance with the minimum wage was mostly common among the smaller companies that were usually based in rural areas. The reason given for non-compliance with minimum wage legislation was that it was too high and unaffordable. Some employers argued that they did not know about the prevailing minimum wage rates. Fifty percent of the industries that were inspected were found to be paying their employees wages that were below the stipulated minimum levels (Sesinyi 1998: 9).

3.3.3.3 The effects of minimum wage legislation on employment

It was discovered that the overall employment level in Botswana had increased after the introduction of minimum wage policy. The increase in employment level was more evident in sectors where minimum wages increased by smaller percentages. However, in sectors where minimum wage levels increased by bigger percentages, it was discovered that the vulnerable workers were negatively affected by the increases because they lost their jobs (Sesinyi 1998: 12).

Scoville and Nyamadzabo (1988) found that the levels of minimum wages were lower in most of the economic sectors in Botswana. This is believed to be the main reason why minimum wage policy did not adversely affect output and employment in the country. Another reason why the legislation did not have an adverse effect on employment was that some firms had high proportions of skilled workers whose wages were already higher than the stipulated minimum wages (Sesinyi 1998: 12).

3.4 The tertiary sector

3.4.1 Minimum wage legislation in the tertiary sector of New Jersey

3.4.1.1 The setting of the wage floor in New Jersey

In November 1989, a bill, which raised the federal minimum wage from US\$3.35 per hour to US\$3.80 per hour, was signed into law. The law was to be effective from 1 April 1990 with a further increase to US\$4.25 per hour in April 1991. In 1990, the

New Jersey legislature went a step further and enacted parallel increases in the state minimum wage for 1990 and 1991. From 1992, New Jersey's minimum wage was to further increase to US\$5.05. The scheduled increase gave New Jersey the highest minimum wage in the United States (Card & Krueger 1994: 775).

In the two years between the passage of the US\$5.05 minimum wage and its effective date of 1 April 1992, New Jersey's economy slipped into a recession. This made the authorities reluctant to introduce the 80 cents minimum wage increase at that particular time. They were afraid that high minimum wage increase would worsen the economic conditions of New Jersey. To minimise the possible negative effects of higher minimum wage to the economy, the state legislature voted in March 1992 to phase in the eighty-cent increase over the period of two years. The purpose was to lighten the burden of high minimum wage to employers. The authorities failed to secure the necessary votes, which would allow them to introduce the 80 cents increase over the period of two years. The governor allowed the US\$5.05 to go into effect on April 1 1992, as was initially agreed (Card & Krueger 1994: 773).

Pennsylvania, where minimum wage was still at US\$4.25, was used as a control group in this case. Their choice of the fast food restaurants was motivated by the following factors:

- The fast food stores were the leading employers of low-wage workers in 1987;
- The fast food restaurants were known for complying with minimum wage regulations and they were expected to comply with the legislation even this time;
- The job requirements and products of fast food restaurants were relatively identical. That made it easy to obtain reliable measures of employment, wages and product prices;
- It was easy to compile a sample of frame of franchised restaurants; and
- The fast food restaurants were known to have a high response rate to telephone surveys (Card & Krueger 1994: 774).

Before the actual date of introducing the higher minimum wage of US\$5.05, Card and Krueger (1994) conducted a survey in both New Jersey and Pennsylvania to determine what the situation had been like before the high minimum wage legislation was introduced. In the first survey, they found the following information:

Table 3.4: The situation in Pennsylvania and New Jersey before the introduction of higher minimum wage legislation

	New Jersey	Pennsylvania
Full-time employment (%)	32.8	35.0
Starting wage (US\$)	4.61	4.63
Wage = US\$4.25 (%)	30.5	32.9
Price of full meal (US\$)	3.35	3.04
Hours open (weekdays) (hrs)	14.4	14.5

Source: Card and Krueger 1994: 776.

When the minimum wage level for both New Jersey and Pennsylvania's fast food restaurants was US\$4.25, the percentage of full-time employment was 32.8 per cent and 35.0 per cent respectively. The price of a full meal in Pennsylvania was US\$3.04 and in New Jersey the price of a full meal was slightly higher at US\$3.35. In terms of working hours, there was not much differences between the two states. In New Jersey, they were open for 14.4 hours per day and in Pennsylvania they operated for 14.5 hours per day (Card & Krueger 1994: 775).

3.4.1.2 The effect of minimum wage legislation on New Jersey's economy

After the introduction of the higher minimum wage of US\$5.05 in New Jersey's fast food restaurants, about 90 per cent of the employers paid their employees the stipulated minimum wage. Other employers paid their employees' wages that were above the stipulated minimum. There was not a single restaurant in New Jersey that still paid its workers wages below US\$5.05. They either paid the stipulated minimum

or higher minimum wages. The reason for the high compliance level was that the system of inspections used in that state was highly effective. The fast food restaurants of Pennsylvania, however, still paid their employees the lower minimum wage of US\$4.25, as the higher minimum applied only in New Jersey (Card & Krueger 1994: 776).

Despite the high minimum wage level in New Jersey's restaurants, the average percentage of full-time employment (FTE) increased from 32.8 per cent to 35.9 per cent. This finding supports the monopsonistic theory that minimum wages lead to an increase in the employment level. In Pennsylvania, where minimum wage levels remained unchanged at US\$4.25, the average percentage of full-time employment (FTE) decreased from 35.0 per cent to 30.4 per cent as can be seen in Table 3.5 below:

Table 3.5: The situation in New Jersey after the higher minimum wage legislation

	New Jersey	Pennsylvania
Full-time employment (%)	35.9	30.4
Starting wage (US\$)	5.08	4.62
Wage = US\$4.25 (%)	0.0	25.3
Wage = US\$5.05 (%)	85.2	1.3
Price of full meal (US\$)	3.41	3.03
Hours open (weekdays) (hours)	14.4	14.7

Source: Card and Krueger 1994: 776.

The hours of operation in New Jersey's fast food restaurants remained unchanged after raising the minimum wage rate. They still operated for 14.4 hours per day. In Pennsylvania, where the minimum wage level was lower at US\$4.25, the operation hours increased from 14.4 to 14.7 per day. The New Jersey's meal price increased from US\$3.35 to US\$3.41. This meant employers passed the higher labour cost on to the customers. In Pennsylvania, however, the price of a full meal decreased

slightly from US\$3.04 to US\$3.03 during the same period (Card & Krueger 1994: 776).

3.4.2 National minimum wage policy in the United Kingdom's tertiary sector

3.4.2.1 National minimum wage policy in small and medium-sized enterprises

The national minimum wage (NMW) came into operation in the United Kingdom in April 1999 (Druker *et al.* 2005: 6). The inaugural national minimum wage (NMW) levels was £3.60 for adult workers (i.e. workers aged 22 and above). There was also a developmental rate of £3.00 for young workers of ages 18 to 22. The developmental rate also applied to adult workers in the first six months of their new employment. This was intended to encourage employers to employ the youth and inexperienced people. Kristensen and Cunningham (2006: 6) asserted that special minimum wages could be set for some categories of workers like apprentices, the youth, workers with disabilities et cetera.

National minimum wage (NMW) was expected to benefit about two million poorly paid workers in the United Kingdom (UK), the majority of whom were women and young workers (Druker *et al.* 2005: 6). The opponents of the minimum wage policy argued that it would have negative consequences for the economy of the United Kingdom, especially for the firms that complied with the policy. McNabb and Whitfield (2000: 291) pointed out that the national minimum wage (NMW) would negatively affect a large number of small businesses since they were the ones that mostly employed majority of low-paid workers. The small businesses owners also complained that the increased employment regulations would affect their businesses negatively since they could not cope with the higher labour costs. They maintained that the new legislation would force them to replace labour with machines, as labour had become more expensive as a factor of production (Druker *et al.* 2005: 6).

3.4.2.2 National minimum wage legislation and the hairdressing salon industry

Hairdressing was a labour-intensive sector comprised predominantly of small businesses. About 80 percent of the hairdressing salon industry comprised businesses with fewer than ten employees. Sixty-five percent of the salons were single outlet businesses, usually with the employers working alongside their employees. This was an indication of how small those businesses were.

Despite the fact that the majority of businesses were small, the sector made a significant contribution to the economy of the United Kingdom. They made a positive contribution in that they employed and trained more women and young workers in the United Kingdom's economy. In 1999, for example, about 91 984 people were employed in the United Kingdom's hairdressing salon sector. By June 2002 the number of people employed in the sector increased to 103 000. People employed in this sector acquired skills that were important to their survival. The skills they had acquired in this sector enabled some of the women to open up their own small hairdressing salon businesses and become employers themselves (Druker *et al.* 2005: 8).

3.4.2.3 Compliance with the policy

Contrary to the complaints raised by the small business owners that the legislation would make the services of the vulnerable workers more expensive and that they would be forced to retrench some of these worker, the majority of employers in the United Kingdom's hairdressing salon businesses complied with the legislation. Where non-compliance existed, it was partial rather wholesale within the industry.

The high level of compliance with the legislation could be attributed to the fact that the United Kingdom's national minimum wage was less complex and easy to understand when compared to other countries' minimum wage legislation in the 1990s. One other factor that made the compliance level to be higher in the United Kingdom was that the inspectors targeted the sectors that were considered to be at risk of not complying with the legislation. This made it possible for the United Kingdom to use the limited resources available in the most effective way (Benassi 2011: 15). In this way, the level of compliance increased, as employers were afraid to be reported to the Employer Tribunal (Druker *et al.* 2005: 18).

However, some employers in the industry did not comply with the legislation. There were some salons, for instance, where workers worked 40 hours per week and were only paid for 37.5 hours. In these salons, the managers, together with their colleagues, were paid wages, which were below the adult national minimum wage of £4.10 in 2002. These employers preferred to employ young people and trainees whose wage rate was lower as compared to the adult national minimum wage (Druker *et al.* 2005: 19). The Low-Pay Commission (2003: 99) confirmed that the percentage of hairdressers who earned below the adult minimum wage remained higher as compared to other sectors. The main reason for this was that the hairdressing sector was a major training sector and it made more use of youth development rates and training exemptions than the other low paying sectors.

3.4.2.4 The effect of the national minimum wage policy on employment

Contrary to the concerns of the small business owners, the number of small businesses and the employment level in the UK's hairdressing sector had increased after the introduction of the wage policy. In June 1999 (three months after the introduction of the NMW), for example, there were 91 984 employees in the United Kingdom's hairdressing salon sector and by June 2002 the number of people in the industry had increased to 103 000, which was a 12 per cent increase (Druker *et al.* 2005: 9). This was an indication that more jobs were created in the hairdressing salon industry in spite of the introduction of national minimum wage legislation. Mason *et al.* (2006: 103) declared that the national minimum wage policy did not have any adverse effect on employment in the United Kingdom's hairdressing salon industry. The following were some of the reasons why the national minimum wage policy had negligible negative effects on the UK's hairdressing salon industry:

- The level at which the national minimum wage had been set initially was cautious. It was intended to avoid drastic consequences;
- Large numbers of under 18 trainees and 18-22-year-olds lessened the impact upon the overall pay bill, as their wage rates were lower; and
- National minimum wage adopted by the Low-Pay Commission allowed incentive pay to count towards minimum wage. National minimum wage legislation was introduced at the time when consumers were experiencing a growth in disposable income, as the United Kingdom's economy was doing well at the time. There was therefore a buoyant demand as people had more money to spend (Druker *et al.* 2005: 21).

Besides the increase in the level of employment, which came after the introduction of national minimum wage, the wage legislation also made a substantial improvement to the wages of low-paid workers in the hairdressing salon industry of the United Kingdom. The average gross annual, weekly and hourly earnings improved substantially after the introduction of the national minimum wage policy. However, the average weekly hours remained more or less stable after the introduction of the legislation. This is illustrated by the information in Table 3.6 below.

Table 3.6: Average earnings and working hours of adult femaleworkers after the introduction of the national minimum wage policy,1998-2003

Earnings	1998	1999	2000	2001	2003
Average Hourly Earnings (Pounds)	4.15	4.64	4.79	5.15	6.02
Gross Average Weekly Earnings (Pounds)	157.9	177.2	184.4	199.9	227.6
Gross Average Annual Earnings (Pounds)	7.962	8.368	9.201	9.809	10.812
Average hours per week	38.1	38.1	38.6	38.8	37.9

Source: Druker et al. 2005: 9.

The United Kingdom's national minimum wage improved the working conditions of full-time adult female workers of the hairdressing salon industry. After the introduction of the policy, for example, the average hourly earnings of the adult female workers increased from £4.15 in April 1998 to £6.02 in April 2003. These amounts excluded overtime pay. The average gross weekly earnings for female workers increased from £157.9 in April 1998 to £227.6 in April 2003, while the average gross annual earnings increased from £7 962 to £10 812 over the same period. Thus the weekly earnings increased by 12.2 per cent between 1998 and 1999, and by 44.1 per cent from April 1998 to April 2003 (Druker *et al.* 2005: 18).

The average working hours per week remained more or less stable after the introduction of the national minimum wage policy. In 1998 and 1999, for example, the average working hours per week were 38.1. These increased slightly to 38.6 per cent and 38.8 per cent in 2000 and 2001 respectively, but in 2003 these hours decreased to 37.9 (Druker *et al.* 2005: 18). This confirmed that the national minimum wage policy benefited the vulnerable workers as predicted by the proponents of the policy.

There were, however, some negative outcomes caused by the national minimum wage policy, especially amongst the reactive firms, which did not come up with new ways of effectively managing employment. In a survey of 6 000 small firms conducted by the Low-Pay Commission (2003) it was found that 11 per cent of those firms cited the higher national minimum wage as an obstacle to the success of their businesses. Some of those employers responded to the legislation by employing smaller number of trainees. Other salon owners simply passed on the increased cost of labour to the consumers through raising the prices (Druker *et al.* 2005: 17).

3.4.3 Minimum wage policy in Costa Rica's tertiary sector

3.4.3.1 Background of minimum wages in Costa Rica

Costa Rica, like other countries, introduced minimum wages to improve the welfare of the working poor. They wanted to use a minimum wage policy to reduce earnings inequality in Costa Rica's covered and uncovered sectors. Costa Rica had multiple minimum wages, which were set for various occupations and industries. In the 1970s and early 1980s, for example, they had about 350 minimum wages (Gindling & Terrell 2002: 6).

Later the authorities realised that a single minimum wage or a few minimum wages would be more effective in reducing wage inequality and poverty than multiple minimum wage levels. This made them reduce the number of minimum wages to about 80 (EI Hamidi & Terrell 2001: 3). In 1997, the policy of setting minimum wages by industry was done away with and it was replaced by a simpler system that was based on the educational qualifications of the workers (Gindling & Terrell 2002: 6).

The Costa Rican minimum wage was always set by negotiations. It was decided by negotiations within the tripartite body, which consisted of the National Council of Salaries representing workers, employers and government. Adjustments were made on an annual basis until 1980. As the inflation rate increased in the 1980s, the frequency changed to two adjustments per year. The first increase was made in January while the second was made in either June or August each year. The adjustments were largely inflation based (El Hamidi and Terrell 2001: 3).

In the 1980s and 1990s, the Costa Rican National Salary Council took an additional step of systematically raising the lowest wage floor by a greater percentage than it raised the higher minimum wages. This was done to reduce the level of wage inequality between the rich and the low-paid workers in Costa Rica (Gindling & Terrell 2002: 6). This was an indication that Costa Rica was more determined to use minimum wages as a vehicle to improve the living conditions of the working poor in that country.

Eyraud and Saget (2005: 87) asserted that minimum wages could serve to reduce wage inequality if it were increased faster than wages of the highly paid workers. To achieve the country's goal of reducing inequality between the rich and the poor workers, the council did not allow minimum wages to be eroded by inflation, as it was the case in most Latin American countries like Ecuador, Mexico and Peru. This made minimum wages to be relatively stable in Costa Rica over the period 1976 to 1992 (Gindling & Terrell 2002: 6).

3.4.3.2 Minimum wage policy and compliance in Costa Rica

As in other developing countries, compliance with the minimum wage policy was not perfect in Costa Rica. On average, 33 per cent of full-time salaried workers earned less than the lowest minimum wages between 1976 and 1991. The share differed according to industries. The highest non-compliance level in the tertiary sector was in personal services and transportation where it was 44 per cent and 15 per cent respectively (Gindling & Terrell 2002: 7).

Inspectors employed by the Ministry of Labour carried out the enforcement of the policy. They worked on complaints made by workers to the National Directorate of Work Inspection. About 11 per cent of the Costa Rican businesses were inspected for violating minimum wage legislation. The inspection level was the highest in commerce where half of all inspections were made between 2000 and 2001 (Gindling & Terrell 2002: 7).

3.4.3.3 The effects of minimum wages on wage inequality

Up to a certain point, an increase in the service sector minimum wage in relation to an industry's average reduces wage inequality in that sector. This is true only when minimum wage rate is not set at a very high level. When the minimum wage level is set at an extremely high level, it increases instead of decreases the level of inequality as can be seen in Table 3.7 below.

Income Inequality	Average Wages Levels				
Average Wages	Lowest	Median	Highest		
	(30.0)	(55.5)	(89.0)		
Gini coefficient (Gini)	-0.0195	-0.0093	0.0041		
Theil index (Theil)	-0.0346	-0.0173	0.00552		

Table 3.7: The effect of the minimum wage level on wage inequality

Source: El Hamidi and Terrell 2001: 14.

At the average wage level of 30 per cent, a one-percentage point increase in minimum wage reduces income inequality by 2 per cent when the Gini coefficient (Gini) is used and by 3 per cent when the Theil index (Theil) is used. At an average wage level of 55.5 per cent, a one per cent increase in the minimum wage reduces wage inequality by 0.9 per cent when the Gini coefficient is used and by 1.7 per cent when the Theil index is used, as illustrated in Table 3.7 above.

However, at an average wage level of 89 per cent, a one-percentage point increase in minimum wage increases inequality by 0.4 per cent when the Gini coefficient is used and by 0.6 per cent when the Theil index is used (El Hamidi & Terrell 2001: 9). This is an indication that minimum wages have managed to improve the living conditions of the vulnerable workers of Costa Rica when wages were at a lower level.

3.4.3.4 The effects of minimum wages on employment

Contrary to the conventional view that minimum wages lead to job losses, El Hamidi and Terrell (2001) discovered that minimum wages increased the employment level at a decreasing rate in the Costa Rican service sector. When the average wage level was lower, an increase in the minimum wage level led to a higher increase in employment. However, at the higher average wage level, the minimum wage increase led to a decrease in the employment level (El Hamidi & Terrell 2001: 8). This is illustrated by the information in Table 3.8 below.

Table 3.8	: The	impact	of	minimum	wage	levels	on	employment in
Costa Ric	a							

Wage Inequality	Average Wage Levels				
Average Wages	Lowest	Median	Highest		
	30.0	55.5	89.0		
Total employment (%)	1.1	0.3	-0.6		
Covered employment (%)	1.3	0.6	-0.4		

Source: El Hamidi and Terrell 2001: 15.

When the average wage level was 30 per cent, a one percentage point increase in the minimum wage raised the total employment level by 1.1 per cent while employment at the covered sector increased by 1.3 per cent. At the average wage level of 55.5 per cent, a one-percentage minimum wage increase raised the total employment level by 0.35 per cent while the employment level in the covered sector increased by 0.56 per cent. At the average minimum wage level of 89 per cent, however, a one-percentage point increase in the minimum wage decreased the total employment by -0.6 per cent while employment in the covered sector decreased by -0.4 percent (El Hamidi & Terrell 2001: 15). These findings support the monopsonistic model, which holds that the increases in minimum wages may raise employment up to the point where marginal cost is equal to demand curve. When that point has been reached, a further increase in minimum wages forces the employer to be on his demand curve, and this makes him to retrench workers (Jones 1997: 3).

3.5 The effects of the minimum wage policy on poverty alleviation

The proposal to introduce minimum wage legislation is popular among politicians because it is widely seen as an effective tool to pull the working poor out of poverty and promote equal distribution of income (Sabia & Burkhauser 2010: 592). This

perception makes minimum wages to be popular in most countries of the world with the exception of the Middle East (ILO 2009: 2).

There is, however, no consensus regarding the effectiveness of a minimum wage policy as an instrument for poverty alleviation. The empirical evidence produced conflicting results. There were countries where the introduction of minimum wages produced unintended consequences like the substitution of low-paid workers by skilled workers or machines (Zavodney 1998: 20). However, there were also countries where the introduction of minimum wages benefited the low-paid workers. These were instances where minimum wages led to increased employment and strengthened the bargaining power of the working poor (Murphey 1996: 84).

3.5.1 Cases for minimum wages: Empirical evidence

The supporters of the minimum wage policy argue that it is the most useful tool for alleviating poverty among the working poor. They maintain that those who criticise the policy base their arguments on unrealistic assumptions of the perfect market which include the following:

- Labour markets are perfectly competitive. No firm is able to influence the price in this market;
- Workers are homogeneous, which means that all workers have the same level of skills;
- Workers are perfectly mobile. They move without any hindrances from one place to another; and
- Workers have access to full information of job opportunities available (Devereux 2005: 902).

If any of these assumptions could be relaxed, the positive effects of minimum wages would be realised (Boadway & Cuff 2001: 554). In areas where poverty is so widespread that the supply of unskilled labour is greater than labour demand, for example, a legislated minimum wage could increase aggregate employment (Devereux 2005: 902).

The higher minimum wage of US\$5.05 introduced in New Jersey in 1992, for example, did not only increase the wages of the working poor, but it also increased the employment level. After New Jersey's minimum wage was raised from US\$4.25 to US\$5.05 per hour full-time employment (FTE) among the working poor increased from 32.8 per cent to 35.9 per cent (Card & Krueger 1994: 776). Similar positive results were achieved in the United Kingdom's hairdressing salon businesses after the introduction of national minimum wage legislation in 1999.

The introduction of a national minimum wage (NMW) did not only raise the wages of the low-paid workers in the hairdressing salon businesses, but it also led to an increase in employment in that sector. The number of low-paid workers, most of whom being women and the youth employed in the hairdressing salon businesses, increased from 91 984 in 1999 to 103 000 in June 2002 (Druker *et al.* 2005: 8). These findings refuted the argument raised by the opponents of a minimum wage policy who claimed that the policy would lead to job losses among the least skilled, least educated and least experienced workers (Schuldt *et al.* 2012: 265).

They also argued that the minimum wage policy made it impossible for the people with little or no work experience to find their initial employment that would provide them with much needed experience and on-the-job training (Brown & Johnson 2006: 4). This argument also turned out to be untrue in the case of the United Kingdom's hairdressing salon sector because the majority of people employed in this sector were women and inexperienced youth who were entering the job market for the first time. Some of these workers ended up acquiring much needed skills and experience, which made it possible for them to open up small hair salon businesses of their own (Druker *et al.* 2005: 8).

Contrary to the classical economists' prediction that minimum wages would lead to job losses, the minimum wage policy increased employment in Costa Rica, especially when these were at a lower or middle level. When the average wage level

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was 30 per cent, for instance, a further one percentage point increase in minimum wage level increased total employment by 1.1 per cent while employment in the covered sector increased by 1.3 per cent. At the average wage level of 55.5 per cent, a further one percentage point increase in the minimum wage level increased the total employment level by 0.4 per cent while employment in the covered sector increased by 0.6 per cent (El Hamidi & Terrell 2001: 8). This totally contradicted the argument raised by the opponents of the minimum wage policy who maintained that minimum wages would lead to job losses.

These findings supported the monopolistic model raised by the supporters of minimum wages that the employers paid their workers' wages, which were, less than their marginal value product. They argued that forcing the monopsonist to pay a minimum wage increased both wages and employment levels. They maintained that this helped to reduce income inequality as more people from the informal sector then would be employed in the formal sector where wages were higher compared to wages in the informal sector (Devereux 2005: 902).

Despite the higher level of non-compliance and job losses which followed the introduction or raising of minimum wages in most of the developing countries, the policy had somewhat played a role in reducing the levels of inequality and poverty in those countries. The higher minimum wages paid by the firms that complied with the legislation acted as reference wages to the employers of the low-paid workers. The employers of the vulnerable workers, who were found in areas where the policy was implemented, usually raised their employees' wages in accordance with minimum wages paid in their respective areas.

Eyraud and Saget (2005: 62) point out that the increases in minimum wages affected wages across the board because they were usually regarded as wage benchmark. This meant other employers in the area ended up modelling the wage increases of their employees to the minimum wages paid to low-paid workers in their vicinity. This was helpful in reducing the income inequality and poverty among the vulnerable workers. In Malawi, for example, the higher minimum wages paid by the firms that

complied with the legislation pulled up the wages of other estates in their immediate vicinity (Livingstone 1995: 737). Minimum wages were also used as reference wage in India. The labour shortage created by the National Rural Employment Guarantee Scheme programme (NREGS) in India made it possible for the working poor to demand higher wages, which were at the same level as the national minimum wage. The employers of the low-paid workers were forced to respond positively to the demands because workers were becoming scarce due to the NREGS programme (Belser & Rani 2012: 64).

The opponents of minimum wages argued that it helped the people from the middleand high-income families as well as people with no children as opposed to the working poor whom it was intended to help. Herman (1996: 4) concluded that increases in the minimum wages did not raise the poor from poverty since earners were part-time workers, students and people holding down second jobs or supplementing the income of their households' primary earners.

Contrary to the argument raised by the opponents of minimum wage policy that it benefits people from rich families, Belser and Rani (2012) found that about 30 per cent of salaried workers and 40 per cent of casual workers in India lived in poor families between 2004 and 2005. They also found that among the wage earners living in poor families about 50 per cent earned less than minimum wages. This meant there was a greater possibility that minimum wages in India played a pivotal role in reducing poverty among the working poor. This dispelled the myth held by the classical economists that the minimum wage policy benefited people from rich families (Belser & Rani 2012: 52).

The opponents of the minimum wage policy argued that the policy did not help the working poor as the businesses that employ these workers did not comply with the legislation (Rama 2001: 868). They maintained that the firms that employed minimum wage workers evaded the legislation if they realised that chances of being detected were lower (Jones 1997: 1).

This was more common in countries where the labour inspectors were paid little and therefore more prone to corruption (Skidmore 1999: 428). Contrary to this assertion made by the opponents of minimum wages, the majority of employers in the hairdressing salon sector of the United Kingdom complied with the wage legislation (Druker *et al.* 2005: 20). The high level of compliance in the UK was promoted by the effective labour inspections, which targeted the employers considered most likely not to pay the stipulated minimum wage. Employers who were found to have defaulted on minimum wage payment were forced to pay the arrears. The labour inspectors could also take the employers, who deliberately failed to pay the arrears, to court where they would be criminally prosecuted (Benassi 2011: 15). Criminal prosecution was also carried out in cases where the employers had given the authorities false records and information. The fear of prosecution encouraged the employers to comply with the stipulated minimum wage in the United Kingdom (Low Pay Commission 2003: 199).

The United Kingdom's government also ran campaigns intended to make the lowpaid workers aware of the national minimum wage. The campaign was particularly more intense in sectors where the most vulnerable workers were employed like the hairdressing salon sector. In carrying out such campaigns, they made use of different communication methods, which were accessible to vulnerable workers such as posters, leaflets, newspapers and publicity buses. They also made procedures for laying complaints more simple and accessible to the most vulnerable workers (Benassi 2011: 21). These incentives encouraged the employers to comply with the national minimum wage.

The level of compliance with the minimum wage policy was higher in New Jersey. After the raising of the New Jersey's minimum wage there was no restaurant in that state which still paid its employees a wage rate of US\$4.25. About 85 per cent of the restaurants in New Jersey paid their employees the stipulated wage of US\$5.05 while others paid wages that were higher than the stipulated minimum wages (Card & Krueger 1994: 776). This made the argument of the opponents of the policy that employers did not comply with minimum wages to be untrue in this case.

3.5.2 Cases against minimum wages: Empirical evidence

The classical economists argue that minimum wages lead to unemployment in the formal sector as it causes retrenchments of the working poor. Addison and Blackburn (1999) point out that minimum wage levels reduce the share earnings that go to the low-paid workers by displacing them from employment. They argue that the workers whose services are worth less than minimum wages are discharged from employment by the firms that comply with the legislation. The displaced workers will seek employment in the informal sector where they will secure lower returns (Jones 1997: 7). The laid-off workers will then depress wages in the sectors into which they are forced to seek employment, especially the rural and urban informal sectors (Stigler 1946: 359).

The introduction of minimum wages led to job losses among vulnerable workers in countries like Mexico, Ghana, Kenya, Costa Rica, India and Malawi. A 10-percentage point increase in Kenya's minimum wage, for example, reduced the share of formal sector employment by 5.6 per cent (Andalon & Pages 2008: 17). In Ghana, the introduction of a minimum wage policy in the manufacturing sector led to job losses among the low-paid workers employed by smaller firms, which complied with the legislation.

The 1991-minimum wage increase, for instance, led to a 5 to 6 per cent drop in the manufacturing sector's employment in Ghana. From the cross-sectional analysis, it was found that the Ghanaian firms that complied with the minimum wage regulations released 2.5 per cent more workers than firms, which did not comply (Campolieti *et al.* 2012: 289).

The majority of workers who lost their jobs in the formal sector found employment in the informal sector. It is believed that the increase in informal sector employment led to a decrease in wages in that sector, as there was then labour surplus (Jones 1997: 12). This meant the increase in minimum wages in Ghana had an unintended consequence of increasing instead of reducing poverty among the working poor (Campoliet i*et al.* 2012: 289).

The higher minimum wages also led to job losses and a reduction in working hours in the agricultural sector of Malawi, particularly in the tea estates. The Malawian Ministry of Labour found that the number of working days in the tea estate sector was reduced, following the raise in minimum wages. After the higher minimum wage increase of 95 per cent in Blantyre and 126 per cent in the countryside, for instance, the number of working days in the tea estate sector decreased by 17 per cent.

In the tobacco estate sector the number of working days decreased by 11 per cent when compared to the four quotas before the higher minimum wages came into effect (Livingstone 1995: 738). These employers reduced the working days and working hours in order to minimise the high labour cost brought about by higher minimum wages. This made minimum wages to be an ineffective poverty alleviation tool, as it led to job losses and a reduction in working hours for the vulnerable workers. It only protected the few workers who managed to retain their jobs (Eyrand & Saget 2005: 96).

The Mexican situation also confirmed the neoclassical economists' argument that minimum wage was an ineffective tool for poverty alleviation among the less skilled and low-paid workers. This is because employers preferred employing low-paid workers who were less skilled and less experienced only when the wages were lower. At the time when minimum wages were higher in Mexico, for example, fewer skilled and less experienced women between the ages of 15 and 64 were employed. In contrast, more skilled males between the ages of 55 and 64 were employed during the period when minimum wages were high, as employers preferred their services over those of less productive and less skilled workers whose services were then more expensive compared to their marginal product. However, as minimum wages decreased from the 1970s to the 1990s, the employment of the less skilled

female workers between the ages of 15 and 64 increased while the employment of highly skilled male workers between the ages of 55 and 64 decreased (Feliciano 1998: 178).

This confirmed the notion that employers would only prefer the vulnerable and less skilled workers when minimum wages were lower. However, but as soon as minimum wages increased, the employers preferred the skilled workers to the less skilled employees. The reason was that the services of unskilled workers were more expensive relative to their outputs. This meant the less skilled and less experienced workers were laid off as their services had become more expensive compared to the value of their marginal product (Stigler 1946: 358).

The opponents of a minimum wage policy also argue that the level at which those wages are set depends on the expected employment effect they may have on the low-paid workers. If politicians believe that the negative employment effect will be higher, they may increase minimum wage levels just modestly or not raise them at all. The politicians usually raise minimum wages when the negative effects are expected to be minimal, especially at the time when the economy is doing well and the average wages are higher (Zavodney 1998: 24).

Botswana and Costa Rica's minimum wages did not lead to job losses because they were set well below the competitive levels. In Botswana, the authorities kept minimum wages lower in order to protect both the employers and the workers. The workers were being protected from possible job losses that could happen if the wages were above the competitive level. The authorities also wanted to keep the cost of production lower so that Botswana's products could continue to remain competitive in the global market (Sesinyi 1998: 11).

In Costa Rica, employment levels increased only when the average wage levels were lower. At the average wage level of 30 per cent, a one per cent minimum wage increase raised the total employment level by 1.1 per cent while employment in the covered sector increased by 1.3 per cent. However, as average wage levels increased, further increases in minimum wages led to job losses. When the average wage level was 89 per cent, for example, a further one per cent increase in minimum wages made the total employment level to drop by 0.6 per cent while employment in the covered sector decreased by 0.4 per cent (El Hamidi & Terrell 2001: 8). This confirmed the assertion made by the opponents of minimum wages that the minimum wage level did not alleviate poverty because it was usually set at very low levels (Eyrand & Saget 2005: 96).

The sceptics of minimum wages also argue that the minimum wages do not alleviate poverty among the working poor because the firms, which employ minimum-wage workers, do not comply with the policy. They continue to pay wages that are below the stipulated minimum, especially when the possibilities of being detected are lower. The problem of non-compliance with minimum wages is common in developing countries where there are low levels of enforcement. The low level of enforcement occurs because of poor administration and the inability of the authorities to conduct inspections on firms that employ minimum-wage workers (Devereux 2005: 902).

In countries like Botswana, Malawi, Kenya, Costa Rica and India, for example, enforcement was legislated, but it was not carried out due to lack of resources such as vehicles to conduct inspections and telephones to receive complaints from low-paid workers whose employers did not comply with the legislation. The scarce data on enforcement in these countries is a confirmation that fines were rarely enforced (ILO 2009: 26).

About 50 per cent of the industries inspected in Botswana, for example, were found to be paying their workers below the stipulated minimum wages (Sesinyi 1998: 9). In 2009 and 2010, about 15.4 per cent of paid workers and 40.9 per cent of casual workers in India received wages that were below the stipulated minimum wage of eighty Indian Rupees (Rs80) per day (Belser & Rani 2012: 51).

In Kenya, the level of non-compliance with minimum wages was high for both skilled and unskilled workers. In the highly skilled occupations, non-compliance was common among the tractor drivers and salesmen where it was about 68 per cent. In the unskilled occupations, non-compliance was about 78 per cent (Andalon & Pages 2008: 10).

Most of the employers in Ghana complied with the higher minimum wages. Some of the employers even paid their employees' wages that were above the stipulated minimums. However, the situation was different with regard to the less skilled workers in smaller firms and workers in the informal sector. These workers were paid wages that were below the stipulated minimum wages because the employers could not afford higher labour costs (Jones 1997: 7). Eyraud and Saget (2005: 108) found that the proportion of workers earning less than the stipulated minimum wages was usually higher in smaller firms with fewer than six workers than in the larger firms due to limited resources.

Following the high increase in consumer inflation in the 1980s, Malawi responded by raising minimum wages to improve the wages of the vulnerable workers. A large number of deserving salaried workers in Malawi received wages that were below minimum wage levels. In 1990, for example, when the rural minimum was 45 Malawian Kwacha per month, 59 per cent of deserving workers in the tobacco estates received wages that were below minimum wage rates (Livingstone 1995: 737).

The level of non-compliance with minimum wages was also high in Costa Rica. Majority of the working poor in that country received wages, which were below the lowest stipulated minimum wages. On average 33 per cent of full time salaried workers earned wages, which were less than the lowest minimum wages between 1976 and 1991. The highest non-compliance level in the tertiary sector was in the personal services and transportation where it was 44 and 15 per cent respectively (Gindling & Terrell 2002: 6).

The level of compliance with minimum wages was also low in India. In 2004 and 2005, for instance, 73 million Indian workers were paid wages that were below the stipulated minimum wage rate. The female workers and workers in rural areas were the most affected by the high level of non-compliance. About 55.5 per cent of female workers in the rural area of Maharashtra and 88.3 per cent of female workers in the urban area of Haryana, for example, received wages that were below the stipulated minimum wage levels as can be seen in Table 3.3 on page 17 (Belser & Rani 2012: 52). The poor level of enforcement of the minimum wage policy made it to be an ineffective tool for alleviating poverty in India.

The opponents of the legislation also argue that the job losses, which follow the increase in minimum wages, cause the output level in the particular sector to decline. A decrease in the output level creates a situation where demand is greater than supply and this causes prices to rise (Zavodney 1998: 21). The increase in New Jersey's price of a full meal from US\$3.35 to US\$3.41 following the introduction of the US\$5.05 minimum wage seems to confirm the prediction made by the opponents of the policy. Also, some owners of hairdressing salon businesses in the UK have responded to the introduction of the national minimum wage by increasing the prices of their services. If the working poor were the primary purchasers of goods produced by minimum wage workers, the rise in prices would have a negative effect on the very same people whom the policy was intended to help (Freeman 1996: 245).

3.6 Conclusion

Minimum wage policy produced inconsistent results in different countries. In some countries, the policy produced positive results in that it did not only raise the wages of the low-paid workers, instead it also led to an increase in employment levels in sectors in which it was implemented, as predicted by the supporters of minimum wages. These are countries where the introduction or raising of wage floors have led to an increase in both working hours and employment levels as predicted by the supporters of minimum wages (Edwards & Gilman 1999).

In New Jersey's fast food restaurants and the United Kingdom's hairdressing salon sector, for example, the introduction or raising of minimum wages did not only lead to an increase in wage levels of the vulnerable workers, but it also led to an increase in employment levels and working hours. In these countries and sectors of the economy, minimum wages had therefore improved the living conditions of the working poor.

However, there were countries and economic sectors where minimum wages produced unintended negative consequences. In these countries and economic sectors, the introduction of minimum wages did not only lead to the reduction of the working hours and working days, but it also led to massive job losses among the working poor as predicted by the opponents of the policy.

In countries like Ghana, India, Malawi and Kenya, for example, the introduction or raising of minimum wages led to job losses among the working poor whom it was intended to help. These high levels of job losses were even minimised by high levels of non-compliance, which was encouraged by poor enforcement due to lack of the necessary resources needed to carry out inspections. These findings supported the argument raised by the opponents of minimum wages that in developing countries, minimum wages were the principal source of labour market segmentation and unemployment (El Hamidi & Terrell 2001).

CHAPTER 4

AN OVERVIEW OF MINIMUM WAGES IN SOUTH AFRICA'S AGRICULTURAL SECTOR

4.1 Introduction

Just like other countries, South Africa is faced with a huge challenge of poverty. Poverty is most prevalent among the unemployed and the low-paid workers. The high level of poverty is an indication that the economy is unable to distribute income equally among its citizens. The majority of the low-paid workers are black Africans, female workers, the youth, the uneducated and those with low levels of education (Oosthuizen 2012: 180).

In an attempt to alleviate the high level of poverty the South African government introduced a variety of policies that were intended to redistribute income to the unemployed and the working poor (Yamada 2012: 42). One of the policies that was intended to redistribute income and pull the working poor out of poverty is the minimum wage policy for those sectors where workers were grossly exploited by their employers (ILO 2013)

One of the sectors in which minimum wages were introduced was the agricultural sector. In this sector, minimum wages were introduced in December 2002 and came into effect in March 2003 (Naidoo *et al.* 2007: 30). In 2013, the agricultural sector's minimum wage was raised by a significant 52 per cent in an attempt to alleviate poverty among the working poor (Agrisa 2014: 4).

The standard competitive model predicted that minimum wages would force employers to lay off inexperienced and unskilled workers, as their labour had become more expensive relative to the contribution made to the firm. These workers would then be replaced by skilled workers whose wages had increased by smaller margins (Schuldt *et al.* 2012: 265). The classical economists also argue that the policy does not actually help the working poor because most of the employers do not comply with legislation regarding minimum wage. They continue to pay wages that are lower than the stipulated wages, since there is a low level of enforcement (Jones 1997: 1).

The purpose of this study is to look at the level of minimum wages and employment trends in South Africa's agricultural sector, as it is intended to find out if the minimum wage policy had led to job losses among the working poor in the agricultural sector whom the policy is intended to help, as predicted by the standard competitive model. Lastly, the research is also intended to find out if the wage policy has been properly implemented and monitored in the sector.

The first part of this chapter deals with the main causes of poverty in South Africa. This will be followed by the description of South Africa's agricultural sector and the historical background of the sector where the focus will be on the periods before and after 1994. Thereafter a discussion about the size and the characteristics of agricultural sector workers is undertaken. The social and economic conditions of the working poor in the agricultural sector will be discussed thereafter. This will be followed by a discussion about the government's intervention and the criteria used to determine minimum wages in the sector.

The research methodology will be discussed thereafter and this is followed by an analysis of the minimum wage theory and its relevance to South Africa's agricultural sector. Then an analysis of how the minimum wage policy is implemented in the agricultural sector follows. The last part to be dealt with in this chapter is the conclusion.

4.2 Poverty levels in South Africa

Poverty is a situation where individuals, households or entire communities are unable to command sufficient resources necessary to satisfy a socially acceptable standard of living (Ngwane *et al.* 2001: 202). High levels of poverty persisted long

after the first democratic government came to power in 1994. Poverty among the previously disadvantaged groups has remained high even after most of the apartheid laws have been replaced by the new policies designed to tackle the imbalances of the past (Oosthuizen 2012: 173).

Although the intensity of poverty in the country was lessened by social wages, the majority of South Africans remained trapped in poverty (Meth & Dias 2004: 83). The following poverty lines were used to monitor poverty levels in South Africa:

- Food poverty line: This refers to the amount of money that a person will need in order to consume the required energy intake (Statistics South Africa 2009: 5). In 2014, South Africa's food poverty line was R400 per capita per month;
- Low-bound poverty line: This refers to the poverty line where people do not have enough money to purchase both food and non-food items. These people are forced to sacrifice food items in order to pay for other things like transport and airtime (Meth & Dias 2004: 23). In 2014, the low-bound poverty line was R544 per capita per month (Nicolson 2015: 1); and
- Upper-bound poverty line: This refers to the food poverty line plus the average amount derived from the non-food items of households whose total spending is equivalent to the food poverty line (Statistics South Africa 2009: 5). In 2014, the upper-bound poverty line was R753 per capita per month in South Africa (Nicolson 2015: 1).

International poverty lines of US\$1.90 and US\$3.20 were also used to monitor the progress of the Millennium Development Goals. The US\$1.90 poverty line was generally accepted as the international standard of extreme poverty. These amounts were expressed in terms of the purchasing power parity (PPP), which expressed prices adjusted for cost of living in a benchmark currency. In this case, it was the US dollar (World Bank Group 2017: 1).

The proportion of South Africans living below the international poverty line of US\$1.90 per day increased from 16.6 per cent in 2011 to 18.9 per cent in 2015. At the same time the proportion of people living below the poverty line of US\$3.20 per

day also increased from 35.9 per cent in 2011 to 37.6 in 2015 (World Bank Group 2017: 1). This was an indication that government's social wages did not lower poverty levels sufficiently.

Poverty levels were also higher in all nine provinces of South Africa. The poverty rate for each province, according to the upper-bound poverty line, indicated that the poorest of all provinces was the Limpopo Province with the poverty level of 63.8 per cent. It was followed by the Eastern Cape and Kwazulu-Natal at the poverty levels of 60.8 per cent and 56.6 per cent respectively. Poverty levels were lower in Gauteng and Western Cape where they were 22.9 per cent and 24.7 per cent respectively as can be seen in Figure 4.1 (Statistics South Africa 2009: 12).

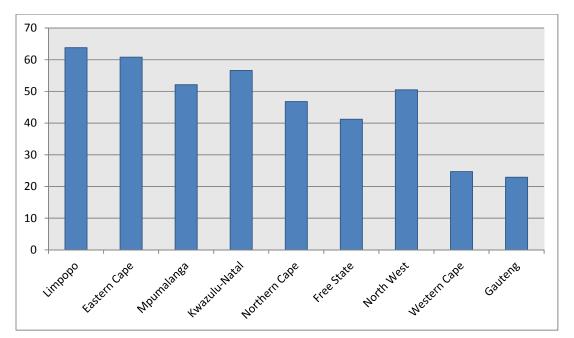


Figure 4.1: Poverty levels by province in 2009 (Percentage)

Source: Statistics South Africa 2014c: 12.

The main causes of the high rate of poverty in the country were the following:

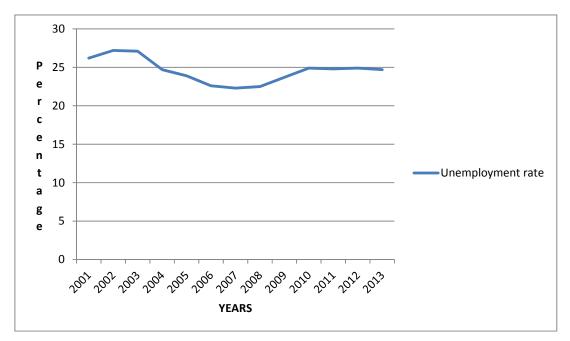
- Many households had no access to wage income (unemployment); and
- Wage income was unequally distributed across the households that had access to it (Murray *et al.* 2001: 78). Allanson and Atkins (2005: 1024) asserted that the substantial wage disparities between the rich and the

poor and the resultant poverty persisted several years after the transition to the democratic majority rule government.

4.2.1 Unemployment and poverty

According to the official definition, "unemployment" refers to people who were without work in the week preceding the interview, have taken steps to search for employment or start a business, and were available to work immediately (Department of Planning, Monitoring and Evaluation 2012: 23). The high level of unemployment continued to be a challenge in the country long after the 1994 elections, which ushered in a new democratic government. The high rate of unemployment can be seen in Figure 4.2 below.

Figure 4.2: The official unemployment rate in South Africa, 2001 and 2013 (percentage)



Source: Department of Planning and Monitoring 2012 and 2014.

For the entire decade the official unemployment rate in South Africa was above 20 per cent. It was, however, much higher in 2002 and 2013 where it was 27.2 and 27.1

per cent respectively. This was due to an economic slowdown that was illustrated by the lower real GDP growth of only 3.7 per cent in 2002 and 2.9 percent in 2012 (Department of Planning, Monitoring and Evaluation 2012: 14). The higher unemployment rate was the main cause of poverty in the country.

4.2.2 Low-pay and poverty

Most sectors in the South African economy were subject to minimum wages that had been agreed upon through collective bargaining (Business Day Live 2015: 3). Bargaining councils were used in sectors where collective bargaining was adequate between unions and employers. Some sectors were, however, characterised by weaker collective bargaining councils. This was mainly due to the difficulties of organising workers in occupations where employment was widely dispersed or where enterprises were small. The difficulties encountered in organising workers made union coverage to be very low in sectors like domestic work, farming, construction and wholesale/retail (Oosthuizen 2012: 186). The union representation of the various sectors of the South African economy in 2002 can be seen in Table 4.1 below.

Economic Sectors	% of Union Representation
Domestic work	1.17
Farming sector	7.98
Wholesale/retail	19.94
Mining/Quarrying	78.25
Manufacturing	35.41
Electricity/Gas/Water	53.19
Construction	13.28
Transportation/Storage/Communication	34.91
Financial intermediaries/ Insurance/Real estate and business services	23.28
Community/Social and professional services	60.26

Table 4.1: The union coverage in South Africa's economic sectors in 2002 (percentage)

Source: Yamada 2012: 43.

The information in Table 4.1 indicates that the union coverage rate was high in sectors like electricity, gas, water, quarrying, and community, social and professional services where it was above 50 per cent. In social and professional services and electricity, water and gas, for example, union coverage was 60.26 per cent and 53.19 per cent respectively.

Union coverage was, however, much lower in the domestic work and farming sectors where it was less than 10 per cent as can be seen in Table 4.1. For domestic workers, union coverage was lowest at 1.17 per cent. This was followed by the farming and construction sectors where union coverage was at 7.98 and 13.28 per cent respectively (Yamada 2012: 43).

Low levels of union representation in these sectors made it easy for employers to exploit the vulnerable workers (Yamada 2012: 43). Murphey (1996: 84) asserted that employers in sectors like these were in a much stronger position from which they could drive a hard bargain against vulnerable workers. This can be seen in Table 4.2 below.

Economic Sector	Rands
Domestic work	2,88
Farmer	3,27
Wholesale and retail	10,02
Mining and quarrying	13,31
Manufacturing	14,67
Electricity, gas and water	19,46
Construction	7,67
Community, social and personal services	21,22

Table 4.2: Mean hourly wage in South Africa's economic sectors in2002 (Rands)

Source: Yamada 2012: 43.

From Table 4.2 it is clear that workers with poor union representation were poorly remunerated compared to those who were well-represented by trade unions. The mean hourly wages for domestic workers and farm workers, for instance, were much lower at R2, 88 and R3, 27 respectively. This made the poverty level to be much higher among the people working as domestic and farm workers (Yamada 2012: 43). In households where members worked as farm workers, about 77.0 per cent were living below the poverty line of R322 per month in 2001 (2000 prices). In households where members worked as domestic workers, about 70.9 percent were living below the poverty line of R322 per month in 2001 (2000 prices). In contrast, the mean hourly wage for workers who were well-represented by trade unions was higher. The mean hourly wage for electricity, gas and water, and community, social and personal services, for example, was R19,46 and R21,22 per hour respectively (Yamada 2012: 43).

The disparities in income continued to widen the inequality gap between the rich and the poor in the country. The monthly real income of the poorest 10 per cent of the population, for instance, increased from R742 in 1995 to only R1 386 in 2009 (Department of Planning, Monitoring and Evaluation 2010: 24). The lowest paid workers often have large families to support, which pushed the whole family into

poverty despite having a family member who was working. Poverty was therefore not found only among the unemployed part of the labour force (Department of Labour 2008: 2). On the other hand, the monthly real income of the richest 10 per cent of the population increased from R13 416 in 1995 to R26 603 in 2009 (Department of Planning, Monitoring and Evaluation 2010: 24).

Recent statistics from Statistics South Africa's Labour Market Dynamics Report for 2013 indicated that the majority of South African employees were still receiving an extremely low pay. It indicated that half of South African workers still earned less than R3 033 per month in 2012 (Statistics South Africa 2014d: 12). This is an indication that most South African workers were still earning wages that were way below the estimated living level of R4 500 per month (Business Day Live 2014: 3). The high levels of poverty and inequality prevailed despite the political transformation and the subsequent abolishment and replacement of the apartheid legislation with the new policies designed to tackle the imbalances of the past (Oosthuizen 2012: 173). This made it necessary for minimum wages to be introduced in the sectors where workers were unfairly remunerated by their employers.

4.3 Poverty in the agricultural sector

4.3.1 Description of the agricultural sector

South Africa has a dual agricultural economy comprising well-developed commercial farming and more subsistence farming that are dominant in deep rural areas. Agricultural activities range from intensive crop production and livestock farming. Livestock farming is dominated by cattle and sheep farming. Cattle populations are mostly concentrated along the coastal areas of the Eastern and Western Cape, north-eastern and central areas of the Free State, western parts of Kwazulu-Natal and the southern parts of Mpumalanga. In the North-West Province, most cattle are found in the south-eastern and north-western areas of the province, and in Limpopo the distribution is even. The sheep populations are mostly concentrated in the Eastern and Northern Cape. In the Free State, the sheep population is concentrated

in the eastern and southern districts. In the Western Cape, the sheep population is mostly concentrated in the Karoo area and along the coast (Department of Agriculture 2006: 13).

South Africa's climatic conditions favour the cultivation of highly diverse agricultural production ranging from deciduous fruit, citrus fruit, subtropical fruit, grain, cut-flowers et cetera. The grain industry is one of the largest industries in South Africa's agricultural sector. It constitutes between 25 and 33 per cent of the country's total agricultural production. The largest area of farmland is planted with maize, followed by wheat that is followed by sugarcane and sunflowers (Department of Agriculture 2016).

Maize is produced throughout the country under different environmental conditions. About 8.0 million tons of maize is produced in South Africa annually on approximately 3.1 hectares of land. Half of the maize produced in the country consists of white maize, which is meant for human consumption (Department of Agriculture 2003: 1). The remaining half consists of yellow maize, which is used for animal feed (Department of Agriculture 2016: 110).

Annual wheat production in the country ranges from 1.5 to 3 million tons per hectare at the rate of 2 to 2.5 tons per hectares in dry areas and approximately 5 tons per hectare under irrigation. The contributions of the provinces are as follows:

- The south-western parts of the Western Cape: 650 000 tons;
- The Free State: 580 000 tons;
- The Northern Cape: 300 000 tons;
- The North-West Province : 162 000 tons;
- Mpumalanga: 92 000 tons;
- Limpopo and KwaZulu-Natal: about 50 000 tons each; and
- The Eastern Cape and Gauteng: 15 000 tons each (Department of Agriculture 2010d: 1).

Wheat produced in the country is not enough for the needs of South Africans. This situation forced South Africa to import approximately 300 000 tons of wheat per year

to supplement what is being produced locally (Department of Agriculture, Forestry and Fisheries 2010d: 1).

Sugarcane is produced mostly in three provinces of South Africa, which are the Eastern Cape, KwaZulu-Natal and Mpumalanga. It is produced in 14 cane-producing areas extending from Northern Pondoland in the Eastern Cape through to the coastal belt of the KwaZulu-Natal midlands up to the Mpumalanga Lowveld (Department of Agriculture, Forestry and Fisheries 2010b: 1).

Sunflowers are produced mostly in provinces which experience their rainfall in summer like the North-West Province, Free State, Limpopo and Mpumalanga. Production of sunflower seeds ranges between 500 000 to 700 000 tons per year. There are, however, fluctuations in production levels that are mainly caused by uncertain price expectations, high production costs and high stock levels (Department of Agriculture, Forestry and Fisheries 2010c: 1).

4.3.2 Historical background of South Africa's agricultural sector

4.3.2.1 The pre-1994 period

For centuries the indigenous groups in South Africa were subjected to restrictions in access to land. The restrictions to access to land became the basis for an adverse incorporation in a colonial society and continued to shape social relations in the country long after the colonial era. The transition of agriculture into a more capital-intensive mode of production differed from region to region. The Cape was transformed much earlier than the eastern and northern regions due to its closeness to the coast. The transformation included the expropriation of land from the indigenous people by the white settler farmers. In the northern and eastern regions, the expropriation of land only happened in the late 19th century due to the fact that the areas were far from the coast and that indigenous communities resisted the white settlers. Many black smallholders in these regions remained mixed farmers who had enough skills and resources to compete with settler famers (Zamchiya *et al.* 2013: 6).

In the 19th century, there was a growing demand for labour in the country. Large numbers of workers were needed to work in the urban economy as well as the agricultural and mining sectors. To address the pressing need for labour, government controlled and curtailed farming activities by the indigenous smallholders or tenants. Government achieved this goal through the promulgation of the Native Land Act No. 27 of 1913 and the Land Act of 1936 (Zamchiya *et al.* 2013: 6). These Acts provided a foundation for a system that had created a huge reservoir of cheap labour (Visser & Ferrer 2015: 36).

The Land Act of 1913 gave settler farmers an opportunity to expropriate their tenants' livestock. This Act made the tenants to be poorer such that they ended up looking for employment on the settlers' farms (Zamchiya *et al.* 2013: 6). Bell (2013: 2) confirmed that the Act was not intended to move Africans from the commercial farms; instead it was intended to keep them there as cheap workers on settlers' farms rather than as tenants.

There were other pieces of legislation and institutions that provided protective frameworks and powerful bargaining mechanisms to farmers only. The Land Bank of South Africa, which was established in 1925, for example, provided subsidised financial services and credit to white farmers. The Agricultural Credit Board, an agency within the Department of Agriculture, provided credit to white farmers who did not qualify to borrow money from the Land Bank (Visser & Ferrer 2015: 36).

The Cooperative Society Act of 1925 led to the establishment of a network of primary producer co-operatives. Through the system of these co-operatives commercial farmers bought inputs collectively and this enabled them to negotiate cheaper prices. They also provided other crucial services like transportation of farmers' produce to the market and grain storage facilities. They also monitored the quality of the products, regulated planting quotas and got rid of surpluses through processing (Visser & Ferrer 2015: 36).

Co-operatives also acted as important financial intermediaries. The Land Bank used these co-operatives as agents to provide short- and medium-term credit to commercial farmers at subsidised interest rates. Government also channelled disaster funds to farmers through these co-operatives. The disaster assistance usually was in the form of debt consolidation. These co-operatives also acted as a link between the state-provided research and extension services (Visser & Ferrer 2015: 37).

The Marketing Act No. 59 of 1968 led to the appointment of state-controlled marketing boards for a variety of agricultural products. The marketing boards fulfilled the following functions:

- They set prices;
- They monitored quality standards;
- They monitored the supply and sale of agricultural products;
- They used their monopoly power to keep prices of produce higher; and
- The boards also fulfilled a co-ordination function (Visser & Ferrer 2015: 36).

The support that the white commercial farmers received from the state enabled them to have more skills and resources than the black farmers. The low interest loans made it possible for white farmers to purchase much needed agricultural machinery and to make improvements on their farms. This enabled the white farmers to farm directly on the land which had previously been allocated to African sharecroppers. This made more Africans to migrate from white-owned farms. African farmers who owned land inside and outside the reserves did not receive any form of assistance from the government and this made it difficult for them to compete with white farmers who could use improved farming methods and expand their farms (South African History Online 2016: 4).

4.3.2.2 The post-1994 period

After the democratic elections of 1994, South Africa wanted to be re-accepted into the global market. They wanted to promote international trade between South Africa and the rest of the world. In order to lower the tariffs with which South Africa's products were confronted in the global market, the government entered into a number of trade agreements with other countries. These agreements were intended to increase South Africa's share of the world market and therefore to promote exports of agricultural products. The two agreements with the biggest implications for the South African economy were the World Trade Organisation Agreement on Agriculture and the Trade Development and Cooperation Agreement (TDCA) with the European Union.

As member of the World Trade Organisation (WTO), South Africa was bound by the agreements of the organisation. One of those agreements was the Agreement on Agriculture (AoA), which came into effect in 1995. The World Trade Organisation's Agreement on Agriculture contained regulations, which were intended to create a fair and market-oriented agricultural trading system. Member countries were expected to cut export subsidies, lower barriers to trade of agricultural products and cut domestic support measures to farmers. The South African government pushed through a number of reforms in the agricultural sector since 1996 (Centre for Rural Legal Studies 2003: 3). Visser and Ferrer (2015: 38) pointed out that South Africa was under pressure to reduce the protection tariffs because it wanted to be accepted as member of the World Trade Organisation.

In 1997, the South African government abolished the General Export Incentive Scheme (GEIS), an export subsidy, which benefited a number of exported products. Government scrapped the scheme because of two reasons:

- Pressure of the World Trade Organisation; and
- High cost to the government.

The extent to which the previous tariff regime was reduced went beyond what was required by the Uruguay Round Agreement of the World Trade Organisation on agriculture. Wheat tariffs in the country, for example, stood at zero per cent instead of the bound rate of 72 per cent. The zero per cent tariff led to an increase in the import of wheat from 20 per cent in 1997 to above 60 per cent in 2007. At the same time local production of wheat decreased by 54 per cent. This indicated that imported wheat had displaced local production (Visser & Ferrer 2015: 38).

Measured by the producer support estimate, the level of support to farmers in the country had decreased substantially. Between 2008 and 2010 it stood at 3 per cent, which was well below the Organisation for Economic Co-operation and Development (OECD) average level of 20 per cent. As a result, producers in South Africa were unable to compete, even domestically, with subsidised imported commodities (Visser & Ferrer 2015: 38). South African farmers were unable to compete in the global and domestic markets because, while the South African government was cutting agricultural subsidies to its farmers, other countries maintained their support to their farmers. The United States of America, Japan, the European Union and other industrialised countries, for instance, spent US\$360 billion on supporting farmers in 1999. The high level of subsidies that farmers in industrialised countries had received enabled them to produce cheaply and to also dump on poor countries, including South Africa (Centre for Rural Legal Studies 2003: 4).

The process of market liberalisation included, among other things, the abolition of state-controlled marketing boards and the single-channel marketing system. Farmers disagreed about the advantages of the marketing boards. The main complaint given was that they pooled produce and did not reward producers for quality, and that it had little incentive to save on marketing cost and innovation (Visser & Ferrer 2015: 38).

In the beginning of the 1990s, resistance to the single-channel marketing system increased as the gap between the producer and consumer price of agricultural products increased. Resistance to single-channel system led to an official inquiry into the marketing of agricultural products. This was followed by the promulgation of the Marketing of Agricultural Products Act of 1996 and the setting up of the National Agricultural Marketing Council (NAMC). The National Agricultural Marketing Council was given the task of dismantling of the marketing control boards, and the future managing and monitoring of the state intervention in the agricultural sector (Visser & Ferrer 2015: 38).

The abolition of the marketing control boards was expected to lead to the following advantages:

- Increased investment and employment in agricultural marketing activities;
- More innovation;
- More efficient use of agricultural resources;
- Low real food prices;
- Reduced opportunities for rent seeking by vested interests;
- · Less exposure to the agricultural risk for the government; and
- Further decrease in real land prices which would facilitate land reform (Visser & Ferrer 2015: 38).

Financial services to farmers were also reduced substantially. Subsidies were either reduced or removed. Interest rate subsidies and export subsidies were also removed in 1997 (Hall 2008: 122). The Agricultural Credit Board closed down on the recommendation of the Strauss Commission of 1996. The Commission also made a recommendation that the Land Bank should receive grants from the National Treasury to enable it to finance small farmers who wanted to enter the sector and did not have money to finance their operations. Lending by the Land Bank itself was also reduced drastically. This made commercial farmers to increasingly borrow money from the commercial banks (at less favourable interest rates) and less from the Land Bank. In the 1970s, for instance, the Land Bank held 22 per cent of all agricultural debt. This figure dropped substantially to only 17 per cent in 2005. Agricultural debt in the commercial banks and co-operatives, on the other hand, increased substantially to 55 and 12.5 per cent respectively (Visser & Ferrer 2015: 39).

These policy reforms had a huge effect on the role of the co-operatives in the agricultural sector. They no longer had the privilege of being appointed as agents at various marketing boards and because of that they lost their regional monopoly positions. While they still provided short- and medium-term credit to farmers, they then had to perform that role on a commercial basis, as the Land Bank also had to compete with the commercial banks for this business (Visser & Ferrer 2015: 39).

By 1996 government's support to the agricultural sector was so low that it was estimated to be only 4 percent. By 2001 the total annual government spending on agriculture was only R2.5 billion (Hall 2008: 122). The phasing out of marketing

boards and co-operatives that provided essential support services to farmers happened at the time when emerging black farmers were trying to establish themselves. These fledgling farmers found themselves having to compete with established producers in the global market. That was the same market where even established commercial farmers were finding it hard to survive without government support (Visser & Ferrer 2015: 45).

It was only in 2003 that government launched a comprehensive agricultural support programme (CASP), which was intended to facilitate market entry for black farmers. This was followed by the promulgation of the new Co-operatives Act of 2005 that was aimed at encouraging black people in rural areas to form emerging cooperatives. Government financing agencies like Khula and Seda were mandated to support emerging farmers through capacity-building (Visser & Ferrer 2015: 49).

Despite all these agencies and promises, the emerging small-scale African farmers continued to experience a range of problems with regard to marketing their produce. These farmers did not have an understanding of the functioning of the international market; for instance, they did not have the knowledge of when and where to market their products. They also lacked transport, assemblage and storage facilities. They also experienced poor infrastructure challenges. This put them entirely at the mercy of the agents (Visser & Ferrer 2015: 49). The continuous decrease in government support to the agricultural sector made the sector's contribution to the economy to dwindle over time (Hall 2008: 122).

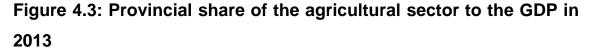
4.4 The size of the agricultural sector

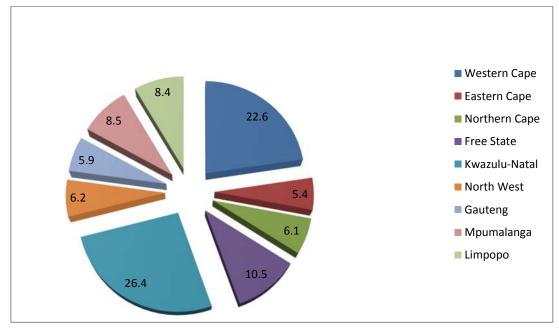
4.4.1 Contribution to Gross Domestic Product (GDP) relative to other sectors

In the years following the Second World War, production in the agricultural sector increased considerably in the country. That was made possible by increased mechanisation in the sector. The area ploughed (dry-land production) increased with the introduction of tractors on a large scale (Bureau for Food and Agricultural Policy

2012: 2). In the 1950s, for instance, the agricultural sector's contribution to the country's Gross Domestic Product was about 15.2 per cent (Department of Agriculture 2010a: 4). It decreased drastically to about 3 per cent in the 1990s and to about 2 per cent in the 2000s (Department of Agriculture 2010a: 3). In the second quarter of 2016, for instance, the contribution of the agricultural sector to the gross domestic product was 2.2 per cent (Statistics South Africa 2016e: 8).

The agricultural sector also played a pivotal role in the economies of all nine provinces of South Africa. There were, however, notable differences on the contribution made by the agricultural sector in the provinces. There were provinces where the agricultural sector made a greater contribution to the gross value added than others. In 2013, for example, the agricultural sector made greater contributions to Kwazulu-Natal and the Western Cape's economies where it was 22.6 and 26.4 respectively. In provinces like the Eastern Cape and Gauteng, the agricultural sector made the least contribution to the GDP during the same period (Statistics South Africa 2014e: 12). This can be seen in Figure 4.3 below.





Source: Statistics South Africa 2014e:12.

The services and manufacturing sectors overtook agriculture in terms of their contribution to the GDP. Although the relative size of the agricultural sector to the GDP had been declining over the years, it showed an annual average growth rate of 1.7 per cent over the past ten years (Department of Agriculture 2010a: 4).

4.4.2 Contribution of the agricultural sector to employment nationally

Large numbers of people were employed in the agricultural sector in the 1950s and 1960s. The agricultural sector employment reached its highest level of just over 1.9 million workers during the early 1960s and decreased thereafter to just above 0.8 million in 2009/10. The majority of those workers were employed to harvest crops (Bureau for Food and Agricultural Policy 2015: 2).

In the 1970s, the South African economy started experiencing labour shortages in the mining and agriculture sectors. Labour shortages put upward pressure on labour prices in the country. Favourable interest rates prevailing at the time, together with subsidised agricultural loans and tax incentives on capital goods, made the cost of capital goods to be lower when compared to labour costs. This, together with the desire of farmers to have greater control over the harvesting process, led to a rapid increase in mechanised combined harvesting and a full transition to bulk grain handling (Bureau for Food and Agricultural Policy 2012: 3).

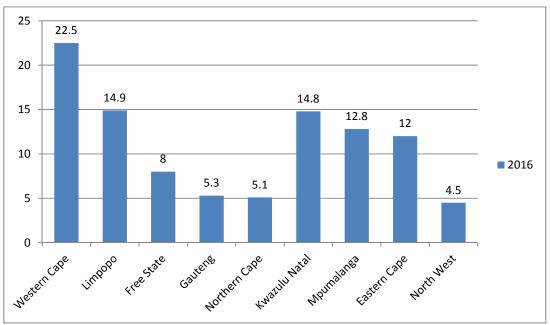
After 1994 the agricultural sector underwent far-reaching changes, which accompanied the political changes in the country. Some of those changes, like trade liberalisation and deregulation of agricultural marketing and withdrawal of direct subsidies, had far-reaching consequences for the agricultural sector. They led to a sharp decrease in areas planted with field crops. The area planted with field crops decreased from about 9 million hectares in the late 1980s to the current 5 million hectares.

This led to a further decline in employment in the farming sector. Employment declined from between 1.6 and 1.9 million in the 1950s and 1960s to below a million in the early 1990s (Bureau for Food and Agricultural Policy 2012: 2). Employment levels in the agricultural sector continued to decrease in the 21st century. Neves and Hakizimana (2015: 7) found that the total loss of employment in South Africa's agricultural sector between 1993 and 2006 was estimated to be as high as 40 per cent. Employment in the sector continued to decrease long after 2006. In the second quarter of 2016, for instance, employment in the agricultural sector was even lower at 825 000 (Statistics South Africa 2016a: 34).

4.4.3 Contribution of the agricultural sector to employment provincially

There were large provincial differences in terms of the proportion of people employed on commercial farms. Some provinces employed more agricultural sector employees than others as can be seen in Figure 4.4 below.





Source: Statistics South Africa 2016a: 34.

At an employment level of 22.5 per cent the Western Cape employed the most agricultural sector workers in the second quarter of 2016. It was followed by Limpopo and KwaZulu-Natal, which employed 14.9 and 14.8 percent workers respectively. The province which employed the least number of agricultural sector workers at the time was the North-West Province, which employed only 4.5 per cent of the total farm workers in the country. The North West province was followed by Northern Cape and Gauteng which employed 5.1 and 5.3 percent of agricultural sector workers respectively (Statistics South Africa 2016b: 35).

4.4.4 The agricultural sector and exports

Exports of agricultural products in the country grew over the years. The rapid growth in exports outstripped the growth of imports. From 1996 onwards, for example, export income of agricultural products increased from R12 531 billion to R71 877 billion in 2013. During the same period imports of agricultural products increased from R7 903 billion to R58 775 billion. Imports were therefore always lower than exports. This meant the balance of trade in the agricultural sector was always positive throughout this period (Williams 2014: 3).

Balance of trade (BOT) is the difference between a country's imports and exports for a given period of time (South African Reserve Bank 2016: 33). It experienced consistent growth between 1996 and 2003. It, however, became more unstable after 2003, hitting a low point of R0.7 billion in 2007 and a peak of R16.1 billion in 2013. The value of the exports market increased from R51.9 billion to R74.9 between 2012 and 2013 (Williams 2014: 3). Between the first quarter of 2014 and the first quarter of 2015, the total export value of agricultural products increased by about 2 per cent (Department of Agriculture 2015b: 36).

The European Union and Africa accounted for well over half of the total export value of these products. The EU retained the greatest market share of well over 30 per cent throughout the period, followed by Africa, which retained a market share of over 20 per cent (Williams 2014: 12). Increased trade with the European Union was made

possible by the Trade, Development and Cooperation Agreement, which was concluded in 2000, after five years of negotiations had started. The TDCA established free trade between the European Union and South Africa (Centre for Rural Legal Studies 2003: 4). Other destinations for these exports were China, Japan, USA, Mercosur et cetera (Williams 2014: 12).

4.5 Characteristics of workers employed in the agricultural sector

4.5.1 Population group

The majority of people employed in the agricultural sector were Africans followed by Coloureds, Whites and Indians respectively. In the third quarter of 2014, for instance, 64.8 per cent of farm workers were Africans. Coloured people constituted about 19.9 per cent while whites and Indians made up 14.4 and 0.4 per cent respectively (Visser & Ferrer 2015: 10). Most of these African workers were overrepresented in low-quality employment like fruit picking and weeding (Orkin & Njobe 2000: 1).

4.5.2 Level of education

Most of the people working in the agricultural sector either had no education or had a low level of education. About 18.6 per cent of agricultural household heads in 2016, for instance, did not go to school at all. Of those who went to school, about 56.3 per cent had between grade 1 and 11. This meant about 74.9 per cent of the agricultural household heads did not have grade 12. Only 16.0 per cent of the agricultural household heads had grade 12 in 2016. About 8.7 per cent of agricultural household heads had tertiary qualifications while 0.4 were classified as 'other' (Statistics South Africa 2016d: 4). This confirms what Liebenberg and Kirsten (2013) found, namely that 74 per cent of people employed in the formal agricultural sector in 2013 did not have grade 12, only 11 per cent had grade 12 while 4 per cent had tertiary qualifications.

4.5.3 Level of earnings

The wages that the agricultural sector workers received was partly determined by the level of education they had obtained. The uneducated and least educated workers were most likely to receive low pay compared to the more educated workers (Oosthuizen 2012: 180). This explained why the majority of workers in the agricultural sector were paid such low wages. In 2014, for instance, the median monthly earnings of agricultural sector workers was R2 153 (Statistics South Africa 2014d: 17). In 2016, farm sector workers earned slightly higher wages after the minimum sectoral wage was set at R2 778,83 per month, up from R2 606,78 in 2015 (Department of Labour 2016: 6). The higher minimum wage of R2 778, 83 per month was still much lower than the estimated living level of R4 500 per month (Business Day Live 2014: 3).

4.5.4 Gender

More men were employed in the agricultural sector compared to women. In the first quarter of 2015, for instance, about 603 000 men were employed in the sector compared to only 289 000 women (Statistics South Africa 2015a: 15). The trend of male dominance in the sector continued even in 2016. In the second quarter of 2016, for example, 590 000 men were employed in the sector compared to 235 000 women (Statistics South Africa 2016b: 2). This was the reason why the agricultural sector was regarded as a male employment generator (Statistics South Africa 2014b: 15).

4.6 The socio-economic conditions of agricultural sector workers

4.6.1 Immobility of farm workers

High levels of unemployment in the country and the isolated nature of rural communities caused farm workers to be immobile. Lack of mobility made farm workers to entirely depend on their employers for family cohesion, housing,

education, basic necessities and social services. Farm workers' access to housing, for example, was linked to their contracts of employment (Weideman 2004: 336). The place of work was also the place of residence for many vulnerable farm workers. Termination of employment for these workers also meant that the right to housing would be terminated. In most cases these workers had no alternative accommodation available (Zamchiya *et al.* 2013: 8).

4.6.2 Violence against farm workers

The high level of vulnerability made farm workers more dependent on and obedient to their employers. It made the working poor in the agricultural sector more open to abuse by their employers. Their high level of dependency on employers led farmers to believe that they had the responsibility to discipline their employees. Farm workers regarded it as normal to be punished by their employers (Weideman 2004: 336).

The relationship between farmers and farm workers was largely characterised by violence. In June 1999, for example, a farmer covered his neighbour's employee in toxic paint as punishment for taking a short cut across his farm. In another incident a farmer drove over and also decapitated (with an axe) two of his farm workers because one of them called him 'Piet' instead of 'baas'. In yet another incident a farmer shot and killed a six-month old baby strapped on the back of her 11-year-old cousin as they walked across the smallholding on which their family lived and worked (Weideman 2004: 336).

4.6.3 Geographic location of farms

Farms are by their very nature isolated. Lack of transport made it difficult for farm workers to get to town. Farm workers were therefore forced to purchase supplies, including basic stuffs from farm stores, which belonged to their employers. Prices of basic stuffs were often set at the discretion of the employers (Weideman 2004: 337). In most cases, prices of basic goods were inflated and farm workers were not told of the prices of those goods. That contributed to a cycle of debt and led to food insecurity for children and adults alike (Department of Social Services 2004: 5).

4.6.4 Poor working conditions

Farm workers were exposed to dangerous working conditions. They worked with harmful chemicals and dangerous machines, usually without protective clothing. Most of these workers were also not given any training on how to handle dangerous chemicals and machines. These workers also carried out too demanding jobs and they also worked very long hours. This made more farm workers to experience numerous health problems like muscular problems, psychological, skin and eye problems (Visser & Ferrer 2015: 67).

Despite all these dangerous working conditions to which the working poor in the farming sector were exposed, they were the most impoverished group in the formal sector of the South African economy. The reason for the high level of poverty was that they were some of the least paid workers in the South African economy. In 1986, for instance, the average income for farm workers in the country (including payment in-kind) was R104 per month. In 1992, the average wage had increased to R225, 25 (Weideman 2004: 335).

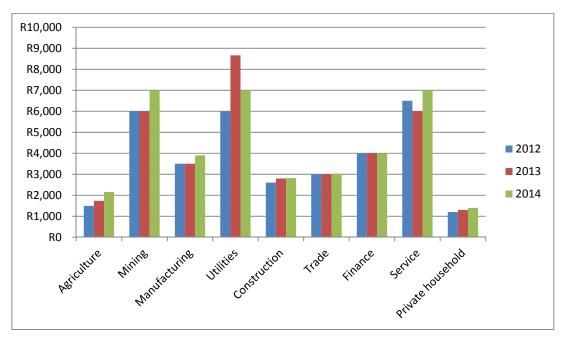
The democratic government, which came to power in 1994, did not do much to reduce the harsh working conditions and the problem of low pay among the working poor in the agricultural sector. On some farms like at the Malamula farm in the former Northern Transvaal, present day Limpopo Province, farm workers were given daily targets that were difficult to meet. Seasonal workers on the Malamula farm, for example, were paid R40,60 for every 60 bags of lemons filled per day, R28,50 for 40 bags and R11,40 for 20 bags. On this particular farm a monthly income of casual workers could be as low as R300 (Zamchiya *et al.* 2013: 76).

By 1996 three-quarters of farm workers still lived below the poverty line. Farm workers continued to receive 21.1 per cent of their wages in-kind, for example, housing, food and land (Weideman 2004: 335). Some wine farms of the Western Cape still practiced the 'dop' system. This was the system where farmers issued part payment of wages to their workers in wine. The system contributed to the chronic

alcoholism, which is still prevalent in the wine producing areas today (Department of Social Services 2004: 5).

Wages for the agricultural sector workers were also the lowest when compared to wages of workers in other sectors. In 1997, for instance, the mean farm worker's wages were 13 per cent lower than the wages of domestic workers, 63 per cent lower than the wages of construction workers, 72 per cent lower than the wages of manufacturing sector workers and 80 per cent lower than the wages of workers in the service sector (Bhorat *et al.* 2012: 5). The wage disparities between the agricultural sector and other sectors continued long after 1997 as can be seen in Figure 4.5 below.





Source: Statistics South Africa 2014d: 40.

From 2012 to 2014 the mean monthly earnings for agricultural sector workers were the lowest compared to other sectors. It was only higher than the earnings of the private household median income as can be seen in Figure 4.5 above (Statistics South Africa 2014d: 40). This made the agricultural sector to have the highest percentage of people living below the poverty line. In 2014, the agricultural sector had 89.60 per cent people living below the working-poor line. That meant only 10.6 per cent of people employed in the sector lived above the working-poor line (Finn 2015: 11).

The low wages which farm workers received made it difficult for them to support their families. It led to food insecurity among their family members. Children of farm workers suffered greatly, as they did not always get the foodstuffs necessary for their development. Most farm workers could not afford nutritious food. Their diets tended to be poor in terms of vitamin intake. Children of farm workers were therefore more likely to be stunted and underweight than any other children (Visser & Ferrer 2015: 69). A survey conducted on farms of the North-West Province, for example, found that 43.6 per cent of all children were either underweight or stunted. About 6.7 per cent of children under the age of ten were wasted (Visser & Ferrer 2015: 69).

4.6.5 Poor union representation

Even though farm workers were unhappy about their working conditions, they were not able to challenge their employers. They considered the employers to have unilateral powers of hiring and firing workers. The situation of the farm workers was made difficult by the fact that the majority were not trade union members (Zamchiya *et al.* 2013: 45). Despite the fact that the Constitution allowed all workers the right to freedom of association there were challenges for strong unionisation in the agricultural sector. Some of the challenges were:

- Lack of access to farms by trade union organisers. Organisers did not have the necessary means to access or provide effective service to farm workers;
- Access to farms was restricted by farmers; and
- Workers who wanted to join trade unions were threatened with dismissal (Department of Labour 2015: 17).

Farm workers of the Malamula farm, for instance, did not want to join trade unions for fear that they would antagonise the farmer. They believed that the farmer would

always have the final say in any dispute. These workers believed that neither the police nor the trade unions had any power over the farmer. They believed that engaging in strikes would be tantamount to self-dismissal (Zamchiya *et al.* 2013: 45).

Therefore, there was no central bargaining process in the agricultural sector. Whatever bargaining which happened in the sector took place between individual farmers and unions, and sometimes between unions and representatives of farmer organisations. This made farm workers to be the most exploited workers in the formal sector (Department of Agriculture 2015 18).

4.7 Government's intervention in the agricultural sector

While the state was gradually withdrawing from the agricultural sector by cutting support to existing producers, it was at the same time intervening in the sector by introducing labour and social security legislation for farm workers. The agricultural sector was to a large extent unregulated by labour legislation until the 1990s. The Basic Conditions of Employment Act of 1983, for instance, did not cover farm workers. The employment rights of farm workers were protected by common law. This put farm workers in a more vulnerable position. Civil liberties for farm workers did not exist (Grub 2005).

It was only in the 1990s that labour legislation began to be extended to the farming sector and farm workers. Some of the legislation that were extended to cover farm workers were the Basic Conditions of Employment Act (BCEA), the Labour Relations Act (LRA), the Employment Equity Act (EEA), the Skills Development Act, the Extension of Security of Tenure Act (ESTA) and the Sectoral Determination Act (Grub 2005).

4.7.1 The Basic Conditions of Employment Act (BCEA)

The Basic Conditions of Employment Act No. 3 of 1983 was extended to cover farming sector workers in 1993. The Act regulated things like working hours, leave and prohibition of child and forced labour. It also laid out procedures for terminating

employment contracts, and prescribed how records should be kept and how wages should be paid out. In cases where workers' rights were violated, they could appeal to the Director General of Labour and the Labour Court (Grub 2005: 56).

4.7.2 The Labour Relations Act (LRA)

The Basic Conditions of Employment Act did not entirely address the needs of the ordinary farm workers. In 1995, the Labour Relations Act (LRA), No. 66 of 1995, was extended to also cover the agricultural sector workers through the Agricultural Labour Act (Visser & Ferrer 2015: 39). The Act provided:

- For the introduction of elected work councils to internally participate in labour decisions;
- Workers with the right to strike, provided proper procedures were followed (Grub 2005: 55); and
- Bargaining rights to farm workers; however, such rights were irrelevant to agricultural sector workers because only six percent were organised (Visser & Ferrer 2015: 39).

4.7.3 Employment Equity Act (EEA)

The Employment Equity Act No. 55 of 1998 was intended to eliminate unfair discrimination and to apply affirmative action measures. The purpose was to promote employment in certain positions of people who were previously disadvantaged like women. Medical testing, HIV testing and psychological testing, as prerequisites for employment, were no longer allowed (Grub 2005: 59).

4.7.4 Skills Development Act

The Skills Development Act No. 97 of 1998, which came into effect in April 2000, established sectoral education and training associations (Setas) for 27 economic sectors in the South African economy. The Seta responsible for the farming sector was the Primary Agricultural Education and Training Association (PAETA). Contributions for the setas were made by employers who employed more than 50 workers. The contribution they made had to be equal to one per cent of their wage

bill. About 80 per cent of this amount could be reclaimed and used for training initiatives for employees (Grub 2005: 60).

4.7.5 Extension of Security of Tenure Act (ESTA)

It was introduced as Act No. 62 of 1997. Its main purpose was to provide security to people living on farms. It was also intended to prevent the fresh waves of evictions from the farms. This Act was also intended to establish smallholder farm and secure the rights of the labour tenants. This law had serious negative effects because it prompted many farmers to evict more labour tenants from their farms (Grub 2005: 57).

4.7.6 Sectoral Determination 8 of 2003 legislation

The labour legislation that had the greatest effect on the farming sector was the Sectoral Determination 8 of 2003. This legislation was intended to protect the farming sector workers of South Africa who were considered most vulnerable (Visser & Ferrer 2015: 40). The absence of collective mechanisms for protecting the interests of farm workers on crucial issues forced government to intervene in the sector. The low wages and high percentage of people living below the poverty line made the Minister of Labour to give directives to the Director-General of the Department of Labour to conduct the necessary investigations to determine if it could be necessary to introduce minimum standard of employment in the sector, including minimum wages. The commissioned investigations found that the agricultural sector workers were some of the most exploited workers in the South African economy. It was then recommended that minimum wages should be introduced in the sector to improve the lives of the working poor (Oosthuizen 2012: 174). The following were some of the main benefits that minimum wage policy was intended to achieve in the sector:

- To ensure that all wage earners in the sector receive decent wages;
- To alleviate poverty;
- To get rid of exploitation;
- To preserve the purchasing power of wages;
- To reduce unfair competition;
- To ensure that workers doing the same job receive equal pay;

• To promote economic growth (Department of Labour 2015: 9).

There was, however, no general consensus regarding the role that minimum wages would play in poverty alleviation among the working poor in South Africa's agricultural sector. The opponents of minimum wages like the director of the Free Market Foundation, Mr Nolutshungu, for instance, argued that the introduction of the wage policy would cripple the South African economy and also push the working poor in the sector deeper into poverty (Business News 2015: 2). The following were some of the unintended negative consequences that were predicted for the South Africa's agricultural sector:

- It would lead to job shedding among the vulnerable unskilled and semi-skilled workers in the sector, as employers could be forced to mechanise and also give preference to highly skilled workers. It is estimated that the demand for unskilled workers could decrease by as much as 28 per cent following the introduction of the minimum wage policy;
- New investors would also increase their reliance on part-time and casual work, and reduce the number of working hours to reduce the wage bill;
- Prospective farmers would also be reluctant to start new farming businesses because of poor profit expectations (International Labour Organisation 2015: 10).
- The comparative advantage enjoyed by the farmers in neighbouring countries would push local farmers to relocate to countries where there was quality land and water and low labour costs. This would lead to further job losses in the country, especially in sectors which employ mostly the vulnerable workers like the agricultural sector;
- Production by local farmers would therefore decrease and this would lead to increased import of agricultural products;
- Imports of sub-tropical products like sugar and vegetables, for instance, could narrow the opportunities of local producers of increasing employment capacity in the agricultural sector;

- It would lead to a great decrease in agricultural exports due to reduction in local production (Cape Times 2013: 1);
- These outcomes would greatly undermine the National Development Plan's (NDP) goal of creating additional 1 million jobs by 2030 (Business Day Live 2015: 3);
- It would also lead to a decrease in government revenue by 0.3 per cent due to loss in income tax revenue; and
- Food prices would increase, and this would hurt the very same vulnerable working poor people whom the policy was intended to help (Mercury 2013: 1).

Supporters of a minimum wage policy, however, argued that it would improve the working conditions of the vulnerable poor workers in the sector. They maintained that the policy would lead to the creation of more job opportunities for the majority of the unemployed South Africans. In his address to the Congress of South African Trade Unions' (COSATU) executive, for example, former Brazilian president Lula da Silva argued that higher minimum wages would stimulate total demand for goods and services produced in the country. The effective demand would play a pivotal role in driving economic growth and economic development, particularly in a country like South Africa, where total demand was stifled by the high rates of unemployment and poverty. He maintained that once more money was put in the hands of the poor, they would spend more and that would make the giant wheel of the economy to start turning (Business Day Live 2015: 3).

The ILO (2015: 12) adds that when wages are low, workers could demand less of the output produced in the country. Workers would end up being retrenched, as the employers would not be making more profit. In this case low pay becomes the main cause of unemployment.

Supporters of minimum wages also maintained that the policy would lead to a reduction in industrial disputes, which are so prevalent in South Africa's farming sector. It would also trigger an improvement in workers' morale and living standards, which would increase their capacity to work. This would lead to a reduction in

debilitating diseases and time off due to illnesses. It would also lead to a reduction in work place accidents caused by fatigue. Productivity would therefore increase in the agricultural sector. In this case low productivity was seen as the direct consequence of low pay (International Labour Organisation 2015: 12).

4.8 Criteria for setting minimum wages in South Africa's agricultural sector

When advising the Minister on the publication of Farming Sector Determination Number 8 of 2003, the following criteria were put forward:

- The basic needs of the workers and those of their family members;
- The average wage levels in the country;
- The cost of living at that particular time;
- The prevailing social security benefits;
- The living standards of other social groups;
- The economic situation and development at the time;
- The impact of any proposed condition of employment or minimum wage on current employment or creation of new jobs in the sector (International Labour Organisation 2015: 17);
- The possible effect of the proposed conditions of employment on workers' health, safety and welfare;
- The ability of employers to carry on with their business successfully after paying minimum wages; and
- Any other relevant information made available to the Employment Conditions Commission (ECC) (Department of Labour 2015:10).

4.9 The introduction of minimum wages in the agricultural sector

The failure of the labour market to pay living wages forced the South African government to introduce sectoral minimum wages in the agricultural sector. The wage policy for the farming sector was first published on 2 December 2002, but it only came into effect on 1 March 2003. This policy was established in terms of

Section 51(1) of the Basic Conditions of Employment Act No.75 of 1997 (Bhorat *et al.* 2012: 5). By the time the minimum wage was first introduced in the farming sector about 70 per cent of farm workers earned less than the urban minimum wage while 50 per cent earned less than the rural minimum (Department of Agriculture 2015b: 9).

Initially, the farming sector minimum wages were set according to the areas where the farms were situated. Minimum wages for farms situated in urban municipalities were higher than those of rural municipalities. Urban municipalities covered those municipalities where the average household income was more than R24 000 per annum in the 1996-census. The workers' minimum wage in these municipalities was set at R800 per month. Area B, on the other hand, consisted of municipalities where the average household income was between R12 000 and R24 000 per annum in the 1996-census. Workers' minimum wages in these municipalities were set at R650 per month as can be seen in Table 4.3 below (International Labour Organisation 1992: 176).

Table 4.3: Minimum wages for agricultural sector workers in urbanand rural municipalities

Urban municipalities							
1 March 2003 – 29 February		1 March 2004	- 28 February	1 March 2005 – 28 February			
2004		2005		2006			
Hourly rate	R4,10	Hourly rate	R4,47	Hourly rate	R4,87		
Monthly rate	R800	Monthly rate	R871,58	Monthly rate	R949,58		
Rural municipalities							
1 March 2003	- 29 February	1 March 2004	- 28 February	1 March 2005 – 28 February			
2004		2005		2006			
Hourly rate	R3,33	Hourly rate	R3,66	Hourly rate	R4,03		
Monthly rate	R650	Monthly rate	R713,65	Monthly rate	R785,79		

Source: Naidoo et al. 2007: 30.

The agricultural sector minimum wages were regularly updated for inflation (Bhorat *et al.* 2012: 5). This was an attempt to avoid the purchasing power of minimum wages from being eroded by inflation (Eyraud & Saget 2005: 30). The minimum

wages for different municipalities laid down in 2003 were merged into a single minimum wage of R1 090 in 2009 (Business Day Live 2014: 2).

Despite the minimum wages, farm workers still could not afford basic things like houses, education and clothing for their children. This made the Western Cape farm workers to go on strike in 2012, protesting against the low minimum wage, which was about R69 per day (Business day Live 2013: 2). The Bureau for Food and Agricultural Policy (2012: 1) asserted that the De Doorns violent protests were about the low wages, particularly for seasonal farm workers. They wanted the farming sector's minimum wage to be increased to at least R150 per day, which was a 117 per cent increase (Business Day Live 2013: 2). The striking workers felt that the higher minimum wage of R150 per day could be enough to meet the socio-economic needs of the low-paid workers in the sector (Business Day Live 2014: 3).

In response to the demand for higher minimum wages put forward by the striking farm workers, the Department of Labour decided to revisit the Sectoral Determination for Agriculture, the most recent being the one concluded in March 2012. The authorities negotiated with the farmers to try and come up with the amicable solution that would suit both the farmers and the farm workers. The negotiations enabled the Department of Labour to raise the minimum wage from R69 to R105 per day, promulgated for a three-year period. In years two and three, the minimum wages would be increased by the consumer price index (CPI) plus 1.5 per cent as can be seen in Table 4.4 below. This was a 52 per cent increase (Business Day Live 2015: 2). Higher minimum wages of R105 per day, which was equivalent to US\$13 in 2013, did not only apply to the De Doorns farm workers who started the strike, but it also applied to all farm owners and farm workers in all parts of South Africa. This increase added R2 billion to the wage bill of the farmers (Anetos 2014: 2).

The new minimum wage of R105 a day came into effect on 1 March 2013. All employers in the farming sector were expected to pay farm workers at least the minimum wage. The employers had to pay a farm worker who worked fewer than 45 hours per week at least the hourly rate as set out in Table 4.4.

Minimum wage rate			Minimum wage rate			Minimum wage rate				
1 March 2013 to 28 February			1	March	2014	to 2	28	1 March 2015 to 28 February		
2014			February 2015			2016				
Monthly	Weekly	Daily	Мо	Monthly Weekly Daily		Monthly	Weekly	Daily		
R2274,82	R525,00	R105,00	Previous year's minimum			Previous year's minimum wage				
			wage + CPI + 1.5%		+ CPI + 1.5%					

Table 4.4: Minimum wages for farming sector employees as of 1March 2013

Source: Department of Labour 2013: 4.

The farming sector minimum wage applied to all workers in the farming sector, including primary and secondary agriculture, mixed farming, horticulture, acquafarming and the farming of animal products or field crops, but it excluded forestry workers. For the purpose of this determination, a farm worker also included a worker employed in a home on a farm and a security guard who had been employed to guard the farm or other premises where farming activities were conducted. This determination did not cover any person in activities already covered by another sectoral determination or by a bargaining council agreement in terms of the Labour Relations Act of 1995. The provisions of the Basic Conditions of Employment Act applied to all farm workers covered by the determination and their employers in respect of any matter that was not regulated in the sectoral determination (Department of Labour 2013: 2).

4.10 The minimum wage and levels of actual wages

In South Africa's agricultural sector, the sectoral minimum wage did much to raise the wages of the working poor in the sector. Districts where wages were lower than the median wages of similar workers in other districts experienced greater increases after the introduction of minimum wages in the sector. Wage levels increased by as much as 17 per cent as a result of the minimum wage policy (Bhorat *et al.* 2014: 9). Between 2001 and 2007, South African farm workers experienced the highest wage increase when compared to other sectors of the formal sector where workers received low-pay. From 2012 to 2013, South African farm workers experienced yet another greater wage increase. They experienced an average increase of 15.9 per cent (Statistics South Africa 2014a: 40). In 2013, the minimum wage in the agricultural sector was increased by about 52 per cent following the 2012 unrests for higher wages (Business Day Live 2013).

Some economists argued that the employment effect of minimum wage largely depends on the level at which the wages were set relative to the market wage. They argued that moderate minimum wage increases do not affect employment in any significant way. The reason being that employers could find some ways of mitigating cost increases in ways other than reducing employment (Department of Labour 2010: 26). Employers could reduce high wage bills caused by moderate minimum wage hikes by reducing other labour costs such as fringe benefits and training (Zavodney 1998: 25). They argued that large increases in the minimum wage, which were above the market wages, would lead to more job losses, especially among the unskilled and semi-skilled workers whom the policy was intended to help (Department of Labour 2010: 26).

4.11 Research methodology and data

To determine the effect that minimum wage policy had on employment of agricultural sector workers in South Africa two groups, namely; the agricultural sector workers and construction sector workers were compared. The agricultural sector workers were used as the experimental group while construction sector workers were used as a control group. Comparison between the two groups was initially made before the minimum wage policy was introduced in the agricultural sector in 2003 and before it was raised by 52 per cent in 2013. The initial comparison was done to establish the state of employment in the two groups before minimum wage policy came into effect in the agricultural sector. Employment levels in the two groups were again compared after minimum wages were introduced in the agricultural sector only in 2003 and after it was raised by 52 per cent in 2013. The post-comparison was

intended to establish how minimum wage policy influenced employment patterns in the agricultural sector as compared to the construction sector where there was no minimum wages.

An analysis, using secondary data, will be undertaken to establish the employment implications flowing from minimum wage legislation in South Africa's agricultural sector. Data used in the research was sourced from the Labour Force Survey (LFS) and the Quarterly Labour Force Survey (QLFS), which were published by Statistics South Africa. The Labour Force Survey was a nationally representative household survey that was conducted biannually on the basis of rotating panels. It was conducted by Statistics South Africa between February/March and September from 2001 to 2007. From 2008, the survey was conducted on a quarterly basis and it became known as the Quarterly Labour Force Survey.

The surveys included about 30 000 households from both rural and urban areas in South Africa. The households in the sampled areas were surveyed in all nine provinces, thus making the data more representative. These households were visited by field workers employed and trained by Statistics South Africa. Information in the LFS was self-reported, as questionnaires were conducted through face-to-face interviews in each household visited (Statistics South Africa 2005: xxi). Both the Labour Force Survey and the Quarterly Labour Force Survey collected data on labour activities of individuals aged 15 to 64 years in South Africa (Statistics South Africa 2016b: iv).

In 2008, the LFS was replaced by the QLFS, which was conducted four times per year. Both the LFS and the QLFS were designed to measure the labour market. They provided information on a variety of issues relating to the labour market like the level and pattern of unemployment, and the industrial and occupational structure of the economy. The design of the questionnaire used was in line with the requirements set by international bodies like the International Labour Organisation (Statistics South Africa 2005: i).

Data from the LFS and the QLFS was used to examine the effect of the minimum wage policy on the employment of farm workers, both skilled and unskilled, and male and female. Biannual data from the Labour Force Survey was used to assess the effect of a lower minimum wage increase of 17 per cent, which came into effect in March 2003, on employment.

Data from the two LFSs was added and divided by two to achieve an average value. To determine the implications of a higher minimum wage increase on employment, the second and fourth quarter data from the Quarterly Labour Force Surveys of 2010 to 2015 was used to establish the employment patterns before and after the implementation of the 52 per cent minimum wage increase. Data from the four quarters was added and divided by four to obtain the yearly average figures. To establish the effect that the wage policy had on employment, the periods before and after the minimum wage increase were introduced or increased were compared.

To ascertain if changes in agricultural sector's employment were indeed caused by minimum wage legislation, a control group was chosen. Matthews and Ross (2010: 116) described a control group as a group of people who are similar to the experimental group in every way except the aspect of change. The control group that was chosen for this purpose was the construction workers of the informal sector.

The group was considered relevant for this comparison because it shared similar characteristics with those of the agricultural sector workers. The majority of workers employed in both groups were Africans. In 2005, for example, 385 000 Africans were employed in the control group compared to only 43 000 of other racial groups. At the same time 391 000 Africans were employed in the agricultural sector compared to 110 000 Coloureds and 75 000 Whites (Statistics South Africa 2005: 15).

In both groups, more male workers were employed compared to female workers .In 2005, about 269 000 male workers were employed in the control group compared to 24 000 female employees. During the same period about 449 000 male workers were employed in the agricultural sector compared to 113 000 female employees (Statistics South Africa 2005: 15).

Employees in both groups had low levels of education. About 65.5 per cent of workers employed in the agricultural sector in 2011, did not have grade 12 (Visser & Ferrer 2015: 11). On the other hand, about 95 per cent of workers in the control group did not have grade 12 for the same period (Petersen 2011: 10). The only main difference between the two groups was that the agricultural sector workers received minimum wages while workers in the control group did not.

To establish the implication of the minimum wage increase on mechanisation will be used, data used was sourced from Abstract of Agricultural Statistics published by the Department of Agriculture. This data showed how the value of capital assets like machinery, implements and tractors purchased by commercial farmers had changed over time. In this research, data from 2001 to 2014 was used with the aim of covering the periods when minimum wages were introduced in the sector in 2003, and when it was increased by 52 per cent in 2013.

4.12 The employment implications flowing from minimum wage legislation

4.12.1 The effects of lower minimum wage on employment

The lower minimum wage increase of about 17 per cent introduced in the agricultural sector came into effect in March 2003 (Bhorat *et al.* 2012: 9). Some economists like Stigler (1946) argued that employers would lay off more workers only if the labour cost became much higher than their marginal products. Moderate minimum wage increases were therefore not expected to have any significant effect on employment. The actual effect of a 17per cent minimum wage increase is seen in Table 4.5 below.

Table 4.5: The employment effect of a low minimum wage in SouthAfrica's agricultural sector (2001-2007)

Year	Employment in agriculture	Change in employme nt (agricultur e)	Change in employme nt (agricultur e)	Control group (constructio n workers)	Change in employment (control group)	Change in employment (control group)
	(thousand)	(thousand)	%	(thousand)	(thousand)	%
2001	735	_	_	276	-	
2002	846	111	15.01	260	-16	-5.8
2003	778	-68	-8.0	248	-12	-4.6
2004	724	-54	-6.9	297	49	19.8
2005	584	-140	-19.3	334	38	11.1
2006	601	17	2.9	339	5	1.5
2007	592	-9	1.3	353	14	4.1

Source: Own calculations using Statistics South Africa's data of 2001-2007.

Before the introduction of minimum wage in 2003, employment in the agricultural sector was increasing as can be seen in Table 4.5 above. Between 2001 and 2002, for instance, employment in the sector increased from 735 000 to 846 000, which was an increase of 15.01 per cent. Between 2002 and 2003, a year in which the minimum wage came into effect in the sector, employment decreased by 8.0 per cent. It decreased from 846 000 in 2002 to 778 000 in 2003, which was a decrease of 68 000. From 2003 to 2005 employment in the agricultural sector continued on a downward spiral. The situation was made worse by the country's economy that was not performing well at the time. Growth in the agricultural sector, for example, dropped by 4.6 per cent in 2003 before it recovered slightly by about 1.04 per cent in 2004 (Jooste & Spies 2006: 12). The minimum wage, compounded with poor economic conditions, therefore affected employment in a very bad way. Employment in the sector only started to recover in 2006 as can be seen in Table 4.5. Between 2003 and 2005, employment levels in the agricultural sector decreased by 25.1 per cent as can be seen in Table 4.5 (Statistics South Africa 2005 & 2007).

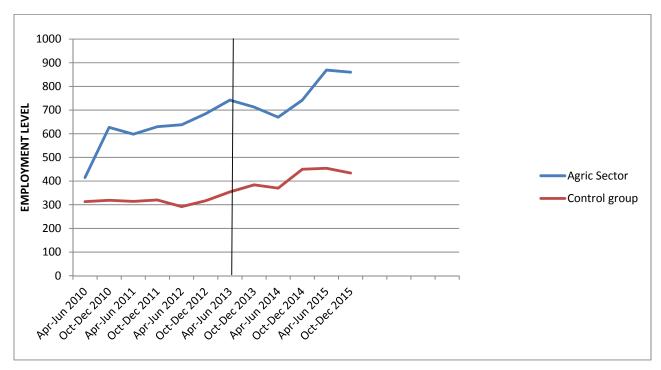
The control group, which was also negatively affected by poor economic growth at the time, experienced a decline in employment between 2002 and 2003. However, unlike in the agricultural sector where the decline in employment started in 2003 after the minimum wage came into effect, a decline in the control group's employment started in 2001 and recovered in 2004. Between 2003 and 2004, for instance,

employment in the control group increased by 19.9 per cent. At the same time employment in the agricultural sector continued on the downward spiral. Between 2003 and 2004, for instance, agricultural sector employment decreased by 6.9 per cent as can be seen in Table 4.5. The decrease in agricultural sector employment could therefore be attributed to the introduction of a minimum wage in the sector because the same trend of continuous decline in employment could not be observed in the control group where there was no minimum wage (Statistics South Africa 2005 & 2007).

4.12.2 The effects of a higher minimum wage on employment

The minimum wage increase of 52 per cent, which came into effect in March 2013, was highly criticised by the opponents of minimum wages. They argued that it would lead to rationing of jobs in the sector. Pieter Mulder, the leader of the Freedom Front Plus, for instance, argued that it would lead to the dismissal of the thousands of seasonal and temporary workers (Dodds *et al.* 2013: 2). Farmers complained that the high minimum wage of R105 would be unaffordable for them and that they could afford about R94 per day (Business News 2015: 3). Agri Wes-Kaap head, Carl Opperman, supported a minimum wage of between R80 and R85 per day, which was even less than the one proposed by the farmers. He predicted that a 52 per cent minimum wage increase would lead to about 30 per cent job losses in the sector (Davis 2013: 2). The information in Figure 4.6 sheds some light on the employment effect of a higher minimum wage increase in South Africa's agricultural sector.

Figure 4.6: The employment effect of a high minimum wage in South Africa's agricultural sector, 2010-2015



Source: Statistics South Africa 2010a-2016b.

Before the high minimum wage of R105 came into effect in March 2013, employment levels in the agricultural sector were increasing. It increased from 415 000 in the second quarter of 2010 to 739 000 in second quarter of 2013, which was an increase of 78.1 per cent. Even after the high minimum wage increase of 52 per cent came into effect, employment in the sector continued to rise until the second quarter of 2013 as can be seen in Figure 4.6. It increased from 739 000 in the first quarter of 2013 to 742 000 in the second quarter of 2013, which was an increase of 0.4 per cent. This indicated that the higher minimum wage of 52 per cent was not felt immediately after it came into effect (Statistics South Africa 2013a-2016b).

The reason, which made the 52 per cent minimum wage increase of 2013 not have an immediate effect on employment in the agricultural sector, was an increase in the demand for agricultural sector products at the time. Prices of agricultural products increased considerably as a result of a higher demand. Prices of field crops, for example, increased by 23 per cent while those of animal products increased by 8.7 per cent (Department of Government Communication and Information System 2014: 34). The growth in the demand for agricultural products was fuelled by an increase in exports that was made possible by the weaker Rand at the time. The Rand fell by almost 10 per cent in the first half of 2013 to reach a four-year low against the US dollar (Department of Agriculture 2013: 27). The weaker Rand encouraged countries like the Netherlands, United Kingdom, China and Zimbabwe to demand more agricultural products from South Africa (Department of Agriculture 2013: 12).

This led to a considerable increase in gross agricultural income. Gross farming income from all agricultural products, for instance, increased from R31, 3 billion in the first quarter of 2012 to R34,1 billion in the first quarter of 2013, which was an increase of 8.9 per cent. The increase was largely supported by a huge increase in gross income from field crops, horticulture and animal products which increased by 38.2, 12.1 and 3.3 per cent respectively (Department of Agriculture 2013: 27). The increase in the demand for the agricultural sector's products could therefore be the main reason which made the demand for workers in the sector not to drop immediately after the high minimum wage increase.

Employment in the sector started to decline only in the third quarter of 2013 when it dropped from 742 000 (second quarter) to 740 000 (third quarter). Employment continued on the downward spiral until it reached the lowest level of 670 000 in the second quarter of 2014 before it started to recover again in the third quarter of 2014. This meant that from April 2013 to April 2014 employment in the agricultural sector had decreased by about 72 000 workers, which was a decrease of 9.7 per cent (Statistics South Africa 2013a-2016b).

The 9.7 per cent drop in employment could be attributed to the 52 per cent minimum wage increase because the same trend could not be observed in the control group where there was no minimum wage increase. Employment continued to increase in the control group as can be seen in Figure 4.6. Between March 2013 and March 2014 employment in the control group increased from 354 000 to 370 000, which was an increase of 4.5 per cent. This happened at the time when employment was decreasing in the agricultural sector. This was a confirmation that employment in the

sector dropped due to the 52 per cent minimum wage increase (Statistics South Africa 2013a-2016b).

4.12.3 Employment effect of minimum wage policy on males and females

The employment effect of the minimum wage policy affected men and women differently in the agricultural sector. More women lost their jobs due to the minimum wage policy than men. When the minimum wage was raised by 52 per cent, for example, an average of 506 000 men were employed in the agricultural sector. After the introduction of the higher minimum wage of 52 per cent, which came into effect in March 2013, the number of male workers employed in the sector decreased to an annual average of about 488 000 in 2014, which was a decrease of about 3.6 per cent as can be seen in Table 4.6 (Statistics South Africa 2010a-2016b).

By the time the higher minimum wage was introduced in 2013, an annual average of 213 000 women were employed in South Africa's agricultural sector. After the introduction of the higher minimum wage of R105 per day, the number of female employees employed in the agricultural sector decreased from an average of 228 000 in 2013 to an average of 213 000 in 2014, which was a decrease of 6.6 percent. The percentage decrease of female workers employed in the agricultural sector was therefore higher than that of male employees as can be seen in Table 4.6. This confirmed the notion that female employees were affected more negatively by the minimum wage legislation than their male counterparts (Statistics South Africa 2010a-2016b).

Year	Male	Change in employment level	Change in employment	Female	Change in employme nt	Change in employment
	(thousa	(thousand)	%	(thousand)	(thousand)	%
	nd)					
2010	417	-	-	217	-	-
2011	413	-4	-0.10	201	-16	-7.4
2012	445	32	7.7	216	15	7.5
2013	506	61	13.7	228	12	5.6
2014	488	-18	-3.6	213	-15	-6.6
2015	587	99	20.3	264	51	23.9

Table 4.6: The effect of minimum wage legislation on employmentin terms of gender

Source: Own calculations using Statistics South Africa's data of 2010a-2016b.

4.13 Substitution effect of minimum wages in South Africa's agricultural sector

The introduction of and continuous increase in the agricultural sector's minimum wage led to an increase in production costs in the sector. Evidence from the key maize producing provinces like the Eastern Free State, North-West Province, KwaZulu-Natal and Mpumalanga indicated that the cost of permanent and temporary workers in 2012 was as high as 19.8 and 22.27 per cent respectively. The cost of permanent workers for 2013 was projected to be 44.97 per cent as a result of the 52 per cent increase in minimum wage (Saayman & Middelberg 2014: 348). According to statistics from the Department of Agriculture, Forestry and Fisheries, the wage bill of agriculture was about R14,5 billion or 13.3 per cent of the total cost in 2013/2014 (AgriSA 2014: 3).

The dramatic increases in labour cost made it difficult for the producers in the agricultural sector to cover their operating expenses as predicted by the standard competitive model. High labour costs made South Africa's agricultural products to be less competitive in the global market. Local farmers found it difficult to compete with subsidised products in the global market (Saayman & Middelberg 2014: 344).

In an attempt to reduce higher productions costs and improve productivity farmers were forced to consider other alternatives such as the following:

- Substituting unskilled workers with more skilled workers; and
- Mechanisation (Saayman & Middelberg 2014: 344).

4.13.1 The effect of minimum wage legislation on mechanisation in the farming sector

The opponents of minimum wages argue that the policy makes labour costs to rise and this makes employers to substitute unskilled labour with machines (Dodds *et al.* 2013: 1). It is, however, not clear how the introduction of sectoral minimum wages in the agricultural sector influenced mechanisation in that sector. To have a clear picture of how minimum wage policy influenced mechanisation in the sector, data from an Abstract of agricultural statistics was used show the value of capital assets purchased by commercial farmers between the year 2000 and 2014. This will be illustrated by figure 4.7 below.

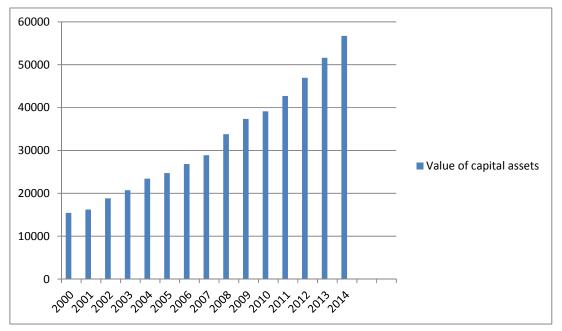


Figure 4.7: Capital assets in the agricultural sector, 2000-2014

Source: Department of Agriculture 2015a: 78.

The value of mechanical implements purchased by commercial farmers has been increasing even before the minimum wage was introduced in the sector 2003 as it could be observed in Figure 4.7. From the year 2000 to 2003 the value of capital assets purchased by the commercial farmers in the country increased from R15 461million to R20 748 million which was an increase of 34.2 per cent. From 2003 to 2005 the value of capital assets purchased by commercial farmers continued to rise from R20 748 million to R24 729 as it could be observed in the Figure 4.7 (Department of Agriculture 2015a: 78).

The value of capital assets purchased by the commercial farmers has been increasing even before minimum wage was raised by 52 per cent in 2013. The value of machines, implements and tractors purchased by commercial farmers increased from R39 148 million in 2010 to R51 626 million in 2013 which was aan increase of about 32 per cent. By 2014 the value of capital assets increased to R56 726, which was an increase of 9.9 per cent (Department of Agriculture 2015a: 78).

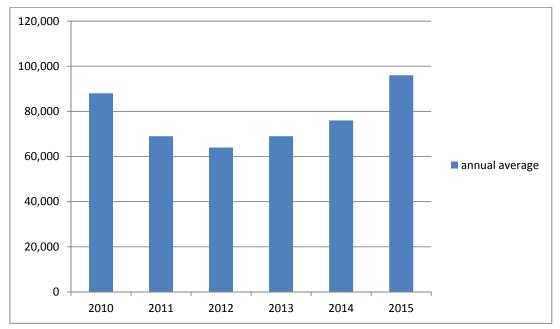
4.13.2 The effect of minimum wage legislation on employment of skilled workers in the farming sector

The standard competitive model predicted that high minimum wages, which made unskilled and inexperienced workers more expensive, would make employers to prefer skilled workers who are more productive than the unskilled, inexperienced and expensive workers (Schuldt *et al.* 2012: 265). With the introduction of the minimum wage in agricultural sector in 2003 expectations were that employment of skilled farm workers would increase as predicted by the standard competitive model. However, with the introduction of the minimum wage in the sector, employment of skilled farm workers dropped from an annual average of 208 00 in 2002 to an annual average of 77 000 in 2003, which was a decrease of 63 per cent. The number of skilled workers employed in the sector continued to drop until 2005 when it reached the lowest annual average of 70 000. It only started to recover in 2006 when it reached an annual average of 93 000 (Statistics South Africa 2009: 15). The

decrease in the employment of skilled farm workers after the introduction of the minimum wage in the sector was contrary to the prediction of the standard competitive model.

With the introduction of a higher minimum wage of 52 per cent, which came into effect in March 2013, employment of skilled workers in the agricultural sector, however, increased as predicted by the standard competitive model. Before the introduction of the high minimum wage increase of 52 percent in 2013, employment of skilled workers in the sector was decreasing. In 2012, for instance, the employment level of skilled workers in the sector was an annual average of 64 000, down from the annual average of 88 000 in 2010. However, with the introduction of a daily minimum of R105 in March 2013, employment of skilled farm workers in the country increased from an annual average of 64 000 in 2012 to an annual average of 69 000 in 2013, which was an increase of 7.8 per cent. Employment of skilled workers in the sector continued to rise and by 2015 the annual average was 96 000 as can be seen in Figure 4.8 (Statistics South Africa 2010a-16b).





Source: Statistics South Africa 2010a-2015b.

4.14 The implementation of minimum wage policy in the agricultural sector

4.14.1 The role of labour inspectors

For minimum wages to be complied with, the authorities had to ensure that the wage policy was enforced properly. Compliance with minimum wage legislation happened when workers who previously received sub-minimum wages then received stipulated minimum wages (Yamada 2012: 41). Labour inspections were the main instrument for ensuring that there was proper monitoring, which would encourage compliance. The inspections were carried out by law in most countries, which had adopted a minimum wage policy as instrument to protect the vulnerable workers (Benassi 2011: 14). To ensure that the minimum policy was enforced properly in South Africa the authorities employed labour inspectors. The labour inspectors could promote, monitor and enforce compliance with a minimum wage law by doing the following:

- Advise workers and employers of their rights and obligations in terms of an employment law;
- Carry out regular inspections;
- Investigate complaints made to a labour inspector by a minimum-wage worker;
- Try to make employers comply with the wage law by issuing compliance orders; and
- Carry out any other prescribed function (Department of Labour 1997:27).

In order to monitor and effectively enforce compliance with the minimum wage law, the inspectors could:

• Enter any work place without any warrant or notice;

- Remove records from the employer's premises and copy them;
- Require a person to disclose information on any matter relating to a minimum wage law;
- Require a person to produce or deliver records or documents relating to the minimum wage to a place of the inspector's choice;
- Inspect or question any person about any work performed;
- Any person questioned by the officer should answer all relevant questions to the best of his or her ability; and
- Employers and employees should provide facilities necessary for the inspectors to carry out their work effectively (Department of Labour 1997: 28).

In South Africa's agricultural sector, most farmers did not comply with the minimum wages because of the following reasons: level of inspection, inappropriate fines, and unwillingness and inability to enforce the law by the authorities.

4.14.2 Level of inspection

In South Africa, the Department of Labour is responsible for enforcing minimum wage legislation. It employs labour inspectors to enforce and monitor compliance with the wage law in all sectors concerned, including the agricultural sector (Bhorat *et al.* 2012: 280). Labour inspections are usually costly and this makes governments, especially of developing countries, not to invest enough funds to finance the inspections. In these countries, labour inspector offices are usually understaffed, under-equipped and under-trained. This makes them to be ineffective when carrying out their inspection duties (Benassi 2011: 14).

Just like other developing countries South Africa did not have sufficient funds to employ enough labour inspectors. In 2004, for example, South Africa had only 706 labour inspectors employed in labour centres across the country. According to the Department of Labour, the inspectors carried out 184 070 inspections between April and December 2004. Extrapolating from these data it could be assumed that 245 000 inspections were conducted per year. According the Department of Labour's estimates, over one million employers were covered by the various sectoral determinations in the country at that time. It could therefore be concluded that a large number of employers were never inspected, as only 245 000 inspections were carried out (Naidoo *et al.* 2007: 32).

The agricultural sector in particular scored very low in terms of the number of inspections conducted by the labour inspectors (Naidoo *et al.* 2007: 32). This explained why the compliance level was so low in the sector. There were many farm workers who still received wages that were far below the stipulated minimum wages after its introduction in 2003 (Bhorat *et al.* 2012: 280). Stanwix (2013: 4) asserted that, while wages for farm workers had increased substantially after the introduction of the wage legislation, a significant proportion of farm workers received higher but sub-minimum wages. In September 2003, for instance, 53.8 per cent of farm workers earned less than the stipulated wage rates (Yamada 2012: 41).

The non-compliance trend continued to rise in the sector long after the wage legislation was first introduced in 2003. By 2005, for example, compliance with the minimum wage level had dropped to only 19 per cent in the farming sector (Yamada 2012: 41). Average wage-level of minimum wage workers increased by 29.2 per cent instead of 52 per cent (Bureau for Food and Agricultural Policy 2015: 41). By 2013 and 2014 the mean monthly earnings of agricultural sector workers were R1 733 and R2 153 respectively (Statistics South Africa 2014a: 40). All these wages were lower than the R2 274.82 minimum wage prevailing in the sector in 2013 (Department of Labour 2013: 4). This is a confirmation that, while non-compliance tended to be minimal in developed countries, it is still a serious problem in developing countries like South Africa where resources are insufficient (Naidoo *et al.* 2007: 31).

4.14.3 Inappropriate fines

In enforcing minimum wage regulations, wage inspectors conducted workplace inspections. Inspectors served employers who violated stipulated employment conditions listed in the Sectoral Determination with penalties for non-compliance. Information on the penalties for non-compliance with the wage law showed that, while repeated offenses and greater levels of underpayment led to large penalties,

the overall fines were small when compared to the extent to which employers had underpaid their workers. A farmer who violated the wage law for the first time, for example, was fined only R300 per worker while a farmer with four previous violations of the same provision within three years was fined only R1 500 as can be seen in Table 4.7. The small fines encouraged the farmers to violate the wage legislation (Cassim *et al.* 2015: 73).

Number of violations	Imposed fine
No previous violations	R300 per worker
No previous violation in respect to the same provision of the Act	R600 per worker
A previous violation of the same year or two violations in respect to the	R900 per worker
same provision during the past 3 years	
3 previous violations of the same provision within 3 years	R1200/worker
4 previous violations of the same provision within 3 years	R1500/worker

Table 4.7: Fines for violating minimum wage laws

Source: Cassims et al. 2015: 73.

4.14.4. Unwillingness and inability to enforce minimum wage laws

At the time when minimum wage legislation was introduced in 2003, the compliance level was higher on large farms than on small farms. The reason for higher compliance on bigger farms was that the farmers thought they would be targeted by the labour inspectors (Bhorat *et al.* 2012: 280). However, soon after the wage legislation had been introduced, they realised that the government was either unwilling or unable to enforce minimum wage laws. The authorities were reluctant to enforce the wage laws for fear that it could lead to more job losses among the poor and less skilled workers whom the legislation was intended to help (Yamada 2012: 47).

This explained why the compliance level was extremely low in areas where the poor and less skilled workers were most likely to be employed. These were the areas where government inspections were likely to have the highest pay-off. The government's inability and unwillingness to enforce the legislation encouraged the employers on bigger farms to disregard the wage laws just like the employers on smaller farms. By 2005 the difference in compliance levels between the bigger and small farmers had disappeared (Yamada 2012: 47).

4.15 Conclusion

South Africa's farming sector workers were some of the least paid workers in the country. Employers were able to exploit these workers because they were not protected by any labour legislation like workers in other sectors of the economy who were protected. The majority of farm workers did not even belong to any trade union. These workers were therefore only protected by the common law. That made it easy for employers to exploit these workers without any consequences (Grub 2005).

The low pay that these workers received made them to continue to live in poverty just like people who were unemployed. They could not even support their families with the meagre pay that they had received. Most children of farm workers were therefore stunted and underweight due to lack of nutritious food (Visser & Ferrer 2015).

It was only in the 1990s and early 2000s that labour laws like the Basic Conditions of Employment Act, the Labour Relations Act, the Employment Equity Act, the Skills Development Act and the Extension of Security of Tenure Act were extended to also cover workers in the agricultural sector (Grub 2005: 60). By extending these laws to the agricultural sector government was trying to improve the working conditions of the working poor in the sector. However, these laws did not do much to improve the working conditions of the working poor in the sector. The majority of workers in the agricultural sector continued to live below the poverty line (Department of Labour 2010: 35).

To help alleviate poverty among the working poor of the agricultural sector, government introduced sectoral determination legislation, which led to the introduction of sectoral minimum wage in the sector. The sectoral minimum wage was introduced in 2002 and it came into effect in March 2003. The 2003 minimum

wage increased agricultural sector wages by about 17 per cent but it was not high enough to improve the living conditions of the working poor of South Africa's agricultural sector (Bhorat *et al.* 2014: 9). Minimum wages were inadequate to afford farm workers and their children a decent standard of living, as they could not afford basics such as housing, clothing and education (Brown-Luthango 2006). This made farming sector workers to go on strike for higher wages, which led to a further increase in the minimum wage by 52 per cent in March 2013 (Times Live 2016: 1).

Minimum wages were also not properly complied with because inspection offices which were supposed to enforce the legislation were understaffed, undertrained and under-equipped. Fines imposed on offenders were too small when compared to the offences committed. This situation encouraged employers in the sector to disobey the minimum wage laws and it rendered the wage policy ineffective as a poverty alleviation strategy (Yamada 2012: 47).

The minimum wages of 2003 and 2013 increased labour costs such that farmers decided to substitute most of their workers with skilled workers and machines (Saayman & Middelberg 2014: 344). As more skilled workers and machines were employed in the sector, the majority of unskilled workers were laid off as predicted by the standard competitive model. The majority of those who retained their jobs continued to be remunerated unfairly, as most employers did not comply with the wage policy. About 262 000 and 72 000 unskilled workers lost their jobs in the sector in 2003 and 2013 respectively (Statistics South Africa 2010a-2014b). The majority of those who lost their jobs were female employees when compared to their male counterparts. About 6 per cent of female employees lost their jobs after the 2013-minimum wage increase compared to 4 per cent of male employees (Statistics South Africa 2013a-2016b).

CHAPTER 5

FINDINGS, POLICY IMPLICATIONS AND CONCLUSION

5.1 Introduction

Countries across the globe, both developed and developing, used minimum wages as a tool for alleviating poverty among the working poor (National Treasury 2016: 8). A minimum wage set at an appropriate level was seen as an effective tool, which could play an important role in addressing extremely low pay, and the broader challenges of poverty and inequality (National Treasury 2016: 60).

There is, however, a raging debate about the relevance of minimum wage as a tool for alleviating poverty among the working poor. The supporters of the policy believe that minimum wages will not only lead to an increase in employment of vulnerable workers, but that it will also stimulate aggregate demand and provide on-the-job training to the working poor. It will eventually make their skills more desirable and expensive (Hashimoto 1981).

The opponents of minimum wages, on the other hand, believe that it does not alleviate poverty because most employers of vulnerable workers do not comply with the minimum wage policy. The opponents also believe that it will lead to job losses among the low-paid workers that it is intended to help. They argue that the policy benefits people from rich families instead of the working poor (Even & MacPherson 1996). South Africa also used sectoral minimum wages in sectors where vulnerable workers were employed, like the agricultural sector, in an attempt to pull them out of poverty. It is, however, not clear as to whether minimum wages succeeded in reducing poverty among the working poor in the agricultural sector or not.

This chapter starts with a summary of the findings on employment and the enforcement of the policy globally. This is followed by findings on employment and enforcement in South Africa's agricultural sector, the contributions of this study, suggestions for further research, recommendations and a conclusion.

5.2 Summary of findings globally

5.2.1 Findings on employment in developing countries

5.2.1.1 Negative employment effect in developing countries

In most of the developing countries, minimum wage policies led to job losses among the working poor whom it was intended to help, as predicted by the standard competitive model. In Malawi, for instance, more workers in the tea estates lost their jobs in 1989 after minimum wages were raised by 95 per cent and 126 per cent respectively. The number of work days in both the tea and tobacco estates also decreased following the 1989 increases in the minimum wages in the country. In the tea estates, the number of work days decreased by 17 per cent, while in the tobacco estates they decreased by 11 per cent (Livingstone 1995: 738). The limited number of work days had negative implications on wages of the working poor (Cunningham 2007).

Minimum wages which were introduced in the formal sector of Kenya in 1999 also led to job losses among the working poor whom the policy was intended to help. It was estimated that a 10 percentage point increase in minimum wages to a median wage made formal sector employment to decrease by between 1.1 per cent and 5.9 per cent (Andalon & Pages 2008: 18). In Ghana, manufacturing sectors' employment dropped by between 5 per cent and 6 per cent respectively after minimum wage was raised by 25 per cent in 1991. Firms which fully complied with the minimum wage policy retrenched about 2.5 per cent more workers than firms which did not comply (Jones 1997: 10).

In Botswana, where minimum wages were first introduced in 1974, more workers lost their jobs due to the minimum wage policy. Job losses were most evident where minimum wages were increased by higher percentages (Sesinyi 1998).

In Costa Rica, the increases in minimum wages which occurred in the 1980s and 1990s led to job losses among the low-paid workers. It was estimated that a one percentage point increase in minimum wages led to a 0.4 per cent and 0.6 per cent drop in the covered sector and total employment respectively when the average wage level was 89 per cent (El Hamidi & Terrell 2001: 5).

In Mexico, more skilled workers were employed in the 1970s when minimum wages were higher. However, unskilled female workers replaced most of the skilled male workers as minimum wages decreased in the 1990s. This confirmed the notion that higher minimum wages would lead to job losses of the very same people whom the policy was intended to help (Feliciano 1998: 178).

5.2.1.2 Increased employment in the informal sector

Some of the workers who lost their jobs in the formal sector found employment in the informal sector. This trend was observed in countries like Ghana and Kenya. The 1999 increase in Kenya's minimum wage increased informal sector employment by between 2.7 and 5.9 per cent (Andalon & Pages 2008). Most of the people who lost their jobs in Ghana's the formal sector joined the informal sector of that country (Jones 1997).

5.2.1.3 Positive employment effect

There was, however, instances where increases in the minimum wages led to increases in employment and work days as predicted by monopsonistic model. The 126 per cent and 95 per cent increases in Malawi's minimum wages led to a 2 per cent increase in work days in the sugar estates of that country (Livingstone 1995: 738). Unlike the smaller firms which retrenched workers, bigger firms in Ghana increased their employment levels after the 1991 minimum wage increase (Jones 1997).

Increases in employment were also observed in situations where minimum wages were raised by smaller percentages or where minimum wages were reduced. This was observed in Botswana in 1985, Costa Rica in the 1980s and 1990s, and in Mexico from the 1970s to the 1990s. In Botswana, an increase in employment was observed in sectors where minimum wages were raised by 37 Thebe per hour as opposed to sectors where minimum wages were raised by 56 Thebe per hour (Sesinyi 1998). Increases in employment were also observed in Costa Rica in the 1980s and 1990s when minimum wages were increased by smaller percentages. At the average wage level of 30 per cent, for instance, a one per cent increase in minimum wage made the employment level of the covered sector to increase by 1.3 per cent. When the average wage level was 55.5 per cent, a one percentage increase in minimum wage made employment levels of the covered sector workers to increase by 0.6 per cent (EI Hamidi & Terrell 2001). More unskilled and inexperienced workers were employed in Mexico when minimum wages were consistently lowered from the 1970s to the 1990s (Feliciano 1998).

5.2.2 Summary of findings on employment in developed countries

5.2.2.1 Positive employment effect

In developed countries, minimum wage policies had positive employment effects in that they led to an increase in employment levels in sectors where they were introduced. In New Jersey's fast food restaurants, full-time employment increased by 3.2 per cent after minimum wage was raised by 3.1 per cent in 1992 (Card & Krueger 1994: 776).

The increase in employment was also observed in the United Kingdom's hairdressing salon industry after the national minimum wage was raised to £3.60 in April 1999. The positive employment effect observed in the United Kingdom was made possible by the fact that the national minimum wage was set at a cautious level. It was also introduced at the time when the country was experiencing high economic growth, and there was therefore a buoyant demand for goods and services in the country (Druker *et al.* 2005: 9). The increase in employment observed in both the United Kingdom and New Jersey confirmed the argument put forward by the monopsonistic model that minimum wages would lead to an increase in wages and employment of the low-paid workers (Jones 1997).

5.2.2.2 Negative employment effect

Although minimum wages led to increases in employment in both New Jersey and the United Kingdom, there were some negative effects that were caused by the wage policy in those countries. In both New Jersey and the United Kingdom, minimum wages made employers to pass on increased labour costs to the consumers by increasing the prices of their products. In New Jersey's restaurants, for example, meal prices increased by 1.8 per cent after the introduction of a higher minimum wage of US\$5.05 per hour (Card & Krueger 1994). In the United Kingdom some small business owners responded to the national minimum wage by employing smaller number of trainees (Druker *et al.* 2005).

5.3 Findings on enforcement and compliance globally

5.3.1 Findings in developing countries

In most of the developing countries, research showed that minimum wages were not enforced properly. Labour inspection offices, who were supposed to enforce the minimum wage laws, were understaffed and inspectors were not properly trained. This made it difficult for the inspectors to enforce the wage laws effectively. Low levels of inspection encouraged employers of minimum-wage workers not to obey the minimum wage laws as predicted by the opponents of minimum wage policy. Therefore, the majority of the working poor were paid wages, which were below the stipulated minimum wages (Benassi 2011).

When the Malawian minimum wage was 45 kwacha, for example, 59 per cent of the tobacco estate workers and 37 per cent of sugar estate workers were paid below the stipulated minimum wages (Livingstone 1995: 737). In Kenya, about 29 per cent of agricultural sector workers and 17 per cent of non-agricultural sector workers were paid below the minimum wages in 1999 (Andalon & Pages 2008: 35).

About 73 million working poor of India were paid below the minimum wage between 2004 and 2005. Between 2009 and 2010 the number of people who were paid below the minimum wage decreased slightly to 61.1 million (Belser & Rani 2012). The majority of less skilled workers in Ghana were given wages, which were below the stipulated minimum wages in 1991 (Jones 1997: 10). In Botswana, the high level of non-compliance with the wage policy was common in small companies that were usually based in rural areas. Most of the workers employed in the small companies were therefore paid wages that were below the stipulated minimum wages (Sesinyi 1998: 9). In Costa Rica, it was estimated that an average of 33 per cent of full-time salaried workers earned below the minimum wage between 1976 and 1991 (Gindling & Terrell 2002: 7).

5.3.2 Findings in developed countries

Unlike employers in developing countries, businesses in developed countries complied with the minimum wage policies. In New Jersey's fast food restaurants, for instance, 90 per cent of employers paid the minimum wage of \$US5.05 in 1991 while

the other 10 per cent paid more than the minimum wage. There was therefore no New Jersey's employer who paid wages that were below the stipulated minimum wage of US\$5.05 per day. The high level of compliance with the wage policy was made possible by the system of inspection, which was highly effective (Card & Krueger 1994: 776). The majority of workers employed in hairdressing salon businesses in the United Kingdom were as well paid the national minimum wage, as employers were afraid to be reported to the Employer Tribunal (Druker *et al.* 2005: 18).

5.4 Summary of findings in South Africa's agricultural sector

5.4.1 Findings on wages

Minimum wages raised the wages of South Africa's working poor. In 2003, minimum wage legislation raised the wages of the working poor by about 17 per cent (Bhorat *et al.* 2014). The high minimum wage increase of 2013 raised the wages of the low-paid workers in the farming sector by R105 per day, which was an increase of 52 per cent (Business Day Live 2013). Areas where wages were much lower experienced high increases as compared to areas where wages were higher (Bhorat *et al.* 2014).

5.4.2 Findings on employment

The 17 per cent minimum wage increase of 2003 and 52 per cent minimum wage increase of 2013, led to job losses among the working poor of South Africa's agricultural sector. Approximately 262 000 farm workers lost their jobs after minimum wages were raised by 17 per cent in 2003, while another 72 000 lost their jobs following the 52 per cent increase of 2013 (Statistics South Africa 2013a-2016b).

The fact that most vulnerable workers in the agricultural sector lost their jobs in 2003 when the minimum wage was raised by 17 per cent than in 2013 when it was raised by 52 per cent supported the argument that any big policy intervention should ideally take place when the economy was growing (National Treasury 2016: 8). At the time

when the wage policy was first introduced in the agricultural sector in 2003, the South African economy was not doing well. This was made evident by a decrease in real Gross Domestic Product, which dropped from 3.7 per cent in 2002 to 3 per cent in 2003 (IndexMundi 2017). The introduction of a minimum wage under those economic conditions made more vulnerable workers in the sector to lose their jobs. About 31 per cent of South Africa's farm workers lost their jobs between 2002 and 2005 as a result of the introduction of minimum wages (Jooste & Spies 2006: 12).

Between 2011 and 2013, which was the period when the minimum wage was raised by 52 per cent, the agricultural sector was doing well economically. There was a high demand for agricultural products, which led to a considerable increase in prices of agricultural products. Gross farming income increased by R2.8 billion at the time (Department of Agriculture, Forestry and Fisheries 2013: 17).

High demand for agricultural products, at the time, made employment in the sector not to drop immediately after the 52 per cent minimum wage has been introduced in March 2013. Employment only started decreasing in the third quarter of 2013 (Statistics South Africa 2014). From the second quarter of 2013 to the second quarter of 2014, 9.7 per cent of farming sector workers lost their jobs. The 9.7 per cent drop in employment was, however, insignificant considering the fact that minimum wages had increased by 52 per cent at the time.

Female employees were more negatively affected by the job losses than their male counterparts. The number of male workers employed in the agricultural sector dropped from 506 000 in 2013 to 488 000 in 2014, which was a decrease of 3.6 per cent. The number of female workers employed in the sector dropped from an average of 228 000 in 2013 to an average of 213 000 in 2014, which was a decrease of 6.6 per cent (Statistics South Africa 2010a-2016b). This meant that the 2013 minimum wage increase pushed more women into unemployment.

5.4.3 Findings on mechanisation and skilled workers

As the services of unskilled and inexperienced workers in the farming sector became more expensive, employers turned to skilled workers in an attempt to lower production costs and improve productivity (Saayman & Middelberg 2014). The increase in the number of skilled workers became evident after minimum wages increased by 52 per cent in 2013. The number of skilled workers employed in the farming sector increased from 69 000 in 2013 to 96 000 in 2015, which was an increase of 39.1 per cent (Statistics South Africa 2010a-2015b). This confirmed the argument put forward by the opponents of minimum wages that the minimum wage policy would make employers prefer skilled workers who were more productive over unskilled workers (Schuldt *et al.* 2012: 265).

It is, however, unclear whether the introduction of minimum wage policy in the agricultural sector had any influence with regard to mechanisation. The value of machinery, implements and tractors purchased by commercial farmers had been increasing even before the introduction or raising of minimum wages in the sector. From the year 2000 to 2003 the value of capital assets purchased by commercial farmers increased by 34.2 per cent and from 2010 to 2013 it increased by 32 per cent (Department of Agriculture, Forestry and Fisheries 2015). This makes it difficult to conclude that increased mechanisation in the sector occurred as a result of minimum wage policy.

5.4.4 Findings on enforcement and compliance

There was high levels of non-compliance with the minimum wage policy, as most of the working poor in the agricultural sector still earned wages that were below the stipulated minimum wages. By 2005, non-compliance with the policy was at its highest level at 81 per cent. In 2013, when minimum wages in the sector increased by 52 per cent, the average wages of entry level workers increased by only 29.2 per cent and 32.7 per cent respectively (Bureau for Food and Agricultural Policy 2015: 41). This meant there were workers who still earned below the stipulated minimum wage of 52 per cent.

The high level of non-compliance with the minimum wage policy was the result of a shortage of inspectors. The few inspectors employed by the Department of Labour were also poorly trained and under-resourced. This encouraged employers to disobey the legislation as the risk of being caught was low. In the Western Cape, for example, the chance of being visited by a labour inspector was only 11 per cent in 2007. Fines imposed on farmers, who did not comply with the policy, were also very low. A farmer violating the law for the first time was only fined 25 per cent of the amount of the underpayment. These factors encouraged most farmers not to comply with the minimum wage policy (Stanwix 2013: 4).

5.5 Summary of contributions

The findings support the argument for the standard competitive model that the minimum wage policy is not an ideal tool for alleviating poverty among the working poor because it leads to job losses among the very same people whom it is intended to help. Although minimum wages increased the wages of the working poor they also led to job losses in some of the developing countries studied and in South Africa's farming sector. More female employees lost their due to minimum wages their male counterparts. Those who retained their jobs did not benefit that much either due to the fact that there was poor enforcement of the policy, encouraging employers not to comply with the policy. In most cases employers continued to pay wages which were below the stipulated minimum levels, since the consequences for non-compliance were not dire. Minimum wages were also set at levels that were even lower than the poverty line. This made the working poor, who retained their jobs, unable to satisfy even their basic needs.

5.6 Suggestions for further research

The topic of minimum wages in South Africa's agricultural sector has been poorly researched. It is now a known fact that minimum wages increase the labour costs, which causes employers to lay off some of their workers. It is, however, not known as to what happens to workers who have lost their jobs due to minimum wages. Jones (1997) pointed out that the workers who lose their jobs in the formal sector end-up finding employment in the informal sector. It would, therefore, be helpful to investigate what happened to workers who lost their jobs in South Africa's agricultural sector and other sectors where minimum wages were introduced.

Workers benefit from minimum wage policy because it increases their purchasing power. It is, however, not known how employers benefit from high wages that they now pay to their employees. The Efficiency Wage Model argued that higher wages encourage workers to work harder such that they become more productive (Brown & Johnson 2006). Research should therefore be conducted to find out if higher wages brought about by minimum wage policy made farm workers more productive following the introduction of minimum wages.

The macroeconomic model argues that the introduction of minimum wages would stimulate aggregate demand because workers would be having more money to spend (Levin-Waldman 2001). It is, however, not certain how minimum wages would influence aggregate demand in the South African context. Research to determine how farming sector's minimum wages influenced aggregate demand in the South African economy would therefore be helpful.

5.7 Policy implications

Despite the fact that minimum wages led to job losses in South Africa's agricultural sector, the policy was a useful tool in promoting social justice in that it improved the living conditions of the working poor, especially of those workers who managed to retain their jobs. Minimum wages played a crucial role because it raised the wages of the working poor in South Africa's agricultural sector. Wage levels increased by as much as 17 per cent in 2003 and 52 per cent in 2013.

For the minimum wage policy to be even more effective, the following recommendations are made:

- Given the vulnerability of the agricultural sector workers to disemployment effects and the evidence from previous experiences where job losses occurred, any adjustment of minimum wages should be based on past experiences or case studies. If available evidence suggests that an adjustment of minimum wage levels will lead to job losses, then such adjustments should not be made. Minimum wages should only be increased if evidence show that such an adjustment will not lead to job losses (National Treasury 2016: 10);
- During recession periods minimum wages should either be frozen or increased cautiously. Past evidence should as a guide as to whether minimum wages should be frozen or increased cautiously. High minimum wage increases should be avoided during recession periods because such adjustments could lead to more job losses as it happened in 2003 (National Treasury 2016);
- The adjustment period should also enable both farmers and farm workers to adjust to minimum wage increases in a manner that does not cause disruptions in the sector. For smooth adjustments to be possible minimum wage increases should be announced a year before the adjustments come into effect (National Treasury 2016);
- Whenever minimum wages in the agricultural sector are increased, small farmers should be given more time to adjust to new wage levels. Sudden changes on the side of these farmers could lead to job losses as employers could not be ready for such changes (National Treasury 2016);
- Any commercial farmer who could effectively motivate why s/he is unable to pay the new minimum wage level should be granted temporal exemption. Such exemptions should be granted only to farmers who are in significant economic distress. The process of exemptions should be based on appropriate and verifiable documentary evidence (National Treasury 2016: 10);

- The authorities should consider appropriate punitive sanctions against commercial farmers who fail to comply with the minimum wage policy. Farmers who repeatedly fail to comply with minimum wage policy should be heavily fined. Only consistent losses will serve as effective deterrent to noncomplying employers. The cost of non-compliance should be structured in such a way that it outweighs the benefits. The punitive sanctions for noncompliance should also be made known to the public (Benassi 2011);
- Labour inspectors should promote, monitor and enforce compliance with the minimum wage policy by advising both employers and employees about their rights and obligations. They should also conduct inspections and investigate complaints made by farm workers on a regular basis (National Treasury 2016);
- Compliance with the policy will also be promoted if simplified, accessible and anonymous reporting is a requirement. Anonymous reporting could be achieved by setting-up call centres that handles employees' queries and complaints regarding non-compliance. Posters on minimum wages should also be displayed in places of work. Information on minimum wage policy should also be widely advertised on radios to make farm workers fully aware of their existence. There should also be seminars where both farm workers and employers could be educated about the minimum wages (National Treasury 2016);
- To overcome the challenge of lack of resources, which is common in South Africa, a prioritisation strategy should be adopted. Farms considered to be at risk of non-compliance should be targeted by inspectors. In this way the limited resources would be used most effectively (Benassi 2011); and
- Sectoral minimum wage system, which is currently in place in South Africa, should be replaced by single wage levels which apply in all sectors of the economy where minimum wage workers are employed. A single minimum wage level (National Minimum Wage) makes marketing and enforcement of the policy more practicable and simple and this would promote compliance (National Treasury 2016: 78).

5.8 Conclusion

Globally minimum wages had mixed outcomes. There were countries where minimum wage policies did not only increase the wages of low-paid worker; but they also increased employment in sectors where minimum wages were introduced. The increase in minimum wages and employment was observed in New Jersey's fast food restaurants and the United Kingdom's hair salon sector after minimum wage was raised by high percentage in the former and national minimum wage was introduced in the later. The increase in employment occurred despite the fact that the policy was properly enforced by the authorities. Increases in employment, after minimum wages were introduced or increased, were also observed in Botswana and Costa Rica in sectors where minimum wages were cautiously raised. The increases in Malawi's minimum wages led to an increase in work days in the country's sugar estates (Livingstone 1995).

Minimum wages, however, also led to job losses in some of the economic sectors of Ghana, Kenya, Botswana and Costa Rica where wages were raised by high levels. The number of work days was decreased in Malawi's tea and tobacco estates after minimum wages were raised by 95 per cent and 126 per cent respectively (Livingstone 1995). The job losses occurred despite the fact that most employers in these countries did not comply with the policy as enforcement was weak (Benassi 2011).

Minimum wages did not do much to improve the living conditions among South Africa's agricultural sector workers either because it led to job losses among the very same workers that it was meant to help. As the services of unskilled and inexperienced workers became more expensive as a result of minimum wages, employers in the sector began to give preference to skilled workers. Majority of the workers who lost their jobs were female employees as compared to their male counter parts (Statistics South Africa 201a-2016a). The high level of job losses in the sector happened despite the fact that most of the employers did not comply with the policy (Bhorat *et al.* 2012).

Although sectoral minimum wages led to job losses among South Africa's agricultural sector workers, it increased the wages of the working poor who retained their jobs in that sector. The 2003 and 2013 sectoral minimum wages raised the wages of the agricultural sector workers by 17 and 52 per cent respectively. The benefits derived from minimum wages made the authorities to consider this policy as an important tool for addressing income inequality among vulnerable workers.

The role that minimum wage policy played in addressing income inequality in the country encouraged government to replace sectoral minimum wages with the national minimum wage, which is less complex and easy to understand. The national minimum wage was agreed upon by members of the National Economic Development and Labour Council (Nedlac), which is made up of organised labour, organised business, communities and government (National Treasury 2016: 8). These parties agreed on a national minimum wage of R3 500 per month, which would come into effect from May 2018. The stipulated minimum wage is expected to uplift more than 6.6 million workers who are currently earning below R3 500 per month (Herald Live 2017: 1).

From the period in which the national minimum wage is to become effective up to 30 June 2019, applicable transitional arrangements will be in place and compliance will be aided through technical assistance and persuasion. Universal coverage of the national minimum wage will only take effect on July 2019. From July 2019 the enforcement for non-compliance will include payment of a fine (National Treasury 2016: 62).

A phase-in period was recommended for workers in vulnerable sectors like agriculture, domestic work and other sectors where the higher minimum wage of R3 500 could lead to job losses. The national minimum wage of R3 500 in the agricultural and domestic work sectors will therefore not be phased in immediately. For farm workers and forestry workers, 90 per cent of the national minimum wage

will come into effect in May 2018. For domestic workers, only 75 per cent of the national minimum wage will be implemented when the policy comes into effect. Any adjustment to the level tiers of 90 per cent and 75 per cent will be made on the basis of evidence of the impact of the national minimum wage in the sector concerned. The parties agreed that any transitional arrangement should be in place until 2020 at the latest (National Treasury 2016: 62).

Businesses that are unable to pay the stipulated national minimum wage will be allowed to apply for exemption lasting one year. For these businesses to qualify for the exemption, they should effectively substantiate why they are unable to pay the national minimum wage (Herald Live 2017: 2). The exemption process will only be based on appropriate and verifiable documentary evidence (National Treasury 2016: 63). Own-account workers and paid or unpaid workers in the informal sector are permanently excluded from the national minimum wage (National Treasury 2016: 11).

The Basic Conditions of Employment Act, which currently governs the working conditions and regulation of wages together with the sectoral determinations, will continue to regulate all other employment conditions and mechanisms of enforcement. A new Wage Commission will be established to deal with setting wages and conditions of employment in all sectors and to review the national minimum wage (National Treasury 2016).

Social partners agreed that the implementation of a national minimum wage would provide a positive intervention in addressing the high level of poverty in South Africa. Unlike the sectoral minimum wages, which varied according to sectors, the national minimum wage would be simpler and easier to communicate and implement, and those aspects would encourage compliance (National Treasury 2016: 9).

The national minimum wage will also stabilise the labour market and reduce the number of strikes, stimulate growth as workers will spend more and address income

inequality, which has always been high. Generally, it will improve the lives of the 6.6 million vulnerable workers who currently earn less than R3 500 per month (Herald Live 2017: 1).

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