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FOOD INSECURITY AND DIETARY DIVERSITY AMONGST SEASONAL WOMEN FARM WORKERS IN SOUTH AFRICA: THE CASE OF CAPE WINELANDS DISTRICT

Samantha Calvert

2874851

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Supervisor: Professor Stephen Devereux

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DECLARATION

I acknowledge that this research study, **"*Food Insecurity and Dietary Diversity amongst Seasonal Women Farm Workers in South Africa: The case of Cape Winelands District*"** is my own work and I have not previously submitted it at any University for a degree or examination. All sources that I have quoted have been referenced.

Samantha Calvert March 2022

(Student Number: 2874851)

Signature ..... Samantha Calvert .....

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This work is dedicated to God and my late father Eric Peter Calvert who wanted me to pursue my studies regardless of my circumstances, as well as my mother and brother, Ruth and Angelo Calvert who have been my rock throughout everything.

ABSTRACT

This research study explores seasonal farm working womens' food insecurity and dietary diversity in Cape Winelands District (CWD). It describes the food difficulties seasonal farm working women are facing that prevents them from acquiring a healthy diverse diet; specify their diet choices as well as portray the current assistance they are receiving from government.

The research study found that seasonal farm working women in CWD do experience food insecurity and lack dietary diversity mainly during certain months of the year when they are unemployed or underemployed due to various barriers they experience. Some barriers are - no income off-season; increase of seasonal work with low and irregular wages; apartheid and discrimination of women; no access to land and inputs for growing food; inflation; low social grant amounts; debt; supermarkets being far from farms; lack of markets in rural areas; farm mechanisation; social ills, such as alcohol abuse, mainly by male partners; high crime rate against farmers which result in farms being sold leaving workers without a job; lack of development opportunities, other work opportunities and access to markets.

The research methodology utilizes a qualitative approach which is exploratory, with methods, such as individual interviews and focus group discussions with seasonal farm working women in CWD who was selected by using the snowball sampling technique. In-depth interviews were taken with relevant stakeholders to determine food insecurity and dietary diversity challenges, household consumption, and assistance currently available to empower farm working women. Recommendations to combat seasonal farm working women's food insecurity and lack of dietary diversity focussed on short, medium and long-term interventions and planning.

Keywords: ***Food insecurity; Dietary Diversity; Seasonality; Farm working women; Unemployment; Underemployment; Minimum Wage; Food choices; Support systems***

Note: *This research does not speak to the effects the Covid-19 pandemic has had on farm worker employment and their food security, nor does it include social assistance measures for vulnerable groups from government during the pandemic, as the field research commenced and was concluded in 2019 before the pandemic was confirmed in South Africa in early 2020. Instead, it explores the food insecurity situation of seasonal farm working women before 2020, its causes, and lack of support from government, thus portraying the inequalities and food and*

nutrition security challenges that existed for farm working women before the pandemic emerged.

LIST OF ACRONYMS AND ABBREVIATIONS

AGRI SA	Agriculture Industry in South Africa
BCEA	Basic Conditions of Employment Act
COSATU	Congress of South African Trade Unions
CSAAWU	Commercial Stevedore Agricultural and Allied Workers Union
CWD	Cape Winelands District
CWDM	Cape Winelands District Municipality
DD	Dietary Diversity
EPWP	Expanded Public Works Programme
ESTA	Extension of Security and Tenure Act
FAO	Food and Agriculture Organization
FAWU	Food and Allied Workers Union
FGDs	Focus group discussions
FJ	Farmworker Justice
FSF	Food Security Framework
IFWF	International Farm Workers Forum
ILO	International Labour Organization
KII	Key informant interview
LRA	Labour Relations Act
NMW	National Minimum Wage
NMWA	National Minimum Wage Act
PMBEJD	Pietermaritzburg Economic Justice and Dignity

PRA	Participatory Rural Appraisal
SPP	Surplus People Project
WCDOA	Western Cape Department of Agriculture
WESGRO	Western Cape Tourism, Trade and Investment Promotion Agency
WFP	World Food Programme (United Nations)
WFP	Women on Farms Project
WFS	World Food Summit
WHO	World Health Organization

CHAPTER ONE
INTRODUCTION AND BACKGROUND

1.1. Chapter overview

This chapter provides an introduction to the research study. It gives a description of the research site, mentions some contextual background of the study and highlights the research problem and research questions, hypothesis of the study, aims and objectives and the significance and rationale of the study. Lastly, the chapter provides an overview of the mini-thesis chapters.

1.1.1. Introducing the case study area: Overview of Cape Winelands District (CWD)

The research study was conducted in Cape Winelands District (CWD), South Africa. CWD is 40 km to the east of Cape Town, resting in the shadow of a perpetual belt of Cape fold mountains (Cape Winelands District Integrated Development Plan, 2018). It comprises a cluster of well-known towns, small suburbs and Cape Dutch farmsteads that supply prestigious local wines to the rest of South Africa and other countries (Cape Winelands District Integrated Development Plan, 2018).

Cape Winelands District Municipality (CWDM) is a Category C municipality in the Western Cape Province close to the Cape Metropolitan area and is landlocked in between the West Coast and Overberg coastal districts (Cape Winelands District, 2020). It includes five local municipalities, namely: Drakenstein, Stellenbosch, Witzenberg, Breede Valley and Langeberg (Cape Winelands District Municipality, 2011) ***(See figure 1: Map of Cape Winelands District and its respective municipalities)***. The districts' mountains produce an implausible scenery for a myriad of vines, but they are also one of the reasons why wine grape grow so well; due to the district's geographical compositions that are equipped with unique soil conditions that directly influences the quality of wine (Cape Winelands District Integrated Development Plan, 2018).

Figure 1: Map of Cape Winelands District and its Municipalities

***Source**: (Cape Winelands District: Map locality, 2011)*

As reported by Wines of South Africa (WOSA) (2019) "94 545ha of vines producing wine grapes in CWD are cultivated over an area of approximately 800km in length", whereas one third (70%) of all South Africa's wine produce farming are evident in the CWD (The Western Cape Tourism, Trade and Investment Promotion Agency) (WESGRO, 2016:5). Roughly 60% of all wine grapes are produced in the Breede River Valley, Paarl and Stellenbosch (Cape Winelands District Municipality, 2011).

According to Cape Winelands District Health Plan (2018:57), CWD was estimated to be home to 933 476 people for the year 2019. The three major races in the district are Coloured (62.1%), Black African (23.7%) and White (12.9%) with females making up 50.7% of the district (Statistics SA Census, 2011).

Many farm workers are employed in the district. In 2017, Western Cape Department of Agriculture (WCDoA) conducted a Farm Worker Household Census Report that shows the percentage of farm workers employed within regions in the Western province. From the sample size used[1], the findings for CWD indicated that 53.4% of farm workers are permanent farm workers residing on the farm they are employed on and 50.5% are permanent farm workers residing off the farm they are employed on. The results also indicated that temporary farm workers residing on and off the farm they are employed on comprised of 57.9% and 36.1%. Furthermore, seasonal farm workers employed on and off the farm they work on showed 67.5% and 19.4% respectively ***(See Table 1: Employment status of farm worker household members in the Western Cape Province)***. These findings indicate the large proportion of farm workers employed in the district as well as indicating CWD as a popular wine producing region which employs one of the highest concentration of farm workers in the Western Cape, of which 70% of the seasonal workforce constitutes women (Women on Farms Project, 1997)[2].

[1] The sample size was a total of 11 028 farm worker households surveyed which covered 42 982 individuals from 2991 farms across the Western Cape Province (2017 Western Cape Department of Agriculture Farm Worker Household Census Report).
[2] A more up to date percentage of seasonal farm working women working on wine farms in CWD could not be found.

Table 1: Employment status of farm worker household members across regions of the Western Cape Province (%)

Employment status of farm worker household status (%)											
REGION	**Permanent on farm**	**Permanent off farm**	**Temporary on farm**	**Temporary off farm**	**Seasonal on farm**	**Seasonal off farm**	**Too young**	**At school**	**Retired/pensioner**	**Actively job searching**	**Unemployed**
Cape Metro	2.9%	2.6%	2.6%	3.1%	1.2%	0.3%	3.5%	4.5%	5.2%	5.4%	4%
***Cape Winelands**	**53.4%**	**50.5%**	**57.9%**	**36.1%**	**67.5%**	**19.4%**	**44.1%**	**37.3%**	**0%**	**0%**	**50.6%**
Central Karoo	1.7%	1.0%	1.3%	0.8%	0.4%	0.1%	2.1%	1.1%	0.8%	0%	1.6%
Eden	8.1%	8.9%	8.2%	8.0%	3.9%	4.6%	11.3%	12.6%	9.8%	24.3%	10.6%
Overberg	8.8%	11.1%	6.9%	26.2%	5.2%	69.2%	6.2%	11.6%	25.9%	29.7%	8.4%
West Coast	25.0%	25.9%	23.2%	25.7%	21.8%	6.5%	32.8%	32.8%	58.3%	40.5%	24.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Province (n)	13189	2145	1737	847	1623	899	3082	8032	367	37	4623
Province (%)	36.1%	5.9%	4.7%	2.3%	4.4%	2.5%	8.4%	22%	1%	0.1%	12.6%

***Source**: Western Cape Department of Agriculture Farm Worker Household Census Report 2017, p.36-37*

From the table above, the categories for Western Province regions, 'Unemployed and Actively job searching', 'Temporary' and 'Seasonal' are noteworthy categories exposed to food insecurity, where Cape Winelands contributes majorly to:

- Permanent (on and off farm): 15334
- Temporary and Seasonal (on and off farm): 5106
- Unemployed and Actively job searching: 4660

From the sample size used, the results indicate that while 4660 of the working age population is currently unemployed and actively seeking work (Western Cape Department of Agriculture Farm Worker Household Census Report 2017, p.36-37), 5106 of the working age population will remain temporary and seasonally employed every year, whereas permanent workers are at risk of becoming seasonally and temporary employed. This puts the unemployed workers and the employed workers (permanent, seasonal and temporary) at an increased risk of experiencing greater food insecurity. From these numbers, it can be seen that sufficient economic growth and development interventions need to occur that would be able to absorb current and new labour market entrants.

1.2. Background to the study

In 2017, the agricultural sector in South Africa had performed best in the first three quarters, adding 2% to GDP growth (Agriculture Industry in South Africa, 2018) (Agri SA) compared to other major contributing sectors, such as mining and manufacturing. As an industry that is mainly export-driven, the South African government and the National Development Plan (NDP) (National Planning Commission, 2013) expressed the 2030 vision of the importance the agricultural sector contributes to South Africa's economy in terms of exports, job opportunities and food security. There has thus been an investment of R5.5 billion (until 2020) of national government money that will encourage 435 000 subsistence and smallholder farmers (Eckstein, 2017) in order to address the food insecurity problem in the country.

The problem of food insecurity amongst farm workers in South Africa is that the very persons who are the producers of quality output on farms, are the persons who are suffering with a lack of food for themselves and their families. According to Shabodien (2018) farm working women are mostly limited to seasonal, insecure and low paying jobs which lead to food insecurity and inferior diets.

Besides automation playing a considerable part in agriculture through the cultivation of farming land, the human element, specifically farm workers should be recognized more for their contribution towards the harvesting, food producing and packaging process (Verdon, 2003).

For generations, farm workers have been trapped in a cycle of poverty whose roots stems from colonialism, slavery, apartheid and the "dop system" (Mackay, 2018), whereby workers were partly paid in alcohol for their labour. As a result, agricultural workers in South Africa continue to experience worse conditions than those working in other sectors of the economy (Prince, 2004) which can also be attributed to social, political and economic factors. The exploitation of farm workers by farmers and the impact it has on their own and on their households' survival, food security, dietary diversity and well-being has caused outrage among farm workers, as well as from a number of entities and organisations globally and locally that fight for causes of humanity. Farmworker Justice (FJ) aim to empower migrant and seasonal farmworkers to enhance their living and working conditions, health and occupational safety (Farmworker Justice, 2020). In 2018 the International Farm Workers Forum (IFWF) was established to provide a platform for farm workers and farm worker union representatives worldwide to discuss strategies to overcome worker violations (IFWF, 2018). In South Africa, the Congress of South African Trade Unions (2018) (COSATU) has pledged to help negotiate with farm workers to obtain ownership of land from on where farm workers are working. Commercial Stevedore Agricultural and Allied Workers Union (2018) (CSAAWU) is fighting for farm workers to receive a minimum wage of R8500 per month, compared to the salary of R3169.19 per month in 2019 (Department of Labour, 2018). Similarly, Women on Farms Project (1997) (WFP) empower women farm workers to claim their rights and to satisfy their needs as a mother and worker to serve as an important participant in the economic, social and political sphere.

Seasonal farm working women, in particular face various challenges in order to sustain their own and their families' dietary diversity needs. This is due to gender inequality (Tran-Nguyen and Zampetti, 2004) - a misconception that male workers will remain less absent and by assuming that a woman's reproductive labour (*i.e.* child rearing and domestic chores) to be a liability to attend to work. This results in farm working women being viewed as less valuable to work, and in turn, are paid less, compared to male farm workers (Shabodien, 2006) and are less likely than men to have employment of a permanent nature. In CWD other causes of food insecurity for farm working

women are isolation from shopping centres where a variety of food options are present, lack of skills for other types of jobs, volatile income and employment, inadequate living conditions and cooking amenities, shortage of transportation from farms to other facilities, lack of government intervention (Wadsworth *et al.,* 2016) and poverty. The barriers to food security therefore affect regular access of adequate food and the achievement of a sustainable, diverse and quality diet.

Given this context, the research study focused on seasonal food insecurity of seasonal farm working women working on wine farms in CWD, South Africa and explained how food insecurity affects their dietary diversity. By using a qualitative research methodology, the purpose was to understand food security challenges and the assistance presently available to help underemployed women farm workers overcome the barriers that prevent them from consuming a variety of quality food regularly. Thus qualitative data was collected that pertained to consumption patterns and food choices of these seasonal farm working women, and food barriers to their dietary diversity, as well as current assistance from relevant stakeholders.

Chapter 1 introduces the background to the research study. Subsequent sections of the chapter provide the: **(i)** problem statement **(ii)** research questions, **(iii)** study hypotheses **(iv)** aim and objectives of the study and **(v)** rationale and significance of the study. The chapter ends with an outline of the thesis.

1.2.1. Problem Statement

Limited but vigorous studies have been conducted on the topic of farm workers' food insecurity in South Africa. Some studies include Lemke and Jansen van Rensburg (2014); Visser and Ferrer (2015); Devereux *et al.,* (2017) and Devereux and Tavener-Smith (2019) that explain the reasons for food insecurity of farm workers, its contributing factors and proposes clear sustainable solutions to government. Although this research clearly describes the conditions of farm workers and their food security struggles, workers are yet to see implementation of food insecurity interventions that would contribute to consuming consistent healthy meals. As mentioned, the barriers to food security and dietary diversity makes it harder to access nutritious foods regularly (Ramkissoon, 2018). Lemke and Jansen van Rensburg (2014) reports that despite protective legislation, farmworkers' living and working conditions have deteriorated and this situation affects food security negatively. Furthermore, there lies a literature gap for South African studies between

how food insecurity affects farm working women's dietary diversity, as well as their households' dietary diversity since they are the primary care givers and in many instances, the sole bread winner.

This study was therefore conducted in order to see how food insecurity and dietary diversity at the household level are affected by barriers that negatively affect seasonal farm working women's dietary diversity needs. Additionally, the gender aspect where inequality still exists for women and for this research, farm working women, is also conveyed through this study.

1.2.2. Research questions

According to Meltzoff and Cooper (2018) a research question is a question that your research project sets out to answer. Due to literature gaps mentioned above, this research study will explore the following main questions:

- What barriers to food security are experienced by seasonal farm working women?
- How does food insecurity affect the household consumption of a varied diet on a daily and monthly basis?
- What assistance is currently available for seasonal farm working women to combat food insecurity and to maintain a healthy and varied diet?

1.2.3. Study hypotheses

Based on the assumption that seasonal farm working women are food insecure and following the key questions mentioned above, the researcher sets out to test the hypotheses indicated below:

Hypothesis 1: Seasonal farm working women do not get enough income because:

- the Sectoral Determination Wage is too low
- farmers are not paying the Sectoral Determination Wage
- they are underemployed

Hypothesis 2: Women seasonal farm workers make bad dietary choices because:

- there is limited knowledge of nutrition education within their community
- they cannot afford a healthy diet
- of the advertising of unhealthy food

- traditional diets are changing

Hypothesis 3: Support systems from government are not adequate because:

- there are no Social Grants which target adults
- UIF does not cover seasonal farm workers
- there are no livelihood support programs
- women do not have access to land to plant

1.2.4. Aims and objectives of the study

The main objective for carrying out the research study is to analyse food insecurity and dietary diversity amongst women seasonal farm working women working on wine farms in the CWD (South Africa) in order to make known the working and living conditions for these workers, as well as challenges that exist which negatively affects their food security and dietary diversity needs. More specifically, the study will investigate:

- The barriers these workers face which affect their food security level;
- The food choices seasonal farm working women make on a daily and monthly basis which affect their household's food security and dietary diversity needs;
- What support structures are presently in place to assist and empower seasonal farm working women.

1.2.5. Rationale and significance of the study

As mentioned previously, the significance of the study is to explore food insecurity and dietary diversity challenges of seasonal farm working women in CWD, as well as to see the available assistance that could combat food insecurity for farm working women. The study also mentions the dietary choices seasonal farm working women make when underemployed. This information has shown to be important for policy-makers of food security to take into account climate change as not being the only contributing factor to food insecurity and lack of dietary diversity for seasonal farm working women. The research will help indicate the importance of a diverse diet on health and the impact it has on other areas, such as child rearing years, household dietary diversity, mental and physical productivity and ultimately a positive influence on economic growth.

1.3. Thesis outline

This research study consists of six chapters which are organized as follows:

Chapter one introduces the background of the study and provides a brief overview of CWD as the case study area, as well as touch on the context of farm workers in the area. The chapter also highlights the research problem, research questions and hypothesis, aims and objectives, as well as the rationale and significance of the research study.

Chapter two presents the literature review which gives an overview of relevant literature pertaining to the concepts of food insecurity and dietary diversity internationally and among South African farm workers. This will portray the historical and current situation of farm workers' food insecurity and dietary diversity situation.

Chapter three provides the theoretical underpinnings of the study. The Food Security Framework (FSF) is applied within the context of the research study and its' dimensions and other aspects thereof are explained. The chapter also defines the dietary diversity concept.

Chapter four presents the research design and explains the research methodology process used to collect data for the study.

Chapter five focuses on the evaluation, presentation and summary of the findings that addresses the research objectives and questions, literature review and conceptual framework of the research.

Chapter six answers the research questions and objectives of the study, explains implications for theory and future research and provides recommendations to key stakeholders that would help reduce seasonal farm working women's' food insecurity and dietary diversity challenges in CWD.

1.4. Chapter summary

This chapter introduced the research study site and provided some contextual background of the study. This chapter also featured the research problem and research questions, as well as highlighted the hypothesis, aims and objectives, and significance and rationale of the research study. Finally, the chapter concluded with a structural overview of the mini thesis chapters of the study.

CHAPTER TWO
LITERATURE REVIEW

2.1. Chapter overview

This chapter examines various literature pertaining to farm workers' food insecurity and dietary diversity situation internationally and in South Africa. The chapter relates to the research study hypotheses and begins with literature on global studies followed by South African studies conducted on farm worker conditions and other factors impacting on their food security. Lastly, this chapter describes farm workers' and particularly, seasonal farm working women's food insecurity experiences in CWD.

2.2. The Food Insecurity and Dietary Diversity situation for farm workers' internationally

2.2.1. Hunger, food and nutrition insecurity and diets

Food insecurity is strongly associated with malnutrition, hunger and poverty (Haque *et al*., 2017). It is influenced by a number of factors, such as poor infrastructure, income, employment, race/ethnicity, gender, disability, social support as well as external factors. Poverty remains one of the main influences in household food and nutrition insecurity particularly in rural settings where sustainable livelihood strategies are limited and asset bases are weak (Mthethwa and Wale, 2021). Food insecurity can worsen or stimulate conflict as inadequate access to food can lead to tensions or riots that become violent (Sasson, 2012), such as with the Arab Spring rebellions of 2010-2011[3]. FAO, WFP and UNICEF (2018) state that people who are most vulnerable to food insecurity should be protected, and to do this requires knowing the identity, location and situation of the most vulnerable individuals suffering from food insecurity (Maxwell *et al.,* 2003), especially women and children. Most households that are poverty stricken are highly reliant on wage income (Gammarano, 2019) and are therefore greatly impacted by employment instability leading to

[3] In late 2010, Arab citizens rose up in protest to express their long-held dissatisfactions with their governments. Unstable food security and international food price hikes were one of the many grievances and likely the factor that sparked the initial unrest (Tree, 2014).

varying levels of food insecurity - low, moderate and severe. The risk to food insecurity therefore increases when there is no or limited financial resources available to purchase food.

Globally, the largest group of individuals living in extreme poverty are farming communities in rural parts of the world who lack sufficient land to grow food to feed themselves and their families (Gassner *et al.,* 2019) and limited financial resources to buy the food they need. For rural farm workers, there are often limited and unaffordable nutritious food where they reside at with inadequate public infrastructure. Their wages may also be depleted before the next payday, leaving them without enough food to get through the rest of the month (Minkoff-Zern, 2012). In addition, food and nutrition security is becoming harder to achieve, particularly for the most vulnerable as increased prices is one major limiting factor in accessing adequate, safe and nutritious food at all times (Gustafson, 2013).

The world produces more than enough food to feed all persons on earth, although there is wide variability in self-sufficiency across different regions and countries, with roughly 800 million people chronically undernourished (Clapp, 2017). The volume of food is therefore not lacking but the problem is rather about who controls the food supply in each country and who has access to resources and the ability to produce or buy food? For example, in the 18th - 19th century many people died as a result of political will - not supplying food to areas where people were starving, rather than lack of food itself (O'Neill[4], 1952; Choudhury, 2011). Countries instead were exporting excess production to other countries (as a commodity) rather than feeding its own people who were poor and in need of it (Kilbane, 2020). These policies were often to benefit corporate businesses.

2.2.2. Women in agriculture

For fortunate individuals, seasonal changes bring varieties of joy and fun regarding food diversity, changing lifestyles, clothes and vacations. Many farm working women are negatively affected by seasonal changes and experience hunger and extreme poverty, particularly during the lean season before agricultural harvests (Mondal, 2017). In 2019, agriculture contributed 25% of female employment globally (The World Bank, 2022) but yet, many female workers cannot survive on

[4] Irish Potato Famine and late 19th-century famines in India and China that killed millions of people.

agricultural income (Rodriguez and Singer, 2018). Hunger seasons[5] [6]have become the norm in many regions of the developing world where women often suffer when there are food shortages (Otter, 2010). Globally, 821 million people (1 in 9) do not have access to enough food to survive and go to bed hungry each night (Food Aid Foundation, 2020) with many of them working in agriculture.

Food production can greatly be attributed to women who are involved in a variety of agricultural activities. These relate to soil and crop cultivation, poultry, livestock and fish farming, food processing and water management at both subsistence and commercial levels (SIDA, 2015). On average, women produce approximately 80% of food in Southern Asia and Sub-Saharan Africa, tend to work far longer hours than men (Glazebrook *et al.*, 2020), often eat last and least and own few land that they work on (Fuhrman *et al.*, 2020). Women face many barriers to acquire productive inputs, natural resources, assets and services required for rural livelihoods. These include access to fertilizers, livestock, equipment, improved seed varieties, extension services, agricultural education and training as well as credit (UNDP, 2012). Women receive only 5% of agricultural extension services globally (UNDP, 2012) and with fewer assets and heavier burdens, women are more vulnerable to shocks and not sufficiently positioned to respond to *e.g.* the effects of climate change or other rapid changes/shocks. According to Ghanem (2011) if female farmers had the same access to productive resources as male farmers, agricultural yields could increase in developing countries by 2.5%, we will have a more resilient food system and value chains and the number of hungry and food insecure people worldwide could decrease by 12 -17%.

Disasters, such as drought, flooding, heatwaves and other shocks are often common causes of famine in the world (Devereux, 2007). In agreement with this is Godde *et al.*, (2021) stating that long term impacts and short term shocks of climate change will be a continuing trend for the future. This would impact food supply, food access, agriculture, food security, nutrition, human health, livelihoods and poverty. In these contexts, discrimination and inequalities of women and girls may be reinforced, with the occurrence of domestic violence increasing during times of food

[5] The time of year when the previous year's harvest stocks have reduced, food prices are high, and jobs are scarce (Vaitla *et al.*, 2009).

[6] During wet seasons between sowing and harvesting of major crops when several adverse factors are at play simultaneously, including food scarcity, increased food prices and diminished food stocks (Mondal, 2017).

scarcity (Le Masson *et al.,* 2016). According to FAO, WFP and UNICEF (2018) hunger is undoubtedly worse in nations with farming systems that are sensitive to rainfall and temperature variability and severe drought, and where the livelihood and food of much of the population is reliant on agriculture. In times of crisis, women also suffer from food insecurity and anaemia at greater rates than men in most countries, including 38% of pregnant women and lactating mothers (Simmons, 2013; Larrea, 2019). Cultural traditions/norms, social structures, incomes and inferior status translates into women being more inclined to experience hunger and poverty than their male counterparts, even though females, particularly pregnant and nursing mothers, often need special nutrition or a better and higher food intake (SIDA, 2015; Behera *et al.,* 2019).

Furthermore, 85 – 90% of the time women are required to provide for household food preparation and strive to ensure that their families nutritional needs are met, often compromising their own well-being, as they prioritize the nutrition of children and men above their own (Sasson, 2012; Larrea, 2019). Women also have limited access to markets and livelihood diversification than men (Jaka and Shava, 2018) which prevents opportunities to earn alternative incomes, and their possibilities to access a greater variety of food. According to Maxwell *et al.,* (2003) and Babatunde and Qaim (2010), several strategies implemented together would assist in alleviating rural food insecurity, hunger and malnutrition. These strategies could include enabling market access, capacity building, gender development, creating off-farm opportunities and implementing a humanitarian food programme in which both men and women equally benefits. With regards to dietary diversity, poor female headed households are often successful in supplying more nutritional food for their children compared to male headed households (Behera *et al.,* 2019) and thus a strong correlation exists between a higher level of gender equality and lower level of child food insecurity, hunger and mortality.

Many farm workers live in rural areas where access to healthy food stores/markets may be limited by both availability and transportation (Treuhaft and Karpyn, 2010) and where convenience stores offer less variety and unhealthier options at a higher price. According to Ver Ploeg *et al.,* (2009) lack of access to public transportation and infrastructure or a personal vehicle limits access to food as well as nutritious food options and healthcare. Vulnerable groups lacking transportation include the elderly, those with chronic diseases, co-morbidities, children, women (including pregnant women) and persons living with disabilities (Syed *et al.,* 2013).

Moreover, nutrition education and the promotion of a healthy diet and lifestyle is a priority in addressing nutrition and health - related problems (Green, 2007) as well as in improving household food security. According to FAO (2021) nutrition education encompasses a series of activities that are interrelated. For example, empowering people in child feeding practices, encouraging people to adopt healthy eating habits through fostering a culture of consuming a variety of macro and micro nutrient rich foods and following food safety guidelines. It also involves sharing information on how to preserve nutrients in foods by utilizing proper cooking methods, and changing attitudes towards healthier foods. Faber and Wenhold (2007) affirms that nutrition education can stimulate the demand for healthy foods, however people must have the means and opportunities to act on that knowledge. This means that for nutrition education to be effective in practice, people should have access to income and healthy food options. Many agricultural workers however lack access to sufficient incomes and diverse nutritious foods (Tandon *et al.,* 2017) as well as is unable to afford such a diet. Unhealthy food environments also affect types of food purchased. Spires *et al.,* (2020) compared the food environments of three low (Uganda), middle (South Africa) and high (Sweden) income countries contributing to non-communicable diseases and found that in all three countries the advertising of unhealthy foods, drinks, and tobacco products exceedingly outnumbers the marketing of healthy lifestyle choices. Furthermore, globalization is driving a nutrition transition and is creating a norm towards ultra-processed foods (through advertising and imports) that are affordable, lasts longer, convenient to prepare and consume but that adversely affects the health of vulnerable populations (Amanzadeh *et al.,* 2015). These diets are now becoming the traditional food choice and as low income women are the purchasers, budgeters and preparers of food, they will try to make their income and food stretch as long as possible.

Many health issues are related to food insecurity and nutrition. According to Napoli and De Muro *et al.,* (2011) and Sasson (2012) food insecurity not only pertains to improper utilization of food, instability of food, insufficient food production, the unavailability of and inadequate access to food and food intake, but also to the consumption of inferior diets of poor nutritional quality. Women and girls who are food insecure are at greater risk to experiencing and developing different health issues and diseases. These include giving birth to babies with birth defects, obesity, diabetes, cardiovascular diseases, iron deficiency and mental health, and face health disparities (Botreau and Cohen, 2019). WHO reports that in 2016, globally 1.9 billion people were overweight or obese

(WHO, 2021), where overweight, obesity, and diet-related non-communicable diseases among women and children are rapidly on the rise[7] (Gowshall and Taylor-Robinson, 2018; Pisa *et al.*, 2021).

Despite policy recommendations and international commitments to supporting women in agriculture, implementation has been slow in ensuring that farm working women have the necessary resources to enhance their livelihoods, combat food insecurity and strengthen their communities' resilience to climate change (Pearl-Martinez, 2017). The state is therefore not providing adequate support to address social, cultural, economic and institutional barriers that hinders farm working women from accessing resources and critical farming inputs necessary for alleviating food insecurity. According to ILO (2017) progress has been made in extending social protection systems to more vulnerable individuals, however, significant gaps still remain as majority of the world's population are unprotected by any form of social protection. The lack of social protection is a major contributor to social exclusion, food insecurity and poverty (Babajanian and Hagen-Zanker, 2012) and increases the risk for gender inequalities worsening the multiple and intersecting forms of discrimination women and girls face. Furthermore, education and skills development are important components of any strategy to improve agricultural and non-farm productivity activities as well as to produce income-earning opportunities to escape poverty (Eskola and Gasperini, 2010). Acquiring new knowledge and skills is important to rural farm working women who are more likely to be contributing family workers. However, to enhance income opportunities and reduce food insecurity, market access support is essential (Achilana *et al.*, 2020).

2.2.3. Exploitation and labour rights for farm workers

Globally, farm workers consistently face challenges in their right to food and this includes working in dangerous conditions, lacking employment protections and receiving part-time work with low wages (Costa *et al.*, 2020; Elver and Shapiro, 2021). Both unemployment and underemployment negatively affect a household's food security status (Krogh and Smith, 2019) especially among low-income groups. According to Gitz *et al.*, (2016) 70 percent of rural farm workers in

[7] From the1980s, Americans began speaking about an "obesity epidemic,". In 2001 the WHO began to speak of "globesity" as a global public health crisis caused by excessive weight gain (Khemka *et al.*, 2017).

developing nations earn less than USD1.25 per capita per day, which is below the international poverty line of USD1.90 per day and many of them depend partly or completely on agriculture for their livelihoods.

To aggravate matters, more than 12 percent of farm workers in America receive less than the minimum wage (Davis and Leonard, 2000). Although many sectors have adopted the minimum wage standards put forward by the International Labour Organization, they still remain unenforced. Through the current system of trade, food security is negatively impacted for this marginalised group of people and inequality and exploitation has exacerbated amongst farm workers, even more so for women workers (London, 2003). All these barriers are contributing factors to farm workers' health and food security which keeps them trapped in a cycle of poverty. Women, migrant and seasonal workers in agriculture often face farm violations (Córdova and Helmcke, 2014). More often than not employers consider migrant workers and women as a removable low-wage workforce who can be silenced through unemployment threats when bargaining for better wages and improved working conditions (Rye and O'Reilly, 2020). This might deter them to stand up for their rights. International organizations, such as Farmworker Justice (FJ) have stood up against such violations. Platforms, such as the International Farm Workers Forum (IFWF) have been developed to give these silenced workers back their voices as employers are mainly focussed on maximizing profit than on the well-being of their workers (Weinhardt *et al.,* 2021). Elver and Shapiro (2021) made a strong statement affirming "*farm workers full satisfaction of human and labour rights being an essential requirement for the realization of their right to food".*

There are concerns however of a higher minimum wage leading to a trade-off of benefits for poor and low income individuals in the form of a reduction in jobs of these workers as employers try to cut costs. There is proof indicating that a higher minimum wage does reduce employment available to low income workers (Neumark, 2014) and in turn could lead to greater farm mechanisation. Although mechanisation and technologies has its benefits in terms of agricultural productivity, soil improvements and profit (Verma, 2006), researchers such as Agarwal (1983); Sindhu and Grewal (1991) and Schmitz and Moss (2015) have argued that its trade-off is a reduction in farm worker labour.

In the past, several policy processes and frameworks have been established to identify all peoples' rights to access food and identifying women's role and challenges in this sphere. There is however still much more work to be done to ensure equality for women and girls across the world.

2.3. The Food Insecurity and Dietary Diversity situation for farm workers in South Africa

2.3.1. Food insecurity in South Africa

In its Constitution, the Bill of Rights affirms that every citizen has the right to access sufficient food, water, healthcare services, security and appropriate social assistance if they are unable to support themselves and that the State should ensure that these rights are being met (Constitution: Section 27, 1996:12). The struggle for social and economic transformation however still remains unresolved even after the shift in political power from 1994 as the country's complex social and economic history has entrenched widespread unemployment, poverty and inequality (Luiz, 2007). In addition, despite having a number of policies and interventions addressing food and nutrition insecurity across all spheres of government, South Africa still has a large majority of people who struggle to access food, including nutritious foods on a regular basis, as well as a considerable proportion of the population living with preventable lifestyle diseases and co-morbidities (Puoane *et al*., 2012).

In 2017 the Department of Agriculture, Forestry and Fisheries (DAFF) (2017) estimated that approximately 13.8 million people in South Africa were food insecure with household food insecurity being one of the underlying causes of malnutrition and death (Kruger *et al.,* 2008). Furthermore, alarming numbers of South Africans in rural and informal urban areas (reaching above 40% of the population) are nutritionally deficient, with low dietary diversity and low food security (Shisana *et al.,* 2014). This can be attributed to the country's high levels of poverty and inequalities compared to other middle income countries in the world (Nsele, 2014). According to Lehlohla (2012) access to food has become a function of household income and thus cash deficit households are more likely to experience inadequate access to food and low dietary diversity. Vulnerable groups suffer most from achieving diversity in nutrition because their standard diet consist of starchy staple foods, such as maize, bread and pasta with reduced fruits and vegetables resulting in nutritional deficiencies (Nsele, 2014). A 2014 Oxfam report indicated that 1 in 4 South Africans endure hunger, caused mainly by poverty and unemployment but also by high living costs, especially high food prices. Many of the South African population are unemployed and rely solely on social grants for income. With constant food price increases, it becomes a challenge for poor people to access nutrient dense foods (Govender *et al.,* 2017). South Africa's high rate of

diseases that relate to long-term food habits - obesity, diabetes, heart disease, and certain cancers shows how few citizens are able to eat healthy foods on a regular basis (South African Food and Farming Trust, 2020). Battersby and *et al.*, (2014) state that it is necessary to look not only at food prices, job and income volatility as possible reasons for food insecurity but also at the geographical location of the poor in relation to markets, time of commuting to and from work, transition in diets to more processed and canned foods, illness, death or accidents in the family, and household resources, such as storage, refrigeration and cooking technologies which all shape what foods are purchased and consumed. Importantly, South Africa is food secure at a national level, either in relation to producing sufficient staple food or in its ability to import sufficient food for its populace (Ngema *et al.*, 2018). However, the country is still food insecure at a household level as not all households have access to an adequate supply of diverse nutritious foods daily (Nsele, 2014; Stats SA, 2019).

2.3.2. Context of South African farm workers' food insecurity and dietary diversity situation

Farm workers is one marginalized group who are among the lowest paid in the South African economy. According to Ledger (2016, p. 29) and Lemke *et al*., (2014) Black and Coloured farm workers are one of the most vulnerable, marginalised and excluded groups in the labour market that are struggling to break out of poverty, either already experiencing food insecurity, or is at risk of becoming food insecure. Similarly, Makwela (2019) affirms that farm workers are an integral part of South Africa's economy and the food system but yet they are often food insecure themselves, marginalised and vulnerable to exploitation.

Previously, employers were able to exploit these workers because they were not protected by any labour legislation that workers in other sectors were afforded, and were only protected by common law[8] (Netshivhodsa, 2017). Considering this, the abuse and violations of farm workers' labour rights as well as inequalities are widespread in the agriculture sector as farm workers face ongoing evictions, casualisation and exploitation (Devereux, 2020) which hampers on their food security and dietary choices. Farm working women have unique challenges and needs and are often on the lower pay scale (Visser and Ferrer, 2015 and Posel and Muller, 2008) compared to men. They

[8] Common law is a body of unwritten laws based on legal precedents established by the courts.

experience unsafe and unhealthy working conditions (Cordes *et al.*, 2011; London, 2003), have no access to clean running water in houses, have no or limited electricity and toilet facilities (South African Human Rights Commission, 2014). The women also face constant threats of evictions, especially those who are denied right of tenure, and experience physical, verbal and sexual abuse (including from their partner) and intimidation and threats from employers (TCOE, 2016; Andrews, 2018).

The current dire position of farm workers and almost slave-like conditions on South African farms has a long history. It is a legacy that is interlinked with slavery with the dispossession of the indigenous Khoi and San peoples (Andrews, 2014). In agreement with this is Zamchiya *et al.*, (2013) and Atkinson (2007) stating the insecurity of employment, tenure and livelihoods on farms has been shaped by historical processes as a result of colonisation, segregation, apartheid, capitalist development and post-apartheid development thinking. The repercussions of this manifests in farm workers and their families having very limited access to developmental resources and other skills and opportunities of advancement to be employed in the wider economy (Kruger *et al*., 2006). Additionally, the present plight of farm workers is embedded in the way the agricultural sector of South Africa developed from the "master and servant" system (Botes *et al*., 2014). Previously, the commercial farming industry was orchestrated and manipulated by state interventions which served to favour (predominantly White) commercial farmers to the neglect of their black workers (Kheswa, 2015) mainly due to apartheid but also due to economic reasons (profit). According to Gossage *et al.*, (2014) farm workers were given free wine in the past, primarily in rural areas, under a traditional system called the dop[9] with the view that workers who were drunk were easier to control. The consequences of this was that many children of vineyard workers suffered from foetal alcohol syndrome (May *et al*., 2019) and faced dietary implications. Lubbe *et al*., (2017) recognises that children experiencing these conditions are exposed to behavioural problems and faces serious barriers to physical and mental development.

From the 1990's, labour legislations like the Occupational Health and Safety Act (1993a), Compensation for Occupational Injuries and Diseases Act (1993b), Labour Relations Act (LRA) No. 66 of 1995, Land Reform (Labour Tenants) Act No. 3 of 1996, Basic Conditions of

[9] The 'dop' system, historically characterised as the institutionalisation of alcohol as a medium of remuneration of, and social control over, employees.

Employment Act (BCEA) No. 75 of 1997, Extension of Security of Tenure Act (ESTA) No. 62 of 1997, Employment Equity Act No. 55 of 1998 and the Unemployment Insurance Act No. 63 of 2001 were extended to the agricultural sector in an attempt to protect the working and living conditions of vulnerable workers. These progressive laws have however failed to improve the working and living conditions of the agricultural sector workers (Netshivhodza, 2017) where benefits have not trickled down to all farm workers. The South African Government was thus prompted to conduct the necessary investigations to introducing minimum standards of employment conditions in the agricultural sector. This led to the adoption of Sectoral Determination 8 of 2003 introducing the Sectoral Determination Minimum Wage for the sector (Grub, 2005).

As a result of farm workers' long suffering, a number of organizations are supporting and empowering farm workers in their fight against food insecurity and exploitation. The Congress of South African Trade Unions (2018) (COSATU) has pledged to help negotiate with farm workers to obtain ownership of land from on where farm workers are working. Commercial Stevedore Agricultural and Allied Workers Union (2018) (CSAAWU) are fighting for farm workers to earn a minimum wage of R8500 per month (Department of Labour, 2018). Trust for Community Outreach and Education (TCOE) (2020) and Surplus People Project (SPP) (2020) aims for both men and women in rural areas to have access, rights and ownership to land, marine and other natural resources for food security and support the creation of sustainable livelihoods. Women on Farms Project (1997) (WFP) empowers women farm workers to claim their rights and to satisfy their needs as a mother and worker to serve as an important participant in the economic, social and political sphere. From 2004 farm worker summits have been held in the Western Cape with the goal to link farm worker communities to relevant stakeholders (Botes *et al.*, 2014).

2.3.2.1. The Western Cape Farm Workers Protest 2012-2013

Since the Sectoral Determination Minimum Wage came into effect in 2003, it was increased slightly by the rate of inflation plus one per cent (Netshivhodza, 2017). It was only after the 2012-2013 Western Cape farm workers violent protest for higher wages, improvements in their working and living conditions and other necessary demands (e.g. food, land, water), that the legislated minimum wage was raised by 52 per cent to R105 per day (although below the demand for R150 per day) (Visser and Ferrer, 2015; Freedom, 2016; Van der Zee, 2017; Devereux, 2020; Nkrumah,

2020). The daily minimum wage for the agricultural sector was R69 in 2012 but many workers reported that they received less than R69. The protest was a historic event in South Africa where farm workers (mainly seasonal and casual workers from rural fruit and wine producing towns) gave expression to the anger, the frustrations, the deprivation and extreme poverty under which farm workers continue to live (Wilderman, 2014). The protest highlighted the need for a form of social movement unionism that goes beyond wage demands (Webb, 2017). These forms of protest confirm that farm workers do not perceive government as supportive of the challenges they face with their employers. Instead, farm workers and dwellers are organising, resisting and pressurising the government – through strikes, demonstrations, lobbying and other means – to have their voices heard, to secure their rights, and for land expropriation. After the protest, many farm workers however had lost their jobs as a result of the strike and the increased minimum wage.

In 2019, CSAAWU handed over a memorandum of '23 demands of the farm worker' ***(See Table 2 below)*** to the Norwegian and Swedish consulate in Cape Town. It highlighted the oppressive working and living conditions of farm workers on South African wine farms selling to monopolies in the Scandinavian countries. The purpose was to demand monopolies to use their power to ensure that the rights of farm workers are protected and that they adhere to ethical standards that do not exploit farm workers.

Table 2: 23 Demands of Farm Workers

23 Demands of Farm Workers	
1.No less than R250 per day (8 hour working day)	**13.**Create a fund to assist with substance abuse and gender based violence
2.A 13th Cheque equal to one month's wages	**14.**Compensation for all retired farm workers, including disabled workers
3.Houses that workers stay in on the farm must be owned by workers	**15.**Creche facilities and play parks for children living on farms
4.Houses must be upgraded with sanitation	**16.**Development facilities for youth living on farms
5.Safe transport to town, school and hospital	**17.**Land made available for farming communities and small-scale farmers
6.Labour brokers must be banned from farms	**18.**Training and development of farm workers
7.No "piecework"[10]	**19.**Minimum of five days family responsibility leave
8.There must be equality between men and women in the workplace	**20.**Workers must be paid for 45 hours a week if it rains
9.Full paid maternity benefits for female workers including seasonal workers	**21.**End the economic boycott against farm workers and farm dwellers[11]
10. Farmers must contribute towards a sick fund for farm workers and their families	**22.**Farm worker children turning 18 years old should stay with their family and not be evicted
11. Freedom of association	**23.**Collective Bargaining Forum for agriculture
12.A good pension fund for farm workers, including disability and death benefits	

***Source**: CSSAAWU Memorandum of demands, 2019*

[10] Farmers pay their workers by the quantity of work they perform rather than for each hour worked.
[11] Farm workers residing on farms.

The previous section briefly explains the context of farm workers' human rights violations and inequalities that impacts on their food security and dietary diversity. These inequalities, exploitation and its implications manifest through the following section.

2.3.3. Reasons for South African farm workers' food insecurity and lack of diverse diets

The most common barriers to farm workers' food security and diverse diets concern the **Sectoral Determination Wage [National Minimum Wage (NMW)] and underemployment**, **economic, political and environmental influences**, **food choices** and **lack of support systems from government**.

HYPOTHESIS 1

2.3.3.1. Sectoral Determination Wage - [National Minimum Wage (NMW)] or 'Minimum Wage (MW)' and Underemployment

According to Bhorat *et al*., (2014) a minimum wage policy is enacted with the purpose of assuring that employees in low-paid vulnerable occupations are guaranteed a basic subsistence income and protected from exploitation. It is seen as a tool to reduce the wage gap (including between genders), protect workers against unduly low pay, overcome poverty, transform the apartheid wage structure (Department of National Treasury, 2016) and to ensure that it is able to cover the basic needs of employees and their families.

From 01 March 2018 to 28 February 2019, the Department of Employment and Labour set the National Minimum Wage (NMN) for those working in the Farm and Forestry Sector at R16.25 per hour (R3169,19 per month) up from R15.39 per hour (R3001,13 per month) in the previous period. The Minimum Wage has shown to improve wages (and overall income) at the lower end of the wage distribution and reduce wage and income inequality (Mudronova, 2016). Many South Africans would be extremely vulnerable to exploitation if the minimum wage was not implemented. Considering the household consumption effect, Adelzadeh and Alvillar (2016)

agrees to the positive effect that a Minimum Wage has in raising the incomes of low paid workers, following increased consumption. However, opponents of the minimum wage believe that increases in the minimum wage would result in job losses amongst lower skilled workers (Netshivhodsa, 2017).

Minimum Wage for farm workers 2018/2019

- R3169, 19 per month
- R731, 41 per week
- R146, 28 per day
- R16, 25 per hour

It is important to note that there is no such thing as a "free lunch"[12]. In the country, minimum wages have shown no significant negative impact on employment in five of six sectors studied, except for agriculture (Stanwix, 2013; Isaacs, 2016). According to Bhorat *et al*., (2014) the effects of fixing the minimum wage too high could lead to a considerable reduction in employment of farm workers. This is due to the sector's competitive nature for low-skilled, low-wage workers which affects farm working women (Nattrass and Seekings, 2016) to a greater extent. Seasonal farm working women, in particular who only work certain parts of the year are already underemployed and face seasonal hunger, even greater food insecurity (Devereux and Tavener-Smith, 2019) and job and income volatility than those that are permanent workers with signed contracts. It is of common notion to believe that higher wages may encourage more workers to supply their labour (Anand *et al*., 2016). However, a study done by Devereux (2020) indicates that 31% of farm working women who were surveyed in the Northern and Western Cape was not aware of what the minimum wage rate was and 21% were not receiving the minimum wage. This seems to indicate that farm working women are in dire need to receive an income to support their families and are not in a position to choose or wait for wages to increase to decide to work. They are actively seeking employment (Department of Women, 2015). Reasons cited for not receiving the minimum wage was due to unrealistic targets set by farmers (Zamchiya *et al.*, 2013; Devereux, 2017) and low farm inspections (Budlender, 2013; Netshivhodza, 2017). Not achieving these targets set by farmers has repercussions on farm worker wages and employment as workers could easily be replaced with other unemployed individuals or mechanisation. Bhorat *et al.*, 2012 found that minimum wage violations in South Africa is disturbingly high where 44% of workers get paid wages below the legislated minimum

[12] There aint no such thing as a free lunch (TANSTAAFL) suggests that things that appear to be free will always have some hidden or implicit cost to someone.

and that this is most prevalent in the Security, Forestry and Farming Sectors. To avoid paying the minimum wage, farmers instead reduce work days and work hours (Visser and Ferrer, 2015). Devereux (2020) states that farm workers are then paid weekly or fortnightly where most know their wage as either a daily rate (55%) or a weekly rate (39%).

Farm workers are divided into ***permanent*** and ***seasonal*** workers. A permanent farm worker can be defined as a person who is permanently employed for an undetermined period of time (Molatseli, 2013) and who holds a signed working contract. Seasonal workers on the other hand, are defined as a person who is employed by an employer for a period of minimum three months over a twelve- month period, with the same employer and whose work is interrupted by reason of a seasonal variation in the availability of work (Department of Labour, 2002). Seasonal workers are therefore not employed all year round. According to Mashiri *et al.*, (2009) 69% of women are temporary and seasonally employed in agriculture in South Africa. Although rural women fulfil a fundamental role in all stages of food production (Raidimi, 2014), job insecurity especially amongst farm working women means uncertainty of employment (*i.e.* if and when they will be employed) and duration and compensation of employment. Increasingly, farm working women are now employed as casual[13], temporary or seasonal workers (Fourie, 2008; Benjamin, 2018). According to Izaks *et al.*, (2018) the nature of some agricultural activities determine the number of workers needed for harvest time and the size of the harvest. The trend towards casual and temporary labour is further encouraged by factors, such as seasonal and climatic weather conditions, unstable market demand for produce, globalisation, higher input costs, labour laws, with little to no social protection, as well as mechanisation (Hurst *et al*., 2005; Visser, 2016). Notably, farm working women have not moved into more permanent jobs, as evidenced by the increasing proportion of men in the permanent workforce (Andrews, 2014).

2.3.3.1.1. Other implications of the 'Minimum Wage'

Although the Minimum Wage benefits many low paid workers in South Africa, there are still some major concerns of the Wage not being enough to stamp out poverty or giving workers a dignified life (Zembe-Mkabile *et al*., 2015).

[13] Casualization means there is a trend away from permanent employment contracts and workers are increasingly being employed as temporary or casual labour on short-term, daily or seasonal contracts with poorer pay and working conditions.

According to Pietermaritzburg Economic Justice and Dignity (PMBEJD), 13.8 million (25.2%) of South Africans were living below the food poverty line of R561 as at September 2019. In 2020 the food poverty line was R585. However, the year-on-year cost of the household food basket increased by R420.94 (13,7%) from R3,065.28 in June 2019 to R3,486.23 in June 2020 (PMBEJD, 2020). For a household size of 4, the 3.8% increase of the Minimum Wage for farm workers cover the food poverty line minimum caloric requirements but falls short of the current inflationary household food basket price as at June 2020. The minimum wage is therefore lower than what is needed for a household to buy a basic basket of nutritious food (Van Wyk and Dlamini, 2018).

Non-communicable diseases in adults often co-exist with poverty and malnutrition. It is also important to consider that poor households make their money stretch as long as possible and purchase foods that lasts longer (non-perishables) and is affordable, often at the expense of nutritious foods (Battersby *et al*., 2014) and their health. Other coping strategies used to retain and obtain food include buying less food[14], skipping meals, reducing portion sizes[15], borrowing money[16], buying food on credit[17], borrowing food from friends and neighbours, begging for food or cash, drawing savings (Mjonono, 2008; Devereux and Tavener-Smith (2019) and from food aid programmes[18]. There is also the problem of non-food items (*e.g.* transport, electricity, rent, water, school and university fees, cleaning supplies, savings, etc.) - another concern that the Minimum Wage and the current upper food poverty line[19] amount of R1268 in 2020 would not be able to cover, for a family of four.

2.3.3.2. Politics, the Environment and Economics

Gender inequality and stereotypes, sexism, discrimination and misconceptions of women from the past are still evident within all spheres of society (Akala, 2018). Generally, the South African Constitution, in terms of labour legislation of farm workers initially applied to full-time employment only (Fourie, 2008) and less so for part-time workers. Unfair treatment and exploitation for seasonal workers, more so for farm working women however, is still present today

[14] Food is usually one of the items that gets cut first when there is limited money and when things become expensive.
[15] Often times women reduce their portion sizes or skip meals in order for the children and men to eat first.
[16] This can be from friends and family or loan sharks.
[17] Food is often, if not, at most bought on credit from spaza shops (tuck shops).
[18] Food parcels, food donations and community soup kitchens, etc.
[19] Refers to the food poverty line plus the average amount derived from non-food items of households whose food expenditure is equal to the food poverty line.

with no significant positive change seen until this day (Shalatek, 2020). Thus a real gap is seen here for influence and intervention from all spheres of government and an opportunity for political inclusion of women.

Climate change plays a huge role in farmer profit and farm worker income. Drought causes water scarcity which lowers agricultural yields; thus making these expensive but also impacts on seasonal farm workers' employment (Turpie and Visser, 2013). Since 2016, the Western Cape experienced one of the worst droughts in recorded history, leading to thousands of on-farm jobs and farmer income losses (Pienaar and Boonzaaier, 2018). As a result of global warming and climate change, agricultural commodity prices changes often which makes agriculture a volatile and vulnerable sector (SEDA, 2012; BFAP, 2014).

Globalisation and trade liberalisation, a decrease in farm subsidization, market deregulation, retail food chains consolidation, and government failure in this regard, causes South African producers and workers to lose their collective bargaining power in the market place (Mather and Greenberg, 2003; Visser and Ferrer, 2015; Oxfam, 2018). This in turn affects domestic prices, and ultimately farm worker incomes and employability. Opponents of trade liberalisation argues that an increase in trade results in higher unemployment, reduced economic growth and ultimately, higher food prices (Jenkins, 2006; Thurlow, 2006) whereas advocates for trade liberalisation contends that trade ensures the availability of food and boosts rural incomes, which in turn reduces poverty (Manchin, 2005). Even with trade policy reforms implemented, South Africa still fails to ensure a major boost in permanent employment in the agriculture sector (Bothma, 2016). Economic growth has been insufficient to reduce inequalities, unemployment and poverty (Mabugu and Chitiga-Mabugu, 2007). Following apartheid, South Africa's economic policy became globally oriented, and steered towards trade liberalisation (Teweldemedhin, 2009; Edwards *et al.,* 2014). This resulted in significant exports of agricultural products, but also an increase in food imports that has accelerated South Africa's dietary shift towards more processed, packaged foods and sugary drinks (Kroll *et al.,* 2019).

HYPOTHESIS 2

2.3.3.3. Food Choices

Not much is known about seasonal hunger, food security and nutritional status of South African farm workers (Devereux and Tavener-Smith, 2019). What is evident though is that food availability in the country is adequate; but a major problem concerning food access does exist (Kruger *et al.,* 2008). According to Kruger *et al.,* (2006) household food security of farm workers are compromised as a result of unemployment, lack of financial resources, inadequate infrastructure and also household resource allocation for women. Food choices of farm workers are furthermore influenced by a number of other factors, including the food environment[20] that they are surrounded by (Spires *et al.,* 2020) which impacts on their nutritional status. Households in rural areas select foods based on personal preferences (*i.e.* taste, culture) and consider price (food affordability) and their limited resources available (budget) to purchase food (Yaktine and Caswell, 2013; Drysdale *et al.,* 2019). This situation affects the quality and types of foods purchased as healthier foods often become more expensive than unhealthier foods (Temple and Steyn, 2011). Perceptions of types of foods to consume were also mainly shaped by the media, which determined which foods were 'cool' and tasty to eat and which often promotes 'junk food' (Tsegay *et al.,* 2014). Additionally, the indigenous African people of South Africa upon contact with Western-oriented societies not only adopted some aspects of the Western food system, but also adapted and changed their traditional food practices with increased exposure to Western foods and diets.

2.3.3.3.1. Nutrition education

Nutrition education is to obtain knowledge on food varieties with necessary nutrients required by the body for a healthy life in addition to good eating habits that improve the health status of people (Joubert, 2019). It helps in understanding the relationship between proper nutrition and good health, food labelling, food utilization practices and the importance of daily consumption of nutrient rich foods to combat health problems such as malnutrition, micronutrient deficiencies, heart disease, diabetes, over-weight and obesity.

[20] Food environment is the physical presence of food that affects a person's diet, is a person's proximity to food store locations, and the distribution of food stores, food service, and any physical entity by which food may be obtained from (Centers for Disease Control and Prevention, 2014).

A study done by Chakona and Shackleton (2017) revealed that farm workers in rural areas studied had knowledge about healthy diets but had insufficient access to it and thus consumed monotonous diets. This suggests that even with access to nutritional knowledge, there is still a lack of access to nutritious and balanced diets due to unaffordability and other barriers to food security mentioned within this chapter. This remains a major obstacle to the health and well-being of people living in rural areas (Govender *et al.,* 2017). Nsele (2014) states that nutrition education is not only meant for those experiencing food poverty but also for people with sufficient food as some of them require information on food combinations necessary for a balanced diet. Nutrition knowledge should be accessible to all people in order to live long and healthy productive lives and reduce pressure on health systems.

Nutrition education is an integral component of a nutrition intervention approach (Vorster *et al.,* 2013) as it forms part of an integrated programme of health services. This involves having the right individuals positioned at the right place, having adequate numbers of people trained in the field of nutrition, having enough health workers to ensure quality nutrition services (including skills for cooking meals), and evidence-informed stakeholders across the 'rings of responsibilities' landscape (South African Urban Food and Farming Trust, 2020). Swart *et al.,* (2000) suggested nutrition intervention programmes be appropriate for the prevailing socioeconomic conditions within its relevant context. Additionally, Labadarios *et al.,* (2001) reports that nutrition initiatives should aim to include the primary caregivers of children, particularly with poor nutritional status, the poor, those having low educational levels, and those in rural areas living and working on commercial farms. Programmes intended to improve household food security should target women (Chitiga-Mabugu *et al.,* 2016). Poor nutrition in women throughout the life cycle extends throughout generations where malnourished girls turn out to be short women and short women give birth to smaller babies (Sambu, 2020). Nutrition information should therefore be reinforced to different target groups in various forms, such as group discussion, role play, drama, demonstration, newsletter, posters, practical sessions, videos and radios in order to be effective and quickly conveyed (World Health Organization, 2007). However, nutrition education has a limited value in situations of poverty, such as in rural areas where there is limited choice when food choices correlate directly to the lived reality of households (Haysom, 2021).

2.3.3.3.2. Unaffordability of a healthy diet

South African Urban Food and Farming Trust (2020) state that healthy foods are often too expensive for many South Africans, perish easily or they are not sold within walking distance of people's homes. South Africa faces a crisis of increasing food prices and food insecurity. Rising food prices has a detrimental effect on food security (Mkhawani *et al.*, 2016) especially within lower income households. Households of minimum-wage earners spend a larger percentage of their income on food and thus price increases are felt more by them compared to higher earners (PMBEJD, 2020). According to Watkinson and Makgetla (2002) the poor typically spend over 50 per cent of their income on food and over two thirds of ultra-poor households are situated in rural areas with more than half of its members being pensioners and women. Women, in particular, who are generally the primary caregivers depend mainly on social grants and cannot afford a healthy diet (Patel *et al.*, 2012). Foods mostly purchased are maize, flour, sugar, salt, tea and potatoes (Sithole, 2005). Starchy foods contribute towards 62% - 71% of energy intake in the diet of rural dwellers (Nsele, 2014). With maize and wheat being a staple meal for many poor South Africans, sharp increases in the price of maize and wheat due to global shocks (BFAP, 2016; Chakona and Shackleton, 2019) threaten to heighten the experience of hunger in South Africa, especially when employment is scarce. According to Nsele (2014) and Govender *et al.*, (2017) many people in rural areas are unemployed or underemployed and are unable to cater for dietary diversity which results in malnutrition and impaired immunity. Food price increases therefore have negative outcomes for nutrition and health among the poor, but most importantly for women and female-headed households with children (Ghattas, 2014; Mkhawani *et al.*, 2016).

2.3.3.3.3. Advertising of unhealthy food

Food choices can be influenced by food environments and food deserts[21], food sold at stores, television and marketing. The promotion and marketing of high energy dense food and the high prices of healthy food have made unhealthy food more affordable and enticing than healthy options (Temple and Steyn, 2011). Food labelling that should help consumers make informed decisions in choosing healthy food is often absent, mislabelled or difficult to understand (nutrition education fundamental) on some food packages (Koen *et al.*, 2016). People may also have lost a taste for

[21]Food deserts can be described as geographic areas where residents' access to affordable, healthy food options especially fresh fruits and vegetables) is restricted or non - existent due to the absence of grocery stores or fresh produce markets within convenient traveling distance (Food Empowerment Project, 2021).

healthy foods, after years of being exposed to flavoured processed foods, and aggressive advertising that has created a cultural norm that packaged foods are aspirational (South African Food and Farming Trust, 2020). Hence, many people's daily diet consists of ultra-processed foods. The amount of shelf-space processed foods take up in a supermarket shows how accessible and pervasive they are (South African Food and Farming Trust, 2020). Importantly, obtaining a variety of nutrients require the consumption of a variety of food items some of which are not affordable to people in rural communities (Nsele, 2014). There is a strong argument made by public health experts saying that society should look beyond the food choices that people make and focus on changing the food system that shapes people's food choices, instead of blaming individuals for their food choices and ill-health (South African Food and Farming Trust, 2020). A dysfunctional food system has the consequences of hunger and malnutrition (Abdalla, 2007; Gillespie and van den Bold, 2017) and bad health outcomes.

2.3.3.3.4. Traditional diets are changing

According to Lahiff (1997) legumes, sorghum, millet crops and maize were the dominant grain staples among South Africa's black population prior to the forced urbanization during apartheid. Food intake is influenced by cultural processes whereby cultural influence on food habits move throughout generations (Mbhenyane *et al.,* 2008). Culture can furthermore lead to resistance to change. However, diets have shifted making unhealthy foods the diet of choice. Viljoen *et al.*, (2005) state that the interaction with the Western-oriented food ways and its adoption of diets resulted in a process called 'nutrition transition'. This nutrition transition in developing countries unfortunately leads to people becoming accustomed to consuming a diet high in saturated fat, carbohydrates, sugar and refined foods with decreased fibre intake (Steyn and Mchiza, 2014). Numerous other influences have caused a transition from self-reliance (growing indigenous foods and utilizing former traditional food practices) to a reliance on the industrial food chains (Akinola *et al.,* 2020). Hence diets are affected by various factors that force people to make food choices with what financial and other resources they have available, affordability of food, convenience of preparation, or what they are surrounded by as well as climate, environmental, political and economic factors (Viljoen *et al.,* 2005).

HYPOTHESIS 3

2.3.3.4. Lack of Support Systems from government

Support systems from government is in the form of social assistance or social protection measures (also called 'safety nets')[22] that aim to alleviate the high rate of poverty and hunger in the country (South African Government, 2021). In South Africa, social protection measures can be described as the set of public transfers (*i.e.* social grants) and remittances (private mechanisms) that protect, aid and prevent people (individuals and households) from suffering the worst consequences of shocks and stresses (Waidler and Devereux, 2019) and aids in food security.

2.3.3.4.1. Social grants

According to Ferguson (2015) more than 16 million South Africans receive one or more social grant- 33.9% of Blacks, 29,9% of Coloured people and 12,5% of Indian/Asian people received a social grant compared to only 7,5% of the white population in 2018 (South African Government, 2021). Lehohla (2012) reported that social grants contributed to 22.3% of household income in poor families in 2011 indicating social grants as an important source of income relief for people in low-income households (Köhler and Bhorat, 2020). More poor people are increasingly depending on social grants as work decreases as well as when work income is insufficient to cover most needs for the month. As reported by Gutura and Tanga (2017); South African Government (2021) more households received grants compared to salaries as a main source of income in the Eastern Cape (59,9% versus 52,6%) and Limpopo (57,9% versus 51,3%) in 2018. During Winter months, seasonal, casual and temporary farm worker households depend especially on social grants, predominantly the Child Support Grant (CSG) and the Older Person's Grant as permanent employment on farms become increasingly scarce (Tsegay *et al.*, 2014) and where only a limited number of households receive food parcels.

[22]Support systems designed to alleviate food and financial insecurity, e.g. community support systems, food and cash direct transfers, indirect transfers (programmes that help with access to food, e.g. job creation and training projects), microcredit to entrepreneurs.

Table 3: Social grants in South Africa

Grants targeting adults	Grants targeting children
Disability Grant	Child Support Grant[23]
Older Person's Grant	Foster Child Grant
War Veterans' Grant	Care Dependency Grant
Grant-in-Aid	

Source: *Researcher's Own Construction*

Nevertheless, social grants intended to support children and older persons is not sufficient to feed entire families and thus, adult seasonal farm workers have little to no other social protection means during off-season periods (Hurst *et al.,* 2005) and are frequently forced to borrow money to buy food on credit (Kritzinger, 2005) often with high interest rates (Prince, 2004; Devereux, 2020). Waidler and Devereux (2019) further states that large numbers of South Africans receive social grants and private transfers, and yet one in four South Africans are still food insecure. This indicates that although social grants play a role in reducing poverty (Satumba *et al.,* 2017) and aids with household hunger and food insecurity (Devereux and Waidler, 2017) it fails to be a sufficient protection mechanism against seasonal farm workers' food insecurity during unemployment and underemployment at different times of the year when work is scarce and when there is little to no other income available to them.

For women who depend on social grants during off season, survival is even more precarious if they also have to cope with diseases, such as HIV or AIDS, which means precious money being spent on medication for themselves or family members who become ill (Tsegay *et al.,* 2014) and having to pay other expenses, such as school fees. Seasonal farm working women and their households thus experience worsened food insecurity and seasonal hunger with inadequate support from government to sufficiently supplement income when work is scarce (Hendricks, 2002). They therefore need more targeted assistance from government. Providing targeted assistance enables women to support their families and reduce their reliance on men. Nevertheless, social grants are not a long term strategy to be used in eliminating poverty, hunger and food insecurity since beneficiaries will be vulnerable to politics and national policy decisions (Nsele, 2014). The

[23]64% of children under 18 years of age received the CSG in 2019 (UNICEF, 2019).

underlying issues can therefore only be addressed through longer term sustainable solutions based on developing skills, creating decent employment with sufficient incomes and by supporting livelihoods and market access.

2.3.3.4.2. Unemployment Insurance Fund (UIF)

According to SOMO and TCOE (2020) seasonal farm workers were originally excluded from the Unemployment Insurance Fund (UIF) but can now contribute to and receive UIF as long as they have been employed for more than 24 hours per month (Parliamentary Monitoring Group, 2011). Farmers must thus register for, deduct from and contribute to farm workers UIF (Molatseli, 2013) as mandated by the UIF (Department of Labour, 2004). Seasonal farm working women however particularly experience barriers concerning deductions not made by their employer when employed and not receiving pay-outs when unemployed. A survey done by Devereux *et al.,* (2017) found that 20% of seasonal farm working women in the Northern Cape did not have UIF subtracted from their wages which has major implications for when they become unemployed. More efforts should therefore be made to extend coverage of the UIF to farm workers who are either not registered by the farmer or do not claim their benefits. Because UIF benefits are limited and complications could arise from both farmer, farm worker and labour centres, innovative arrangements must be found to ensure that farm workers have income and food security throughout the year (Devereux *et al.*, 2019). Farm Worker Rights Charter (2017) suggests a seasonal worker helpdesk should be set up by the Department of Labour that keeps a data-base, track and service seasonal worker needs, *i.e.* UIF claims. While significant progress has been made through amendments to the Unemployment Insurance Fund (UIF) Acts, the fund itself does not adequately cater for workers that are undergoing work transitions, those that resign for whatever reason and those in seasonal work, the self-employed (Devereux, 2010) and other informally employed workers (Parliamentary Monitoring Group, 2003) especially the significantly large number of farm workers still being exploited in rural towns where farm inspections from the DOL is low (Grub, 2005; Farm Worker Rights Charter, 2017).

2.3.3.4.3. Land

The Department of Land Affairs has limited data available on women's access to land in South Africa's rural areas, despite an understanding that accurate data is needed for effective policy

development, implementation and monitoring and evaluation (Weideman, 2004; Ngumbela *et al.*, 2020). This negatively impacts any efforts to develop and implement policies that would successfully address women's inequitable access to land. Nevertheless, there might not be much data that indicates the percentage of women's access to land, but there is a considerable amount of research that alludes to the importance of land to women's food security, livelihoods and economic development. Ngomane (2016); Khuzwayo *et al.*, (2019) confirms that land is one of the key assets that determine women's living standards, their economic empowerment and, to a certain extent, their struggle for equity and equality. The 1997 White Paper on South African Land Policy places a focus on gender equity in land and recognizes that a key contributing factor to women's inability to defeat poverty is lack of access to and rights in land (Commission for Gender Equality, 2009). Moreover, the RDP (1994) established that women face specific disabilities in obtaining land and that support services and government assistance for agricultural production should especially benefit women, acknowledging that the Land Redistribution Programme must target women. However, according to Weideman (2004) most land reform project implementers are men, many of them not having the skills necessary to mainstream[24] gender, specifically for females in land reform projects (Commission for Gender Equality, 2009).

Over 60% percent of women in Southern Africa rely on land for their livelihoods (Mutangadura, 2004) but yet women's rights to access land is derived by virtue of their relationship to men (Rakolojane, 2013) and also determined by factors, such as level of decision-making, social class, status and geographical location (Weideman, 2004). The death of husband often results in the loss of land, house and productive assets, thereby women who possess property or control assets are in a better position to improve their lives and cope should they experience crisis (Chitja *et al.*, 2016). Although South Africa has looked at land distribution for the past 25 years, it has not addressed how women's relationship to land would be accommodated (Thamaga-Chitja and Kolanisi *et al.*, 2010). A possible strategy is to promote food and community gardens to aid in availability and access to nutritious foods thus improving dietary diversity and food security and reducing income spent on food purchases (Govender *et al.*, 2017). However, having access to land alone is not enough. According to Oladele and Mudhara (2016) inadequate access to water, equipment,

[24]Mainstreaming gender is an approach for making women's as well as men's concerns and experiences an integral factor of the design, implementation, monitoring, and evaluation of policies and programmes in all political, economic and societal spheres so that both women and men benefit equally, and inequality is not worsened. The ultimate goal is to achieve gender equality.

extension services, finance and vulnerability to theft (including fencing) means that even if women have access to land, they cannot be productive enough. Adequate, clean and safe water is important for agricultural production, food processing and preparation as it directly affects food and nutrition security. Gender equity in the distribution of critical farm assets remain a vital step to transition rural women-headed households to secure a sustainable livelihood (Aphane *et al.,* 2010). However, growing food should only be viewed as part of a solution and not the ultimate cure to food security and needs to be assisted by other transdisciplinary interventions. Support that enables women to enhance productivity during undertaking agricultural tasks or training, whilst spending less time on family responsibilities is a stepping stone to improving agricultural productivity and earnings which would benefit the whole household (African Development Bank, 2015).

2.3.3.4.4. Livelihoods

A livelihood comprises capabilities, institutional support, assets (including material, social and financial resources, the natural environment) and access to markets. It is essentially activities, government support, human skills, social networks and infrastructure required that enables making a living (Krantz, 2001). According to Forgey *et al.,* (2000) 70% of rural households in South Africa employ some form of farming activity but only 2.7% of rural households are depending primarily on this source of income. Safety nets, other than farming and social grants are employed as a means to obtain income and provide food for the household. According to Mishi *et al.,* (2020) women-headed households in many rural parts of South Africa depend on multiple livelihood strategies to earn a living. These women include smallholder farmers, farm workers, and beneficiaries of government grants (Aphane *et al.,* 2010). Livelihood strategies comprises community and kinship networks, credit, small business, 'odd jobs' and remittances (Grub, 2005; Alemu, 2012). As stated by Perret *et al.,* (2005) diversity in livelihoods is the way out of deep poverty. Rural livelihoods however do not imply a diversification of economic activities only within one's geographic bounds but also considers closer and more extensive connections with urban centres (Ndabeni, 2016) as a way for households to manage risks by diversifying their sources of livelihood.

Farm working women struggle with livelihood support (Sharaunga, 2015) - which could potentially rob their future incomes. An example would be during bouts of unemployment. Food that is meant to be sold for an income becomes food for household consumption instead (Association for Rural Advancement, 2020). This situation reduces income generation. As noted

by a female representative from Women on Farms Project (2019) *"Farm working women experience intersecting livelihood challenges arising from labour rights violations, landlessness, household food insecurity and lack of alternative income-generating skills and opportunities".* Small businesses are a source of jobs or livelihoods that enable people to earn the money they need to access food (Ncube, 2012), however farm working women (particularly in rural areas) are isolated, lack the necessary infrastructure and transport for markets and have limited access to training and educational opportunities. There is growing evidence that enhancing women's livelihood assets has a beneficial effect on household food security and on children's health and education (Lemke *et al.,* 2009). Lemke *et al.,* (2009) further found that women headed households in farming earning diversified incomes, attained a better nutritional status for their households than male headed households and that these social nets need to be supported and protected against shocks and stresses to ensure resilient households. If this is not done, households could become food insecure when their livelihood systems change or fail to adapt to challenges and shocks from the external environment (Twigg and Calderone, 2019).

Hajdu *et al.,* (2020) state that the role of the government is ambiguous being both a restrictor and enabler of local livelihoods. The lack of recreational facilities available to farm workers is linked to the widespread problem of alcohol abuse on farms (Atkinson, 2007). Macanda (2014) eludes to the problem with livelihood support from the state implying that development policies and projects could never succeed because government do not understand the hidden nature of rural poverty. Top-down planning mainly results in scenarios where not enough is known about the culture or conditions of an area or target group before a project is embarked upon. If appropriate interventions are to be effective in reducing rural poverty and vulnerability to poverty, it is important to have an understanding of households' livelihood diversification strategies (Maja, 2019), and that women's disadvantaged position in society be considered in any programme to improve household livelihood security (Ellis, 1999; Glazebrook *et al.,* 2020). Equitable change also needs to ensure that livelihoods are adequate and stable providing farm workers with a real share in power, so that their voices are heard when decisions affecting their lives and livelihoods are made (Du Toit and Ewert, 2002).

2.4. Conditions of Food Insecurity and Dietary Diversity for farm workers in Cape Winelands District (South Africa)

In CWD, seasonal farm working women in particular face various challenges in order to sustain their own and their families' food security and dietary diversity needs. One of these challenges is gender inequality (Tran-Nguyen and Zampetti, 2004). Entrenched attitudes towards women and gender discrimination results in farm working women being disproportionately disadvantaged, having minimal housing rights, are viewed as less valuable to work, and in turn, are paid less, compared to male farm workers (Shabodien, 2006). A total of 70% of farm working women working on wine farms in CWD are seasonally employed (Women on Farms Project, 2009[25]). Many women are also dependent on their abusive partners for money, food and accommodation as men are more likely to be hired by the farmer (Tsegay *et al.*, 2014). Other causes of food insecurity for farm working women are location and isolation from health facilities and shopping centres where a variety of food options are present, supporting larger households, lack of skills and employment for other types of jobs and volatile farm income and employment. Furthermore, inadequate living conditions, water and cooking amenities, shortage of transportation from farms to other facilities, inflation (Wadsworth *et al.*, 2016) and poverty. An over demand of farm worker jobs, low wages, underemployment and lack of support from government in the form of housing, food parcels, employment creation and livelihood opportunities, and lack of assistance with vegetable garden plots and inputs (Wilderman, 2014) are also huge barriers to farm working women's food security and dietary diversity. A point to note is that even if farm working women should obtain skills for other types of jobs, these jobs could become scarce due to fierce competition amongst farm working women and non-farm working individuals who are unemployed.

Even though women are mainly responsible for feeding and caring for their families (Davies, 1990), they experience hunger on a more frequent basis compared to men, as a result of income inequalities, their caring and sacrificial nature and cultural beliefs that make them eat last and less when food is limited (Tsegay *et al.*, 2014). Farm working women regularly experience food shortages and also worry about running out of food. Their food supplies are often depleted a few

[25]A more up to date percentage of seasonal farm working women working on wine farms in CWDt could not be found.

days after payday, leaving them with little to no food to get by and often forgo meals until they get paid again (Devereux and Tavener-Smith, 2019). During food and money shortages, the food they consume include mainly starch and fatty foods, low or no fruits and vegetables and non-nutritious foods (Chakona and Shackleton, 2017) that are cheaper and makes their money stretch longer, but which are bad for their health. Staple foods are maize meal (pap), bread, rice and potatoes. Healthy foods needed for a diverse diet are often unaffordable. Farm working women use a variety of coping strategies when food or money is limited to help get them through the month. These include buying smaller quantities of food, switching to unhealthier alternatives (e.g. meat for chicken feet or offal), skipping meals, reducing the size of meals and consuming a smaller variety of food, asking neighbours or family for food, selling items, borrowing money from loan sharks, purchase food on credit from the farm shop or by growing their own food (Kruger *et al.,* 2008). A concerning factor are the rising prices of food, electricity, transport and other expenses which puts farm working women and their families at a greater risk to hunger, food insecurity (Faber and Drimie, 2016) and reduced dietary diversity. With prices increasing at a faster pace than wages, farm working women are faced with spending less or buying poorer-quality food. They therefore often have to make trade-offs between purchasing food and paying for other essentials, such as school fees, clothing and transport as their consumption decisions are impacted by inflation and their limited financial resources.

Cape Winelands District is known for its wine and grape vineyards (Mouton, 2006) that are mainly abundant at the beginning and end of year. During Winter, there is no employment for seasonal workers and hence, there is no farm income present. In 1964, the International Labour Organization (ILO) adopted the Employment Policy Convention (EPC) framework that defined the term 'underemployment' as an under-utilization of employees' productive capacity (Greenwood, 1999). Thus seasonal farm workers possess the necessary farming skills but are receiving less income than what they are entitled to which impact on their food access and food choices. Working less and not working at all is an important reason for hunger and food insecurity (Dodd and Nyabvudzi, 2014) for seasonal farm working women. Mashiri *et al.,* (2009) explains that during Winter months' seasonal farm working women are more unemployed as well as underemployed than men and this leads to less income and reduced food and nutrition security for themselves and their families. Devereux and Tavener-Smith (2019) attests to these findings as they

discovered that mainly farm working women in the Western and Northern Cape experience hunger between April to August, with social grants then becoming the main source of income. But even during good seasons, there still lies the volatility and vulnerability of a good and bad harvest which would mean that at any time workers can be let go which leaves them with little to no income for the month. This indicates that seasonal farm workers have to try to make a three to six -month salary last for an entire year. Job insecurity also relates to uncertainty of not knowing if and when they will be employed, for how long, and how much they will be paid.

During times of employment working hours per day could extend to 12 hours with vigorous labour and activities, such as crouching, bending and carrying heavy buckets whilst working in the vineyards. Even though strenuous labour requiring greater energy requirements and long working hours should be duly acknowledged and compensated for, seasonal and casual farm working women's income is still not sufficient to adequately provide for food, let alone nutritious foods for themselves and their families, and to purchase other basic necessities like medicine or having savings available for family emergencies (Davies, 1990; Izaks *et al.,* 2018). Income from seasonal employment is therefore not sufficient to prevent food insecurity, for attaining regular access to food or for emergencies, and this context can lead to a spiral of debt (Bolt, 2017). For example, if money is short, farm workers purchase food from the farm tuckshop at high interest rates and the money is deducted as soon as they get paid (Prince, 2004). This situation results in money running out sooner in the month and food insecurity being experienced throughout the remaining weeks in the month. Since workers cannot move out of the farm premises because of lack of housing, money and transport challenges they may have, they are forced to buy overpriced goods from shops owned by the same farmer who have employed them. Seasonal farm working women also experience negative emotions, such as the fear of losing their jobs due to competition and high demand for farm work and worry about paying off their debt and meeting their basic needs and other expenses, such as school fees and leaking roofs, etc.

Seasonal farm working women, in particular have been impacted very badly by farmer exploitation by not receiving the Sectoral Determination Minimum Wage amount. More than two-thirds of women seasonal workers surveyed in the Western and Northern Cape were not paid the legal minimum wage (Devereux, 2020) and still have to pay electricity, water and rent to farm owners, despite the low wages they receive (Andrews, 2014). Workers are then less likely able to purchase

a healthy diverse diet. According to Devereux *et al.,* (2019) farmers protect themselves against paying the national minimum wage by accelerating unfair dismissals, replacing permanent workers with seasonal workers and foreign migrants, reducing the days and hours of employment, rely on low levels of unionisation and have infrequent and inadequate inspections by the Department of Labour. Employers prefer to hire illegal immigrants because they will work for lower wages (Munakamwe *et al.,* 2014). Another significant development is that farmers have been shifting towards mechanisation of farm operations and, together with the implementation of an agricultural sector minimum wage, are hiring fewer permanent workers and more seasonal temporary labourers (Patel *et al.,* 2020).

According to Nsele (2014) food insecurity in rural areas is due to a lack of financial resources and growing food, improper and inadequate food storage facilities and poor food hygiene practices. Farm working women may see healthy foods as financially risky to purchase as they perish quickly especially if there is no refrigeration at home and when weather is extremely hot. Cooking meals also requires time and electricity which are often limited due to long working hours and the price of electricity. This of course impacts the types of foods farm working women purchase that are cheaper and faster to prepare and are often times less nutritious (Joubert *et al.,* 2018). Furthermore, rural farm working women also experience lack of water which affects the safety of their food before, during and after preparation. Govender *et al.,* (2017) states that if there is not proper utilisation of nutritious foods, there will be no change in the nutritional status of vulnerable people.

Farm workers also have limited food choices as farms are located many kilometres away from the nearest Town with shopping centres (Atkinson, 2014), meaning that purchases are done mainly from the farmers' shop. Women would have to travel long distances to reach Town at expensive transport costs as urban centres usually have adequate food availability with a variety of food options and prices to choose from as they consist of well stocked food retailers (Peyton *et al.,* 2015).

Farm working women are seeing a reduction in their ability to growing their own food, mainly due to water scarcity which limit access to nutritious foods to feed themselves and their families as well as any additional income that could potentially be used for savings or to purchase other goods. Lack of access to land and productive resources and extension services are also limiting factors to

sustaining their gardens. Due to these barriers to producing food, it is safe to assume that farm working women access food mainly from shops, whether on or off the farm and are thus vulnerable to food price fluctuations.

Furthermore, farm workers find it difficult to access social services, resulting in social grants not being applied for. Other than the over- reliance of farm work as income, statistics show that over 55% of farm worker households and their children in South Africa are largely reliant on state social grants (Western Cape Department of Agriculture Farm Worker Household Census Report 2017, p.9). According to Tsegay *et al.,* (2014) the Older Persons Grant and Child Support Grant reduces the probability of adults and children skipping meals by approximately 25%, in households where these grants are pooled with income sources from other household members. Women farm workers that have been working on the farm for years who either became injured on the farm without compensation and who are retired complain that they do not know how to claim their money from the government and they do not have the money to travel to town in order to resolve this issue, making it difficult for them to access government support (Botes *et al.,* 2014). They also state that farmers do not let them know about what they are entitled to. This marginalisation places farm workers in a particularly vulnerable position and exposes them to human rights violations and abuse (Department of Social Services and Poverty Alleviation, 2004). Some seasonal farm workers also struggle to access social relief of distress in the form of food parcel assistance as SASSA officials are scarce in some rural areas of CWD. Deductions on the farm, such as UIF and PAYE should be compulsory statutory deductions from a farm worker's remuneration, however some farmers do not register their workers, which means they are not covered by unemployment insurance should they become injured or lose their job. Seasonal farm working women struggle to access other skills and employment opportunities as they are not in close proximity of where they reside. To support farm working women in their struggles, it is often NGOs that support farmworkers' self-organisation and awareness-raising of their rights (Andrews, 2014) as farm working women fear losing their jobs when forming a union.

2.5. Chapter summary

This chapter examined both international and South African literature of food insecurity and dietary diversity for farm workers. The chapter highlighted various factors affecting food

insecurity, and extensively identified farm working women's struggles in reaching a state of food security for themselves and their families. Seasonal farm working women's experiences and challenges in CWD, South Africa concluded the chapter.

CHAPTER THREE
THEORETICAL FRAMEWORK

3.1. Chapter overview

This chapter begins with discussing the history and evolution behind the food security concept and defining food insecurity. This is followed by explaining the Food Security Framework (FSF). The food security dimensions (availability, access, utilization, stability and sustainability), its levels (individual and household), its components (quantity and quality) and its outcomes (physical well-being) are also briefly touched on. Lastly, this chapter explains the dietary diversity concept which is essential to the food security concept.

3.2. History and evolution of the food security concept

The concept of food security has evolved, from a focus on food production (self-sufficiency), to ensuring adequate food availability (countries importing surplus food from elsewhere), and more recently shifted again to ensuring access to food (or adequate 'entitlements' to food).

3.2.1. History of the food security concept

The food security concept originated during different volatile crisis periods throughout the past and up until the modern era, taking on various definitions as time passed. For example, from the early 1900's to the late 1970's World War 1 and 2 had led to a decrease in world food supply (Leonard, 1957: p.113-125). Following these events, entities such as United Nations Food and Agriculture Organization (FAO) assisted to increase agricultural production (resulting in food surpluses) because of the increasing global population growth and to reduce the risk of famine and starvation. The need for increased production was a major priority since protein-energy deficiency in 1970 affected more than 25% of the global population (Peng and Berry, 2019). Although 3.4 billion people worldwide were fed (Simon, 2012), another problem arose affecting food production. For instance, little to no mitigation was taken when climatic conditions affected agricultural activities (Lipper and Zilberman, 2018) whereby drought effects limited cereal production causing an increase in food and oil prices (as a result of the demand for imports). This

event that occurred from 1972-1975 was called 'The International Food Crisis' or the 'Global Food Crisis' as the global food system became vulnerable to economic and environmental shocks (Gimenez, 2008) which led to fluctuating food prices.

3.2.2. Evolution of the food security concept

As mentioned, the constant change of the food security definition can be explained by various volatile time periods after World War 1 and 2. Following these events, having the physical **availability** of food became the first most important aspect to the food security concept. The concept of 'food security' at the national and global level was related to issues on the supply side of the food equation and especially, on a country's ability to provide sufficient food to meet the needs or demands of the population, either through domestic production or food imports (Pinstrup-Andersen, 2009).

Due to the abundant quantities of food countries produced, the notion of trade was established. For major food importers trade balance and currency reserves needed to be recognized as important factors of national food security for a country (Diaz-Bonilla *et al.,* 2002; Breisinger *et al.,* 2012). Global and local price stability of basic food stuffs also became a concern and an important factor to food security due to unstable agricultural commodity prices (Berry *et al.,* 2015).

Food security though goes far beyond matters of agricultural production, prices and international trade, given the strong linkages with the rest of the economy, through which production in non-food sectors and macro-economic policies largely influence food supply (Timmer, 2000). Other scholars like Sen (1981) indicated that sufficient food supply is only one of many preconditions of having enough food to eat, while the causes of hunger and starvation may be of other nature. For example, Sen further elaborated on lack of entitlement to food either through growing food, buying food, working for food or being given food by others as factors affecting vulnerability to famine (Devereux, 2001) more than the unavailability of food itself (Berry *et al.,* 2015). In addition, Govender *et al.,* (2017) mention the role of social sectors—primarily health and education - as critical for treatment and prevention of nutritional deficiencies. Nevertheless, food security only had the ***"availability of sufficient, nutritious food"*** which was the first pillar of the World Summit definition. In the 1970's, the World Food Summit (WFS) defined food security as the ***"continuous***

availability of sufficient world food supplies of basic foodstuffs to maintain a steady augmentation of food consumption and to counteract instability in production and prices" (United Nations, 1975). Having enough volume (quantity) and **stability** of food was therefore significant to one's physical well-being and to becoming food secure within a country.

In 1983, this definition developed to one where economic **access** was integrated into the food security concept as vulnerable groups and countries did not have the financial means to obtain the available supply of food (FAO, 1983). According to the World Bank (1986) the food security concept lacked the 'adequacy of food' element which meant all people accessing sufficient food consistently to produce an active and healthy life. There however developed the problems of (1) accessing and consuming enough food to living a healthy active life, without considering the quality and nutritional balance aspect (including the preserving and preparing of food: **utilization**) and (2) considering social and cultural food preferences that was needed for maintaining a diverse diet (World Health Organization, 2019). Due to food inferiority and malnutrition that occurred during the mid-1990's, the World Food Summit accepted a new concept of food security, emphasizing that *"all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life"* (World Food Summit, 1996). This definition incorporates the four essential dimensions of food security at the national, individual and household level, namely availability (national), access (household), utilization (individual) and stability (affecting all levels).

Sustainability later became another significant dimension of food security due to its economic, political, demographic, environmental and social impact on food systems (Berry *et al.,* 2015) which is still an ongoing challenge today.

3.3. Definitions of food insecurity

There are different definitions of food insecurity defined by different authors.

- Anderson (1990) defines food insecurity as "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways".

- According the United States Department of Agriculture (USDA) (2016), food insecurity "is defined as a household-level economic and social condition of limited or uncertain access to adequate food".

- The United Nations World Food Summit (1996) (WFS) and the World Food Programme (2009) (WFP) defines food insecurity as a situation where people at all times do not have physical and economic access to adequate quantities of safe and nutritious food that meets their dietary needs and food preferences, and for this reason do not consume the food that they need to grow normally and to live an active and healthy life.

Seasonal farm working women often struggle to access sufficient and a stable amount of diverse nutritious foods regularly, often consuming unhealthy foods which affects their health and well-being. This research study therefore selected the **WFS (1996)** and **WFP (2009)** definition of food insecurity for the purpose of analysing food insecurity and dietary diversity amongst seasonal farm working women in CWD.

3.4. Food Security Framework (FSF)

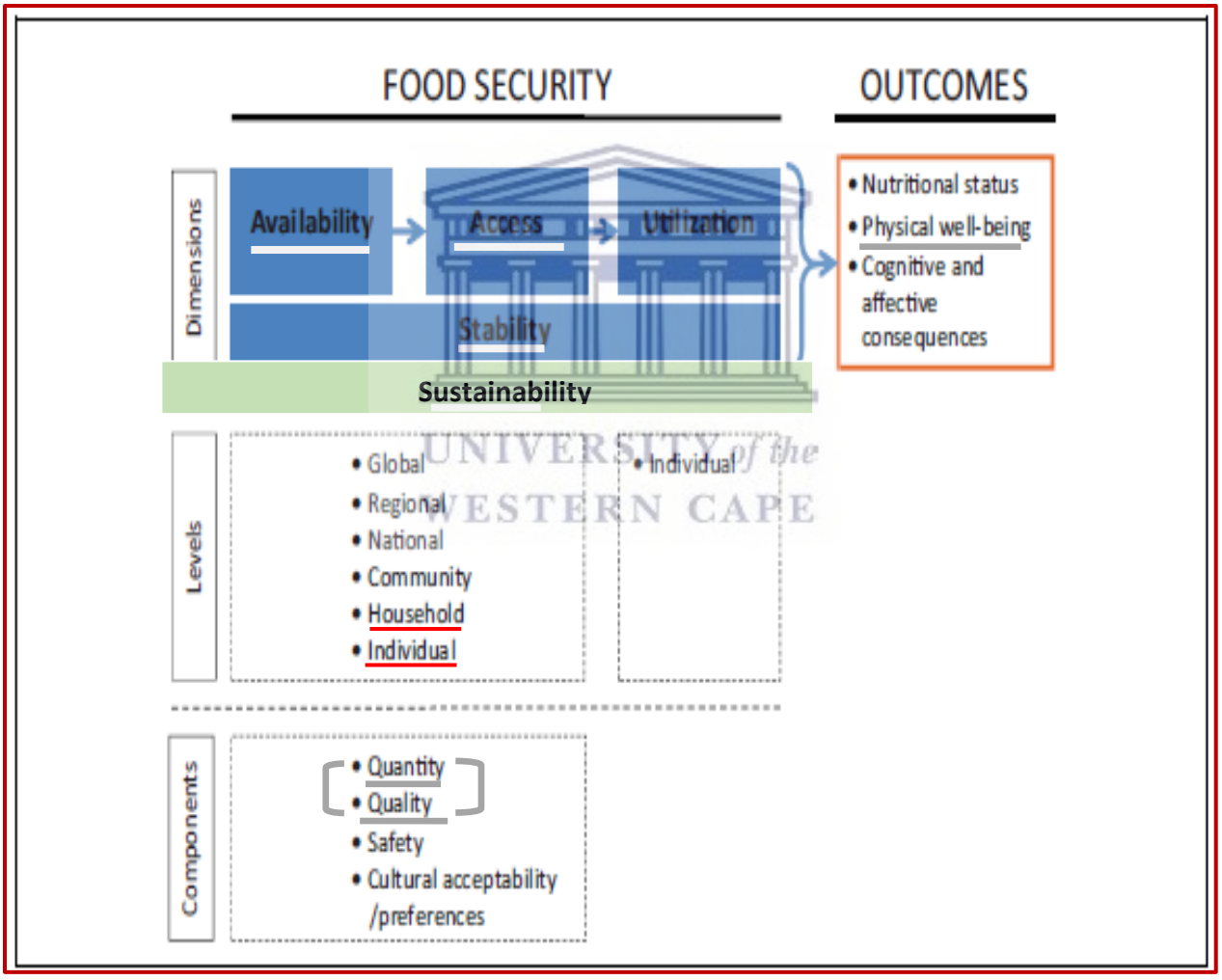
A Food Security Framework (FSF) is used as a tool to understanding the complex realities, processes and linkages, often through an illustration of these complexities in a simplified diagram. Its purpose is to help understand links among various food security dimensions, while also explaining linkages with underlying causes and outcomes, as well as related concepts and terms (FAO, 2016). A FSF is therefore a helpful tool when one begins to undertake a food security analysis.

A FSF) will be used as the theoretical framework and guide to understand the research problem of food insecurity influences on dietary diversity for seasonal farm working women in CWD and to

better comprehend the analysis of the study. We also refer to individuals and households when describing the FSF guide.

For the purpose of this study the focus is on availability, access, stability and sustainability of food under dimensions of the FSF; household and individual under levels of the FSF; quantity and quality under components of the FSF and physical well-being under outcomes of the FSF **(See *Figure 2: The Food Security Framework).***

Figure 2: The Food Security Framework (FSF)



***Source** : (Leroy and Ruel et al., 2015)*

3.4.1. Dimensions of the Food Security Framework

To comprehend the food security concept is to understand and expand on the dimensions of food security that can be used to analyse the phenomena. All of these dimensions explained below must be in place for full food security.

3.4.1.1. Availability

In the WFP definition, availability as the first dimension of food security refers to the word **'sufficient'** which means the supply of food that resides within a nation or region through local production, food aid and distribution, and food imports (World Food Programme) (WFP, 2009, p.170). This concept concerns the net commercial imports less the commercial exports and all other exports for a country but the concept can also be applied to households and villages. This means that there must be a sufficient amount of the right kinds of foods available in all areas of a country. Berners-Lee *et al.*, (2018) argues that even though agricultural production has continuously grown more than the population and food commodities available on earth is enough to feed more than the world's population, all people do not have access to food. This shows that although a country has sufficient food, it does not translate into the whole country being food secure, nor that an expansion in food production will result in a nation being food secure.

3.4.1.2. Access

The second dimension of food security is access which implies **'physical, economic and social access to food'**. The concept speaks to the capability of a household to acquire a sufficient amount of food consistently (Du Toit, 2011) through a mix of bartering, the purchasing process (including accessing markets), food production, food aid, borrowing and donations. Accessibility of food consist of tangible and financial factors. For example, the former implies producing and selling food in one area in a country may make it impossible for another area to acquire this supply due to limited transport means and inadequate road infrastructure. The latter, financial accessibility of food refers to people who need food and has the financial means to purchase enough of it regularly to meet their daily food requirements. One would think that in rural households, climate change would be the primary concern to obtain sufficient food, but food produce that is available but becomes unaffordable could also lead to a situation of food insecurity (Misselhorn and Hendriks, 2017). Another element to food access relates to socio-cultural barriers. Maiga (2010) describes

this as limiting access to food to specific groups of the population for gender, culture or social reasons, which alludes to the importance of social protection measures for women.

3.4.1.3. Utilization

Utilization as the third food security dimension refers to '**safe and nutritious foods which meet one's dietary needs to live a long and healthy life'** (World Food Summit, 1996). Put differently, utilization refers to the quality of food that is nutritious and safe to consume and that would meet daily individual and household food requirements (Barrett, 2010) necessary for a productive life. FAO (2006) and Battersby and Watson (2018) furthermore states utilization comprises food security via an adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. A number of factors intervene here such as: the selection of food commodities for consumption, hygiene practices, such as washing of hands and food, conservation and preparation of food (that affects food safety), as well as the absorption of nutrients (Simon, 2012) which all plays a significant role in people's health and diets. Amongst the poorest of the poor, food safety is a serious concern. Food safety consists of the processes of correct handling, preparation and storage of food to prevent long-term illnesses and chronic diseases (Oggiano, 2015). According to the World Health Organization (WHO) (2019) unsafe foods containing harmful bacteria, viruses, parasites or chemical substances gain entry into the body through contaminated food products of animal origin, fruits and vegetables or polluted drinking water which lead to diarrhoea and certain cancers. Good hygienic practices in food handling as well as food safety economics and awareness are therefore important strategies to prevent foodborne diseases in humans.

Improper storage conditions also result in huge wastage of food (Schanes *et al.,* 2018). For vulnerable groups, nutritious foods become even more costly to preserve and obtain when there are no proper storage facilities. More so, the cost of disease, sickness and premature death negatively affects countries in terms of medical care, and socially and economically in regards to lost productivity and potential (Suhrcke *et al.,* 2006).

The above discussion depicts the meaning of non-food inputs in food security. For instance, there may be availability and access to food but once food becomes of an inferior quality and unsafe, this puts households at risk of not only lacking dietary diversity but to more serious issues, such

as disease and death. According to Conte and Morrow (2002) a number of observations have been made, including by the World Food Programme of populations where food is available and fully accessible but where malnutrition exists mainly because of the non-correct utilisation of food commodities which leads to health conditions. Food safety are closely linked to disease and illness, and ones' physical health.

3.4.1.4. Stability

The fourth food security dimension is stability which refers to: '**at all times**'. The stability concept refers to households having safe nutritious foods at all times (Barrett, 2013). To be food secure, a population, household or individual must have access to adequate food at all times. In other words, the system providing food must be reliable and stable. A population, household or individual should not risk losing access to food as a result of sudden shocks (*e.g.* an economic or climatic crisis) or cyclical events (*e.g.* seasonal work fluctuations) (FAO, 2006) but remain resilient before, during and after these disturbances. Stability is therefore the short-term time indicator of the ability of food systems to withstand shocks, whether natural or man-made, or food emergencies. Stability can thus refer to the availability and access dimensions of food security (FAO, 2006; Battersby and Watson, 2018) but also at the utilization dimension as water insecurity and power outages (as stresses and shocks to the food system) play a role in consuming a healthy, safe and food secure diet.

The stability element is further broken down into chronic, transitory and cyclical food insecurity ***(See Table 4).***

Table 4: Definition of Chronic, Transitory and Cyclical food insecurity

Definition of Chronic, Transitory and Cyclical food insecurity
*"**Chronic food insecurity** is a situation where people are unable to meet their minimum food requirements over a sustained period of time" (FAO, 2008).*
*"**Transitory food insecurity** refers to the inability to meet the food intake needs when specific fluctuations or shocks affect income or means to access food, without sacrificing productive assets or undermining the human capital" (Dhur, 2005).*
*"**Cyclical/Seasonal food insecurity** occurs when there is a cyclical pattern of inadequate access to food (e.g. food shortages in pre-harvest period, seasonal fluctuations, climate change and labour supply" (FAO, 2002: Devereux, 2006).*

3.4.1.5. Sustainability

Sustainability, also seen by many as the fifth and long-term dimension of food security ensures that every person is fed equitably and healthy, being able to access affordable diets for optimal growth and development (mental, physical and social well-being) and which would sustain future generations (Sustainable Development Commission, 2009; World Health Organization, 2019). According to Berry *et al.*, (2015) sustainability has a time dimension which determines how to consider trade-offs between social, economic and environmental issues. The implications of including sustainability as a fifth dimension of food security are to consolidate a more holistic operational framework at each level – regional, national, household and individual. It also combines other important concepts such as: sustainable agriculture (FAO, 2013), sustainable economy, sustainable food production (Smith and Gregory, 2013) and sustainable diets (Burlingame and Dernini, 2012). Sustainability can thus be viewed as a precondition for long-term food security.

The FSF dimensions of **availability, access, stability and sustainability** were the focus of the study. Availability was looked at as healthy foods are not necessarily available to many seasonal farm working women. Access was looked at as income (through wages and grants) are not enough to purchase food. Stability was looked at as the availability and access of food (especially during seasonal variations) on a regular basis are not a reality for many seasonal farm working women. Sustainability was included to determine sustainable ways that will ensure both short and long-term food security and dietary diversity of seasonal farm working women and their families.

The **household and individual level** were also chosen as the focus of the research study since the study's aim and methodology was to explore seasonal farm working women's food insecurity and dietary diversity at a household and individual level.

The **components of quantity and quality** were selected, as the two components of food security becomes prominent within the research study because seasonal farm working women experienced a lack of sufficient nutritious foods.

Physical well-being as an outcome of food security was chosen above nutritional status and cognitive and affective consequences. Living in poverty is linked to high levels of prolonged stress associated with health problems (Whiting and Ward, 2010). Seasonal farm working women experienced tremendous stress (mentally and physically) when trying to find work during off-season times to access food for themselves and their households.

3.5. Dietary Diversity (DD)

Dietary diversity means including various food groups to attain a healthy diet, and therefore becomes essential in the food security concept. Without consuming diverse nutritious foods, food insecurity can exist (Weigel *et al.,* 2016). Dietary diversity is therefore seen as a key ingredient of healthy diets and is termed as the number of different foods or food groups (12 food groups in total) consumed over a given reference period (Ruel, 2003). Increasing food variety across food groups is preferable in most dietary guidelines as it is thought to ensure adequate intake of essential nutrients, promote good health and contribute to food security. Rammohan *et al.,* (2019) report that the benefits of consuming different foods is that they have their own health and nutritional value leading to a long healthy life.

3.6. Chapter summary

This chapter discussed the history and evolution of the food security concept and defined food insecurity. The chapter also explained the food security framework as well as its dimensions of (availability, access, utilization, stability and sustainability), its levels (individual and household), its components (quantity and quality) and its outcomes (physical well-being) that was selected as the focus of the study. The chapter concluded with an explanation of the dietary diversity concept.

CHAPTER FOUR
RESEARCH METHODOLOGY

4.1. Chapter overview

This chapter describes the research methodology that was employed in the research study. It explains the research design, qualitative data collection techniques, the snowball sampling process and sample size considered in the collection of data for the research study. The chapter further outlines the research approach used, called Participatory Rural Appraisal (PRA) and the tool: a seasonality calendar that was applied in the study. Furthermore, the chapter mentions the ethics declaration and highlights data analysis and presentation. Lastly, this chapter explains the limitations the researcher experienced throughout the research study and provides solutions that overcame these challenges.

4.2. Research design

According to Durrheim and Terre Blanche (2004:29), a research design can be defined as a mental roadmap a researcher uses to plan how the specific research will be undertaken. To understand a particular research question and to explore avenues in which limited literature exists (Cuthill, 2002:79), an exploratory research design was employed for this study. The purpose for adopting an exploratory approach during the study was to understand the situation and barriers of food security for farm working women in CWD on a deeper level, and in so, allowing seasonal farm working women the opportunity to freely voice their opinion on the situation of food insecurity and challenges to dietary diversity amongst themselves.

As reported by WESGRO (2016) approximately 70% of South Africa's wines are produced in the Cape Winelands. Because the research study only focuses on wine farms in the CWD, it was therefore chosen as the geographical location for the study but most importantly, because a large proportion of farm workers are employed within this district (Women on Farms Project, 1997).

4.3. Sampling procedure

Webster (1985) defines a sample as a share of the population whose elements are studied so that one may draw inferences of the population as a whole. Equivalently, Mouton (2001) describes sampling as a process of choosing actors from the larger population. For this study, snowball sampling was used to find samples from the population of seasonal farm working women for semi-structured interviews and focus group discussions. Snowball sampling is a qualitative technique which involves locating research subjects where one subject provides the researcher with the name of another subject, who in turn gives the name of a third, etc. (Vogt, 1999). Snowball sampling has the major advantage where some degree of trust is needed to initiate networks that are relevant to the research study (Atkinson and Flint, 2001). These participants are subsets of a population and should be available and willing to participate, and be able to clearly express their experiences and ideas (Palinkas *et al.*, 2015). Another benefit of this technique is that it can be practised as a more formal methodology for making inferences about a population of individuals who have been difficult to enumerate through the use of descending methods, such as household surveys (Snijders, 1992; Faugier and Sergeant, 1997).

The sample group selection for this study was assisted by Women on Farms Project who initially knew a seasonal farm working woman who could then refer the researcher to the subjects' networks (either non-seasonal farm working women or seasonal farm working women) in order to reduce bias and increase the selection of participants, as well as acquire the relevant information needed for the study.

4.4. Qualitative research methods

In carrying out this research, a qualitative approach was employed during data collection. Choosing a qualitative method over a quantitative and mixed method approach allowed for interactions with research participants to elaborate on the research problem and helped to better understand the experiences of food insecurity and dietary diversity from seasonal farm working women's point of view. According to Babbie and Mouton (1998) a qualitative study is an extensive methodological approach with the main aim on gaining access to participants, collecting data and analysing it. This research study was explorative and did not assess relationships between other variables with statistical techniques (Meurer *et al.*, 2007) in order to draw conclusions. Instead, it

provides information for policy makers and researchers to explore the topic further and provides recommendations to the specific problems faced by seasonal farm working women. A participatory approach allows for many voices and experiences to be reflected on, and also strengthens the inclusion and ownership of the research by women working on farms (Devereux *et al*., 2017:4).

The researcher used qualitative methods, such as face-to-face semi-structured interviews and focus group discussions with seasonal farm working women, and key informant interviews with relevant stakeholders. No farm worker who was interviewed individually formed part of the focus group discussions. This procedure avoided any duplication of information. Both the semi-structured interviews and the focus group discussions were grouped under four broad categories: **(A)** Demographic information, **(B)** Contract, wages and sources of income (employment), **(C)** Dietary choices and sources of food and **(D)** Social assistance available **(See *Table 5: Proxy variables that determine food insecurity)***. All fieldwork instruments were translated from English to Afrikaans before fieldwork was undertaken.

Table 5: Proxy variables that determine food insecurity for seasonal farm working women

A.	***Demographic Information:*** Provides particular characteristics of seasonal farm working women, including their socio-economic status.
B.	***Contract, Wage and Sources of Income:*** Explains the significance of the Minimum Wage and other income sources, excluding from farm work.
C.	***Dietary Choices and Sources of food:*** Elaborates on changes to food security levels and access to food before and during seasonal unemployment.
D.	***Social Assistance Available:*** Identifies the role of social grants for seasonal farm working women and other assistance available to them that contributes to their food security.

Source*: Researcher's Own Construction*

4.5. Data collection methods

The nature of the research topic should dictate the sample description, as well as the research data tools to be used in the study. For this research study the researcher strived to understand and obtain responses to the research problems and the hypotheses of the study, which aim to address the research study objectives previously outlined. The researcher employed the tools described below for data collection during and after the commencement of the field research:

4.5.1. In-depth semi-structured interviews

In-depth interviews provide the researcher the opportunity to obtain rich and more relevant data, compared to other data collection methods such as questionnaires (Boyce and Neal, 2006). It also helps the researcher comprehend challenges and circumstances by seeing it from another's perspective. Interviews bridges the gap of what is known and what is unknown. Bloom and Crabtree (2006) speaks of structured and semi-structured interviews for data gathering where the former process involve closed ended questions, are more formal and prevents any probing beyond what is asked. The latter includes open ended questions, is informal due to its 'guided conversation' nature and provides more information about the particular research problem.

For this study, the researcher used in-depth semi-structured interviews which were constructed, based on the research objectives of the study. Semi-structured interviews were administered to 5 individual seasonal farm working women working on 4 wine farms in CWD during peak season. Altogether, this amounted to 20 participants. The questions were prepared ahead of time and were structured in a way that allowed participants to understand, express their views on and provide relevant information to the problem area. The questions were furthermore designed in two languages (English and Afrikaans) since the majority of CWD farm working women are dominant in the Afrikaans language. The researcher had two bilingual (English and Afrikaans speaking) assistants who helped assist with any queries, such as clarity and translation issues pertaining to the interview process. The length of the interview was < 60 minutes for each participant.

The selection of farms for this study were guided by Women on Farms Project (WFP) as the organization has access to and advocates for the rights of a number of farm working women in the CWD, through the empowerment of farm working women. The selection criteria for the farms chosen for the research study were for seasonal farm working women working on wine farms during peak season and who were either food secure or food insecure. The four farms chosen for the research study are located in the town of Simondium due to its close proximity to Women on Farms Project facility. As a result of the organization's busy schedule and the researcher's difficulty, in terms of budget in travelling and having access to other farm locations in the District, food insecure farms in other areas of the District could not be selected to be part of the study.

4.5.2. Key informant interviews (KIIs)

Key informant interviews are in-depth qualitative interviews with individuals who have knowledge about the community and its challenges (Kumar, 1989). The intention of key informant interviews is to gather information from a large base of people, such as community local leaders, experts in the field or community residents in order to give insight on the number of challenges the community are faced with but also to provide suggestions on how to solve these issues. There are two primary tools used to perform the key informant interviews. These being telephonic and face-to-face interviews (Marshall, 1996).

For this study 5 groups of face-to-face key informant interviews were conducted. Key stakeholders like Women on Farms Project **(WFP)**, Surplus People Project **(SPP)**, Cape Winelands District Municipality **(CWDM)**, Commercial, Stevedoring, Agriculture and Allied Worker Union **(CSAAWU)** and Food and Allied Workers Union **(FAWU)** were interviewed. Stellenbosch Municipality was initially chosen for interview but due to government processes and the longer time frame to interview with government officials at Stellenbosch Municipality, the CWDM was selected and was available for interview within the researcher's fieldwork time frame.

The shortest interviews were between 0-60 minutes, whereas the longer interviews stretched between 60-120 minutes. These interviews sought to explore the challenges to food security and dietary diversity for these farm working women. Furthermore, how this scenario affect household daily and monthly food consumption and what support structures are presently in place to help empower women farm working women. Additionally, what assistance there is to fight for justice for these workers.

The following reasons indicate why the particular key informant stakeholders were chosen to be part of the study:

- **Women on Farms Project (WFP)** empowers exploited farm working women in the CWD and guided the researcher to the relevant farms, as well as provided a significant amount of information on the current situation of food insecurity and dietary diversity amongst farm working women residing in the CWD region.

- **Surplus People Project (SPP)** are advocating for farm worker food sovereignty, addresses structural barriers that are constraints in securing access to productive land and other natural resources as a means for livelihood sustainability and where food security forms part of the agrarian transformation.

- **Cape Winelands District Municipality (CWDM)** is mainly responsible for disaster management, environmental and tourism functions in the district and plays a role in the alleviation of poverty and food insecurity through providing food parcels and empowerment courses on farms. These programmes address the vulnerable groups in rural areas in the district, including women working on farms.

- **Commercial, Stevedoring, Agriculture and Allied Worker Union (CSAAWU)** and **Food and Allied Workers Union (FAWU) are trade unions** that intervene, negotiate and fight on behalf of farm workers in relation to workers' struggles and complaints of exploitation and unfair pay which affect farm workers' food security.

4.5.3. Focus group discussions (FGDs)

Gibbs (1997) describes a focus group discussion as an organized conversation undertaken with a selected group of individuals pertinent to the study in order to gain views and insights for the study topic. Similarly, Kitzinger (1995) contends that focus group discussions are types of group interviews that gains from communication between research subjects in order to produce data as it involve explicitly group interchange as part of the method. The aim of the focus group discussions for this study was to provide the participants, being a group of seasonal farm working women the opportunity to freely voice their opinion and contribute to detailed information on the situation of food insecurity and dietary diversity amongst themselves.

4 FGDs with 5 female seasonal farm working women were conducted on 4 wine farms (*i.e.* one FGD per farm) in the CWD. The underlying questions and points of discussion were centred on the experiences and challenges these workers endure regarding food and dietary diversity issues and how it affects their household. The length of the focus group discussions was between 60-120 minutes for each focus group. Table 6 provides a summarised version of the sample size of each research method used for the study.

Table 6: Summary of research method with corresponding sample size

Research Instruments	Sample Size
Semi-structured interviews	**20** participants
Focus group discussion	4 groups of 5 (in total **20** participants)
Key informant interviews - WFP - SPP - CWDM - CSAAWU - FAWU	**[8]** 2 1 3 1 1

***Source**: Researcher's Own Construction*

4.6. Literature review

As stated by Mouton (2001) a literature review assists researchers to avoid any duplicate studies and helps further contribute to and identify gaps in the body of knowledge of a specific area of focus, as well as support the research design for analysis. The inspection of suitable literature formed a significant part of the study as it added to the research context, displayed the relevant theoretical conceptual framework and also helped to provide an understanding of the problems and concepts relating to the topic of focus. The literature review concentrated on literature collected through academic sources, such as publications, reports, books, journals, internet sources and policy and process documents which speak of food security and challenges of farm workers, minimum wage and employment laws and support structures for farm workers, all of which was then used to assist with the analysis.

4.7. Importance of recordings and note taking

In order to effectively retrieve information from research participants, one needs to store information of qualitative methods so that it can be processed at a later time. Wengraf (2001) states that recording memories, opinions, experiences and ideas during interviews is fundamental for data analysis. Similarly, Mosleh and Baba (2013) describes note taking as a process of capturing

responses from a transient source, such as oral dialogues and which are frequently used to record events. Both note taking and recordings become essential tools when one has to interpret information in understanding contextual knowledge, and in doing so, enables one to grasp the crux of the research problem.

During this study, each semi-structured interview and focus group discussion were documented subject to informed consent from respondents, via note taking and recordings by using notepads and sound recorders. These notes and recordings were translated from Afrikaans to English and then transcribed to text in order to assist with the analysis and findings of the data.

4.8. Research Approach

4.8.1. Participatory rural appraisal (PRA) Approach

Bush *et al.,* (2011) describes participatory rural appraisal (PRA) as a technique researchers employ in collaboration with those implicated by the problem being studied for the main goal of taking action or effecting social change. This makes the approach one of the most popular and effective approaches when wanting to obtain knowledge in rural settings (Cavestro, 2003). Using a PRA means that a wide range of participants with their own knowledge and expertise are brought together to collaborate on changing structural barriers that prevent their progress to development. This technique, also called the 'bottom up approach to development' takes into consideration the active involvement of people in making decisions about their own development (Burns *et al.,* 2004). Having the active participation of both farm working women and other key stakeholders' therefore played a key role in addressing this research. The PRA tool that was used for this study was a seasonality calendar.

4.8.1.1. Seasonality calendar

Gijsbers *et al.,* (2001) defines a seasonal calendar as a tool which examines seasonal patterns in the incidence of animal, crop, pests and diseases, rainfall, household expenditure or farm labour. The researcher used a seasonality calendar for both individual interviews and focus group discussions for seasonal farm working women. Seasonal patterns that were examined consisted of rainfall periods on farm labour at the start of June to the end of August during which Winter prevailed and farm work, such as cutting, pruning, removing twigs, etc. were scarce. According to

FAO (2002); Devereux, (2006) cyclical/seasonal food insecurity arises when there is a cyclical pattern of insufficient access to food (*e.g.* food shortages in pre-harvest period, seasonal fluctuations, climate change and reduced labour supply. The reason for utilizing this tool was to assess how food insecurity and household diet changes when there are cyclical patterns exacerbated by climate change and to analyse the employment volatility of farm working women during seasonality changes which impact on their access to and stability of food. This gave an indication of how food secure a particular household was every month.

4.9. Ethics statement

As stated by Dey (1993), a research design should always provide careful attention to ethical issues in research projects. The main objective of an ethical statement is to safeguard the welfare rights of research participants. Important ethical issues that have to be considered entails avoiding harm to participants, avoiding undue intrusion, communicating information and obtaining informed consent, rights to confidentiality and anonymity, fair return for assistance, participants' rights in data and publications and participants' involvement in research (Laws *et al.,* 2003). Interviews were only undertaken when the participant willingly gave consent to engage in the study (this was done through signing a letter of consent). No participant was forced to participate in the study and the participant was free to withdraw from the interview should they have felt uncomfortable to answer some of the questions.

In order to have proceeded with this research, permission was granted by the Senate of the University of the Western Cape, Economic and Management Sciences (EMS) faculty board, as well as from the Institute for Social Development (ISD). As both primary and secondary data were collected and analysed, the consent of female seasonal farm workers and the key informant interview participants were obtained. No special ethical issues were encountered during this research.

4.10. Data analysis and presentation

Caudle (2004:417) affirms that data analysis entail comprehending appropriate information which was retrieved from different sources. These sources consist of documents and articles, in-depth interviews and focus group discussions which were interpreted so that it becomes possible to see what the data reveals. The data was inspected, grouped, compared and scaled down to separate

insignificant from interesting data. Data was then summarised, coded and transcribed in excel sheets whereby themes and the association between themes was identified and used to explain the findings.

The researcher analysed and interpreted the data after the data collection process of semi-structured and key informant interviews and after each focus group discussion was completed in order to assess the results. The researcher then linked the empirical findings to the literature done on food insecurity and dietary diversity amongst farm workers and farm working women in South Africa. Finally, the researcher determined how these findings differed, contradicted and coincided with the cited literature and theory.

4.11. Limitations of the study

The researcher experienced a number of challenges during the tenure of the research study. The first challenge was determining the sample size of the farm working women participants since a large proportion of farm working women are seasonal and therefore a small selection of farm working women could only be chosen due to the researcher's budget constraints. The researcher selected snowball sampling as the most appropriate technique during fieldwork since during peak season, farm working women with similar contexts, background and interests were working together in one location (same farm) which made it easier to locate seasonal farm working women participants. As mentioned before, the researcher experienced the problem of budget constraints since many farms are resident in the Cape Winelands and the lack of funding to be able to select a bigger sample size and being able to travel to many farms for the study became a problem.

Because a small sample size was chosen for the study, the second challenge the researcher experienced was the problem of not being able to accurately generalize over the large percentage of seasonal farm working women as mentioned above. Myers (2000) acknowledges that small qualitative studies are not generalizable in the traditional sense, but yet have redeeming qualities that contribute significantly to literature and policy. Having implemented the fieldwork instruments, it became clear to the researcher that the situation of food insecurity and dietary diversity was common to many seasonal farm working women participants and seasonal farm working women that the subjects knew, since these women would support one another with food when the other was lacking during peak and off peak season times. The researcher also discovered

during key informant interviews that there is not much support in terms of food security and dietary diversity for seasonal farm working women which increased the researcher's generalization accuracy.

Thirdly, accessing farm working women was another barrier as during peak season the participants were very busy (even though they were on a break) and did not have much time to speak with the researcher about their situation on food insecurity. Accessing farm working women participants together with the timing of the interviews then became the challenge. The researcher had support from Women on Farms Project (WFP), a familiar entity to farm working women, who had the authority to step in, make the participants feel safe and allow the researcher to continue the farm working women interviews. It also provided an opportunity for the researcher to familiarize herself with the community and gain their trust.

4.12. Chapter summary

This chapter has presented the research methodology employed for the research study, as well as the research design and qualitative data collection methods employed in the study. The sampling technique, sampling procedure and sample size used in the fieldwork were also provided. Snowball sampling was implemented in order to sample participants for the qualitative research study. In this chapter, the researcher also outlined Participatory Rural Appraisal (PRA) as the research approach and the seasonality calendar which was used as the participatory tool during the study. Furthermore, the ethical procedure was discussed and data analysis and presentation highlighted. Lastly, limitations' the researcher confronted throughout the study and solutions to the challenges were discussed.

CHAPTER FIVE

DATA ANALYSIS AND FINDINGS

5.1. Chapter overview

This chapter presents and examines the research findings from the data that was collected, which addresses the research questions, objectives of the study and the literature review chapter. The chapter uses four proxies to determine food insecurity and dietary diversity amongst seasonal farm working women in CWD. The chapter first discusses demographic information of the research subjects to get an overall idea of the sample study group. Thereafter it presents and discusses contract, wages and other sources of income of the subjects. This chapter also reveals dietary choices and sources of food, followed by social assistance availability for the farm working women. Furthermore, this chapter includes the seasonality calendar used during the research study period which displays months and reasons for food insecurity for seasonal farm working women. Lastly, this chapter discusses the key informant interview responses related to seasonal farm working women's food insecurity situation in CWD.

5.2. Semi-structured interviews and Focus group discussions with seasonal women farm workers in CWD [Annexures 1 and 2]

The interview guide for the semi-structured interviews and focus group discussions were divided into four sections, namely: **(A)** Demographic information, **(B)** Contract, wage and sources of income (employment), **(C)** Dietary choices and sources of food; and **(D)** Social assistance. These proxies were used to determine food insecurity for seasonal farm working women in CWD ***(See Chapter 4, Table 6: Proxy variables that determine food insecurity for seasonal farm working women)***.

For ease of reference, a system of identification was set up to identify responses between semi-structured interview participants and focus group discussion participants as follows:

- **Semi-structured interview participants are named as Participant 1, Participant 2, Participant 3....Participant 20.**

- **Focus Group Discussion participants are named as FGD1, FGD2, FGD3 and FGD4 (food secure) participants.**

5.2.1. Demographic Information

The sampled 40 Participants from the semi-structured interviews and focus group discussions were all female seasonal farm workers on wine farms who may or may not have had a food insecurity problem at the beginning of the study. The data indicates the socio-economic status of the participants and provides an indication about who ends up becoming farm workers and seasonal farm workers based on certain characteristics the sample population presents, contextual background and location they are in.

Participants differed in relationship status, age, dependents, farm work experience, distance living from farm, education and employment choice. A few migrants were part of the sample size of 40. Participants were either married, single, widowed or co-habituating, with the largest group being single (33%) followed by married (27%) and widows and co-habituating at (20%) each. The youngest and dominant group of participants were between the ages of 16-29 years of age (47%) and the oldest participants were between the ages of 51-60 years of age (7%). All age groups had dependents to look after, in the form of children, whether or not it was the participants' biological children and/or parents, grandparents and other family members. Farm work experience for participants were equal for between the least 0-5 years of experience (27%) and most 16+ years of experience (27%). Farm labour is thus a combination between younger workers and more experienced workers. A total of 66% of farm working women live near the farm they work on – they either live on the farm or the farm is within walking distance. The remaining workers replied that they get to work with some form of vehicle organized by the farmer. Majority of farm working women had low levels of education - 87% of farm working women did not finish Matric. None of the participants have tertiary education qualifications.

Reasons for becoming farm workers had a lot to do with poverty, their backgrounds and the context they find themselves in. When asked why they became farm workers, reasons stated were *"There were no other jobs available, I lived on the farm and had to work on the farm, farm work is the easiest way to get work*" – Participants 7, 9, 11,12. A FGD2 and FGD3 participant responded by saying *"I did not have any other choice because we were 8 children and my father was the only*

one working so I had to leave school and help him. Std.6 I had to leave school because of my circumstances. The only work there was farm work. The salary of my husband was too little and I had to help him with providing for our children" (FGD2 participant); *"Farm work was the first jobs that was available and did not require any special skills"* (FGD3 participant). A FGD4 food secure participant working and living on the farm decided to work on the farm for the convenience of her family. She responded by saying *"When my husband started working on the farm I also worked here because it was more convenient for the children. The farmer provided a house for us to live in"*. When asked about career aspirations, responses from both semi-structured and FGD participants varied greatly - from social worker, nurse, computer technician, chef to academic. There was a long pause as participants were thinking back to their childhood dreams indicating everyone had their own individual dream but that their and their families' socio-economic status and location were contributing factors towards becoming farm workers. For example, a participant in FGD1 replied that she wanted to become a primary care-giver but she had to drop out of school in Std 6 because the school was too far (often times she had to walk to school in the dark) and her family did not have money for transport or to study further; she then ended up becoming a farm worker to help her family financially.

With regards to other employment opportunities available near Simondium or challenges farm working women faced when trying to apply for them, there were other jobs available only in Town but none in Simondium. The jobs in Town however required experience other than farm work and so, they were disqualified for jobs requiring other skills. *"There are no other work where we live"* – FGD1 respondent; *"There are factories, guest houses, wineries, a chocolate shop, packing stores. Simondium people don't get the jobs, only the people who come from Paarl (outside people). The problem with this is that they are looking for people with relevant experience within that field. Most of the people here only have farm work experience. They do not get other opportunities to gain other skills"* – FGD2 and FGD3 respondents.

5.2.2. Contract, Wage and Sources of Income (Employment)

The Minimum Wage in 2018/2019 was R3169.19. Majority of participants from the semi-structured interviews received the Minimum Wage at the time of the data collection (70%) and (50%) from focus group discussion participants ***(See table 7).*** One FGD3 participant cited that she

only received R53 a day. It is not clear whether this was because the farmer didn't pay the Minimum Wage to the worker working a full day or whether the participant had only worked for a few hours of the day. None of the participants were unsure of whether they received the Wage or not. Those respondents who did not receive the Minimum Wage believed that the Wage would still not have been sufficient to cover their family's food security and dietary diversity needs should they have received it because prices are increasing at a faster rate than wages leading to reduced spending power. As cited by FGD1 respondents *"It won't help much because the food is too expensive. We will mostly buy bread because it fills one up. There won't be extra money for fruit and other things because the first thing will be to buy the basics that one usually needs and uses in the cupboard, such as mealie meal, potatoes, meat, bread, coffee, sugar"*. Participant 9 responded *"It would not help much because it is too little and I only do piecework"*. This response provides a good indication that seasonal farm working women do not work every day or for the full 8-9 hours per day and because of this situation, wages are low affecting their access to nutritious food and food choices, and increases stress about food. According to Tsegay *et al.*, (2014) poor households nearly give out half of their income on food but have to make due with cheap, expired and non-nutritious food, which creates a society that has 'good access to bad food and bad access to good food. A total of 71% of participants also worried about where their next meal will come from.

Table 7: Seasonal farm working women who received and did not receive the Minimum Wage in 2019

Do you receive the Minimum Wage amount of R3169.19?	
Semi-structured interview participants	**Focus Group Discussion participants**
YES	**YES**
14 (70%)	**10 (50%)**
NO	**NO**
6 (30%)	**10 (50%)**

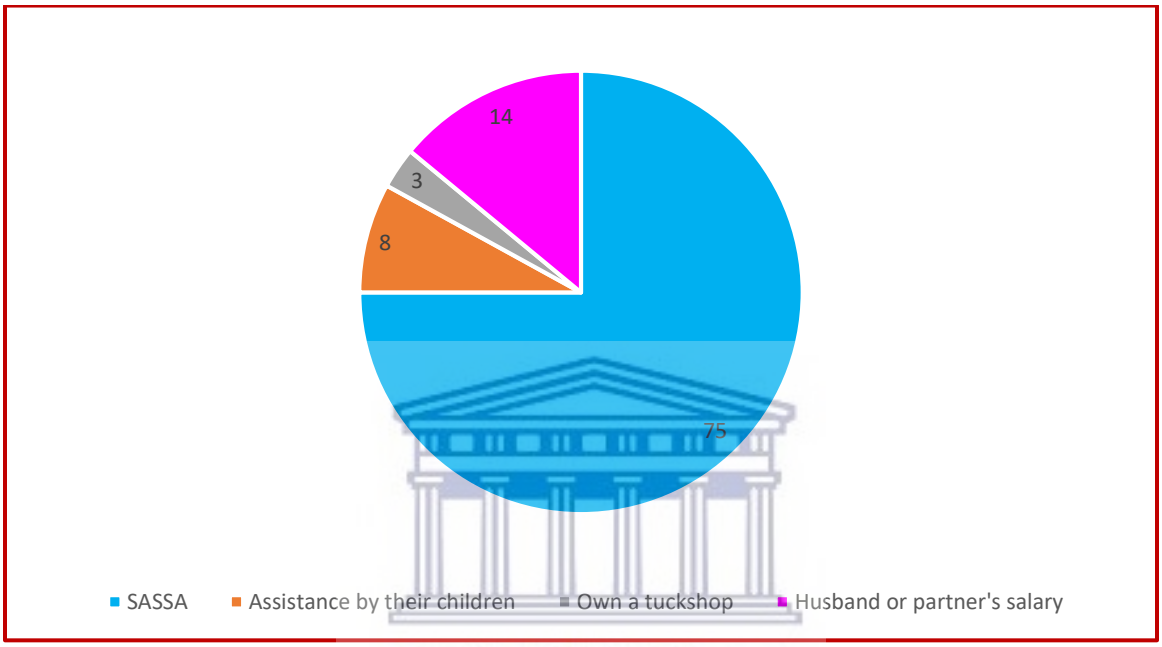
***Source**: Researcher's Own Construction (from data collected in 2019)*

Some participants believed that the Minimum Wage helped with their food needs but majority replied that it did not help much with their diets for the month. Responses about the benefits of the Minimum Wage were mostly negative from both semi-structured (93%) and Focus Group Discussions 1, 2 and 3 (75%) respondents. Reasons cited were *"I still can't buy everything I want to. Money is too little for even basic things"* and *"It did not help much because it only went to toiletries and clothes"* – Participant 7 and 8. *"It was not enough. Food prices increase all the time. The next month we will not be getting the same quantity of food as the previous month. We can't keep up with the price increases. The children need clothes and stationery"* – FGD2 respondents. These responses are indicative of basic essentials costing too much and often times food is cut from the budget leading to food insecurity, lack of dietary diversity and hunger, and that the Minimum Wage amount should also factor in the cost of non-food items that often eats up this income. Some positive responses were *"I can buy food weekly. I do not need to wait for SASSA"* – Participant 2. *"It helped a lot because my parents could not always buy food"* – Participant 6. The FGD4 food secure participants received much more than the Minimum Wage and other benefits from the farmer, such as bread 3x per week, have their own vegetable garden, don't pay any electricity, and transport is provided by the farmer to Town when they need to purchase food. They responded by saying that they did not have any problem with food for the month.

The cost of electricity is another major component that decreases income. Besides the benefits they receive from the farmer, not having to pay any electricity certainly assisted the FGD4 participants with having more room in their budgets to have savings, access healthy food and to afford other essentials, such as school fees, clothing and toiletries. All other participants agreed that paying for schooling and clothing, rent and electricity was draining their budgets and often times, less nutritious foods are consumed to try to make the Minimum Wage amount last for the month. *"We can't buy food that is needed for a healthy diet. It is also why we get sick often and get chronic diseases. We have to make do with any other kind of food to survive"* – FGD2 respondents. It is important to note that if more than 1 household member is working and there are members that receive a social grant from government or other income sources, this would certainly aid with having enough food in the home, more importantly, accessing nutritious food. *"The Minimum Wage did assist to an extent but only because my husband was working and I received the child grant"* – Participant 10.

Sources of income cited, after farm income were SASSA (75%), ranked as the most common source of other income received, followed by husband or partner's salary (14%); children's assistance (8%) and having a small tuckshop (3%).

Figure 3: Most common sources of income after farm wages



***Source**: Researcher's Own Construction (from data collected in 2019)*

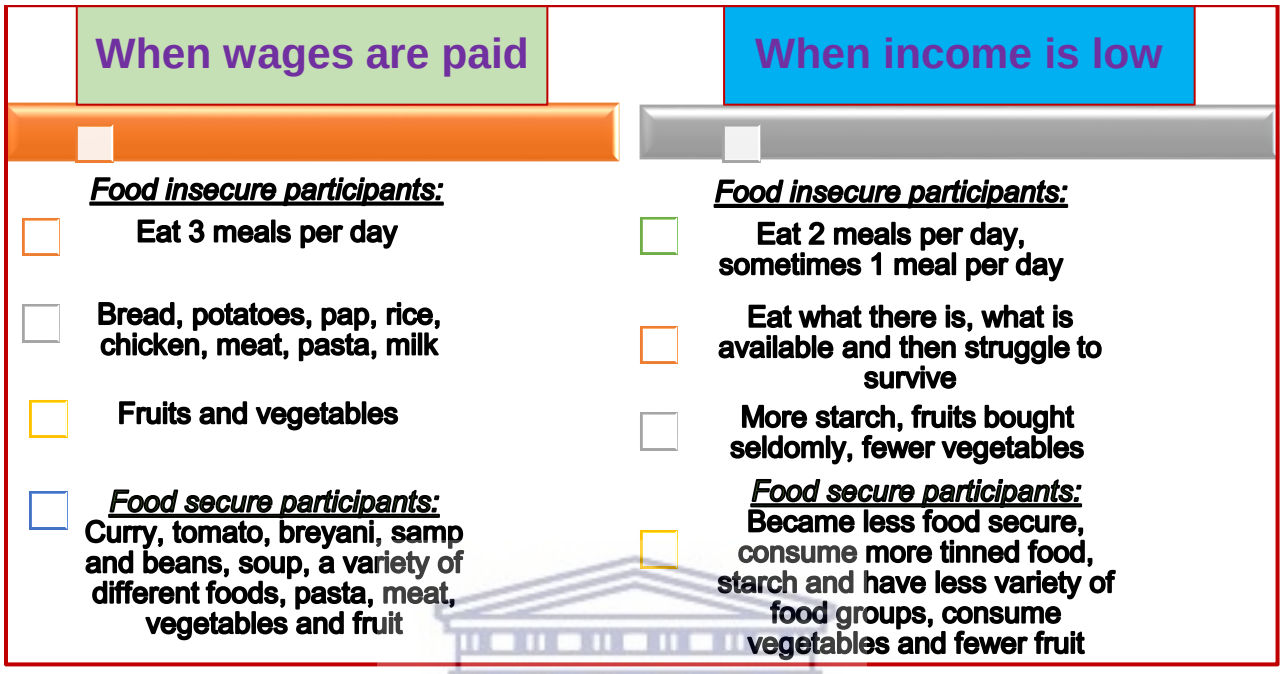
5.2.3. Dietary choices and Sources of Food

Seasonal farm workers and their households face many food security barriers that lead to their diets being compromised with bad food choices and often times not having a stable amount of food everyday. They will do consumption smoothing – reducing their dietary diversity – to ensure a supply of basic food for the household (Charles and Battersby, 2019 Popular responses from seasonal farm working women participants on their food security barriers were 'Food is too little' and 'There is no food because income is too little'. *"There is not always enough food. The income is too little. We give more out than what we are receiving because food is not the only thing we buy"* – Most respondents. These responses stemmed from work not being available during Winter and as a result, income and food are less. *"There is never enough food in our house. During Winter there is really nothing because there is not much work in Winter. The children eat a lot during Winter, compared to Summer"* – FGD 2 participants. Increasing food and other prices is also a challenge to access food. Majority of women purchased most of their food from Town (Paarl).

Town is not within walking distance from the farms but no participants claimed that getting to Town with a taxi (although there were concerns about the cost of transport increasing and not being able to go to Town regularly if income is low), with the farmer or with someone on the farm to access food was a huge problem. This could be because the women realized that purchasing food on credit from the farm tuck shop was self-sabotaging leading to a cycle of debt and they are willing to travel a further distance to obtain and pay for food at a lower price and to have a variety of options to choose from. It is only when money and food is low that tuckshops are used to purchase food at. As FGD 2 participants said *"Tuckshops on the book until we get SASSA but then there is no more grant money left over".* Only a few women responded that there is always something to eat and the FGD4 participants did not experience food security challenges. They responded *"There is enough food. We have land to plant our own vegetables"*. As previously mentioned, this group of members are food secure receiving many benefits from the farmer, including accommodation (a formal house with running water). A point to note is that upon arrival on the 3 other farms, all were living in informal dwellings that were not maintained. One particular participant responded that her plumbing system was not working well as it affects her neighbours plumbing. They have numerous times told a government worker in the area but the work was delayed. Besides worrying about food for themselves and their families and about losing their jobs, farm working women's living conditions are also a topic that causes concern. Flooding or strong winds might negatively affect their dwellings – which they would need emergency savings, for reducing any potential savings or money for food.

One of the questions asked to the respondents was what their families consumed on a weekly basis? From the responses, it was clear that every week differed as income decreased and as income becomes volatile when work becomes scarce. Figure 4 below is a weekly comparison summary between kinds of foods consumed and how diets change as soon as seasonal farm working women gets paid and when income becomes low.

Figure 4: Transition summary comparison of weekly diet changes when income changes



***Source**: Researcher's Own Construction (from data collected in 2019)*

The results reveal that the farm working women participants' diets do change when their income changes where 3 meals changes to 1 or 2 meals per day as money runs out. In the week of the interview, participants were asked if they had eaten 3 meals per day everyday that week. Fifty percent had not consumed 3 meals per day that week. Starchy foods, such as bread, potatoes, rice, pap and pasta is still dominantly consumed even when they get paid. These foods are cheaper to buy, fill up tummies and help stay full for longer and also because they work sparingly with their incomes taking into account employment and income volatility. When income is low, starch is consumed even more with fewer vegetables and fruit. *"If there is not enough money for bread, then pap becomes the alternative; We eat more pap, mostly in the morning and at night again"* – FGD 1 and 2 respondents. *"We only eat vegetables twice a week. Other than that it is rice, potatoes, pasta, beans, more starch. We know that eating too much starch is bad but we don't have any other choice"* – FGD 1, 2, 3 participants. Less nutritious foods that are affordable and lasts longer have become the diet for seasonal farm working women participants only because they do not have the means most of the time to purchase foods that are healthier to consume but would have no problem switching to healthier foods if the financial means were there. Other respondents say that they eat less when income is low and consider their children first. *"When there is little, I*

give it to my children so that they don't go to bed hungry" – Participant 10. This shows that women would rather sacrifice their own meals for their family to eat first, often at the expense of their own food security needs and well-being. FGD 2 and 3 respondents makes this clearer. *"We make sure the children eat first and we eat less; Sometimes we combine the little that we have into one meal. The children get the most"*. Even though the food secure participants (FGD 4) do have support to assist with their food security status, their diet and food secure status diminishes when their income is low although still more improved compared to the food insecure participants' diets.

Participants were asked to remember a time when they themselves and their families did not have enough food to eat in the period from May 2018 – May 2019. **Table 8 (seasonality calendar)** below provides a summary of the months and seasons that participants could remember in which they were food insecure/secure and the reasons there for. Fifty percent and over were food insecure in the months of June, July and August 2018 and in June 2019. Some reasons for food insecurity were that they were not working, they were the only one working and work was scarce due to consecutive days of rainy weather. Increasing coping strategies are evident during this time (Devereux and Tavener-Smith, 2019). From September 2018-April 2019 over seventy-five percent of participants were food secure in the seasons of Spring, Summer and Autumn. Reasons there for were that they were working and had more earnings. Note that even though participants indicated that they were food secure in the aforementioned months/seasons, it does not mean that they had an abundance of food or even nutritious food to eat everyday because of the high cost of living (Izaks *et al.,* 2018) and uncertainty of employment. It means that they had more food or money in these months compared to the months in which they indicated they were food insecure, *e.g*. during Winter. This strongly came through as participants spoke about this topic. One participant mentioned that because she was pregnant, she had to keep money aside for transport to get to Town and to purchase other items. This led to her household being food insecure. As previously mentioned, farm working women have no to limited savings available and any unexpected expenses are mainly paid from the income they receive from farm work or from SASSA grants. Any savings are used up in the days and months when they are unemployed.

Table 8: Seasonality calendar of seasonal farm working women's food security and food insecurity during the period of May 2018-May 2019

Month	Food secure (Y/N)	%	Reason
June 2018[26] **WINTER**	N	57%	➢ It was raining a lot and there was little to no work ➢ Work is scarce ➢ No work only when asking ➢ My husband is a seasonal worker and he was not working ➢ My husband was working alone ➢ I was working alone ➢ I was pregnant and I had to keep money for the hospital
July 2018 **WINTER**	N	64%	➢ It was raining a lot and there was little to no work ➢ Work is scarce ➢ No work only when asking ➢ My husband is a seasonal worker and he was not working ➢ My husband was working alone ➢ I was working alone ➢ I was pregnant and I had to keep money for the hospital
August 2018 **WINTER**	N	50%	➢ I was the only one working. Husband does casual work. ➢ Not enough food ➢ Work is scarce ➢ No work only when asking ➢ My husband is a seasonal worker and he was not working

			➢ I was pregnant and I had to keep money for the hospital
Sep 2018 – Dec 2018 **SPRING AND SUMMER**	Y	93%	➢ I was working
Jan 2019 **SUMMER**	Y	79%	➢ I was working
Feb 2019 **SUMMER**	Y	93%	➢ I was working
Mar 2019 **AUTUMN**	Y	93%	➢ I was working
April 2019[26] **AUTUMN**	Y	86%	➢ I was working
June 2019 **WINTER**	N	64%	➢ I was not working

[26] May 2018 and May 2019 missing responses on semi-structured interview schedule.

When asked if food security of the participants was better or worse in 2014 and 2009, 71% of participants responded that their food security was better in 2014 compared to 2009. In 2014 participants stated that food was cheaper, income lasted for the month, everything was cheaper, both partners were working, there was full-time work and enough work was available. For 2009, participants responded salary could last longer, more food could be bought and there were more opportunities to obtain an income.

The 29% who believed their food security was worse in 2014 responded by saying that age and health played a role in receiving work, no one in the household was working, there was little money because work was scarce. In 2009, 55% responded that only one person in the household was working, there was not much work which led to low income and less food and, work was insecure. One participant believed there was no change in her food security status in both years because she could see there are no jobs for the youth, apartheid is still happening and food prices continued to increase. Main themes and responses for food security/insecurity status in 2014 and 2009 are summarised in table 9.

Table 9: The Food Security status of Seasonal Farm Working Women in 2014 and 2009

2014		2009	
Better **71% of women responded**	**Worse** **29% of women responded**	**Better** **45% of women responded**	**Worse** **55% of women responded**
Food and electricity was much cheaper and our food and income lasted for the month. One could buy more with less.	No support from husband. My age and health played a role.	Our pay could last longer and we could buy more food.	My husband and children was looking for work.
Both me and my husband was working.	There was no food in the house. No one was working.	There were more opportunities to obtain an income.	There was not much work. The income was low and there was not much food.
There was work available.	My husband was sick, there was little money	I had work from three to six- months. Son	Not full time. Insecure work.

	and I was not working everyday.	contributed. There was the child grant and I had a vegetable garden.	
The work was full time and the income was more. There was more food.		There was someone working in the house.	I was the only breadwinner. Some days when it was raining we did not work and then we would struggle a lot especially with small children in the house.
There was better work - other work I could do.		My husband's family was helping us.	
My husband was still alive to support me.			
I had a full time job and my mom was still alive and helped out.			

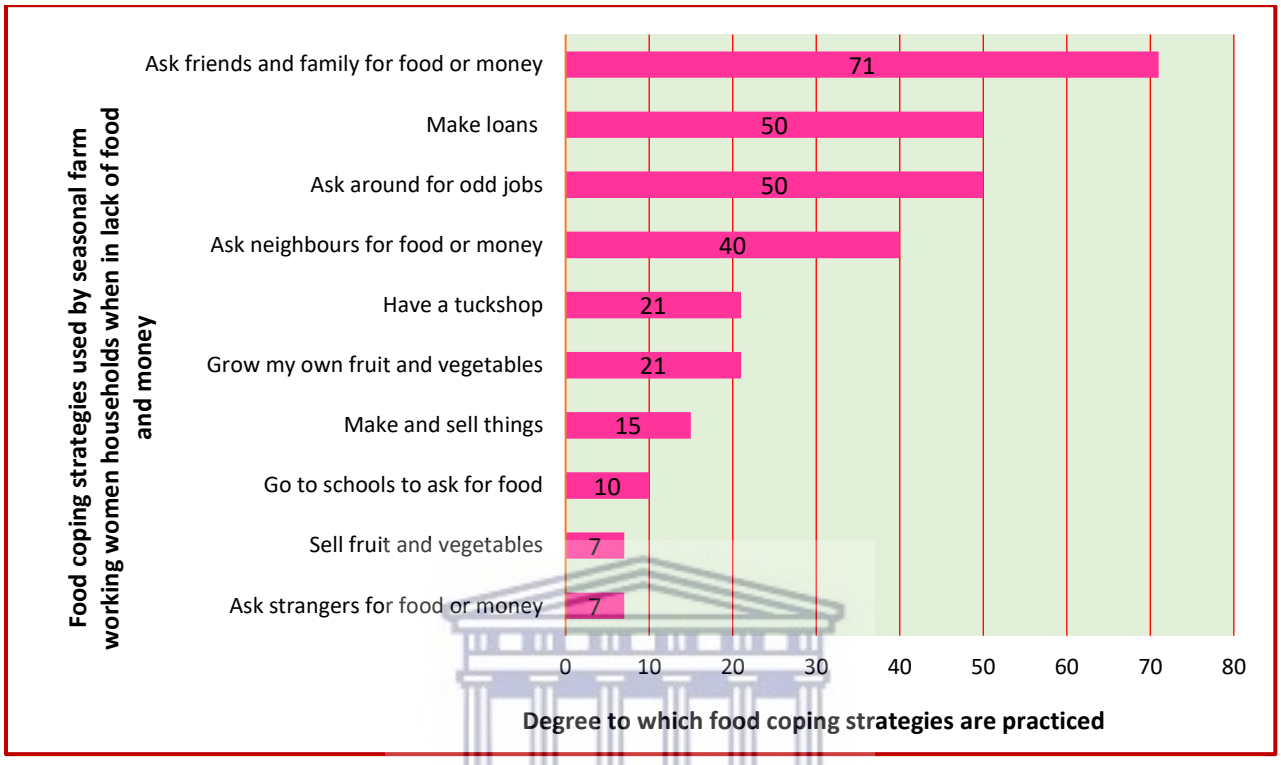
Source: *Researchers own construction taken from researcher's semi-structured interview guide*

Women are not only responsible for providing food but also to take care of the family's needs, and are thus most able to describe the **food-coping situation** in their households and the community, as well as the degree to which food coping is practiced (Kruger *et al.*, 2008). Participants used a variety of coping strategies when there was not enough food or money in the household, some that has been mentioned previously. These coping strategies were used in combination with others.

In the order of mostly utilized: Majority (71%) of participants asked either friends or family for food or money; 50% asked around for odd/char jobs and made loans. These loans included food on credit at the farms tuckshop and obtaining money from loan sharks. A total of 40% asked neighbours for food or money; 21% grew their own fruit and vegetables and had a tuckshop. Participants responded that vegetable gardens helped with saving money, eating healthy every day

and getting less sick. Majority of participants not owning vegetable gardens believed that owning one's own garden meant having healthy foods every day and to be able to grow food for themselves instead of buying food or relying on others for fresh food. *"Vegetable gardens will help a lot because we heard that the people that have vegetable gardens in Keimoes does not have that much high blood pressure, diabetes. The more vegetables one eats, the lower the risk of chronic diseases"; "We will have healthy food every day and our children will grow healthy"* - FGD 2 and 3 participants. Note for participants owning a tuckshop, this tuckshop is not referred to as the farms tuckshop but rather selling a few products, such as chips and cigarettes from within their households for extra money. A total of 15% made their own products to sell. This involved knit work and catering. A total of 10% of participants went around schools to ask for food, knowing that some schools provided food to their learners. From the participants who grew their own fruits and vegetables 7% sold the produce and the remaining used it for own consumption and helping out friends, family and neighbours. A total of 7% asked strangers for food or money. In cases where participants asked someone for food or money - whether it be friends, family, neighbours or strangers, they felt humiliated or embarrassed. *"It made us feel stressed out and humiliated to ask others. Sometimes others have but they do not give us. You feel bad because you don't have food for your children when other children are eating"* – FGD 1 participants. None of the participants gambled for money. ***(See figure 5).***

Figure 5: Coping strategies used by seasonal farm working women to obtain food



Source: *Researcher's Own Construction (from data collected in 2019)*

Other coping strategies identified from the study are women consuming cheaper and inferior foods, such as starchy foods when income is low, skipping meals and eating less to make food last longer and to have other family members have food and for them to eat more. Women also make hard sacrifices between buying food or paying for other essentials, such as electricity. They count every cent they have and can usually tell, to the cent, by how much something has gone up by. No participants mentioned that they relied on humanitarian food aid as a coping strategy. This indicates that there is lack of community support from government but also civil society as there are limited NGOs or other community facilities where the farm working women reside at where food could be served and distributed from.

What was shocking was that 62% of semi-structured interview participants and their families went a day without eating any food and all the 3 FGD food insecure farm participants' response were the same. This was a heart-breaking topic as many women became emotional when thinking and

talking about those times of hunger. *"I thought my children would not survive because they were weak. We were sad and crying"* – Participant 4 and FGD2 participants. Most women mentioned that it was their children they were thinking of and worrying about when there was nothing to eat as women are usually the ones who answers to children when they are hungry (Tsegay *et al.*, 2014).

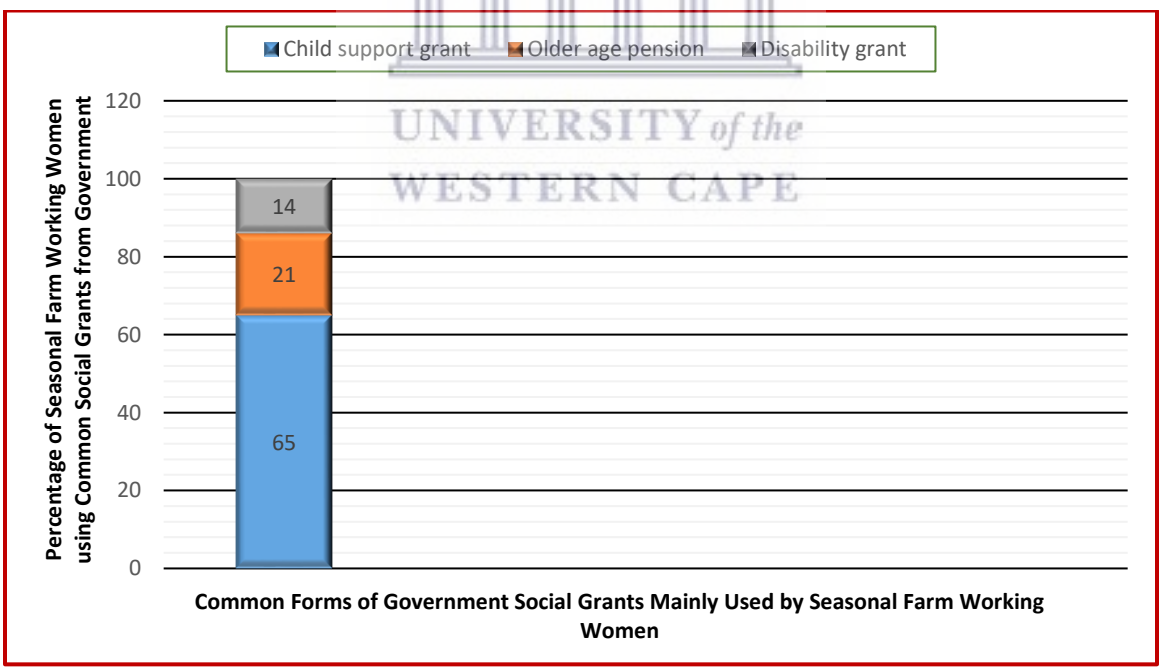
As mentioned previously, the seasonal farm working women participants know what foods are healthy and unhealthy to consume regardless of the marketing of unhealthy food by corporations. It is because they have to manage their limited available means that their quality, quantity and stability of food is compromised. They are therefore not influenced by the advertising of unhealthy foods but rather cannot afford healthy foods that they purchase energy dense foods that are cheaper and unhealthy. *"For us we gain weight because we are struggling"* – FGD1 participants. They responded that a healthy diet involves the consumption of diverse foods, such as chicken, fish, vegetables, fruit and milk with starchy foods and red meat in moderation. Only FGD1 participants did not know what a healthy diverse diet comprised of but they did know about the importance of consuming such a diet. *"They say you have to watch your figure. Your immune system will be stronger. Being overweight makes one get sicker quickly"* – FGD1 participants. All other participants also knew the value of eating a healthy diverse diet for themselves and their children's development. *"To avoid chronic diseases, such as high blood pressure, diabetes, cholesterol"; "To live a healthy and longer life. We would feel better, more energetic. Children will learn better in school"* – FGD2 and 4 participants.

5.2.4. Social Assistance available

Participants from both interviews and focus group discussion groups stressed the importance of social grants as a safety net and as their only reliable source of income. A total of 71% of interviewed participants received this support from government. The most common forms of social grants are the Child Support Grant and the Old Age Grant. A total of 65% received the Child Support Grant followed by 21% the Older Age pension and 14% received the Disability Grant ***(See Figure 6)***. There were mixed responses when it came to views about social grants. Majority of participants appreciated this form of income to assist them with food and other essentials, although it did not assist for the entire month. *"It helps with putting food on the table for two weeks, pay for debt and funeral policies. The children at least have clothes on their back"* – Participants 1, 3 and 4. Others could not at all manage with the grant for the month. *"It doesn't*

help much because my children are in after care that must be paid each month" – Participant 10. *"It is way too little. What can one do with R400 a month? If you look at what all the expenses are. Children need raffle money, food at school, functions at school, transport etc."* and *"electricity is expensive. We have to buy everyday"* – FGD 2 and 3 respondents. Social grants thus restrict the participants to a restricted food basket that lacks dietary diversity (Govender *et al.*, 2017). FGD 4 respondents also agreed that the grant from government doesn't help much. Because they receive more than the Minimum Wage per month, they can buy enough food and pay for other essentials for the month. It is clear that seasonal farm income together with social grants from government is still not sufficient to assist the majority of seasonal farm working women with their food security and diverse nutritious diets for the month. Importantly, social grants are received only if there are children, older persons and persons with a disability within the household and are only meant to support such individuals and not specifically the farm working women themselves who are the main providers of the household.

Figure 6: Common forms of social grants from government for seasonal farm working women



***Source**: Researcher's Own Construction (from data collected in 2019)*

It is unfortunate to hear that there is no other support available to seasonal farm working women, other than the social grants provided by government. These were the responses from all

participants. No participant mentioned the Expanded Public Works Programme (EPWP) as alternative work when unemployed as support from government. The Expanded Public Works Programme is a programme created by government for the purpose of providing poverty and income relief by means of temporary work for the unemployed to deliver social useful activities[27] (South African Government, 2018). The Expanded Public Works Programme emphasises the participation of youth, women and disabled persons and the beneficiaries also receive UIF benefits. There was no mention of the Unemployment Insurance Fund (UIF) as support from government through EPWP or seasonal farm work. It is unclear whether they do receive UIF from seasonal farm work or whether their responses only related to sources of income that they usually receive. They do however wish that government could increase the social grant amounts and the Minimum Wage by a reasonable amount each year to help more with their food security and diverse diets. Other responses were asking for food parcels as SASSA was not visiting their farms, and assistance with land for vegetable gardens. *"Help give us vegetable gardens, sponsor vegetables, food parcels with dry food monthly or twice a month"*. What was also interesting was that the women also wished that government could assist with more work opportunities, and work that developed other skills. There were no other organizations, besides Women on Farms Project, although not their main focus, that assist with any livelihood and social opportunity farm working women may have for themselves and their community. *"Not all farms receive the food parcels. Our desire is for feeding the community, children, old people, less privileged. Government should help set this up because there is no money or decent food preparation space to do this. A big piece of land to plant and helping the community is needed"* – FGD2 participants in agreement with majority of participants. These farm working women can relate to one another's food and other struggles and hence care not only for themselves but for each other's well-being. If there are other ways to make money, it is limited by market access. *"We make jam and sell but mostly within our community. Nobody helps us to sell. We do it on our own"* – FGD2 participants*; "There are no entities helping us. We rely on each other as a community. There are shops but we would need people to help get it to them"* – FGD1 participants in agreement with majority of participants. Without any additional source of income, food or support seasonal farm working women are very vulnerable to hunger as was seen in the analysis of the previous sections.

[27] Government and state-owned enterprises use the EPWP to create temporary labour intensive employment opportunities via the delivery of public and community services. Amongst others, social useful services are homebased care, community security and the cultivation of community gardens (South African Government, 2018).

5.3. Key Informant Interviews [Annexures 3 – 6]

The names and identities of the key informant interviewees are disguised; respondents are instead identified by the acronym of their organization name ***(see chapter 4 section 4.4.2 for purpose of organization).***

Women on Farms Project: **(WFP)**; Surplus People Project: **(SPP)**; Cape Winelands District Municipality: **(CWDM)**; Commercial, Stevedoring, Agriculture and Allied Worker Union: **(CSAAWU)** and Food and Allied Workers Union: **(FAWU).**

5.3.1. Discussion and analysis

The discussion and analysis are divided into different segments below.

5.3.1.1. Food security of farm working women becoming better or worse over the years?

All five key organizations agreed that food security for farm workers and seasonal farm working women became worse over the years but affected certain classes of people more than others. All referred to price increases as the main reason to food insecurity, which corresponds to one of the reasons that seasonal farm working women were saying is a barrier to achieving food security and dietary diversity. According to FAWU and SPP, classes referred to those who can afford to buy food when prices increase and those that cannot – the vulnerable, and in this case – seasonal farm working women. *"There is enough food but the workers don't have enough money to buy it"* – FAWU. *"Everyone has to pay the same price for food even though their salary amounts differ"* – SPP. According to CWDM *"The wages of the people on the farm does not grow that tremendously. There is an imbalance between salaries and inflation because the people need to also pay for school and transport. Money becomes scarcer"*. Another factor affecting the agricultural sector and food security of farm workers that is of concern to CWDM is that of increasing power outages/load shedding during farm operations which have potential negative consequences to farm workers' food security and to their employment and income. Load shedding during irrigation and on cold chains reduces the quality and quantity of produce the farmer can sell which directly impacts farmer profits and the salary/wages the farmer can pay to his workers. This results in the volatility of employment and income of farm workers. CSAAWU understood that drought plays a negative role in farm workers employment and their food security but is stating that government

and farmers are not assisting farm workers with land and other inputs to produce their own food. *"We demand land for workers. The farmers said that they don't have money to pay the workers but there is land. People have skills"* – CSAAWU. Because agricultural gender inequalities persist, seasonal farm working women are mainly at risk of hunger and food insecurity. Despite their significant roles in household food security, they experience discrimination and have limited bargaining power. Patriarchal norms result in disadvantages for women farm workers, especially in land rights and secure employment (Botreau and Cohen, 2019). WFP responded that food security for farm working women became worse because more farm working women are losing their jobs or are becoming seasonal, casual and temporary workers, but also cited farm evictions as a contributing factor towards food insecurity, lack of dietary diversity and nutrition of farm workers, especially women workers. *"Farm working women don't stand a chance to become a permanent farm worker. They become either a seasonal or casual worker and when they don't have jobs or decent work or a place to live, they don't have money, then there is food insecurity in the household"; "Women farm workers don't work for the season, they work for a week here, two weeks there, a month here. Because work is so casualised for them and because they are far from non-farm work opportunities, they are stuck. Without an income (which they could have relied on 15 years ago), where they were working for six months, now they are not. That means that the income the household has, is less, its more insecure because they don't know when they will work, when they not going to work, how much they are going to earn. Therefore, the income and the ability to buy food is obviously much worse"* - WFP. WFP further responded that the working season has become shorter and that farmers are employing women for shorter periods and mechanisation are increasing - famers are using machines more for picking grapes. Farm working women's income has thus either stagnated or declined in the last 5 or 10 years at the same time that prices have become higher, negatively impacting farm working women's food security.

5.3.1.2. Impact of the 2012/2013 farm worker protest on food security of farm working women

CSAAWU calls it "*a rebellion, started by seasonal women farm workers"*. The 2012/2013 protest indirectly contributed towards farm worker's food security but also had a negative effect. After the protest farm workers received an increase to the Minimum Wage amount from R69 to R105 per day but many farm workers however lost their jobs thereafter indicating a trade-off between

increasing the Minimum Wage amount and workers in the agricultural sector losing their jobs. Furthermore, FAWU and WFP responded that the increase of the Wage had not increased with inflation and hence people were not really better off after the protest and the rise in the Minimum Wage amount. *"We cannot say that this protest has taken people out of the poverty trap"* - FAWU. *"When the strike took place in 2012-2013, at that time workers were asking for R150 a day. Now it is 7 years later they still haven't yet reached R150 a day. By now the value of that R150 is totally different"* - WFP.

5.3.1.3. Food security and dietary diversity barriers experienced by seasonal farm working women

Similar responses were evident across the key informant interview respondents and most of their responses are aligned with seasonal farm working women's responses on the food security and dietary diversity barriers they face. Seasonal farm working women do not have an income off-season; women have been reduced from permanent to seasonal workers leading to low and irregular wages as they work for fewer days and fewer hours and are therefore underemployed. *"Seasonal workers do not have a contract/conditions of employment that protect them and to say this is the fixed hours to work for the month. You can start working in the morning and then the farmer says you are done pruning, which means working only from 7am-11am and getting that 4 hours' amount of money instead of for the whole day. There is thus no obligation for the farmer to keep them there until 4pm which would make 8 hours of work per day"* - FAWU. Other reasons cited by CSAAWU for women receiving low incomes stems from apartheid where women, specifically black women were not regarded as much, having a lack of power and were easy to exploit. *"Farmers need to be more sensitive towards female workers"* - FAWU. WFP's feedback was that *"seasonal male farm workers are placed in permanent positions more than seasonal farm working women even though the women can do the same kind of work. This means that men are then paid more than women"* - WFP. Farmers are employing more immigrant workers at an even lower wage than local workers; and women do not have access to land for housing and to grow their own food. *"If they had both employment with decent wages and their own production of food, they would have access to food and this will be more sustainable for them". Furthermore, "it will be good if plots of land can be made available and they have their own tenure of security. This will create a new image in the farming sector where they become part of the farming system and*

not only a worker" – FAWU and SPP. Vegetable gardens also require having access to inputs to be able to produce well. *"Because of the water shortages they can't be sure how well the gardens will produce. If they don't have food in their gardens they are forced to buy from tuck shops"* – WFP. Furthermore, WFP cited price increases; social grant amounts being too low; cycle of debt; other necessities needed, such as clothing and school expenses; supermarkets being far from farms; lack of markets in rural areas and farm mechanisation being further food security barriers. *"Food products should be exempted from VAT. VAT increased by 15%. When prices go up, ultimately it has an effect on women's buying power. If the taxi fare goes up, supermarket prices go up, as you know the rise of oil prices lead to rise of food prices"*- WFP. CWM responded that social ills, such as substance abuse is a major problem on farms where men mainly spend money on alcohol and not give money to his partner. Social ills therefore play a part in the availability of money. In addition, there is a high crime rate in CWD rural areas where farmers get killed. This leads to farmer's wives selling the farm and then job opportunities are gone. It not only affects farm worker's food security but also the country's.

The food security and dietary diversity barriers seasonal farm working women face impacts on other areas of their lives. It impacts hugely on the children and their physical and mental development and progress in school. *"Children come to school in the morning without food. They cannot concentrate and fall asleep"* – CWDM. People need to have nutritious food so that they can produce healthy children and for them to be active in society. Furthermore, seasonal farm working women cannot send their children to university should they complete school because of their low wages, which continues the poverty cycle. Other areas it affects is their health resulting in chronic illnesses, such as diabetes, overweight, obesity and heart disease, because they lack the right nutrition. WFP continued to say that women at times feel weak or sick when having to go to work but if they stay out of work there won't be money or they will earn less; and farmers can be unreasonable at times. *"When the women come with a sick letter from the clinic the farmer would still not pay them. Farmers want doctors' letters and the women obviously don't have the money to go to a doctor"* - WFP. Nevertheless, despite the food security challenges women are faced with, they are still enduring and not giving up hope. *"Women are surviving, being resilient amongst their tough conditions"* – CSAAWU. In addition, seasonal farm working women do not

have development opportunities to increase their skills and other work opportunities to advance their lives.

5.3.1.4. Views about the Minimum Wage

SPP, CSAAWU, FAWU and WFP agreed that the Minimum Wage amount of R3169.19 is a good intervention to assist seasonal farm working women with their food security needs. However, it is not enough to combat inflation and escaping poverty, compared to what a living wage could do. Furthermore, farmers reduce working hours and working days to cut back on their expenses and women are left with less income and more debt negatively affecting their food security and food choices. *"Farm working women buy at the farm shop on the book where they find themselves in a debt trap because they can't make ends meet at the end of the week"* – FAWU. WFP responded that the Minimum Wage amount should be estimated based on what a basket of nutritious food costs. These situations indicate that all farm workers do not benefit from new reforms established by the South African Government. CWDM responded that the Minimum Wage is payed all over the District area. Where farmers are not paying it happens mainly on the smaller farms where business is not going good. However, names of the farms who are exploiting farm workers should be brought forward to investigate.

5.3.1.5. Global food prices and women on farms food security

International countries purchase South African wine at a lower price and sells it at a higher price. CSAAWU responded that international countries are receiving all the profits but South African farm workers are neglected. *"70% of the wine profits stays in Sweden to benefit their country in social matters. We want the Swedish government to invest in the farm workers here. We want part of that 70% profit that they get"* - CSAAWU. This is the reason for the memorandum of the 23 demands of the farm worker to highlight the oppressive working and living conditions of farm workers working on wine farms that sell to monopolies. When the price of oil increases internationally, the price of food and diesel increases globally and so does the cost of wine. Farmers have to sell their wine to a local or international supplier at a certain price. The famer can profit or lose out from the deal when negotiating a price. If the farmer makes losses, working days and working hours of seasonal farm workers are reduced and this leaves the workers food security and health impacted badly as they purchase less nutritious foods. CSAAWU and WFP are working to

put pressure on international suppliers to pay a better price for South African wines so that South African farm workers receive a decent wage and have work every day.

5.3.1.6. Assistance currently available to help assist with seasonal women farm workers' food insecurity

The key interview respondents could not think of any other assistance available to seasonal farm working women to help combat their food insecurity, besides from social grants and food parcels. However, food parcels were hard to access because they are limited, only available during disasters[28] (CWDM), not everyone meets the criteria, takes a while to process and it is only provided for a short period of time– six months at most. All unemployed women also cannot afford to go to SASSA offices and SASSA officials are not going to all farms. More interventions are needed to assist seasonal farm working women with their food security, according to FAWU. *"There is no other alternative work to do when the wine grapes season is over. This is what we need to look at also, to create alternative jobs after the harvesting. People are at home, with no income and this is where poverty and food security becomes worse"* - FAWU. WFP provides seasonal farm working women with assistance to start their own food gardens by giving the women training on how to grow food.

5.3.1.7. The role of Social grants

Key interview respondents agreed that social grants play a huge role in assisting seasonal farm working women with their food needs as women are dependent on these grants especially during off-seasons when they are unemployed. It helps keep away hunger but is however still too little. For example, *"the Child Support Grant only cover the needs of the child, such as their school fees, books and stationery and is therefore not sufficient to cover food insecurity of the entire household"* - WFP. Furthermore, supporting more people in the household and the cost of living increasing is a further argument why social grants do not adequately render seasonal farm working women and their households' food secure. This seems to suggest that seasonal farm working women's food choices do not differ much when working compared to when they are not working during off seasons as with both cases, they still have to manage with limited resources for the month. Again, a living wage or basic income grant (when seasonal farm working women are not employed) was suggested instead as having a greater poverty and food insecurity alleviation

[28]Interviews were conducted in 2019 before the COVID-19 pandemic. Hence COVID-19 food and income assistance measures were not in play.

impact and bringing peace in the country, and in so, attract investment and foster economic growth. A living wage will give people the capacity to develop themselves and not be dependent on anyone. *"We are not safe in South Africa if 40% of the country is unemployed. Peace comes when the needs of people are being met. A living wage will bring harmony to us and that will bring investors here"* - CSAAWU.

5.3.1.8. Do seasonal farm working women receive UIF?

All key respondents agreed that paying and receiving UIF is required by law. There were however mixed views on whether seasonal farm working women receive this benefit. WFP, CSAAWU, FAWU, SPP and FAWU responded that some farmers do not register the farm working women for UIF or deduct UIF which means the women cannot get unemployment benefits when the season is over. *"These things happen but I don't know if it is happening on a large scale. I can with confidence say these things do happen"* - CSAAWU. FAWU responded by saying that it is not the farm workers fault as deducting and paying in UIF is expected from the farmer and that the Department of Labour (DOL) should go into areas, do blitzes (without anyone knowing they are coming) to check if regulations are being followed by farmers as this was not done in a long time. CWDM however responded that seasonal farm working women do receive UIF as the farmer will get into trouble if the farmer does not register or deduct UIF from the workers. The Municipality further replied that the process to receive this benefit is lengthy in terms of paperwork and signing. It may take 6 weeks or longer to receive the first UIF payment and within that time frame there is no income for the farm working women. Furthermore, some of the farm working women struggle to go to DOL because of transport costs and the farms location from Town or bad weather conditions. They further replied that structures are needed to assist farm working women with these kinds of challenges, which was also agreed to by CSAAWU.

5.3.1.9. Livelihood support programmes for seasonal women farm workers

Another key concern is that there are no large scale livelihood support programmes that women farm workers are provided with and especially need when they are unemployed. With skills development not being their mandate, Women on Farms Project still assists farm working women with growing food, beadwork and the production of atcha and jam training. *"The women sell this amongst themselves, to other shops and to farmers who have restaurants. It is definitely something that shows us there is potential. It is just that for WFP, skills building is not our main mandate but*

we are doing it to supplement women seasonal work" - WFP. FAWU responded that there are no EPWP programmes, and a number of stakeholders play a role in establishing livelihood support programmes for farm working women. *"If the farm workers have their own piece of land, DOL and DOA must come in and assist with access to markets. Even the farmer himself can help assist with this to get into a specific area to market the products. If there is a piece of land to grow food, farm working women do not have to go to Town to buy fresh produce. This can happen if everyone works together"* - FAWU. All stakeholders thus can do something to contribute to farm working women's food security. CWDM responded that they are talking about constructing an Agri-park which is a livelihood support structure to farm working women and other vulnerable groups.

5.3.1.10. How can land be made more accessible to farm working women?

Women should be able to access land in their own right so that they can grow food for their families and also grow food for local markets to generate an income. *"When women own land, this will reduce the role of supermarkets who are price setters with the aim of maximizing profit and transform the food system"* - WFP. Despite the Constitution of South Africa being non-discriminatory, women are discriminated against within all tenure systems – customary and statutory. No independent law exists that provide for women's independent access to land in South Africa. The factors that prevent women from obtaining land rights is (1) application of customary law of patriarchy, which discriminates against women. (2) lack of women representation on community land committees and engagement in traditional community decision-making structures (Mutangadura, 2004).

The Constitution allows provision for land expropriation without compensation by obligating government to carry out land reform via restitution, redistribution and tenure reform. Previously, the willing seller-willing buyer model was in operation[29]. Most key respondent interviewees replied that the government does not have money to buy over land from the minority group owning land and hence land expropriation without compensation should be implemented. However, people who gets the land should be assisted for a period of time to be able to develop the land on their

[29]The willing seller-willing buyer approach denotes a completely voluntary transaction between a seller and a buyer; this transaction takes form by means of negotiations between landowners who wish to sell their land and government officials who act on behalf of the intended beneficiaries of the land. Government assists in the purchase of land. According to the White Paper government would make land acquisition grants available and also support and finance the required planning process (Dlamini, 2014).

own. *"The person might have the skills of planting but don't have the skills for managing the land and other resources and support"* – SPP. Land must therefore be given with support.

5.3.1.11. Responsibility of farmers to their workers

Respondents replied that farmers have a responsibility towards their workers when they are living on the farm. With regards to land, farm owners should assist their workers by providing them with land for growing their own food. To give farm workers a piece of land however depends on the relationship between the worker and the owner. Furthermore, farmers and government should ascertain that farm workers have other skills that would assist with their well-being. For example, *"in Norway there are no farm workers, the production is mechanised. Many of the factories have reduced their workers from 200 to 60 in Sweden. The people laid off were retrained in other things or given packages that sustain them for the rest of their lives. You don't find people there on the roads asking for food or money"* - CSAAWU. In addition, following the law and paying their workers the right amount of wages. If the person has eaten the previous night, she will perform better the next day. This also speaks to them having authority to produce their own food.

5.3.1.12. What should be done to combat food insecurity of women farm workers?

Respondents replied that everything cannot only be done by government, but should also comprise of stakeholders in the country directly involved in the agricultural space, the producers of food and civil society NGO's (that is taking a **whole**-of-**society-approach**) that should create a collective vision in respect of food security of farm workers and specifically women farm workers. All stakeholders should have a common understanding and be in agreement on what the best ways are to produce a food secure community of farm workers and the role they will play to enable it.

Although a basic grant from government is suggested during off-seasons and would benefit farm working women when they are not working (WFP), farm workers cannot only rely on social grants but need other developmental interventions to aid with poverty and stimulate greater access to a stable amount of nutritious foods on a consistent basis. The government and other stakeholders should intervene by providing farm working women with land, training and productive inputs taking into account that food security of farm workers is systematic and structural. Government should provide other work opportunities to farm working women and pay them a decent wage, assist with local markets for livelihood initiatives and ensure more goods are VAT exempt.

In addition, Department of Social Development plays no role on certain farms, visits are irregular and do not benefit many farm working women as thousands of farm working women become unemployed and many do not benefit from food parcels. As mentioned previously structures are needed to better capture and prepare for the number of workers who become unemployed and who might not qualify.

Consumers have a role to play to boycott farms that are not producing ethically when its workers are being exploited. Most of this is governments responsibility with enforcement of laws and policy. *"We have to think big, have to change these big neo-liberal policies which is pro capital, pro big business and anti-poor"* - WFP.

Furthermore, farmers must abide by the law and action should be taken against farmers who are not paying the Minimum Wage.

5.3.1.13. Policy interventions for farm working women's food and diet challenges

Respondents had similar views on there being no other policy interventions for farm working women's food insecurity and diets besides from social grants, the Minimum Wage and the food parcels from SASSA. Policy papers in South Africa state the nation is food secure, however, *"we cannot say that our country is food secure when there are people going to sleep hungry. Nobody should go without eating a proper meal for a day"* - SPP. FAWU, CSAAWU and WFP believed that the Minimum Wage is a contradiction policy where farm working women do not greatly benefit from it as they do not work every day and for the whole day, translating into reduced incomes. Hence policies should be looked at in conjunction with other policies that affects farm workers, and specifically seasonal farm working women's food and development challenges.

5.3.1.14. Farm working women and traditional diets, nutrition education and advertising of unhealthy foods

Most farm working women rely on rice, potatoes, pap and bread on a daily basis. This is their traditional diet - more affordable, less nutritious foods that lasts longer. Their diet arises out of survival and need. *"I don't think they would be reluctant to switch because before they had the food gardens, they didn't eat vegetables. When they got food gardens they ate more vegetables. It shows that if they have the means/resources or access to those things, they consume more of those things"* - WFP. Farm working women knows what healthy foods are, however they are not so

concerned about nutrition because of their lack of financial resources. *"The farm working women are aware of the health benefits of consuming a nutritious diet because WFP also do health training but sometimes they don't have a choice of eating unhealthy because the money that they earn don't allow them to access all the healthy foods"* - WFP. Furthermore, advertising of unhealthy foods does play a role in farm working women's food choices to a certain extent but only on an ad hoc basis when they have more money and are in Town to buy at fast food outlets. *"Maybe once in a while when they are in Town and get their social grant money where they could buy KFC but in the day to day scheme of things, it doesn't have an impact because they can't afford it to have an impact"* – WFP. This statement refers both to their insufficient means to afford such foods as well as to their health conditions.

5.4. Chapter summary

This chapter presented and examined the research findings from the data that was collected for the study. The study used four proxies to determine food insecurity and dietary diversity among seasonal farm working women in CWD. The results of the study revealed that the seasonal farm working women do experience food insecurity and lack of dietary diversity mainly during certain months of the year when they are unemployed or underemployed. This was identified through a seasonality calendar. The chapter concluded with a discussion and analysis of key informant interview responses on seasonal farm working women's food insecurity situation in CWD further elaborating on the various food security barriers farm working women are faced with.

CHAPTER SIX

IMPLICATIONS FOR THEORY AND RESEARCH, RECOMMENDATIONS AND CONCLUSION

6.1. Chapter Overview

This chapter achieves the objectives and answers the research questions of the study. The chapter discusses implications for theory by linking the theoretical framework to the findings of the research study and explains future research implications which can better inform policies affecting seasonal farm working women and other vulnerable groups food security and dietary diversity challenges. This chapter also offer policy recommendations to key stakeholders to ensure food security for seasonal farm working women in CWD and to reduce their food security barriers. Lastly, the thesis is concluded.

6.2. Implications for theory

The dimensions of the Food Security Framework (FSF) - availability, access, stability and sustainability was the focus of the study. The findings of the research established that seasonal farm working women are vulnerable in **all of these dimensions**.

Availability – Ogot (2021) states that food should be made available for consumption at local levels where local individuals or households can locate a variety of sufficient foods and their needed foods without difficulty. Sufficient varieties of foods and quality foods is not available to seasonal farm working women on the farm or in their immediate surroundings but only available in Town. The farm working women travel a distance to get to their nearest Town, however the cost of transport puts a strain on their limited budgets (Tsegay *et al.*, 2014) and hence they do not go to Town regularly. This limits them to the farm tuckshop who has less variety, sell food at higher prices at a lower quality and limit farm working women's choices of food (Temple and Steyn, 2011).

Access – According to Botreau and Cohen (2019) the poor and marginalized may lack the resources to access adequate amounts of nutritious food through purchase, production or social

assistance. Seasonal farm working women's working hours and days are often reduced (Devereux *et al.,* 2019) and because of this they have reduced incomes to be able to afford healthy foods and a healthier diet. The price of healthy food and electricity, distance from markets and cost of transport also makes consuming a nutritious meal hard (Tsegay *et al.,* 2014). They often use coping strategies, such as limiting food intake, skipping meals, buying food on credit, switching to alternatives that is affordable but unhealthy to ensure that there is food for themselves and their household. This reduces their food security and diets and worsens their physical well-being. There are also no humanitarian aid or assistance from SASSA and not all women have food gardens which further reduces their food availability, food access and daily dietary requirements.

Stability – The stability dimension of food security is under-recognized. Due to agricultural seasonality, seasonal hunger of farm working women is induced (Khandker and Mahmud, 2012). Seasonal farm working women do not have a permanent working contract and thus do not consume food (and nutritious food) regularly due to irregular farm employment/income. Having irregular employment and unemployment during the Winter months reduces their stability of food (Zamchiya *et al.,* 2013) and quality of diet. Social security systems do not target seasonal unemployment and hence farm working women are without an income during this time. Seasonality is therefore the biggest contributor to food insecurity of farm working women as they cannot access a regular amount of sufficient food or farm income all year round due to their instability of farm employment.

Sustainability – Seasonality is a reason for diversification of livelihoods (Ayana *et al.,* 2021). Having only a wage from farm work is not sustainable. Seasonal farm working women in this study do not have sufficient diverse livelihood strategies that are needed to limit vulnerability should any food system shock and stress occur. They also lack market assistance and other work opportunities to assist with their food security and dietary diversity. Livelihood strategies employed and identified in this study by the farm working women themselves consider their own context, challenges and lived realities that would enable them and their households to access sufficient healthy foods regularly thereby reducing food insecurity and seasonal hunger. It will also contribute to a number of other benefits. These are living a long healthy and productive life, healthy and prosperous children and less stress and reduced reliance on farm income and social grants.

6.3. Implications for future research

The below points could be a basis for future studies in better comprehending and assisting seasonal farm working women and other vulnerable groups food security.

There lies a research gap that may have enhanced the aim of the research study. For example, studies on food system shocks and its impacts on farm workers are lacking as well as research on the impact of colonialism and apartheid on specifically farm working women that manifests into the current situation farm working women are experiencing.

There are questions to ask seasonal farm working women during data collection that would have informed the study and accuracy of the data better. For example*, "Do seasonal farm working women work the full 8 – 9 hours a day and receive the full Minimum Wage amount? Do seasonal farm working women receive UIF when unemployed? Do health workers visit their farms to render nutritional services?"*. These were not addressed by this study because they emerged after fieldwork was completed and data analysis began.

Similar research in other rural parts of Cape Winelands where seasonal farm working women reside should be undertaken to compare findings and should entail the above mentioned questions, along with a bigger sample size and a mixed methods design approach to strengthen the findings. This will assist with presenting greater evidence for policy on food insecurity of seasonal farm working women.

As stated by Ellis (2005) *"volatile weather conditions (both rainy and dry seasons) and harvest output make a fixed amount of daily income difficult to secure"*. As seasonal farm working women are impacted by seasonal changes and as climate change worsens, the livelihoods of seasonal farm working women should be monitored on a monthly basis to determine effective interventions that will sustain their livelihoods, especially during periods of farm unemployment.

Addressing the above statement, this study can be used to generalize other vulnerable groups at risk of food instability. These can be applied to domestic workers and informal traders, etc. The COVID-19 pandemic and its accompanying lockdowns has negatively impacted their employment, livelihoods and income and thus worsened their stability of food. However, studies on seasonality, stability and access to food is needed to understand it better.

To adequately determine food security and diets of seasonal farm workers and other vulnerable groups, the utilization dimension of food should closely be studied along with other services, such as clean water, sanitation and health care. This would enable nutrition education to be effective when considering other components at play during storing, processing and preparing of food.

6.4. Policy recommendations

The researcher proposes appropriate interventions and policy recommendations to key stakeholders in a bid to improve food security and dietary diversity of seasonal farm working women in CWD and to reduce their food security barriers. The recommendations are grouped into relevant themes.

6.4.1. Employment, Livelihood support and Development opportunities

Although agriculture is one of South Africa's best performing sectors contributing to GDP and the country's food availability, rural farm employment and farm workers' food security has not improved, specifically for seasonal and temporary farm workers. This study revealed that seasonal farm working women are underemployed and are unemployed during off-season times and there are no development opportunities that would produce an alternative income. It is recommended that relevant stakeholders, such as government officials ***(i.e****. from Department of Social Development, Department of EPWP, Department of Health, Department of Agriculture, Department of Labour and Water and Sanitation, local municipalities amongst others); farmers; trade unions and NGOs* representing farm workers **form a Work Group** to discuss strategies on how to keep seasonal, temporary and casual farm workers employed everyday ensuring that they receive reasonable wages and have their voices included in these conversations[30]. Part of these stakeholder discussions is to do a **location mapping exercise** to identify where the most rural and most vulnerable farms and farm workers are situated with the highest food insecurity and lack of other employment and development opportunities available.

Employment should not only be limited to farm work as seasonal changes, increasing costs to the farmer and farm mechanisation will disrupt farm employment and income. Public works

[30] It is of utmost importance to share information in a common language that all people understand and bring in facilitators if need be as well as choose an appropriate location/platform where these meetings are accessible to farm working women and also consider transport challenges the farm working women may have.

programmes generate important opportunities to earn non-farm income and to respond to food emergencies when farm employment is scarce (De Klerk *et al.*, 2004). Western Cape Government, **providing EPWP opportunities** as a short-term alternative is one suggestion.

With regards to seasonal farm workers not receiving the UIF benefit, a **seasonal worker helpdesk** should be set up by the Department of Labour and SASSA that keeps a data-base, track and service seasonal worker needs, *i.e.* UIF claims (Farm Worker Rights Charter, 2017). The mapping exercise could assist with finding the workers. Department of Labour should also consider **disbursing UIF seasonal cash transfers** when farm working women are seasonally unemployed.

Findings revealed that majority of farm working women appreciated the Minimum Wage but still had complaints about the Minimum Wage not being paid, not being sufficient and not increasing with inflation. Department of Labour should therefore **do more farm inspections/blitzes and enforce the Minimum Wage and other labour legislation** that is meant to assist farm workers. This was also suggested by FAWU.

In addition, Department of Agriculture and Department of Rural Development and Land Reform should **assist with livelihood opportunities** resilient against climate and political changes to ensure constant food and nutrition security for farm workers, as more permanent workers are now becoming seasonal and casual workers (Simbi and Aliber, 2000) with low wages. **A gendered lens** should also be included as men and women have different needs (McKune *et al.*, 2015). Specific attention needs to be given to women, their specific needs and challenges.

Local government should **alter its spatial planning** making room for market access and market trading spaces. These strategies should constitute **systems thinking** in the context of farm workers' challenges, such as lack of transportation and market access, health facilities and financial resources, and limited NGOs and resources that could potentially assist with skills development.

6.4.2. Planning for the future

As components of the food system are interrelated with some components more resilient than others, **scenario planning exercises** could be undertaken in the Work Group to anticipate food system changes due to shocks to the system and its impact on farm workers (seasonal, temporary

and permanent workers). These should include mitigation measures to combat the negative impacts and reduce vulnerabilities. This exercise should include short, medium and long term actions that addresses farm workers' employment, hunger, health, nutrition and food insecurity, amongst others so that there are flexible actions in place across various timelines.

Policy papers focus mainly on availability, access to food and food insecurity. However, the stability of food dimension should be emphasized in policies due to seasonality and farm working women's instability of employment leading to no or irregular incomes, especially during Winter. This should be a priority for national, provincial and local governments.

An important suggestion pertains to land distribution and for government to start thinking beyond small-scale farms as a mere solution to food security. The transformation of the food system and agrarian structures encompasses small-scale, medium scale and large-scale farming.

6.4.3. Community gardens and health

Women tend to have little access to productive resources, including land, and therefore less capacity to produce their own food (Glazebrook *et al.*, 2020). The study findings revealed that not many seasonal farm working women owned a vegetable garden. Considering the limited healthy food options rural farm workers are surrounded by and the increasing cost of food and electricity which affects quality, quantity and stability of diets of farm working women and their families, **community gardens** need to be established with open spaces identified by farmers and the DoA. Other productive resources should be supplied and **smart agriculture training** to ensure nutritious foods are accessible, even during climatic events. In turn this produce could be used for soup kitchens, with facilities and resources, such as cooking amenities, storage, water, refrigeration and electricity supplied by DoA, Water and Sanitation and Social Development in collaboration with farmers and the private sector (for food donations before going to waste). At these facilities, representatives from Department of Health could **also screen for malnutrition** of farm workers and their families and capture them on a system to see who is in need of nutritional packs, food parcels and other health interventions and this is also where nutrition education can be delivered that alludes to the importance of a diverse, safe diet and meal planning. **Constant monitoring** of community nutrition programmes should be done in order to ensure that nutritional and health status are improved.

6.5. Conclusion

The purpose of the research study was to explore the food security and dietary situation of seasonal farm working women in CWD. It was identified that seasonal farm working women face many barriers to achieving food security and dietary diversity and that not much assistance is available to them to overcome this. This has been established through literature and throughout the research study. The four variables used to determine food insecurity amongst seasonal farm working women in the study were Demographic information; Contract, Wage and Sources of Income; Dietary choices and Sources and Food and Social Assistance available to them. A significant key finding of the study is that seasonal farm working women are food insecure, especially during the Winter months when they are mostly unemployed. A large part of them being food insecure was because of seasonal changes and not having permanent working contracts that lead to irregular farm employment/income and food consumption. The findings therefore confirmed the significance of seasonality and how it impacts stability, access to food, quality and quantity of diets and seasonal hunger. There are however no policies that deals with seasonal hunger. Furthermore, seasonal farm working women do not receive a targeted social grant or have EPWP or other work opportunities available to them when they are unemployed which makes it harder for them to cover the needs of their household during this time.

The research study aimed to answer 3 main questions through addressing 3 hypotheses containing relevant sub-components that plays a role in seasonal farm working women in CWD food insecurity and dietary diversity challenges. The study provided sufficient literature on farm workers internationally and in South Africa and explained the Food Security Framework (FSF) and the dietary diversity concept.

The study was exploratory and explained the qualitative approach with methods, such as semi-structured interviews, focus group discussions with seasonal farm working women as well as key informant interviews and other resources used for the study was discussed. A seasonality calendar was highlighted which helped analyse employment/unemployment times of the seasonal farm working women.

The study further explained implications for theory using the FSF framework together with the findings of the study which showed that seasonal farm working women are vulnerable in all of the

food security dimensions (availability, access, stability and sustainability) utilized for this study. The stability dimension is however under-recognized in research and policy. Implications for future research was listed to better inform policies affecting seasonal farm working women's food security and to generalize across other vulnerable groups, such as informal traders and domestic workers whose food stability and access to food is at risk during shocks. Policy recommendations and interventions were provided to relevant stakeholders from government, civil society, farmers and the private sector that will help achieve food security and dietary diversity for seasonal farm working women everyday and to reduce their food security barriers.

Although the research answered the research questions and objectives of the study, it also had some limitations. The study was only able to cover a limited scope area due to limited time of the researcher. This then automatically excluded farms in other areas of the CWD to be able to do a broader comparison and analysis of food insecurity among seasonal farm working women in the District. Regardless of these limitations, the research findings of this study still captured the challenges seasonal farm working women endure that influences their food security and the consumption of a diverse diet as well as confirmed that majority of the seasonal farm working women participants of one area in CWD were food insecure.

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ANNEXURES

UNIVERSITY of the WESTERN CAPE

INSTITUTE FOR SOCIAL DEVELOPMENT

University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa

Telephone :(021) 959 3858/6 Fax: (021) 959 3865

E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 1: Semi structured interviews (These were conducted with seasonal farm working women)

The purpose of the semi-structured interviews is to provide women who are seasonal farm workers the opportunity to freely voice their opinion on the situation of food insecurity and barriers to dietary diversity within their individual households. Please answer the questions without hesitation.

A) DEMOGRAPHIC INFORMATION

Province: _____

Town/Area: _____

Farm name: _____

Export or local market: _____

Commodity/product: _____

1. **Age**

16-29	30-40	41-50	51-60

2. **Relationship status**

Single	Married	Widow	Co-habit (stay together)	Other

3. **Do you have dependents? (please circle)** **YES** **NO**

4. **How long have you been a farm worker?**

0-5 years	6-10 years	11-15 years	16 + years

5. **Do you stay far from the farm you work on?** **YES** **NO**
6. **How do you get to the farm?**

.....
.....

7. **Did you finish Matric?** **YES** **NO**
8. **Why did you choose to become a farm worker?**

.....
.....
.....
.....

9. **What other jobs would you have preferred to do, other than farm work?**

.....
.....

B) CONTRACT, WAGE and SOURCES OF INCOME

The current Minimum Wage amount is R3169.19.

10. **Are you receiving the Minimum Wage?** **YES** **NO** **Not sure**
11. **If yes, how has the Minimum Wage assisted you with your household's diet for the month?**

……
……
……
……

12. If no and not sure, how would the Minimum Wage assist you with your household's diet for the month?

……
……
……
……
……

13. Do you think the Minimum Wage amount would be enough to sustain you and your household for the month? YES NO

14. What does most of your income go towards?

……
……
……
……
……

15. Do you have any other source of income besides from farm work and social grants?

YES NO

16. If yes, please elaborate?

……
……
……
……

C) DIETARY CHOICES and SOURCES OF FOOD

Food security refers to the state of having reliable access to a sufficient quantity of affordable, nutritious food on a consistent basis.

17. What are the food security challenges faced by your household?

.....
.....
.....
.....

18. What does your household consume on a weekly basis?

.....
.....
.....
.....

19. How do your household meals per day change when there is little to no income?

.....
.....
.....
.....

20. Have your household eaten 3 meals per day this week? YES NO

21. Were there any months from May 2018 until now (May 2019) where you and your family did not have enough food to eat? YES NO

22. If yes, in which months from May 2018 until now (May 2019) did you and your family not have enough food to eat? Please provide a reason for all months in which you were food secure and food insecure.

MONTH	YES/NO	REASON
May 2018		
June 2018		
July 2018		
August 2018		

September 2018		
October 2018		
November 2018		
December 2018		
January 2019		
February 2019		
March 2019		
April 2019		
May 2019		

23. Do you think your food security changed, got better or worse 5 or 10 years ago and why/why not? Please circle Better OR Worse and provide a reason/s.

5 years ago (in 2014) – Better Worse

Reason:.....
.....
.....

10 years ago (in 2009) – Better Worse

Reason:.....
.....
.....

24. What kind of coping strategies (survival strategies) do you have when there is not enough food in the household? (Please tick next to the appropriate box).

Grow my own fruit and vegetables	
Sell fruit and vegetables	

Ask friends and family for food or money	
Ask neighbours for food or money	
Ask strangers for food or money	
Ask around for odd jobs	
Gamble	
Have a tuckshop	
Make and sell things	
Loans	
Other (please specify)	

25. Where do you purchase most of your food?

……

……

26. If you cannot afford to purchase food, where or how do you get food?

……

……

……

27. Are grocery stores within walking distance?

YES NO

28. How do you get to the store? Walk, drive a vehicle?

……

29. Do you worry where your next meal will come from? YES NO

30. Was there a time when you and your family went a day without eating any food?

YES NO

31. If yes, what was that experience like and how did it make you feel?

.....
.....
.....
.....
.....

32. Do you own a vegetable garden? YES NO

33. If yes, how does the vegetable garden assist you and your household with eating healthy food?

.....
.....

34. If no, how would a vegetable garden assist you and your household with eating healthy food?

.....
.....

35. What would you consider a healthy diverse diet?

.....
.....
.....
.....

36. Why do you think it is important to consume a healthy diverse household diet?

.....
.....

D) SOCIAL ASSISTANCE

37. Do you receive Social assistance, such as pensions/grants from government?

YES NO

38. If yes, what are they? (Please tick next to the appropriate box)
If no, move on to question 40

Pension	
Child grant	

Disability grant	
Foster child grant	
Other (please specify)	

39. How does question 38's response help with your household's food security needs?

……
……

40. What other assistance are you receiving from government?

……
……

41. How do you wish the government could help you with being food secure?

……
……

42. What entities are in your area and in what way are they supporting livelihoods of seasonal women farm workers?

……
……

Thank you for taking your time to participate in the interview

UNIVERSITY of the WESTERN CAPE

INSTITUTE FOR SOCIAL DEVELOPMENT
University of the Western Cape

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Telephone :(021) 959 3858/6 Fax: (021) 959 3865
E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 2: Focus Group Discussions (These were conducted with seasonal farm working women)

The purpose of the focus group discussions is to provide women who are seasonal farm workers the opportunity to freely voice their opinion on the situation of food insecurity and barriers to dietary diversity within their individual households. Please answer the questions without hesitation.

A) DEMOGRAPHIC INFORMATION

Province: _____

Town/Area: _____

Commodity/product: _____

1. **How do you women get to the farm that you work on?**
2. **Why did you choose to become a farm worker?**
3. **What other jobs are available in the area and have you applied to any?**
4. **What other jobs would you have preferred to do, other than farm work, and why?**
5. **What challenges do farm working women experience when obtaining employment?**

B) CONTRACT, WAGE and SOURCES OF INCOME

The current Minimum Wage amount is R3169.19.

6. **Are you receiving the Minimum Wage? YES NO**
7. **If yes, how has the Minimum Wage assisted you with your household's diet for the month?**
8. **If no, how would the Minimum Wage assist you with your households diet for the month?**
9. **Are there any concerns you have about the Minimum Wage, and what are they?**
10. **What does most of your income go towards?**

11. Do you have any other source of income and what is it?

C) DIETARY CHOICES and SOURCES OF FOOD

Food security refers to the state of having reliable access to a sufficient quantity of affordable, nutritious food on a consistent basis.

12. What are the food security challenges faced by your household?
13. What kind of coping strategies (survival strategies) do you have when there is not enough food in the household?
14. What does your household eat on a weekly basis?
15. How do your household meals per day change when there is little to no income?
16. Was there a time when you and your family went a day without eating any food?
    YES NO
17. If yes, what was that experience like and how did it make you feel?
18. Where do you mostly purchase your food from?
19. If you cannot afford to purchase food, how do you get food?
20. Are grocery stores within walking distance?
    YES NO
21. How do you get to the store? Walk, drive a vehicle?
22. Do you own your own vegetable garden?
    YES NO
23. If yes, how does your own vegetable garden assist you with eating healthy food?
24. If no, how would a vegetable garden assist you and your household with eating healthy food?
25. What would you consider a healthy diverse diet?
26. Why do you think it is important to consume a healthy diverse household diet?

D) SOCIAL ASSISTANCE

27. How does Social assistance, such as pensions/grants from government assist you with your household's food security needs?
28. What other assistance are you receiving from government?
29. How do you wish the government could help you with being food secure?
30. What entities are in your area and in what way are they supporting livelihoods of seasonal women farm workers?

Thank you for taking your time to participate in the discussion

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University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone :(021) 959 3858/6 Fax: (021) 959 3865
E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 3: Key informant interview [This was conducted with Cape Winelands District Municipality (CWDM)]

The purpose of the Key informant interviews is to understand the situation and barriers of food security for women farm workers on a deeper level and what role key stakeholders play to assist women farm workers. Please answer the questions without hesitation.

1. What is the purpose of your Municipality?
2. In which way does the Municipality help farm workers and farm working women?
3. What are some concerns farm working women have, regarding food security?
4. What do you think are the reasons for farm working women's food insecurity and dietary diversity struggles?
5. How has CWDM contributed to household food security for women farm workers?
6. Do you think that food security got worse or better 5 or 10 years ago and why?
7. What barriers to food security are experienced by seasonal women farm workers? Do you think that they have an access to food problem? If yes, why do farm working women not have access to food?
    a. What are your views on the Minimum Wage and will it be enough to sustain farm working women's food security needs, particularly seasonal food insecurity?
    b. Why and why not?
    c. What are the reasons seasonal farm working women are receiving a low income?
    d. Why do you think seasonal farm working women are underemployed?
    e. How do you think global food prices affect women on farm's food security?
8. What are the challenges that women farm workers face in accessing a diversified and nutritious diet?
9. How do you think the challenges that women farm workers face in accessing a diversified and nutritious diet impact on other areas of their lives?
10. What assistance is currently available to help assist with seasonal women farm workers food insecurity?
    a. What is the role of Social Grants?

b. How do you think not having access to UIF affected farm working women's food security?
c. What livelihood support programmes are there for women farm workers?
d. How do you think 'access to land' for growing food will play a role in farm working women's food security?
e. How can land me made more accessible to farm working women? How should it be done?

11. What responsibility do you suggest farmers take regarding farm workers' food insecurity?
12. Has any government officials assessed the situation of seasonal women farm workers food security situation in CWD, and if so, what was the outcome?
13. What is being done to help farm working women with their food security challenges? Is what is being done adequate enough? Why or why not?
14. Can you explain any policy interventions that help farm working women with their food insecurity and dietary diversity challenges?
15. What do you think should be done to combat food insecurity for women farm workers, and by whom?
16. Do you have any other ideas/suggestions or advice on the topic of food insecurity and dietary diversity amongst farm working women?

Thank you for taking your time to participate in the discussion.

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University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone :(021) 959 3858/6 Fax: (021) 959 3865
E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 4: Key informant interview [This conducted with trade unions Commercial, Stevedoring, Agriculture and Allied Workers Union (CSAAWU) and Food and Allied Workers Union (FAWU)]

The purpose of the Key informant interviews is to understand the situation and barriers of food security for women farm workers on a deeper level and what role key stakeholders play to assist women farm workers. Please answer the questions without hesitation.

1. How did the idea of your Union come about and why was it started?
2. In which way does the union assist farm workers?
3. How does your union help farm working women?
4. Over the years, how has the union improved household food security for women farm workers?
5. Do you think that food security got worse or better 5 or 10 years ago and why?
6. How did the farm worker protests help farm working women with their food security needs?
7. What barriers to food security are experienced by seasonal women farm workers? Do you think that they have an access to food problem? If yes, why do farm working women not have access to food?
    a. What are your views on the Minimum Wage and will it be enough to sustain farm working women's food security needs, particularly seasonal food insecurity?
    b. Why and why not?
    c. What are the reasons seasonal farm working women are receiving a low income?
    d. Why do you think seasonal farm working women are underemployed?
    e. How do global food prices affect women on farm's food security?

8. What are the challenges that women farm workers face in accessing a diversified and nutritious diet?

9. How does the challenges that women farm workers face in accessing a diversified and nutritious diet impact on other areas of their lives?
10. What assistance is currently available to help assist with seasonal women farm workers food insecurity?
    a. What is the role of Social Grants?
    b. How has not having access to UIF affected farm working women's food security?
    c. What livelihood support programmes are there for women farm workers?
    d. How do you think 'access to land' for growing food will play a role in farm working women's food security?
    e. How can land me made more accessible to farm working women? How should it be done?

11. What responsibility should farmers take regarding farm workers' food insecurity?
12. What is being done to help farm working women with their food security challenges? Is what is being done adequate enough? Why or why not?
13. Can you explain any policy interventions that help farm working women with their food insecurity and dietary diversity challenges?
14. What do you think should be done to combat food insecurity for women farm workers, and by whom?
15. Do you have any other ideas/suggestions or advice on the topic of food insecurity and dietary diversity amongst farm working women?

Thank you for taking your time to participate in the discussion.

UNIVERSITY of the WESTERN CAPE

INSTITUTE FOR SOCIAL DEVELOPMENT
University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone :(021) 959 3858/6 Fax: (021) 959 3865
E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 5: Key informant interviews [This was conducted with the NGO Surplus People Project (SPP)]

The purpose of the Key informant interviews is to understand the situation and barriers of food security for women farm workers on a deeper level and what role key stakeholders play to assist women farm workers. Please answer the questions without hesitation.

1. How did the idea of Surplus Peoples Project come about and why was it started?
2. How long have you been assisting women farm workers?
3. In which way does your initiative help farm working women?
4. Over the years, how has the project improved household food security for women farm workers?
5. Do you think that food security got worse or better 5 or 10 years ago and why?
6. How did the farm worker protests help farm working women with their food security needs?
7. What barriers to food security are experienced by seasonal women farm workers? Do you think that they have an access to food problem? If yes, why do farm working women not have access to food?
    a. What are your views on the Minimum Wage and will it be enough to sustain farm working women's food security needs, particularly seasonal food insecurity?
    b. Why and why not?
    c. What are the reasons seasonal farm working women are receiving a low income?
    d. Why do you think seasonal farm working women are underemployed?
    e. How do global food prices affect women on farm's food security?
8. What are the challenges that women farm workers face in accessing a diversified and nutritious diet?
    a. How do farm working women educate themselves about the importance of nutrition?
    b. How does low income affect farm working women's dietary choices?
    c. How does advertising of unhealthy food play a role in dietary choices for farm working women?

   d. What are traditional diets for farm working women and do you think that they would be reluctant to switch from this diet?
   e. Why and why not?

9. How does the challenges that women farm workers face in accessing a diversified and nutritious diet impact on other areas of their lives?
10. What assistance is currently available to help assist with seasonal women farm workers food insecurity?
    a. What is the role of Social Grants?
    b. How has not having access to UIF affected farm working women's food security?
    c. What livelihood support programmes are there for women farm workers?
    d. How do you think 'access to land' for growing food will play a role in farm working women's food security?
    e. How can land me made more accessible to farm working women? How should it be done?

11. What responsibility should farmers take regarding farm workers' food insecurity?
12. What is being done to help farm working women with their food security challenges? Is what is being done adequate enough? Why or why not?
13. Can you explain any policy interventions that help farm working women with their food insecurity and dietary diversity challenges?
14. What do you think should be done to combat food insecurity for women farm workers, and by whom?
15. Do you have any other ideas/suggestions or advice on the topic of food insecurity and dietary diversity amongst farm working women?

Thank you for taking your time to participate in the discussion.

UNIVERSITY of the WESTERN CAPE

INSTITUTE FOR SOCIAL DEVELOPMENT
University of the Western Cape

Private Bag X17, Bellville 7535, Cape Town, South Africa
Telephone :(021) 959 3858/6 Fax: (021) 959 3865
E-mail: ***pkippie@uwc.ac.za*** *or* *spenderis@uwc.ac.za*

ANNEXURE 6: Key informant interviews [This was conducted with the NGO Women on Farm's Project (WFP)]

The purpose of the Key informant interviews is to understand the situation and barriers of food security for women farm workers on a deeper level and what role key stakeholders play to assist women farm workers. Please answer the questions without hesitation.

1. How did the idea of Women on Farm's Project come about and why was it started?
2. How long have you been assisting women farm workers?
3. How does your initiative help farm working women?
4. Over the years, how has the project improved household food security for women farm workers?
5. Do you think that food security got worse or better 5 or 10 years ago and why?
6. How did the farm worker protests help farm working women with their food security needs?
7. What barriers to food security are experienced by seasonal women farm workers? Do you think that they have an access to food problem? If yes, why do farm working women not have access to food?
    a. What are your views on the Minimum Wage and will it be enough to sustain farm working women's food security needs, particularly seasonal food insecurity?
    b. Why and why not?
    c. What are the reasons seasonal farm working women are receiving a low income?
    d. Why do you think seasonal farm working women are underemployed?
    e. How do global food prices affect women on farm's food security?

8. What are the challenges that women farm workers face in accessing a diversified and nutritious diet?
    a. How do farm working women educate themselves about the importance of nutrition?

b. How does low income affect farm working women's dietary choices?
c. How does advertising of unhealthy food play a role in dietary choices for farm working women?
d. What are traditional diets for farm working women and do you think that they would be reluctant to switch from this diet?
e. Why and why not?

9. How does the challenges that women farm workers face in accessing a diversified and nutritious diet impact on other areas of their lives?
10. What assistance is currently available to help assist with seasonal women farm workers food insecurity?
    a. What is the role of Social Grants?
    b. How has not having access to UIF affected farm working women's food security?
    c. What livelihood support programmes are there for women farm workers?
    d. How do you think 'access to land' for growing food will play a role in farm working women's food security?
11. What responsibility should farmers take regarding farm workers' food insecurity?
12. What is being done to help farm working women with their food security challenges? Is what is being done adequate enough? Why or why not?
13. Can you explain any policy interventions that help farm working women with their food insecurity and dietary diversity challenges?
14. What do you think should be done to combat food insecurity for women farm workers, and by whom?
15. Do you have any other ideas/suggestions or advice on the topic of food insecurity and dietary diversity amongst farm working women?

Thank you for taking your time to participate in the discussion.