Maize and Food Security:
The case of Farm Input Subsidy Programme (FISP) in Malawi

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List of Acronyms

ADMARC	Agricultural Development and Marketing Corporation
AEDO	Agricultural Extension Development Officer
AEDC	Agricultural Extension Development Coordinator
AEHO	Area Environmental Health Officer
APES	Agricultural Production Estimates Survey
ASWAp	Agriculture Sector Wide Approach
CUMMYT	International Maize and Wheat Improvement Center
DADO	Department of Agriculture Development Offices
EPA	Extension Planning Area
FISP	Farm Input Subsidy Programme
FWP	Food for Work Program
FAO	Food and Agriculture Organization
FISP	Farm Input Subsidy Program
HIPC	Heavily Indebted Poor Country
HSA	Health Surveillance Assistant
IMF	International Monetary Fund
MASAF	Malawi's Social Action Fund
MoA	Ministry of Agriculture
MoAFS	Ministry of Agriculture and Food Security
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MPRS	Malawi Poverty Reduction Strategy
MVAC	Malawi Vulnerability Assessment Committee
NAP	National Agricultural Policy
NFIRP	National Food Insecurity Response Plan
NSO	National Statistics Office
OECD	The Organization for Economic Co-operation and Development
OPV	Open pollinated variety
PWP	Public Works Program
SAPP	Sustainable Agricultural Production Programme
SHSA	Senior Health Surveillance Assistant
SIVAP	Smallholder Irrigation and Value Addition Project
SSA	Sub-Saharan Africa
SP	Starter Packs
TAs	Traditional Authorities
TIP	Targeted Input Program
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
VDCs	Village Development Committees
WB	World Bank
WFP	World Food Program
WHO	World Health Organization
WPR	What the Problem Represent to be

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Currency Equivalents

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Currency Unit – Malawian Kwacha (MK)

MK 100 = USD $ 0.14

USD $1.00 = MK 730

Abstract

Malawi has been under chronic food insecurity for decades, and the government has continued to implement various policy to addresses the severity of food insecurity in the country. However, since its inception in 2005, Farm Input Subsidy Program (FISP) remain the dominant policy in the discourse around agriculture and food security. However, there have been an ongoing competing debate on failure and success FISP, and as result too controversial to be a model to recommend for other African countries that seek to increase crop productivity and reduce food insecurity in their attempt to tackle poverty. With a different approach from previous study on policy evaluation of the impact of FISP on food security in Malawi, this study adopted the 'What's the Problem Represent to be?' (WPR) approach to reveal how the policymakers conceptualised the problem of food insecurity and the hidden variables that shape the representation of the food insecurity in policy response. Data collection rely mostly on secondary sources and some level of primary data to sources were also adopted. The findings of the study is that in Malawi, the meaning of food security is availability of maize, therefore FISP was designed to address maize availability only. In Malawi, "maize is life" and maize is connected to everything even to elections and politics on the one hand. On the other hand, maize is also malnutrition because the Malawian diet lack nutritional balance diet due to excessive consumption of maize among the poor farmers. The conclusion is that going by food security in Malawi context, FISP is not doing badly but if we want to assess FISP with the four pillar of food security, it is not a model that is useful for other African countries to emulate in addressing food insecurity without careful analysis.

Relevance to Development Studies

Due to food insecurity, a number of negative effects may occur such as malnourished, immune compromised and diseases. Those conditions are effective to produce individual well-being or activities regarding with economics which influences the national level economic growth and development. In order to achieve better growth or development, we need to have food as all human beings have the right to access food. To support this, in 1966, the United Nations General Assembly defined and recognized the access food as basic human right. As well as in Sustainable Development Goals (SDGs), its one of the achievements is "Zero Hunger". This acute issue is especially in Sub-Sahara African countries. Hence, this Malawi's experience should take account of other countries of food security policy or programme to consider it more effectively and efficiently.

Keywords

Food security, nutrition security, subsidy, maize, fertilizer, vulnerability, poverty, FISP, Malawi, conceptualization,

Chapter 1 Food Insecurity in Africa and The Malawi FISP Policy Response

1.1. Introduction

The devastating effect that food security has on the human race as postulated by McCarthy (2018) is too substantial to be ignored. This is because the effect of food insecurity has led to major societal challenges that require immediate international attention as hundreds of millions of people globally were not only undernourished but also unable to access adequate food supplies (McCarthy et al. 2018:12). However, the debate around crisis of food insecurity is not alien to the international community. For many decades there have been an array of empirical studies that posited agriculture as foundation for social development and economic prosperity (Johnston and Mellor 1961: 569), as well as improving food security and reducing poverty in comparison to other sectors of the economy (Majid 2004; Irz et al. 2001).

Unfortunately, agricultural productivity growth has been lagging behind in sub-Saharan Africa (SSA) when compared with Asia. In response to the challenges of food shortage, in the 1970s and early 1980s, several African governments start to form policies that promote the use of fertilisers to enhance productivity in the agricultural sector with the aim of reducing rural poverty and stimulating economic growth (Morris et al. 2007:2-3). This was done through several intervention programs such as direct and indirect subsidies to lessen the prices of fertilisers for farmers, centralisation of both the procurement, control of output markets, and distribution of fertiliser, and government-financed and -managed input credit programs (Denning et al. 2009:2).

While plethora of studies have shown the potential of agricultural input subsidies in hastening crop production (Rusike et al. 1997; Crawford et al. 2003; Alumira & Rusike 2005:56-58), a number of African countries that provided 'smart subsidies' for farmers to improve productivity have encountered difficulties to sustain the intervention programs (Dorward et al. 2008: 2, Dorward 2009: 5; and Chirwa and Dorward 2013: 15, 24). The argument has always been that the subsidies scheme is not effective and efficient for African countries because it is too expensive and are not sustainable financially for the vast majority of the countries in sub-Sahara Africa (Dorward, 2009: 8).

In this study, we look at Malawi, a landlocked country surrounded by Zambia, Tanzania and Mozambique with a population 17.5 million (UN, Department of Economic and Social Affairs, Population Division 2017) where 90% of the population resides in rural area (FAO 2018a) and employed in agriculture sector (Sahley et al. 2005: 7). To be precise, the county was ranked 107th out of 113 countries in the global food security index of 2018 (EIU, 2018).

The decision to opt for Malawi as a case study for the purpose of research out of all the African countries was because Malawi is one of the few countries that the government prioritised food security policies (Makombe et al. 2010:1). In particular, the Malawi Farm Input Subsidy Programme (FISP) has been applauded to represent a practical policy model that has transformed the nation's

food security (Messina et al. 2017), and yet described as failure that have no significant impact on the food security of Malawi (Asfaw et al. 2017: 104-105).

In order to address the competing narratives around the success and failure of FISP, this study seeks to understand how the Malawi government conceptualised FISP as a response to 'food security', and the effects of such conceptualisation on households concerning household's food production and consumption. In achieving the set goals, a discourse analysis through the framework of What the Problem Represent to be (WPR) to analyse the various studies and reports on the FISP in addition to semi-structured interviews, ethnography and participant's observations are adopted to critically engage in the analysis of data collected from both primary and secondary sources. The data analysis, however, was done through the lens of various concepts such as food security, vulnerability, poverty, and nutrition security. This enables us to have a clear understanding in assessing the Malawi National Food Insecurity Response Plan and the Implementation of FISP to ascertain whether the program is a success or failure in its conceptualisation and how best to respond if the conceptualisation was flawed.

1.2. Statement of Problem

Despite the praises heaped on Malawi government response plan and implementation of several policies on food security, in particular, the FISP, Malawi faced an unprecedented food crisis in 2016/17 most especially, in the southern and central Malawi (Babu et al., 2018:1). Various scholars have argued that while the extensive, pricy fertiliser subsidy programs that was implemented in the mid-2000s at first increased maize productions in Malawi (Dorward and Chirwa 2011; Pauw et al., 2014), it has been unsuccessful in improving food security generally (Mazunda 2013; Schutter 2013). This resonates with the findings of the vulnerability assessment carried out by the Malawi Vulnerability Assessment Committee (MVAC) that was released in June 2016 report. The reports show that about 7 million people in 24 districts of Malawi would be unable to meet their food requirements over the period to the following harvest (Babu et al. 2018:1).

In addition, the Civil Society Association Network [1] emphasized on the FISP encountering a lot of challenges in the 2016/2017 that really affect households in the rural areas, most especially Mzimba District, and there is no light at the end of the tunnel that the situation will improve in the following year (CISANET 2017). While FISP in Malawi was introduced in the 2005/2006 due to protracted food shortage as a result of bad weather, the competing national debate whether the FISP's potential has been fully exploited since the inception of the program continue to occupy both media and the academic space (Messina, 2017; Fisher and Kandiwa, 2014; Lunduka et al., 2013; Dorward and Chirwa, 2011).

There are a number of reasons that have been put forward that contributes to the competing debates around FISP. For Nkhoma, the objectives of FISP is not clear and confusing that lacks specificity and as result becomes difficult to ascertain whether the scheme is successful (Nkhoma, 2016 and 2018). While

[1] CISANET is a policy advocacy organization, mainly working on agriculture and food security policy issues, affecting the poor people and their livelihood.

there are also those that maintained FISP is not suitable in addressing the plights of the poorest in rural Malawi which would have been better addressed by social safety net programs rather than spending huge amount of money with focus on inputs subsidies (Messina et al. 2017). Others maintained that FISP have contributed to higher wages not only in farm employment but also in the non-farm employment as well as rapid growth in seed market for agro dealers due to the increase in farmer usage of improve seeds courtesy of FISP (Dorward and Chirwa 2011). While some scholars and commentators have pointed out that for FISP to be a success that will achieve its objectives, the targeting criteria used to define eligible farmers to benefit from FISP needed review (Dorward and Chirwa 2011; Chibwana et al. 2012).

The problem here is that whether chronic-poor farmers can exploit the potential benefits arising from FISP depends on how the FISP as a response to food insecurity in Malawi is conceptualised. The definition of who is vulnerable or who is at risk to become vulnerable most importantly, what is the understanding of food security as reflected in the Malawi food insecurity response plan need to be understood before one can make a specific comment as regards the effectiveness of FISP meeting its set objectives. However, since the Malawi's input subsidy program has been adjudged as practical "model" that other countries can copy in the process of their subsidy policy design (Lunduka et al., 2013:564), Chinsinga (2013), however, cautioned that it is important to engage in critical analysis of FISP considering the protracted debate on its efficacy in addressing food security issues before calling for emulation from other African countries.

1.3 Background To Food Insecurity in Malawi.

Malawi is one of the few countries that prioritised food security as national issue captured in several policies since independence from the colonial masters. Since the era of Banda, "Malawians have widely identified food security with national self-sufficiency in maize production. Most households raise maize for their own consumption" (Sahley et al. 2005: 2). About 15% of the maize produced in Malawi is for the market (GoM, 2016:97). The International Maize and Wheat Improvement Center (CUMMYT) stated three fundamental conditions for the production environments of maize: 1) Altitude, particularly suitable in the mid-latitude (900 to 1800 meters above sea level) or highland (above 1800 meters), 2) Maturity, necessary to have the number of rains and length of the growing season, and 3) Grain colour and texture conditions, most maize produced in Africa is white. (Byerlee and Eicher 1997: 15) Hence, most places in Malawi are suitable to grow maize.

> "It is highly sensitive to the deprivation of water, sunlight, and nitrogen; it rots easily in tropical storage. Even a few days of drought at the time of tasseling[2]

[2] **Tasseling** is an important stage in corn plant's growth. Tasseling stage is the corn reached visible full height. Corn's growth scale is divided between two different sets - vegetative (designated as V-stages) and reproductive (designated as R-stages). The transitional stage between the V and R stages is VT - also known as tasseling.

have the potentials of runing a crop. Thus, maize monocultures are extremely vulnerable to environmental shocks, especially drought." (McCann 2001: 249)

In General, food security in Malawi relies on rain-fed subsistence agriculture due to lacking water and soil (Sahley et al. 2005: 12). As the Integrated Household Survey 2016-2017 conducted by National Statistics Office (NSO) stated that during 2015/16, around 78% of households cultivated in the rainy season while in the dry season there are only 8% of households that grew seasonal crops (NSO, 2017: 123). Approximately 50% of smallholder farmers have less than 1 hectare of their land to cultivate (Chirwa and Dorward 2010: 12 and NSO 2017: 125). To understand better to imagine how much maize does a household need? According to Byerlee and Eicher, "the typical family of five must plant more than 1 hectare of maize to meet annual subsistence requirements, however two-thirds of farmers possess less than 1 hectare" (Byerlee and Eicher 1997: 67).

As demonstrated in Table 1 below, the climate had an influence on Malawi agricultural productions since the late 1970s and the droughts were the top of the causes of food insecurity. In the Integrated Household Survey 2016-2017, 40% of population faced food shortage because of the climate reasons, 28% were affected by high market prices and over 20% could not access agricultural inputs in 2015-2016 (NSO 2017: 195). "In bad years, households must seek more *Ganyu* labour opportunities and divest of assets to buy food" (Rubey 2003: 2). *Ganyu* is described as a wide range of short-term agricultural or non-agricultural rural casual labour/ piecework to exchange labour and small wage or food widely common in Malawi that might be done for relatives, neighbours or smallholders who own bigger land. "*Ganyu* is the most important source of livelihood for most poor households" (Whiteside 2000: 1). However, *Ganyu* has some negative aspects, for instance, unstable wages, inadequate food stocks from *Ganyu* and the benefit might not cover all household member (Whiteside 2000 :9) as well as most of the *Ganyu* labour is in cropping season, therefore the employee's field might leave their own garden. Hence, Malawian food security, therefore, is a very vulnerable environment as well as coping strategy.

Table 1: Climatic influence on food security

Year	Type	Production effect	Affected domestic population
1979~80	Drought, Civil war in Mozambique (1977~1992)	*N.A.*	*N.A.*
1987~90	Drought	*N.A.*	*N.A.*
1991~92	Very poor rainfall	Maize production was declined approximately 60 %	5.7 million

1992~93	Very poor rainfall	Maize production decreased about 20% compared to previous year production	*N.A.*
1996~97	Floods	*N.A.*	400,000
2001~02	Erratic rains and floods	Lower fertilizer subsidies and production	2,829,435
2004~05	Drought, Food crisis	24% maize production was less than previous year	5 million
2012~13	Food shortage	3 million MT of maize production was declined	2 million
2015~16	Drought and floods	Overall food production declined about 30 % compared to the 2013~14 season	6.5 million

Source: Stevens et al. (2002), Denning et al. (2009), GoM (2016), Nkhoma (2018)

In addition to the issue of climate, population increase also exacerbated the food security in Malawi as well as the unstable price of fertiliser or limited access to agriculture credit, especially for poor smallholder farmers (Chirwa and Dorward 2010: 13). Agricultural Development and Marketing Corporation (ADMARC) was established in 1971 by the government to sell agricultural inputs, purchase outputs and supply agricultural credit. They have a role in the marketing and handling of all agricultural goods. Most of the profits flowed to the estate sector that was considered as the main economic growth sector. "Maize prices were kept low to reduce food prices and encourage the production of cash crops for export" (Chibwana et al. 2014: 134). However, since the mid-1980s, due to trade collapse at the end of 1970s, drought in 1979-80, most households are not able to purchase maize that ADMARC owned (Harrigan 2003: 849).

It was occasional, however, "refugees continued to come from Mozambique, and Western non-humanitarian aid was frozen in 1992/1993 in protest against President Banda's suppression of the pro-democracy movement" (Chibwana et al. 2014:134). Therefore, political situation, as well as geographical matter, are also one of the food insecurity cause.

1.4. Malawian Agricultural Input Subsidy Policy/Program.

The implementation of agricultural policies that focus on inputs subsidies in Malawi is not a new phenomenon, it is a practice that can be traced back as far as the Malawi independent in 1964. Although the inputs subsidies in the ear of independence as on a small scale fertilizer and seed distribution, it made Malawi to become self-sufficient in terms of maize production, unfortunately, the poverty rate in the rural areas continue to rise (Buffie & Atolia, 2009). The ideas of input subsidies were later phased out in the 1980s as a result of conditions for loans from IMF and WB, by 1998, the government of Malawi introduced free seeds and fertilizers distribution popularly knowns as Starter Packs (SP) for farmers to cultivate maize (Pauw and Thurlow 2014). SP was replaced the Targeted Input Program (TIP) in 2001. In fact, since year 2003, government have initiated small scale programs that prioritized subsiding fertilizer with about 2.8 million farmers benefiting from such programs (Buffie & Atolia 2009).

Notwithstanding the extensive history of agricultural inputs subsidies in Malawi, there is none of the previous programs since independent that can match the scale of FISP in terms of beneficiaries and cost of implementation. In the wake of the 2004/2005 drought that left approximately 5 million Malawians were push into food crisis in need of food aids, the Agricultural or Farm Input Subsidy Program (AISP/FISP) was launched (Khalon et al. 2018 :4-6). For the Malawian government, FISP is the solution to address the problem increasing smallholder farmer accessibility to improved agricultural inputs, boosting the incomes of the farmers through increased food and cash crop production to accomplish national and household food security. The targeted beneficiary was approximately 50 % of farmers in 2005/06. It was much larger of inputs than the previous SP and TIP in the late 1990s to the early 2000s. "In food security terms, the impact that TIP had on household production was modest, delivering a net increase of 35 kilograms of maize per household" (UNDP 2012: 26).

FISP provided for selected households vouchers or coupons that could purchase fertilizer, hybrid seed and pesticides at reduced prices. Since 2005/06 till now, the government has been implementing FISP every year although the inputs of the programme are unstable regarding the budget and logistics issue. The vouchers contained maize seed and maize/tobacco fertilizer until 2006/07, however, after that it included legume seed with a limited amount of distribution. "In 2008/2009, each voucher entitled a household to 50 kg of maize fertiliser at 8% of market price, and free seed – either 2 kg of hybrid maize seed or 4 kg of open pollinated variety (OPV) seed" (Chibwana et al. 2014: 135).

Furthermore, the criteria of beneficiaries have also been changing. Initially, when the programme started in 2005/06, it did not have explicit targeting. After the first year of implementing, the government had decided to put the criteria for the selection of recipients that was 'Maize growing full-time smallholder farmer who is unable to afford to purchase 1 or 2 unsubsidized fertilizer bags'. Since then the criteria has been changing, but the government is trying to focus on vulnerable households which means child-, female-, or orphan-headed, people living with HIV and AIDS, or guardians or carers.

According to Chibwana, criteria to select recipients from 2007/08 to 2008/09 were: 1) the household possess cultivated land, 2) the household stays in the village without counterfeiting, 3) only one household member was selected from the household, and 4) giving priority for vulnerable groups which were children or female headed households. (Chibwana et al. 2014: 135). However, on the other hands, in 2016/17, the criteria changed to 'productive farmers', that is the farmers that have farming skills (Nkhoma 2018: 6). Even the targeted population also witnessed declined from 1.3 million households in 2005/06 to 900,000 households in 2016/17. On the contrary, the cost of the programme has not witnessed significant reduction, for instance, in 2010/11, the targeted population was 1.6 million households, and the cost was MK 22 million, then in 2016/17's expenditure was MK 31 million despite the subsidized pack remain unchanged as well as the beneficiaries. Therefore, Kerr pointed out the benefit was not for all smallholder farmers, but for private traders or few farmers who can control to buy maize at lower prices or to produce it abundant then sell it when the price increase (Kerr, 2014: 581).

The distribution of coupons/vouchers has also been changing. It did not use a farm household register to identify the beneficiaries which have started to utilize since 2008/09. The main responsible organization for identification and distribution was Traditional Authorities (TAs)[3], however, from 2007/08, the government put more responsibility for Ministry of Agriculture and Food Security (MoAFS) and Village Development Committees (VDCs). Besides, an open meeting for coupon allocation was introduced in 2008/09.

1.5. The aims and Objectives

The research aims to understand how the agricultural input subsidy program affects the beneficiaries' improving their food security as well as how the Malawian government see the issue of food insecurity in both the household and national level. Through the WPR approach the study aim to understand the meaning of food security in Malawi government policies, the factors responsible for such policies formulation, the weakness and opportunities in ensuring that the policies response to food security have a direct and significant impact of the poor population of the country that depends solely on small-scale subsistence farming for survival.

[3] Traditional Authorities (TAs) are like administrators of cultural and traditional worth of the community. They have power for controlling "customary land ensuring that authority over land is passed in succession from one generation to another" (FAO 2018b). They also take position of chairpersons in Area Development Committees (ADCs). Each village is governed by a village headman and a group village headman overlooks several villages. Therefore, those people own a lot of influence for community development or activities. (FAO 2018b)

1.6 The research questions

1.6.1. Main

How does the FISP intervention to reduce food insecurity conceptualise 'food security' and what are its effects regarding the household's food production and consumption?

1.6.2. Sub-questions:

a) How does the FISP conceptualise food security?

b) What policy options were considered and what explains the focus on maize in FISP?

c) What are the effects of the policy at the local level on households' food production and consumption?

1.7. The structure of the paper

The paper consists of five chapters. The first chapter already highlighted the problem of research, the objectives, research questions, a brief background about the food insecurity issue in Malawi. In the second chapter, the focus will shift to the brief discussion of the relevant concepts of food security/insecurity, vulnerability, nutrition-security, and poverty in the order set the framework for analysing the collected data for this research in chapter four. While the chapter focuses on the policy background of Malawi by looking at all other policies that the government has initiated to address food security problem including a detailed presentation of the FISP policy, the fourth chapter presents the discourse analysis to answer the research questions that seek to understand how the policy/program/strategy formulated and how people in rural area manage their food production and consumption with their income resources. The last chapter is the conclusion and summary.

Chapter 2 The Conceptualization of Food Security and Vulnerability; A Necessity for FISP Effective Implementation in Malawi

2.1. Introduction

This chapter focus is on the discussion of relevant concepts that is crucial for this study. The discussion of concepts such as food security, vulnerability, and nutrition security help in preparing a solid theoretical foundation that is needed for the data analysis in chapter four of this study that sought to understand through WPR framework how the FISP response to food security was conceptualized. However, the discussion in the chapter is organized into five main sections. The first section briefly highlights the importance of agriculture growth to food security; this discussion underlines the necessity for interventions programs such as FISP.

In the second section is the discussion around the concept of food security as well as highlighting the clear distinction between food security and food sufficiency which is a subset of food security but in most occasions confused with each other. The third section looks at the concept of nutrition security and the linkage to food security while the fourth section focus is on the discussion relating to the importance of the vulnerability concept in the analysis of food insecurity concept to get to know which condition people face with risks. While the fifth section focus is on poverty as a concept that is interconnected to all the other concepts, the last part of the section of this chapter is the conclusion

2.2. Agricultural growth

If there are other potential such as export manufacturing or tourism in a country, they will take it to boost their economic growth, however, on the other hand, a country which has fewer natural resources or tourism sights, what will they handle with it? In this case, agriculture is supposed to be a crucial growing sector that stand as the back born of poor people livelihood. However, the sector has difficulties in going forward, especially when it comes to rural economic growth and poverty reduction (Dorward et al. 2004: 73). There are some steps to develop the agricultural sector, producing export crops to earn foreign exchange, supporting domestic demand in other sectors such as manufacturing to shift from agriculture with labour force, and agricultural products cover increasing domestic demands with rising population (Dorward et al. 2004: 74 and Johnston and Mellor 1961: 571-572).

However, especially in African countries, there are more smallholder farmers than commercialized farm, hence to achieve "small farm development is therefore to develop new coordination systems involving combinations of government agencies, civil society, farmer organizations, and agri-business firms" (Hazell et al. 2010: 1357) as well as developing new technologies to increase agricultural productivity (Hazell et al. 2010:1351). Besides, in the most impoverished rural areas, there is a lack of infrastructure, agricultural technologies, and

developed markets. With these situations, the government need to invest in the infrastructure, technologies, and extension services are critical factors of the green revolution. When an active market with supporting institutions is developed, the government could phase out (Hazell et al. 2010: 1357).

Hazel and others argued that the role of government in agricultural development is changing regarding governance, democratization, decentralization, participatory policy processes, and collaboration with international donors that delivers more effective and efficient support and services to farmers. Democratization may strengthen farmers voices, and decentralization provides more effective local services, especially extension services as well as collects relevant data sufficiently. Decentralization can be a more effective system to reflect the participatory policy processes (Hazell et al. 2010: 1357).

Hazell and others also addressed that politicians should consider constructive policies for smallholder farmers otherwise "there is the growing risk that there will soon be a dramatic increase in rural poverty and waves of migrants to urban areas that could overwhelm available job opportunities, urban infrastructure, and support services" (Hazell et al. 2010: 1358). As some researchers recognized that changing rural agriculture economy requires local demand of products with their preferred prices (Dorward et al. 2004: 75), hence government intervention should consider the local and rural economy as well as livelihoods to take their initiative back to reform better agricultural development. The only way to achieve this is through the realization of food security in society.

2.3. Food Security

The concept of food security is very critical to this study, although very complex to understand or define. This is evident from the several attempts at definition in policy usage and research for more than four decades with more than 200 definitions and 450 indicators of food security in published literature (Maxwell and Smith, 1992: Bajagai, 2015). To have a precise definition for food security is very problematic, for that reason, at any time the concept is introduced in the objectives or title of a study, it is essential to look closely to establish the explicit or implied definition (Maxwell, 1996). Be that at it may, the continuing development of food security as an operating concept in public policy is a testament of the broader recognition of the complexities of the technical and policy issues involved.

Food security as a concept originated only in 1974 at the World Food Conference. In the early 1970s, the price of international grain increased, and it had significant influence on low-income countries in Asia and Africa. In the conference, focusing on food security means boosting food productivity for food deficit countries to be independent from international markets, and building cooperated system of national and international grain reserves (Eicher and Staatz 1986: 215).

According to Gross, et al., food security can be simply defined as "adequate access to food for all people at all times for an active, healthy life" (Gross, et al. 2000:4). Moreover, when food security fulfils availability, accessibility, and utilization of sufficient food, every single person could stay healthy all the time (Gross, et al. 2000:4). Then three of the elements can be affected by stability

(Gross, et al. 2000:5). Notwithstanding the plethora of definitions of food security, any chosen definition of food security has to cover food availability, food access, food utilization and stability (FAO 2006: 1).

Food availability' is referred to as supply (physical) side which is the level of production, stock and net trade. 'Food access' is concerning about economic and physical access food with incomes, expenditure and market prices. 'Utilization' is recognized as taking nutrients food that leads to the result of good care and feeding practices as well as the diversity of the diet. 'Stability' is a constant condition of availability, accessibility, and utilization of food. Therefore, for any intervention programme such as FISP to be successful in Malawi, the design and conceptualization of the response to food insecurity must be based on the premise of availability, accessibility, utilization, and stability.

However, it is worthy to note that, there is a difference between 'food security' and 'food self-sufficiency' with their definition. Clapp defines 'food self-sufficiency' as the "ratio of food produced to food consumed at the domestic level" and "it is not necessarily focused on where specific foods are grown" (Clapp 2017: 89). Food self-sufficiency is a part of food security. Both are not mutually exclusive to each other, and it focuses on availability and supply part which meet sufficient production for domestic needs (Clapp 2017: 89). In addition to this, Thomson and Metz described food self-sufficiency should only see at the domestic production of supplying source (Thomson and Metz 1999). This definition can apply for all level of national, regions or individuals (FAO 2015: 2).

2.4. Food security and Nutrition security

Food security cannot be realized without nutrition security been accomplished because the consequences of poor nutrition are enormous on productivity. It can lead to impaired mental and physical development, increase the susceptibility to a different kind of disease due to the reduction in immunity (WHO 2018). WHO defines 'nutrition' as "the intake of food, considered concerning the body's dietary needs? Good nutrition – an adequate, well-balanced diet combined with regular physical activity – is a cornerstone of good health (WHO 2018). When food security fulfils availability, accessibility, and utilization of sufficient food, every single person could stay healthy all the time (Gross et al. 2000:4). But then this can be affected by stability (Gross et al. 2000:5) as discussed earlier.

Nutrition security, it "defined as adequate nutritional status regarding protein, energy, vitamins, and minerals for all household members at all times" (Weingärtner 2004:5). The food security and nutrition security have four dimensions: the categorical dimension, socio-organizational dimension, managerial dimension, and situation-related dimension. The categorical dimension is described as relationships between conceptual framework of food security and nutrition as illustrated in Figure 1. When the three factors of food security (availability, accessibility and utilization) meet stability, households and individuals can obtain a nutritious diet.

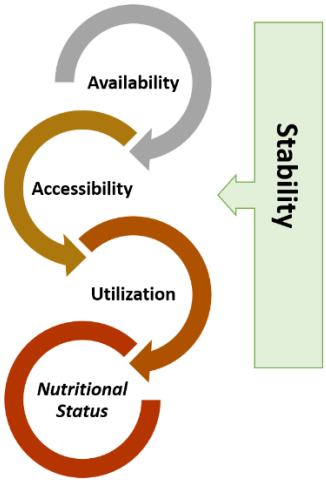


Figure 1: Food security and nutrition

Source: Gross, et al. 2000:5.

Moreover, focusing on the household level of nutritional status, figure 5 describes that the nutritional status can be achieved by both food intake and health status. As Gross et al. mentioned that the first beginning point of cause and effect to food and nutrition security is 'food availability' (Gross et al. 2000: 6). As demonstrated by Figure 2 below, there is a nexus between food security and nutrition security; therefore, none of the two concepts can stand alone.

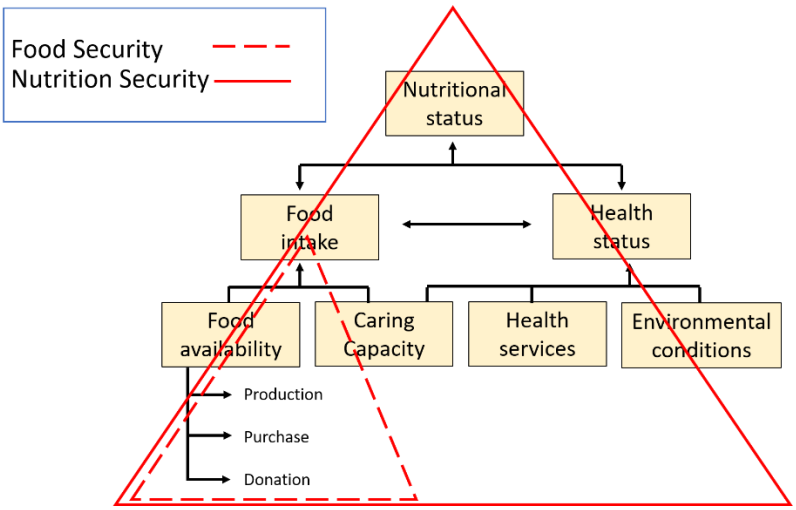


Figure 2: Conceptual Framework of the Nutritional Status at the Household Level

Source: Gross et al. 2000:7.

While the socio-organizational dimension addresses that food security and nutrition security have to include each layer of social organizations; national and global (macro), region or district/town/village (meso), and household and individual (micro) (Gross et al. 2000: 9). Each level has different causes and effects

for ‘availability', ‘accessibility', ‘utilization', and ‘stability'. The managerial dimension covers food and nutrition security projects or programmes' management aspect regarding the project cycle management, assessment or indicators. The situation-related dimension is illustrated as the stages of food and nutrition security regarding effectiveness that change time to time, emergency to secured conditions (Gross et al., 2009). ‘Food intake' is not referred to present or past, but also related to the process of future household food security that the household afraid to have inadequate food in the future, hence they reduce food consumption (Maxwell and Frankenberger 1992: 27).

2.5. Vulnerability to Food Security

The concept of vulnerability and food security are not mutually exclusive when it comes to the understanding of how FISP is conceptualized as a response to food insecurity in Malawi. The understanding of the concept of vulnerability is crucial to this study because, in recent years, the analysis of food insecurity have gone beyond just looking at the current occurrence of shortage of food. The analysis of food insecurity now pays close attention to identifying individuals, households, and communities that are more at risk of becoming vulnerable to the suffering food insecurity in the future (Scaramozzino, 2006; Løvendal, Knowles and Horii, 2004). This means that the core benefits of the vulnerability approach in the analysis of food insecurity are in twofold.

Firstly, the approach is unambiguously dynamic and progressive as it looks at the future by sending early warning signal to governments on the probability of certain fraction of the population to become vulnerable to food security and secondly, help identify coping strategies that the communities, households or public institutions can adopt in order to lessen the possibility of unfavorable outcomes as a result of uncertainties and shock (Scaramozzino, 2006:1). The implication of adopting vulnerability as a concept to analyse interventions such as FISP in Malawi is that it will help in highlighting why a substantial portion of the population at risk of becoming food-insecure in the near future are excluded (Azeem et al., 2016:1).

It is without a doubt that the expansion of the food security analysis with the focus on vulnerability resonate with the reality often ignored by many policymakers that people move in and out of poverty and such should be noted (Lovendal and Knowles, 2006: 4-5). Just like food security concept is plagued with the crisis of definition, for decades, the actual definition of vulnerability has been a significant concern for many professionals in the development and academic field. Nevertheless, what the term means and how it how to measure it remain vague (Dilley and Boudreau, 2001: 230). This murkiness impedes conceptualization of real problems facing families in food-insecure areas and encumbers proper analysis for forestalling and addressing these problems.

Apparently, the murkiness in the definition and interpretation of vulnerability as a concept shape the thinking of policymakers when designing intervention plans to arrest food security. This implies that the how the policymakers or government define, and measure vulnerability will determine who get assisted and who gets ignored. Considerably, "vulnerability" has become a term of art and a basis for assessment approaches in several settings, including the impact

analysis climate and disaster management as well as the analysis of food security (Dilley & Boudreau, 2001: 230). 'Vulnerability' can be thought that a person or household is put at risk due to chronic or temporary hazard which might be natural, political, economic or social unpredictable livelihood shocks, for instance, drought or floods for crops, civil war or conflict, inflation, or geographical area (Cromwell and Kyegombe 2005: 47 and FFSSA 2004: 41-42).

However, there is a different perspective of vulnerability which is "the capacity to manage the realization of damages" (McCarthy et al. 2016: 2). Vulnerability and hazard create a risk of a particular outcome like food insecurity, hunger, malnutrition, or violence that affect to being illness, orphan, or old age individuals, particularly (Cromwell and Kyegombe 2005: 47, FFSSA 2004: 41, and Alwang et al. 2001: 6). Hence, vulnerability is affected by the disease, age, disability, social exclusion, or cultural practice that curtail access to assets. This accessibility is related to the ability of a household or individual to respond to the risk (Alwang et al. 2001: 4). Even non-poor households might be in vulnerable situations if they are not able to access insurance or credit, as well as staying remote area where limited infrastructure or social services (McCarthy et al. 2016: 2).

There are different types of vulnerability: 1) chronic vulnerability unable to participate economic activity, 2) unstable engagement because of recurrent ill or fluctuating situation, and 3) engaged the activity more or less (FFSSA 2004: 42). To reduce risk or vulnerability, implementing social protection or action can contribute to do reducing risk of becoming vulnerable (Alwang et al. 2001: 2). Therefore, "vulnerability" encapsulated elucidation of the degree to which people suffer from calamities of any kind rest on both the possibilities of not only being exposed to shocks or hazard but also the capacity to withstand hazard and shock which is dependent on their socio-economic circumstances (Dilley & Boudreau, 2001: 231).

2.6. Poverty

The conceptualization of the FISP will be incomplete with discussing the importance of understanding of the concept of poverty, and yet having a precise definition of poverty among scholars is a herculean task in itself as there is no universal accepted definition of poverty (Kamruzzaman, 2015; Toye, 2007; Laderchi et al., 2003). Having a clear understanding of poverty is very crucial to this study because the different conceptualizations of poverty as suggested by Kamruzzaman (Kamruzzaman 2015: 3) have significant implications for intervention programs such as FISP targeting groups in the society that are considered poor. This implies that the success of intervention programs depends on how policy makers saddled with the responsibilities to designing and implementing the intervention programs conceptualize poverty.

Without clear understanding of poverty, policy meant to alleviate or reduce poverty will fail. For example, there are different type of poverty such as relative poverty used in depicting individuals that earn relatively below the national bench-mark of poverty line with potentials of moving out of poverty (Hulme and Shepard 2003; Humle et al. 2001). We also have absolute poverty to de-

scribes those that not only lack basic needs for wellbeing but also lack the capacity to afford lack necessities that are indispensable to his or her existence (Hulme and Shepherd 2003; Hulme et al. 2001). Apart from absolute and relative poverty, there are those are extremely lacking for a protracted period of time, and in some cases poverty has become generational. This are people in chronic poverty and are usually categorized at indigent poor (Foster et al. 2013: 225). However, these definitions and classifications mostly depends on situational circumstances and a result the designing of government intervention must pay close attention to context (Glauben et al. 2012:785) as well as the type of poor they are targeting for the program of intervention to stand a chance of becoming successful (Hulme and Shepard 2003:404).

2.7. Conclusion

This chapter has been able to highlight the relevance and importance of food security, vulnerability and food nutrition concepts to the design and implementation of any intervention program aimed at arresting the food insecurity crisis in any country, in particular, Malawi that is the subject of this research. None of the concepts can be jettison or downplay the conceptualization of intervention programs as all of them are mutually inclusive as a key component of intervention programs and policies such as the Malawi FISP. Though both food security and vulnerability are plagued with the crisis of definition, nevertheless, there are undisputable variables that must be captured in whatever definition one chose to adopt if there is going to be any chance of success in the policy implementation that seeks to address food insecurity. While any conceptualization of intervention programs to address food security must capture the four pillars of availability, accessibility, utilization, this chapter shows that the assessment of beneficiaries' vulnerability of such programs should not be limited to the present situation but also the future. Moreover, people degree of poverty is not the same as discussed in this chapter.

Chapter 3 Methodology

3.1. Introduction.

At the core of the methodology of this study is the qualitative approach of data collection, in particular, making use of the existing secondary data to answer research questions one and two, and in some part the third research question which was complemented by interview, ethnography, and participants observations? One aspect of research process that a researcher should pay close attention to is the methodology because a faulty methodological approach can make or mar the study as well as invalidating the outcomes and findings of the researcher efforts. Therefore, methodology just like other components of research ought to be treated with seriousness.

In the main, this chapter present the comprehensive details of the collection of relevant data used in addressing the objectives of the research as well as the research questions. The discussion focus on the methodological tool deployed in collecting data, the process involved in collection of the data as well as the approach use in analyzing the collected data. The justification for choosing the approach, limitations and ethical considerations as well as the justification of selected materials and sample size. For the sake of clarity, the chapter is organizing into four parts. The first part gives details of the data collection tool for both the primary and secondary data, although the bulk of the data collected for this study are secondary. The second part focus on the discussion and process involved in selecting relevant secondary data material, the justification for the choice of sample size for the primary data and the procedures that it entails. In the third part of the chapter describes each data analysis approach. Lastly, the fourth part explains this research field work procedure to clarify this research positionality and limitation.

3.2 Data Collection Approach and Tools

3.2.1. Working with Text

The choice of making use of the secondary data is not only restricted to the fact that it was a more feasible and practical alternative for research with inadequate time and resources (Creswell, 2009:56). Most especially in a situation where there have been overabundant of existing data on the research problem. Moreover, findings from the secondary data analysis are considered credible and valid just as the one of primary data analysis because both approaches are a practical exercise that makes use of the same research principles (Doolan & Froelicher, 2009:206). There it was deemed more appropriate for this study.

However, in making use of pre-produced text, it requires planning that involves the creation of a list of relevant texts as well as identifying the methods to be adopted in accessing them, and how to address the biases most especially when it comes to the background and reliability of the authors of the texts (O'Leary, 2010:222). O'Leary maintained that before deciding to make use of text, one must be cognizant of what precisely to look for in the text (O'Leary,

2010:222). Therefore, in line with the suggestion of O'Leary, the first step the author took was to identify exactly what to look for in the text most especially those that are closely connected to the research objectives and questions with an eagle-eye on the authenticity and credibility of the text source. As a result, the secondary data considerations were reliant on the published and non-published and materials that originate from different academic journal articles and books, Malawi government official reports, International bodies such as FAO, WFP, and International and national newspapers.

3.2.2. Interview, Ethnography and Participants Observations

To complement the working with text approach of data collection, the other qualitative research techniques adopted for this study was the semi-structured interviews, ethnography and participants observations to answer research question three. This approach was judged appropriate because interviews as a means of data gathering is beneficiary to getting unambiguous information regarding specific subject of research targeted at specific respondents as well as from the area of research.

Besides, "interviews are a useful tool which can lead to further research using other methodologies such as observation and experiments" (Jensen and Jankowski 1991:101). The method allowed the researcher to make inquiries about the experiences of the farmers' food production and details about how secure they are when it comes to food and how vulnerable they are to unexpected shock.

However, more data were collected subtlety through ethnography and participant's observation with 3 households — ethnographic research methods which are described as a "description of a culture or behaviour pattern, that rely on generalized description rather than including detailed extracts from concrete data, or that separate analysis and data" (Hammersley 1992: 62). Moreover, the ethnographic research is looking at how "people's daily lives for an extended period, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews" (Hammersley 2007: 3).

Participant observation can be closer to people (informants); thus, a researcher is going to able to observe their lives as information (Bernard 2011:256). "Participant observation has long been used in product applications research, where the object is to solve a human problem" (Bernard 2011: 257). Even though there are usually problems which are the reaction of informants; they might change their behaviour when they have a researcher. Participant observation could decrease this kind of issues because the researcher will not visit them occasionally, but continuously (Bernard 2011:265-266).

3.3. Selection of Relevant Secondary Data materials and Sample size

The search for the selection of relevant secondary materials was done through various search engines such as Google Scholar, Google, ISS e-Library, JSTOR, Springer, and Science Direct. Using keywords such as food security, food insecurity, nutrition security, farm inputs subsidy, vulnerability, Malawi,

Sub-Sahara Africa during the search was done for the purpose of trimming down all the collected secondary data to focus on the objectives and research questions of this study that seek to understand how agricultural or farm input subsidy program affects the food security of the beneficiaries'. In particular, looking at how Malawi government conceptualised food security to address food insecurity in both household and national level.

Because Malawi government have introduced several policies since independent to address the issue of food insecurity and hunger in the country, there was no restriction on the year of publication of articles, books, and reports. Although, specific attention was given to most recent published secondary data of the last 14 years that FISP was introduced in Malawi in 2004/2005 as well as official government document as regards policies on food security within the same year. For example, serious attention was given to documents such as the 2015/2016 and 2016/17 National Food Insecurity Response Plan reports, and the 2013/14 Final Report on The Implementation of The Agricultural Inputs Subsidy Program as well as the National Agricultural Policy (NAP) of 2016. The prioritisation of these documents as the main source of data to analyse the conceptualisation of food security proven to be very helpful as they are more recent with valid statistical data.

With consideration of the third research question and the overall objectives of the study, purposive sampling techniques was adopted in this study for the selection of key informants and households to be interviewed since all the households in the research areas are smallholder farmers. The purposive sampling method is most useful when data required for the study can only be acquired from a specific source (O'Leary, 2010).

The criteria for this selection was planned with the previous research topic which was about effect of nutrition education project implemented by an international donor organization. However, the author was not able to receive primary data from the organization; hence the research topic has changed into the current one. However, FISP is also implemented in the Mzimba district too; hence the primary data can still explore FISP's influence. Moreover, randomly selected 19 households, 10 caregivers, and 1 village headman were interviewed in the Machilika Chirwa village which is one the numerous villages in Champhira area of the Mzimba district. Also, 3 caregivers from different villages, 2 front-line agricultural staffs and 4 health front-line staffs in Champhira were interviewed. For the participant's observation and ethnography approach, three households were selected based on the previous topic. During the observation, focused simply on seeing how their cooking preparation as well as their gardens. As participating in their activities, the author helped to cook their meal, and carried water to their gardens or picked crops up from their gardens.

3.4. Data Analysis Approach

After the selection of relevant materials for secondary data sources, to guide the analysis of data collected from the existing text in relationship to the research questions, the "What the Problem Represented to be" (WPR) framework of Bacchi (2009) was adopted for this study. As postulated by Godwin (2011:172), the WPR approach offers the opportunity to the additional knowledge that is

beyond the "existing system of meaning" on a particular problem of discourse. This is because the WPR approach is one of discourse analysis, and the advantage of the discourse analysis is that we could see the deeper meaning of policy-making and how the policy meaning is created (Bacchi 2009: 7).

The WPR is more suitable in answering the research question one and two because the approach seeks how problems are described in policy and also how its subjects are constructed by the problem illustrations (Goodwin 2011: 167). Moreover, the existing texts selected for data are the ones that the author considered to be "typical or representative of a particular practice" (Godwin, 2011:172) in the formulation of FISP in Malawi.

The WPR approach suggested some checklist of steps to consider in the process of applying the framework in the discourse analysis of problems that the researchers intend to solve. These steps are carefully applied to research the questions even though not all the steps apply to the subject of research in this study. As demonstrated in the Table 2 below, the six steps with probing questions help the researcher of this study to have a clear understanding on the hidden factors that are inhibiting the successful implementation of FISP to reach the food security goals as well as factors that are ignored in the conceptualization of FISP that could catalyse the food security realization in the country.

Table 2: A summary of the WPR approach framework

	Question	Goal	Strategies
1	What's the problem represented to be?	To identify the implied problem representation	Identification of the problem as it is expressed in the policy
2	What presuppositions or assumptions underlie this representation of the problem?	To ascertain the conceptual premises or logics that underpin specific problem representations	Foucauldian archeology involving discourse analysis techniques, such as identifying binaries, key concepts and key categories
3	How has this representation of the problem come about?	To highlight the conditions that allow a particular problem representation to take shape and assume dominance	Foucauldian genealogical analysis involving tracing the 'history' of a current problem re presentation to identify the power relations involved in the prevailing problem representation
4	What is left unproblematic in this problem representation? Where are the silences? Can the 'problem' be thought about differently?	To raise for reflection and consideration issues and perspective that are silenced in identified problem representations	Genealogical analysis, and cross-cultural, historical and cross-national comparisons in order to provide examples of alternative representations
5	What effects are produced by this representation of the problem?	To ascertain discursive effects, subjectification effects, and lived effects	Discourse analysis techniques including identification of subject positions, dividing practices where subjects are produced in opposition to one another and the production of subjects regarded as 'responsible' for problems. Impact analysis: consideration of the material impact of problem representations on people's live

6	How/Where is this representation of the problem produced, disseminated and defended? How could it be question, disputed and disrupted?		Identification of institutions, individuals and agencies involved in sustaining the problem representation. Mobilizing competing discourses or reframing the 'problem'

Source: Goodwin 2011: 173

While the adoption of WPR is not meant to be a policy evaluation, but it aims to reveal premises of specific problem representations and not identifying the real problem (Bacchi 2009). This will help us to understand and how a 'problem' is assumed and thought in policies. In application, the WRP various steps was used in analysing the objectives of FISP, the circumstances that reinforced the issues that were prioritized as objectives of FISP as well as the dominant factor behind such conceptualization which resonates with the first research question of the study.

Besides the WRP steps were deployed in looking at the history of problems and how it was addressed, the role that the history of food security policies in Malawi played in the conceptualization of FISP food security intervention programs. This allow us to have understanding of the second research question that look at what policy options were considered and what explains the focus on maize in FISP. Besides, the WPR application to the analysis of the secondary data collected for this study did not only expose the weakness, it also presents an opportunity to address underplayed factors that are clogs in FISP effective response to food security in Malawi.

For the participant's observation and ethnography, the focus during the process is to observe their cooking preparation as well as their gardens while interacting with the household jotting key moments in the day to day interactions. As participating in their activities, the author helped to cook their meal, and carried water to their gardens or picked crops up from their gardens. After the process, the author goes back to the notes taken during the process to and arrange key moments in the notes along the theme of the study objectives and research question three that seek to understand the consequences of the policy at the local level on households' food production and consumption.

3.5 Procedures and Limitations

However, there were some challenges encountered during this study. The fieldwork was conducted from 8th of July 2018 to 31st August 2018, although, the purpose of the field work was to collect data for another topic due to unforeseen circumstances on the field, the author had to change course and made use some of the data collected in the field. Before going to the community, the author contacted the district council office in Mzimba district to ask for research permission. While visiting the office, the author demanded their cooperation and asked them to contribute some of their data for this research. From the district council, they provided the Socio-economic profile in Mzimba district. Before moving to the Champhira area, there was one meeting in the Department of

Agriculture Development Offices (DADO) in Mzimba to brief what this research is about to the district officers. After having this meeting, moved to Champhira area and chose one village.

All the time when the author attempted to visit or interview people, there were some schedule crash or people did not show up, hence before going out, the author communicated to the person to double-check for be ensuring the appointment or the person is around as much as possible. Due to lack of transportation and limited time and budget, to visit the village or extension staff's office, the author used a bicycle every time with a hill area. When the author and selected household for participatory observation discussed its schedule, because of a community event in the different area, the author was not able to conduct the observation for a long period.

The author decided to get a volunteer and research assistant that serve as a translator during all the individual interviews except for the front-line staffs interviewing. The author tried to find the research assistant who was not coming from Machilika Chirwa village to avoid biased to see the informants' response. The author did not need translator for my ethnography and observation data collection since the author can communicate and understand their language to some extent due to my years of working in the region. The interviews were recorded and transcribed. Before conducting all of interviews, an informed consent form was explained and signed up by the informants. If the informants were not able to read or write, the consent was accepted by oral confirmation to proceed.

Through this research process, the author learnt that the primary data has to take completely before going back to home and should consider more flexible alternative plan or way when the plan cannot proceed anymore.

3.6. Conclusion

This chapter illustrated the research procedures and how the author looked at the data or collecting the data. To use secondary data analysis is practical research same as primary data analysis to make the data valuable. Interviewing allows the researcher to understand the informants' details and research-related contents. Conducting participant observation has some advantages that the informant's live can be the source of the information as well as to solve human issues surrounding their lives. To adapt WPR approach is not about policy evaluation, but we could identify how problems are described in the specific policy and also, how the problem is constructed by the problem assumption, context or background. Although this research procedure did not proceed well, however, the author learnt the crucial points when the researcher conducts his/her data collection in the field.

Chapter 4 "Maize is Life" and It Consequences on FISP Response Food Insecurity

4.1. Introduction

This chapter centres on the analysis of data collected from the exploration of both the secondary and primary sources as well as the discussion of the findings to the research question that examine how the FISP intervention to reduce food insecurity, conceptualize 'food security' and what are its effects in terms of household's food production and consumption. To resolve the debate impasse that the FISP has generated, rather than taken side in the debate three sub-questions were proposed in chapter 1 of this study. 1) How does the FISP conceptualise food security?, 2) what policy options were considered and what explains the focus on maize in FISP? and 3) what are the effects of the policy at the local level on households' food production and consumption?.

The discussion of findings in this chapter is organized in subsection along the research questions for the purpose of clarity. While the WPR framework approach guides the analysis of the findings, the concepts of food security, vulnerability, nutrition security, and poverty will be explored to give meaning to the findings concurrently. The next section focuses on understanding what food security means to FISP intervention program while the next two sections discuss the policies that inform the birth of FISP, and the consequences on the poor farmer's production and consumption of food.

4.2 How does the FISP conceptualise food security?

4.2.1 Food Security means Availability and Stability of Surplus Maize Supply.

As mentioned already, FISP has started its implementation since 2005/06 up to now. The primary goal was to address increasing smallholder farmer accessibility, using improved agricultural inputs, boosting the incomes of the farmers through increased food and cash crop production to accomplish national and household food security. To understand the FISP conceptualisation of food security, the first step is to critically examine how the problem was identified in the policy of FISP as suggested by Bacchi (2009) in the WPR approach framework. The findings of this study reveal that food security in Malawi from the FISP context is the availability of maize. Regardless of how we decide to interpret food security, the four pillars of food security that addresses concerns about availability, accessibility, utilisation, and stability are non-negotiable variables to be captured in the formulation of the policy (Silva, 2016:139).

For Silva, "food security is an encompassing concept that includes several dimensions: sufficiency, acceptability, safety, stability and nutritional quality (Silva et al., 2016:139). However, the analysis of the National Food Insecurity Response Plan (NFIRP) of 2015/ 2016 document revealed that the concern of government on the food security is the abundant availability of maize without

disruption in supply. However, critical assessment of the NFIRP shows that the attention of government was fixed on improving maize yields in the country as a result of maize deficit for the first time in 10 years that FISP has been established (GoM, 2015:5). For the Malawi government, the maize deficit is a crisis of food security, and the implication is that the moment FISP failed to generate maize surplus, then the scheme did not meet its core objective. "Even if the total food production is above the minimum food requirement, but maize supply is below the minimum food requirement, the nation is deemed to be food insecure" (MoAFS 2011: 16). Therefore, proposals and plans highlighted in the NFIRP document focus on required actions to be taken to avoid humanitarian crisis because maize deficit means changes in the pattern in household food consumption. There were concerns about the productivity of those affected most especially the pregnant and lactating women that will be affected due to the reduction in the meal frequency (GoM, 2015: 5).

Without a doubt, the FSIP conceptualization of food security was flawed as it failed to capture the utilization pillar of food security that emphasized on adequate diet towards nutritional well-being (FAO 2006: 1). One does not need to have medical experience to understand that excessive consumption of a particular food item has consequences of an imbalanced diet. Although, maize has a substantial component of carbohydrates that offer energy and strength that is most needed in working for long hours on the farm. Nevertheless, there are serious consequences attached to predominant maize meal in terms of deficiency in required nutrients for good health (The Malawi Project, 2015). Unfortunately, the "FISP subsidies do not encourage crop diversification that could result in a year-round harvest season of various crops. (Currier and Reynolds, 2014:7), a clear explanation to why there is food insecurity because if nature negatively affects maize field, there is no other alternative food.

As discussed earlier in chapter two of this study, claiming to be food secure because one is having access to available food is not tantamount to food security because it depends on what type of food is eating and the component of such food. The consequences of malnutrition are devastating, and it remains the most significant causal factor of child mortality. In Malawi, the rate of malnutrition continues to decline since 1992 that it recorded the best outcome (Ma-leta, 2006; UNICEF-Malawi, 2015). Available empirical data on the prevalence of malnutrition in Malawi shows that even in the years of plenty of maize production due to the FISP as demonstrated in Figure 4 below, the Figure 3 on malnutrition is evidential enough to assert that FISP has never met up with the acceptable international conceptualisation of food security.

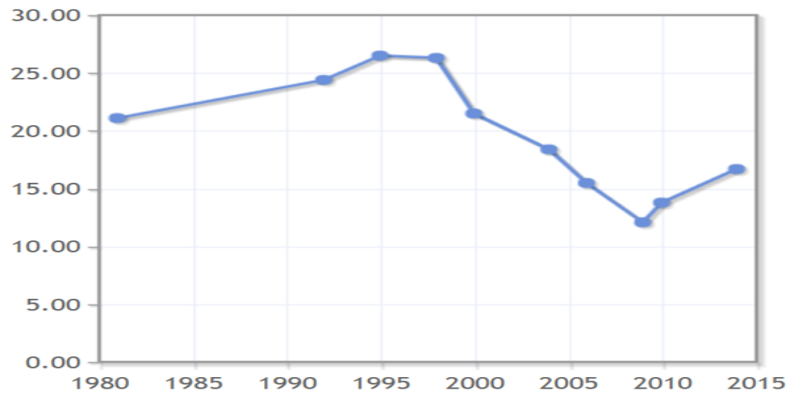


Figure 3: Prevalence of underweight, weight for age (% of children under 5) due to Malnutrition.

Source: Index Mundi (2017)

Apparently, in Malawi, the availability of maize which is the main goal of FISP did not stop about 46% of children that are below the age of five to suffer from stunted growth are stunted due to the micronutrient deficiencies that are predominant in the Malawian diet (UNICEF-Malawi, 2015:3).

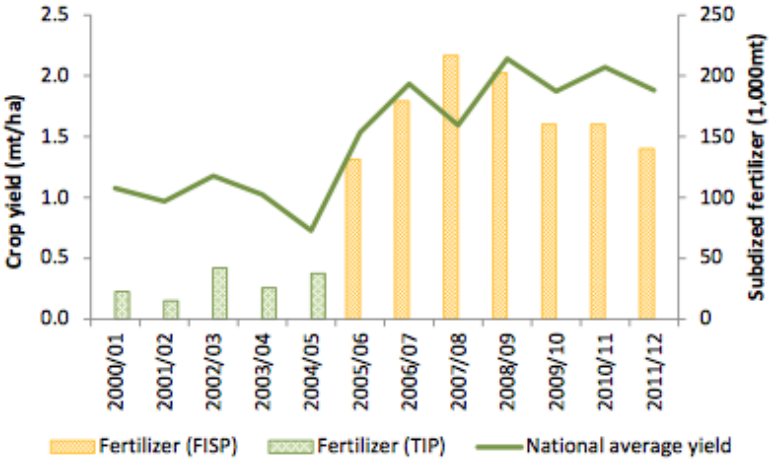


Figure4: Maize Yields and Subsidized Fertilizers.

Source: Pauw and Thurlow (2014:1)

Further evidence shows that the availability of maize does not translate to food security as conceptualized by the design of FISP because approximately 60% of children under five years as well as 57% of non-pregnant women in Malawi exhibited deficiency of Vitamin A (UNICEF-Malawi, 2015:3). The lack of Vitamin A expose children to serious danger of various diseases as the deficiency lower their immunity to disease which makes their survival of serious illness highly unlikely (Maleta, 2006:5-6). Therefore, the utilization pillar of food security is as important as other pillars of food security.

Apart from failure of FISP intervention to conceptualise food security along the utilization pillar, the accessibility pillar was largely ignored even though on

paper the objectives are to ensure that poor farmers have access to improved seedlings and fertilizers to boost production so that they can have access to food. Many farmers were excluded from the benefiting from FISP because they were considered as unproductive poor. Although, in the early years of FISP, the selection criteria to benefits from the fertilizer voucher was based on the status of individual vulnerability. However, "by accounting for vulnerability, food security policies and programs broaden their efforts from addressing current constraints to food consumption, to include actions that also address future threats to food security" (FAO, 2008:2). Unfortunately, criterial as changes in recent years as well as how the scheme determine who is vulnerable who is not vulnerbale. One thing is for sure in the selection of poor farmers that can access FISP currently exclude a significant number of farmers that needs help.

According to Lunduka et al., (2013), the targeted farmers had to be smallholders and/or female-headed households that lack financial capability but must be a landowner with required labour and skills to use the subsidized inputs. This has led to FISP fixed on rural middle-income or higher-income households at the detriment of poor productive farmers (Fisher and Kandiwa, 2014). For the fact that some of the qualified farmers that got the FISP voucher sell their voucher in a trade by barter with other farmers in exchange for cash for the purpose procuring basic needs such as food (Chibwana et al., 2012) is evident that the analysis of the FISP conceptualization of food security is highly germane in the discourse of the crisis of food insecurity that is ravaging Malawi. This implies that the FISP is not targeting farmers that are in chronic or absolute poverty.

4.3. Policy Options that Inform FISP Focus on Maize

According to Bacchi (2009:9-10) to have a clear understanding how the representation of the problem come about, it is essential first to understand what specific decisions contribute to identifying the problem representations looking at the role of government mechanism from the historical perspective in representing the problem in policies formulation. Therefore, this study examines the previous policies of government before the emergence of FISP to address food security as well as policies that came after the implementation of FISP that reinforced the FISP conceptualisation of food security. Although the history of policies that influenced the representation of food security problem as conceptualized.

4.3.1 Malawi's Social Action Fund programme (MASAF)

To address food security in Malawi, with loans from the World Bank, the Malawi government established the Malawi Social Action Fund (MASAF) in 1996 to empower local communities. The World Bank loan was part of the poverty alleviation program of the government designed to stimulate "employment creation and provide social and economic infrastructure" (Kishin-do, 2001:303). The Malawi Social Action Fund (MASAF) operated Public Works Programs (PWP) and Food for Work Program (FWP) operated by NGOs in collaboration with the WFP. PWP aims to provide short-term labour activities to the poor household to enhance their food security (Beegle et al. 2014: 3). The program

implementation was done in a decentralized manner, and funds allocation to all the 31 districts in Malawi were based on the government estimation of food security and the population of each district, although the distribution was done in collaboration with WFP.

The food security objective of MASAF was addressed from two strands, 1) taking care of the consumption on the immediate and, 2) to promote on a medium-term food security through "investments in fertilizer, which is intended to increase yields in the subsequent season" (Beegle et al., 2017:2). This was done through the synchronization of fertilizer coupons availability in planting seasons and public works employment off planting seasons. Among all the nations that fall under the classification of low- and middle-income countries, concerning population coverage, Malawi's PWP was ranked in the fourth position (Beegle et al., 2017:2-3). While there were earlier years of success, the PWP did not only failed to improve food security in 2012-2013 but also have no significant impact on the increase in fertilizer usage.

4.3.2. Malawi Poverty Reduction Strategy (MPRS)

MPRS was launched in 2002, implemented by Heavily Indebted Poor Country (HIPC) process of the World Bank (Sahley et al. 2005: 18). MPRS focus is also on agriculture that prioritized provisions of various services that enabling conditions that facilitates an increase in income for the farmers. This involves a series of intervention programs such as "availability of inputs through improved production technologies and value addition to marketing" (GoM 2002: xii). The MPRS was designed along four pillars, but the one that addresses food security directly from the goals of MPRS was the targeted nutrition programmes, the supply of agricultural inputs, public works programmes, and disaster mitigation (Cromwell et al., 2005:5-6). The targeted inputs for agriculture aimed at enhancing the productivity of the poor farmers that are cash constrained while the poor that are land constrained poor will become productive by getting employed public. The nutrition strand of the policy focuses on how to ensure that malnourished children, pregnant and lactating mothers get the required assistance they need (IMF, 2002: xiv).

4.3.3. A New Agricultural Policy

In 2005, just the same year that FISP was established A Strategic Agenda for Addressing Economic Development and Food Security in Malawi was initiated. This strategy tried to achieve "to promote and facilitate agricultural productivity to ensure food security, increased incomes and creation of employment opportunities through the sustainable management and utilization of natural resources, adaptive research and effective extension delivery system, promotion of value-addition and agribusiness and irrigation development" (MoA 2005: 3). The core agenda of the Ministry of Agriculture with this policy is to transform Malawi from a net importer of the staple such as maize to not only a self-sufficiency country but also to become an exporting nation to other countries (MoA 2005: 9), therefore, leading to the robust drive to promote maize as a cash crop (MoA 2005: 10) with short-term strategies. The strategies include "a) Liberalisation for maize market to increase competition, b) Expanding grain reserves to be stocked sufficient maize to export, and c) Liberalising land for agricultural estate" (MoA

2005: 12). These strategies were implemented through the introduction of targeted subsidy for fertilizers with priority on maize, by promoting the use of OPV and hybrid maize seeds, and the promotion of the production of organic manure as well as agroforestry technologies that can advance seed production of all crops (MoA 2005: 16).

4.3.4. Agriculture Sector Wide Approach (ASWAp), Sustainable Agricultural Production Programme (SAPP), and Smallholder Irrigation and Value Addition Project (SIVAP)

However, there are also significant policies that were initiated after the establishment of FISP and one of such policies is the Agriculture Sector Wide Approach (ASWAp) established to run for four years, between 2011 and 2015. The main focus of the ASWAp was to achieve agricultural growth and poverty reduction in line with the Malawi Growth and Development Strategy (MoAFS, 2011:11-13). For ASWAp, food security and nutrition security is a core priority area which focuses on increasing maize productivity, crop production diversification, and decreasing post-harvest damages (MoAFS, 2011:12). The long-term objective of the Malawi government with this program is to achieve a significant reduction in the severity of all forms of malnutrition (acute and chronic malnutrition, and micronutrient deficiency disorders) that is a predominant phenomenon in the country (MoAFS, 2011:12).

However, a year after ASWAp was established, Sustainable Agricultural Production Programme (SAPP) was established in 2012 and is expected to run till 2020 in six selected districts of the country. SAPP was designed in alignment with ASWAp to hasten the realization of its objective. SAPP is to "contribute the reduction of poverty and improved food security among the rural population, and the specific objective is to achieve a viable and sustainable smallholder agricultural sector employing good agricultural practices" (GoM 2016: 95). The programme target smallholder farmers that have the potentials of achieving household food security but find it difficult to produce the surplus that is required for market by receiving financial and technical support including necessary inputs such as fertilizers and seeds to increase their crop yield.

Formulated in 2013, Smallholder Irrigation and Value Addition Project (SIVAP) was designed to tackle food security in addition to increasing smallholder farmers income levels through the escalation of irrigation, crop diversification, value addition and capacity building. The program designed to run from 2013 to 2018 with an estimated cost of $922,400.00 in the selected 7 districts that fall under the green belt zone that has been prioritized for agricultural investments. In all the policies to address food insecurity in Malawi, pre and post FISP, SIVAP is the only intervention program that the core objective is to promote seed selection and development of pigeon peas, cassava, soybeans, rice, groundnuts without focusing on maize among farmers (GoM 2016: 94).

4.3.5. National Agriculture Policy (NAP)

From the analysis of all the Malawi policy on food security, the National Agricultural Policy (NAP) initiated in 2016 is more recent that attempt to close the loopholes in previous policies on agriculture that have not yielded result to

the realization of food security in Malawi. Although, NAP is a policy approach that creates a shift from smallholder agriculture production to a more market-oriented and specialized production, the design of NAP was coined in a way that closely aligns with priority areas of vision 2020. NAP has 8 priority areas, and one of the priority areas is food and nutrition security (MoAIWD 2016: 12). The focus of the NAP priority area 5 is to promote and foster production and utilisation of various nutritious foods consistent with the National Nutrition Policy and Strategic Plan (NNPSP) couple with sufficient access and market supply of different and nutritious foods. The NAP emphasized the coordination of "investments and sub-sectoral policies and strategies that help improve the nation's nutritional status and promote healthy diets. Promote bio-fortification and fortification of major food staples" (MoAIWD2016: 16-17). From the analysis of the NAP document it was clear that from the food security context, more attention was given to the nutrition security of Malawians.

4.4 "Chimanga Ndi Moyo": Maize is Life

From the discussion so far, it was clear that food security in Malawi means availability of maize as it was represented in the FISP which itself is a product of previous policies that considered maize availability with constant supply as a necessity to realized food security. To understand dogmatic approach of the Malawi government in prioritising the surplus availability of maize and making it accessible to the poor without interruption supply as the crux of FISP to address food insecurity in Malawi can be best understood by step 2 of WRP approach that interrogates traditions that accentuate the representation of a problem. In particular, the traditions that are 'deep-seated cultural premises' in the problem representations that contributed to shaping the policies formulation or design to address a problem Bacchi (2009: 5). From the findings of this study to all Malawians, "Maize is life", to the extent that the assessment of government performance in food security by the public is dependent or the overabundant of maize in supply (MoAFS 2010: 16).

The explanation of such long traditional influence on policy formulation is that maize is so vital to the Malawian diet "that the saying exists "chimanga ndi Moyo" or "maize is life" (Kahlon et al., 2018:2) as it covers about 80 to 90% of the entire diet of Malawians. As demonstrated in Table 3 below, maize dictates the consumed calories on the per capita level. Notwithstanding of impact on the production of maize, FISP subsidies were designed to sustain the dominance of maize in the dietary of Malawians. This is because the staple food of Malawians, nsima[4], is a product of cornmeal that is majorly present in each meal per day (Currier & Reynolds, 2014:6). According to Smale (1995), "chimanga ndi moyo and the ideal of producing enough maize to meet household food needs informs everyone's actions and rationales for their actions before, during and after the maize harvest" (Smale, 1995:820).

[4] Thick dish made from maize flour and water eaten as staple food in some part of southern and eastern Africa. The flour can be cooked into porridge for breakfast too. Nshima is served with side dishes such as greens, beans, egg, meat or fish.

Table 3: Per capita consumed calories by sources

Commodity	Consumption Quantity [kcal/capita/day]
Maize	1158
Potatoes	195
Cassava	135
Sugar	124
Pulses, Others	95

Source: Currier & Reynolds (2014:6).

However, apart from the maize dominance in calories consumption in Malawi, the production of maize largely rests on 84% poor people in the areas that their livelihood relies on subsistence agriculture (UN, 2015). The spike in importation rate of maize after severe shortage (UN 2015) is a proof that the government policies on agriculture and food security is informed by the narrative of *"Chimanga Ndi moyo"*. The narrative of "Maize is Life" is so potent to the extent that it influences the outcomes of election. Political parties, whether ruling party or the oppositions risk losing votes if their manifestoes did not reflect a comprehensive agenda on availability of maize in surplus (Chinsinga and Poulton, 2014:128-130).

Maize has always been the major determinant in in mobilizing for support base of the ruling government and those in opposition because the major measurement of a fail government in reducing hunger in the country have a long history with maize availability (Dionne & Horowitz, 2016: 217). This explain why the political leaders of Malawi despite the country long history of prevalent malnutrition in the country find it difficult to change direction in promoting diversification be investing hugely on other types of crops production that can guarantee food security. However, in the next section, we look at the practical consequences of the conceptualisation of food security as availability of maize in abundance on the local food production and consumption.

4.5 Food production and consumption at the local level

To design a better food security programme, it is necessary to know "who are malnourished, what they eat and why they are hungry" (Eicher and Staatz 1986: 226). Therefore, this section will contribute to add further aspects on how smallholder farmers stay with their food situations at the household level for the existed researches in Mzimba district.

4.5.1. The profile of Mzimba district

Mzimba district is located in northern part and the largest dimensions in Malawi (Appendix 1). The district has two cities, one is Mzimba Boma where most governmental district offices are gathered, and another one is Mzuzu City where is the 3rd biggest city by population, and it has national chains supermarket or depot as well as university. The population of the district was 727,931 and the number represented 5.5% of the country's population in 2008 (M'Mbelwa District Council 2018: 4). As the rainy season begins from November to April, the crop cultivation season also take place in the same time. The main crops are maize as food crop and tobacco as cash crop. Most part of the district relies on rain-fed cultivation (Appendix 2). In Mzimba district, its average size of household is 5.2 while its average of Malawi is 4.6, thus the district has larger size of it according to Socio-Economic Profile in Mzimba (M'Mbelwa District Council 2018:55).

Poverty rate in Mzimba district is above national rate as the below Figure 5. It describes that the district faces with limited basic needs. In the district development planning framework 2013-2018, the focus is on the food insecurity, most especially on food security level (M'Mbelwa District Council 2018 :322). The village where the author conducted interview and participatory observation was about 9km away from a small town which has a small franchised supermarket and one big open market. The village is consisted by 42 households, does not have household which has electricity and water tap access, therefore some use solar panel to generate electricity and borehole to get safe water.

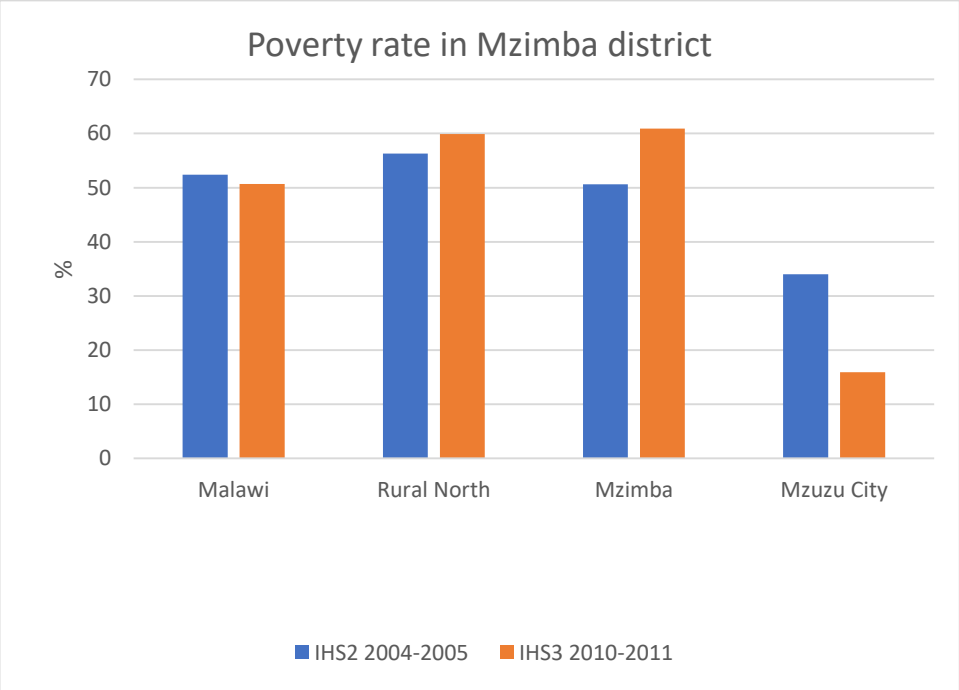


Figure 5: Poverty rate in Mzimba district
Source: Integrated Household Survey 2010-2011 (NSO 2012 :206).

4.5.2 Food production

All the households in the interview answered they grow maize for their own consumption as well as for selling. However, there were not so many households growing rice due to lack of irrigation scheme and access for its seed, but there was only one household that harvested rice.

> "One household showed me their freshly harvested rice (Picture 1), they had started grown it since January 2018. They received its seeds from their neighbours in different village and tried to grow it for their first time. Even though they do not have irrigation, they were able to harvest it. They taught me that they only applied fertilizer for the rice only once." (*Participatory observation field note*[5])

Picture 1: Harvested rice

Author's own pictures taken on 20th August 2018.

Compare to maize, the number of applying fertilizer is less for rice, therefore there is a potential for small farmers to grow rice as their staple food as well as cash crop. Also, the household is a good example to grow it with limited water resources that means there is possibility to harvest rice without irrigation.

The fieldwork was in dry season, hence the author was not able to see applying fertilizer for maize, however it was obvious that smallholder farmers needs to apply pesticides and fertilizer to vegetables too, not only for maize as quoted the fieldwork note below.

> "They put some empty pesticide bottles around the garden. There are some types of pesticides (Picture 2). It costs MK2,000 to MK3,500, one pack or bottle covers 1 acre and they have to give them to the crops every week. Moreover, they also have to give fertilizer to the crops. These situations explain that a lot of money go into the pesticides and fertilizers. According to the farmers, they sell tomatoes mainly from September to April, but still they can sell it on July or August even though the price of them are extremely low. For one pale of tomatoes is MK 500 to MK 2000 in this time. However,

[5] Participatory observation with C2 (Detail in the Interviewees List) at Z village on 18th August 2018.

in January and February, it goes up to MK 15000 to MK 18000 per one pale." (Picture 3) (Participatory observation field note6)

Picture 2: Pesticide for tomato.

Author's own pictures taken on 18th August 2018.

Compare to growing maize, growing vegetables give the farmers more frequent harvesting, especially those without their personal irrigation scheme. It means the farmers spend more money to buy the fertilizer for vegetables. Moreover, except one household, rest of households in the interviewing are growing tomato. Using the above information of the field note, if we calculate the fertilizer of tomato per a month might be minimum MK8, 000 and it costs a lot for smallholder farmers. Besides, the farmers just produce the same crops for whole year like tomato, however, they should think about their input costs and output or profit, as they could only get small amount of money even, they spend money for buying the same fertilizer. On the contrary, there are no subsidy or support program for agricultural input for tomato or any vegetables. If agricultural input subsidy program aims to achieve food security, it should be considered to supply fertilizer for vegetables as well since people do not eat staple food alone.

Picture 3: A pale of tomatoes

Author's own picture taken on 21st August 2018.

[6] Participatory observation with C2 (Detail in the Interviewees List) at Z village on 18th August 2018.

4.5.3 Food consumption

Remarkably, from the interview responses, people tend to spend more money in dry season like MK5000 per a week then MK3000 in rainy season per a week. (Figure 6)

Rainy Season	Number of Households
MK1,000	1
MK2,000	4
MK3,000	8
MK4,000	1
MK5,000	3
MK6.000	1
MK7,000	0
MK8,000	3
MK9,000	0
MK10,000	7
MK15,000	1
MK20,000	1
MK30,000	1

Figure 6: Budget for food in rainy season
Source: Interview in Machilika Chirwa (2018).

There are some assumptions that could be used in explaining the situation this situation. 1) people do not remember collect amount since they have not recorded their household book keeping, 2) people sometimes just give and take food or vegetable from their relatives or neighbourhood, and 3) in rainy season, although they do not have enough food, they tend to use their money for fertilizer and pay school fees first then spend rest of money for their food as almost every household answered their top priority of spending money is for fertilizer for the crops. (Figure 7)

Dry Season	Number of Households
MK2,000	3
MK3,000	4
MK4,000	3
MK5,000	9
MK6,000	3
MK7,000	3
MK8,000	3
MK9,000	0
MK10,000	4
MK20,000	1

Figure 7: Budget for food in dry season
Source: Interview in Machilika Chirwa (2018).

According to the interviews and the observations the households' stock their nshima (Picture 4 and 5) flour and relish at home, however, they do not stock so much ingredients for their breakfast such as sweet potatoes, pumpkins, gaiwa flour (main ingredient for porridge) and bread.

Picture 4: White nshima flour

Author's own picture taken on 18th August 2018.

Picture 5: White nshima and relishes

Author's own picture taken on 18th August 2018.

Besides, one of the biggest features is that their vegetable choices are limited as local availabilities. Those 3 households in the Table 4 chose rape, mustard and bean's leaves with onions and tomatoes. According to their eating habits, they do not normally eat nshima with tubers and roots; potatoes, sweet potatoes and pumpkins. Besides, most people harvest the same type of vegetables like tomatoes, onions, rapes and mustards, hence they get used to eat those vegetables rather than eating nshima with "new" vegetables such as peppers, carrots, eggplants, mushrooms, green pea and so on even though it could find at the market nearby. It can also be said they do not go shopping for food because they plant their own consumption crops by themselves, thus unless they face shortage of food, they do not buy vegetables or nshima flour.

Picture 6: Groundnuts flour and cooked a relish with the flour

Author's own pictures taken on 18th August 2018.

One more thing they get used to is that they use salt and cooking oil for their main seasoning to cook most relishes. If they cannot afford to buy the oil, they use pounded groundnuts flour instead. (Picture 6) This alternative seasoning is crucial for them to harvest the groundnuts to put flavour for their relish.

Table 4: Recipes of each household

Observation: C2	**20th August 2018**	**21st August 2018**	**22nd August 2018**
Breakfast (1 year and 2 months child)	Porridge (Gaiwa flour, egg, cooking oil and salt)	Rice Porridge (Gaiwa flour, cooking oil and sugar)	Porridge (Rice, milk powder, sugar and cooking oil)
Breakfast		Sweet potatoes	Sweet potatoes
Lunch	Grand mill nshima, Mustard (with tomatoes, onions and ground nuts flour)	Grand mill nshima, Rape (with tomatoes, onions, cooking oil and salt)	Grand mill nshima, Soya pieces (with tomatoes, onions and cooking oil)
4pm (1 year and 2months child)	None	Porridge (Gaiwa flour and salt)	None
Supper	Grand mill nshima, Fish (with tomtoes, onions, cooking oil and salt)	Grand mill nshima, Black-jack (with tomatoes, onions and ground nuts flour)	Grand mill nshima, Goat meat (with tomatoes, onions, cooking oil and salt)

Observation: E	**20th August 2018**	**21st August 2018**	**22nd August 2018**
Breakfast	Pumpkin, Sweet potatoes	Porridge (Gaiwa flour and egg)	None
Lunch	White nshima, Rape (with tomatoes, onions and ground nuts flour)	White nshima, Small fish (with tomatoes, onions, cooking oil and salt)	White nshima, Pumpkin leaves (with tomates, onions, cooking oil and salt)
Supper	White nshima, Mustard (with tomatoes, onions, cooking oil and salt)	White nshima, Bean's leaves (with tomatoes, onions and ground nuts flour)	White nshima, Rape (with tomatoes, onions, ground nuts flour and salt)

Observation: C6	**20th August 2018**	**21st August 2018**	**22nd August 2018**
Breakfast	Sweet potatoes, Tea (But C did not eat, just prepared for her family)	Bread, Tea	No breakfast (Because she went to Jenda)
Lunch	White nshima, Pumpkin leaves (with tomatoes, onions and ground nuts flour)	White nshima, Bean's leaves (with tomatoes, onions, cooking oil and salt)	White nshima, Small fish (with tomatoes, onions, cooking oil and salt)

Supper	White nshima, Rape (with tomatoes, onions, cooking oil and salt)	White nshima, Rats (with tomatoes, onions, cooking oil and salt)	White nshima, bean's leaves (with tomatoes, onions, cooking oil and salt)

Source: Own construction

However, from the observation within the three households and discussion during interview with various households, the idea of "maize is life" continue to dominate the public discourse because there is no access to alternative source of food and the government did not promote alternatives by spending heavily on maize subsidies rather than shifting attention to massive and aggressive crop diversification. Without crop diversification the maize is life narrative will soon become "*maize is malnutrition*".

4.6. Conclusion

This chapter has established the fact that maize it is the most important factor in the fabrics and existence of Malawi. Maize shape policies, political space as well the wellbeing of an individual. Understanding the space of maize in Malawi give a rare clue to how food security is understood in the context of Malawi which is different from the global context. While the global context of food security is the realisation of availability, accessibility, utilization, and stability, in Malawi, availability of maize is food security, constant supply of maize is food security, in fact, "maize is life" and there is a huge consequence for political leaders that attempt to depart from the long tradition of "Chimanga Ndi Moyo". A tradition that has been shaping the policy space since 1964. However, maize is life narrative needed to challenge as its consequences are severe malnutrition since 1992 that Malawi recorded their best record. Moreover, the focus on maize as food security for more than five decades has not to transform Malawi.

Chapter 5 Conclusion and Summary

This study focus is to unravel the understanding behind the competing debate concerning the failure and success of Malawi FISP saddled with the responsibility to reduce poverty and tackle food security crisis by promoting increase production in maize among the rank and file of smallholder farmers. Three main question were proposed to answer the main research question that seek to analyse how FISP intervention to reduce food insecurity conceptualize 'food security' and what are its effects in terms of household's food production and consumption. 1) How does the FISP conceptualize food security? 2) What policy options were considered and what explains the focus on maize in FISP? 3) What are the effects of the policy at the local level on households' food production and consumption? Through the application of the WPR approach to analyses data collected both from primary and secondary sources this study findings shows that the protracted debate around the FISP is unnecessary as the FISP conceptualization of FISP of food security is different from the theories and analysis that many previous studies have subjected FISP too.

First, the conceptualization of food security in Malawi context is maize security and maize availability. The FISP failed the test of the four pillars of food security, availability, accessibility, utilization, and stability. The concern FISP policy is to ensure that maize is available without any form of maize deficit and as result FISP was designed exclusively to promote maize production. Therefore, the utilization and accessibility pillar become immaterial to FISP since we all know consuming maize alone have nutritional negative consequences. Moreover, the poor farmers that deserves to be assisted have no opportunity from benefiting from the FISP scheme because the criterial of vulnerability and poverty favors those that are relatively poor or middle income but not those that are in Chronic and Absolute poverty. Yet the larger percentage of the Ministry of Agriculture Budget goes to FISP while other programs that can push the neglected farmers to improve their status from other social safety net programs suffered neglect

However, the exclusive focus on maize have history in Malawi government policies since independent. All the polices that were analyzed in this study except one focus exclusively of fertilizer subsidy on maize, the implication of this that FISP is nothing new and not a new policy but an expansion of previous polices in scale and funding. The question that came to mind was, then what the variables that are responsible for maize focus policies for decades despite long years of prevalent malnutrition. One would have expected to see a plethora of policies that promote crop diversification rather policy upon policy that continue to promote maize. The findings show that "Maze is Life" in Malawi, maize is food security, maize is politics, maize is vote, maize is everything and the performance of a government is measured on availability of maize. Maize made up of 90% of the calories consumptions of Malawian and political parties risk losing support based if they attempt to promote programs that will lessen the funding on maize production in favor of other staple foods.

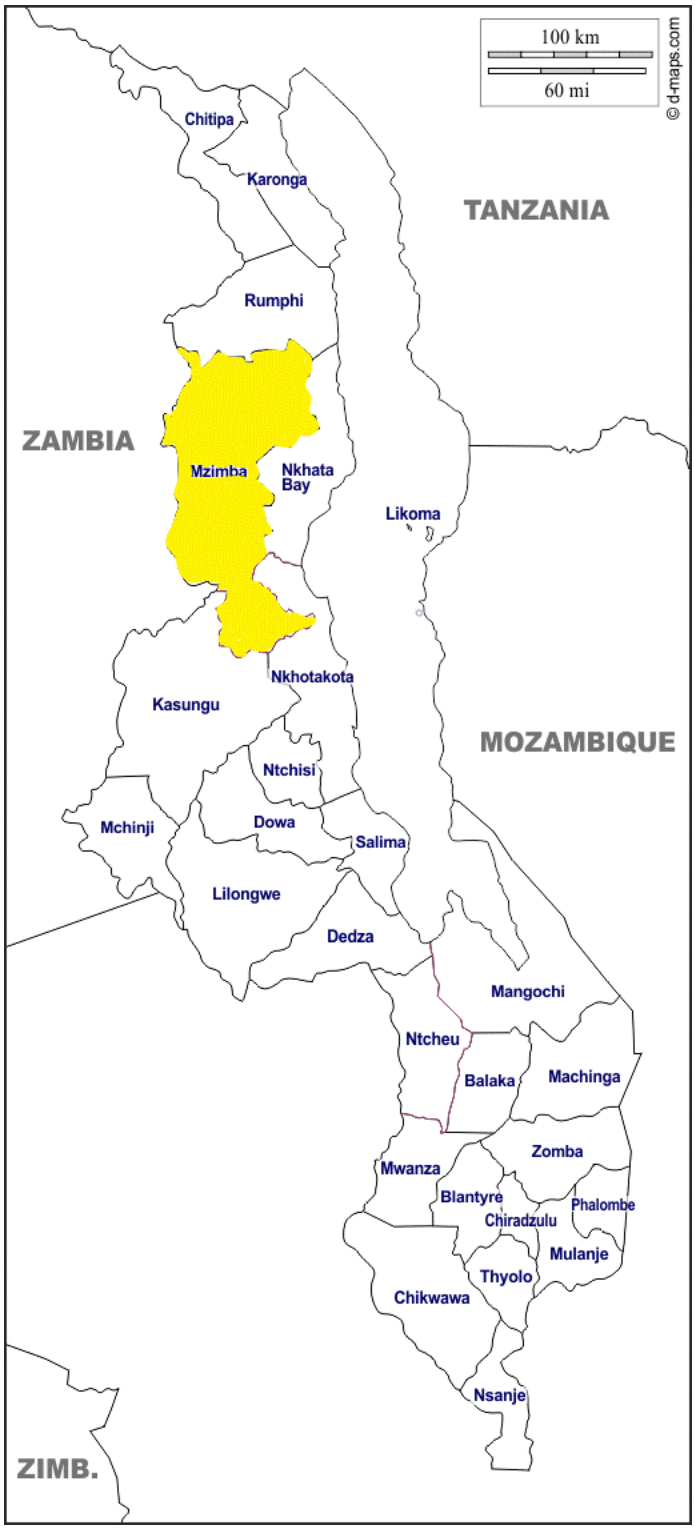
This have a serious consequence on the nutrition security of Malawian as it shapes their day to day food consumptions as well as food productionutilization

deal with nutrition security which requires to have food intake as well as health status. Moreover, it could say FISP is synonymous to including maize production, hence it does not encourage food diversity which needs to be concerned as nutrition security. Since people prefer white nshima which has less nutrition and it has high diet calories rather than more nutritious ingredient; grandmill or gaiwa flour.

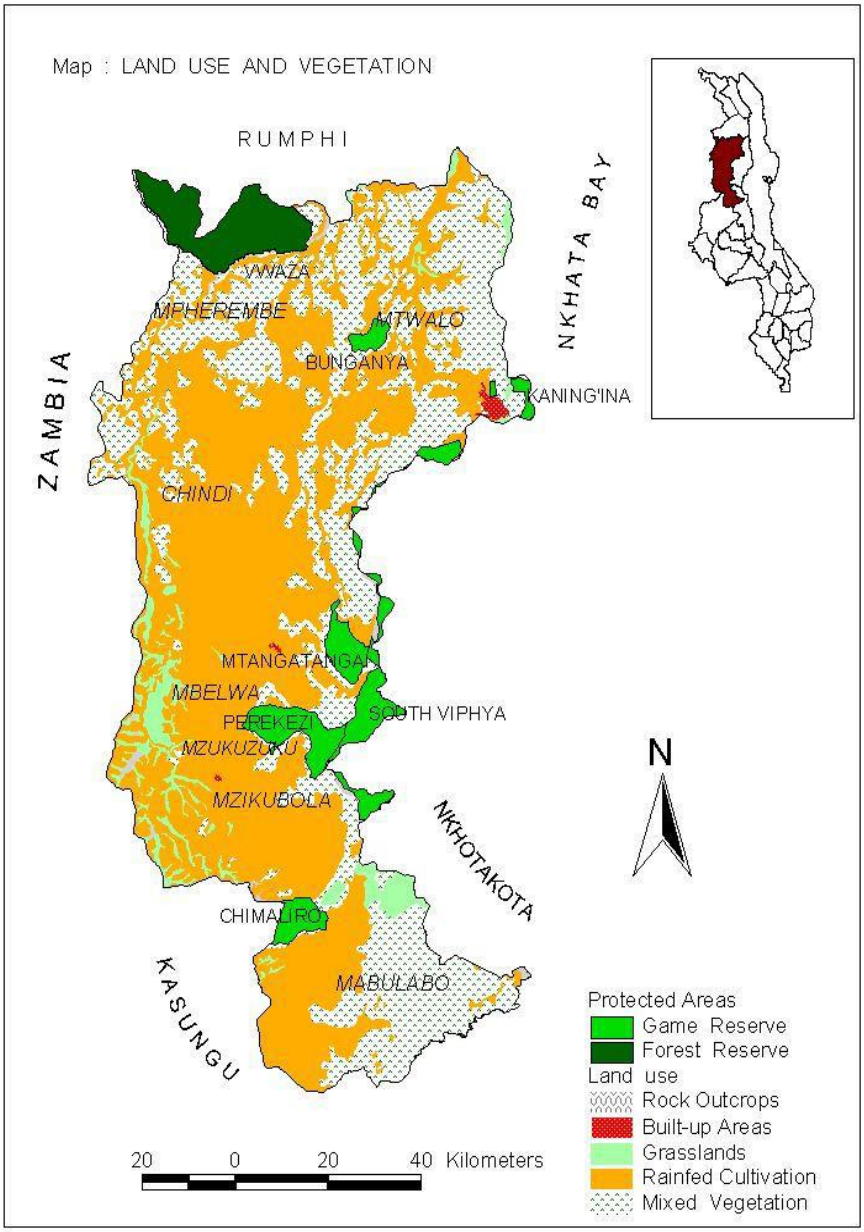
Then when we look at gross-root level of reality, people strongly believe maize is their breath of life by their food preferences and recipes. If they have abandoned of maize, they use it for every single meal which changes into nshima or porridge. In addition to this, their relishes are concerned as how it is suitable with nshima, that is also related to their limited planting when it comes to vegetables. That is why people always say such as "nshima is food", "without nshima, we feel hungry", or "I can't satisfy if there are no nshima" and they spend their money for fertilizers to maize and milling the maize all the time. However, this persistent cultural term hinders to be crop biodiversification or food diversity, and FISP is also encouraging this cultural term over many years. However, few people like the author found one household successes to harvest other staple food crop; rice, even though they do not have irrigation scheme, hence people have chance to change their food security in the household level and to coexist with the maize cultural term. Indeed, the household family seems to eat nutritious food compared to the other households of the participatory observation. Shifting from the existing cultural term to new perspective term of food is not short-term objective, but if people find a way, it gradually happens.

Appendices

Appendix 1: District Map



Appendix 2: Mzimba district land use and vegetation



Source: Socio-Economic Profile in Mzimba (2018 :76)

Appendix 3: Interviewees List

Front-line staffs				
Code	**Organization**	**Description**	**Sex**	**Date**
E1	Katete health center (3km away from Champhira EPA)	SHSA	M	26th/July 2018
E2	Jenda health center (The nearest public health center, 7km from Machilika Chirwa)	AEHO	M	30th/July 2018
E3	Jenda health center	HSA	M	1st/August 2018
E4	Jenda Health Center	SHSA	M	12th/August 2018
E5	Champhira EPA	AEDO	M	15th/August 2018
E6	Champhira EPA	AEDC	M	14th/August 2018

Community Leader				
Code	**Village**	**Sex**	**Description**	**Date**
V1	Machilika Chirwa	M	Village headman	13th/August 2018

Caregivers (All of them are from Machilika Chirwa)					
Code	**No of Household**	**Sex**	**Family composition**	**Description**	**Date**
C1	1	F	Husband, 7 children (Husband, wife, 5 children are staying at home)	Farmer Wife of the community leader	27th/July 2018
C2	2	F	Husband, 1 child	Farmer	30th/July 2018
C3	3	F	Husband, 4 children	Farmer	30th/July 2018
C4	Counted in the households list	F	Husband, 2 children	Farmer The wife of *I* (In the household interview list)	6th/August 2018
C5	4	F	Husband, 3 children	Farmer	6th/August 2018

C6	5	F	Husband, 4 children	Farmer	8th/August 2018
C7	6	F	Husband, 5 children	Farmer	8th/August 2018
C8	7	F	Husband, 2 children	Farmer	8th/August 2018
C9	8	F	Husband, 1 child	Farmer	10th/August 2018
C10	9	F	Husband, 2 children	Farmer	10th/August 2018
C11	10	F	Husband: in South Africa, 2 children	Farmer	13th/August 2018

Caregivers (From different village)					
Code	**Village**	**Sex**	**Family composition**	**Description**	**Date**
C12	Noah (10km away from Machilika Chirwa)	F	Husband, 3 children	Farmer Community Health Volunteer (CHV)	7th/August 2018
C13	Chiyahlula (5 km away from Machilika Chirwa)	F	Husband, 3 children	Farmer The leader of other nutrition program's promotor The promotor of other nutrition program Micro nutrient powder volunteer	7 th/August 2018
C14	Machilika Nyirenda (2 km away from Machilika Chirwa)	F	Husband, 5 children	Farmer	13th/August 2018

Household (All of them are from Z village)					
Code	**No of Household**	**Sex**	**Family composition (Age of children)**	**Description**	**Date**
A	1	F	Husband, Wife, 6 Children	Farmer	27th/July 2018
B		M		Farmer	

C	2	F	Husband, 6 children (Husband, wife, and 4 children are staying at home)	Farmer	27th/July 2018
D	3	F	Husband: in South Africa, 3 children	Farmer	30th/July 2018
E	4	F	5 Children (Husband, wife, and 3 children are staying at home)	Farmer	6th/August 2018
F		M		Farmer	
G	5	F	Husband, 3 children	Farmer	6th/August 2018
H	6	F	Husband, 3 children, 5 grandchildren (Wife, 1 child, and 5 grandchildren are staying at home. Husband and 2 children are staying in Suwe village; 5km away from Machilika Chirwa)	Farmer	6th/August 2018
I	7	M	Wife, 2 children	Farmer	6th/August 2018
J	8	F	Husband, 1 child	Farmer	8th/August 2018
K	9	F	No husband, 5 children	Farmer	8th/August 2018
L	10	F	No husband, 7 children	Farmer	8th/August 2018
M	11	M	Wife, 2 children	Farmer	8th/August 2018
N	12	F	No children, only wife and husband	Farmer	8th/August 2018
O	13	M	Wife, 4 children	・Farmer ・Community Communicator	10th/August 2018
P	14	F	No husband, 6 children, 1 grandchild, (Wife and 1 grandchild are staying at home)	Farmer	10th/August 2018
Q	15	F	Husband, 8 children, 1 grandchild, (Wife, husband, and a grandchild are staying at home)	Farmer	10th/August 2018
R	16	F	Husband, 5 children (Husband, wife, and 2 children are staying at home)	Farmer	10th/August 2018

S	17	F	Husband, 8 children, 3 grandchildren (Husband, wife, 3children, and 3grandchildren, are staying at home)	Farmer	10th/August 2018
T	18	F	Husband, No children	Farmer	10th/August 2018
U	19	F	No husband, 2 children	Farmer	10th/August 2018

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