

**ENGAGING WITH MEDIA AS A KNOWLEDGE RESOURCE FOR MAKING
SENSE OF CLIMATE CHANGE: A CASE STUDY OF THE FARMERS OF
NYANGA, ZIMBABWE**

A thesis submitted in partial fulfilment of the degree of

Master of Arts in Journalism and Media Studies

Of

Rhodes University

By

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December 2017

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ACKNOWLEDGEMENTS

I would like to thank God for guiding me through my academic work. I would also like to thank my family and friends for their support throughout this project. Special salutation to my brother Caleb for standing with me through the tough times. My sincere appreciation goes to my supervisor, Dr Jeanne du Toit, for guiding me throughout the writing process for this dissertation. Your patience, encouragement and continued support was profound. To all the staff members of the School of Journalism and Media Studies at Rhodes who contributed to my academic growth, I salute you.

DECLARATION RELATING TO PLAGIARISM

I hereby declare that this dissertation is my own work. I have acknowledged all other authors' ideas and referenced direct quotations from their work. I have not allowed anyone else to borrow or copy my work.

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ABSTRACT

This study explores how small-scale farmers in Nyanga, Zimbabwe engage with the media as a knowledge resource for achieving agricultural productivity, particularly in context of climate change. The study is contextualised by means of a literature review that maps out the history of agricultural productivity in Zimbabwe. It is argued that this history has been shaped by changes in both socio-economic context and climatic conditions. Both kinds of change impact on the degree to which small-scale farmers have access to knowledge that is of relevance to agricultural productivity. The study then examines the Zimbabwean media landscape, focusing on how history has shaped the way in which different media define their social purpose. This examination draws on Hallin and Mancini's 'models' of media systems as well as Christian et al's traditions of media practice. It is concluded that, due to the high level of conflict that has characterised Zimbabwean history, aspects of both the polarised pluralist and democratic corporatist models are present in its media landscape. The collaborative, monitorial and radical approaches to media also exist in contestation with each other. Indeed, the media is characterised by profound contestation around the conceptualisation of social purpose. Furthermore, international media is of particular significance as a resource of knowledge within the local media landscape. The empirical component of the study explores the implications for the extent to which media are likely to serve as valuable knowledge resources for small-scale farmers. This exploration is pursued by means of a case study of the experiences of three farmers in Nyanga who were granted farms as part of the government's land-reform programme. In context of episodic biographical interviews, the participants share their experience of becoming farmers and of managing their farms. Attention is paid to the challenges they face with regards to producing successful crops, both in context of socio-economic and climatic conditions. The study looks at the way in which participants draw on the media as a knowledge resource to help them overcome these challenges. The participants understand international media to be a more credible knowledge resource, but also refer to the need for local media which can provide them with knowledge of local relevance. In this context they identify an absence of collaborative, developmental media that engages with the unique challenges that they face in producing crops. It is concluded that the value of media for the farmers of Nyanga as a knowledge resource for making sense of climate change would only be achieved through the establishment of locally produced, participatory media that foregrounds the use of indigenous language.

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INTRODUCTION TO THESIS

I grew up in a farming community in Nyanga, a town in the Eastern Highlands of Zimbabwe. My older family members have told me that, in earlier decades, Nyanga and its surroundings received rainfall throughout the year. During my own lifetime, however, the weather patterns have not matched this description: the rains fall within a short space of time, from early December to mid or late January. In my observation, these changes have impacted on potato farming, which represents the main crop in the area. Dams and perennial streams that the farmers could previously rely on for irrigation are now drying up around September every year. As a result, the correct dates for planting crops have become unpredictable. There have, in addition, been outbreaks of fungal diseases that seem directly related to the changing rainfall patterns. These conditions have impacted on crop yields with many farmers producing half or even less than half of what they harvested in previous decades.

I believe that the changes in rainfall patterns that I have observed in Nyanga are representative of shifts in weather conditions that are taking place globally; they are, in other words, an example of climate change. I have drawn this conclusion based on my exposure to literature that points to evidence of profound shifts in global weather patterns. These include rising temperatures, changes in rainfall patterns and an increase in the frequency and severity of extreme weather (Wheeler & Braun, 2013; Shaw et al, 2010). It is noted, in such literature, that these changes pose threats to food and water security, to political and economic stability and to the livelihoods of communities across the globe (Shanahan et al 2013; Vermeulen et al, 2010).

It is also argued that farming communities such as that of Nyanga need to have access to global and local knowledge about climate change. They need, firstly, to have access to knowledge that will enable them to consider how changes in weather conditions in their own environments may form part of climate change. Secondly, they should have access to discussions that are taking place internationally and locally about the strategies that agricultural communities can adopt in order to respond to such changes (Schipper et al, 2014). This is understood to be of particular importance in the context of societies that are heavily dependent on agriculture, such as Zimbabwe (Mano & Nhemachena, 2007:6). However, many poor communities, particularly those with limited education and access to information, do not have such access. As a result, such communities often do not connect the changes in weather patterns that they are already experiencing with the global phenomenon

of climate change, nor are they aware of potential future changes in their environments (Musco & Staden, 2010: 37).

Commentators also note that many communities obtain their knowledge of debates around climate change from the media (Boykoff & Roberts, 2004:1; Carvalho, 2007:223). It is argued that the media therefore has an important role to play in facilitating access to knowledge about climate change. Such access should, in particular, enable different interest groups to make informed decisions about how to respond to changes in weather patterns that they observe in their environment (Boykoff, 2011:1;

Schipper et al, 2014). The media is understood, within such arguments, to be an essential means of facilitating communication about climate change between scientists, politicians, and the public (Moser & Dilling, 2007:162; Stamm et al, 2000:219).

In response to such arguments, this study explores the role that media can play in providing farmers in Zimbabwe with access to knowledge that assists them in making sense of the relevance of climate change to their experience of crop decline. The aim is, more particularly, to find out how subsistence farmers in the Nyanga area of Zimbabwe would evaluate the role that media plays in this respect. The study deals with farmers' evaluation of the role that such content plays in helping them to develop strategic responses to the threat that climate change may pose to their livelihood.

CHAPTER ONE: THE SOCIAL AND ENVIRONMENTAL CONTEXT

Introduction

This chapter establishes contextual terms of reference for this study. Section One maps out the socio-political context within which the study is located. It responds to the realisation that, in the Zimbabwean context, changes in agricultural practice (and phenomena such as crop decline) cannot be explained only in relation to climate change or even simply as it relates to weather patterns. In addition, it must be acknowledged that developments within the socio-political context have played an important role. With this argument in mind, this section presents a review of literature dealing with changes that have taken place over time in agriculture in Zimbabwe. It focuses on the relationship between these developments and the country's political and economic history.

Section Two deals with the environmental context of the study, with a particular focus on climate change. It contains a discussion of changes in weather patterns in Zimbabwe and their possible relationship to climate change. It focuses, as part of this, on debates about the relationship between such change and the decline of agricultural productivity in Zimbabwe. In this way, the discussion provides a backdrop against which the Nyanga farmers' understanding of factors impacting on their experience of crop decline can be assessed.

It should be noted that in this chapter the word 'natives' is used to refer to members of the African communities that were inhabitants of the geographical region under discussion before the establishment of Zimbabwe as an independent state. The study acknowledges that there are well-established and legitimate debates in which the political correctness of this term has been questioned. It is argued, for example, that the term forms part of a language formulated by British colonial governments in order to legitimise their administrative strategies (Mamdani, 1996). The term is nevertheless used in this dissertation for the sake of convenience. Similarly, the phrase 'white settlers' is used to refer to people of European descent who occupied land in this region.

Section One: The socio-political context

There is no doubt that the role that agriculture has come to play in Zimbabwean society has been profoundly shaped by the political and economic history of this country. Indeed, it is possible to conceptualise of this Zimbabwean history as a series of distinct periods, each characterised by specific changes in the nature of agricultural practice and its location within society.

The first period to be discussed falls in pre-colonial times, and starts in the early 16th century when Portuguese traders first appeared on the eastern side of the Zimbabwean region. During this time, the inhabitants of this region were predominantly Shona and Ndebele. Both groups survived on farming traditional cereal crops such as bulrush, finger millet and sorghum and, in addition, relied on hunting wild animals and gathering edible plants. Trade also played some part in their economy, as they bartered goods and services in exchange for grain and gold produced by other societies within the region (Ndlela & Robinson, 2007). However, with the arrival of Portuguese traders, this way of life started to change. The traders introduced the Shona and Ndebele people to maize and the majority of the people quickly adapted to the growing of this new crop as a useful addition to their stock of food (Tavuyanago et al, 2010:1; Zeleza, 1993). Maize was much less labour intensive and yielded more produce on a small piece of land compared to the traditional crops. The farming of maize therefore became the main source of food for such communities, replacing traditional crops, and the surplus was used for trade with the Portuguese (Green, 2013:10).

The next period can be described as that of colonial settlement and is understood in this study to stretch from the 1890s to the 1920s. It was precipitated by the arrival of the first European settlers, who came to this region from South Africa. These early settlers consisted primarily of soldiers hired by Cecil John Rhodes, sent to Zimbabwe in search of opportunities for mining. They soon came to the conclusion that minerals were not as abundant in the region as they had imagined, and shifted their focus to farming. As compensation for taking part in the mining expeditions and succeeding in the occupation of new land, Rhodes allocated his hired soldiers vast stretches of farming land. In the process of doing so, he displaced the natives from their fertile land into unproductive settlements (Mukanya, 1991; Ndlela 1981:70). Agriculture for the newly resettled white minority farming community was geared towards producing maize. By the early 1920's, maize produced on these farms had become the main crop grown in colonised region and agriculture stood as the basis of the economy. The unproductive land that was allocated to the native African majority was, at this time, termed 'native reserves'. The white settler community secured all the fertile soils while confining the natives to these agriculturally unproductive pieces of land.

After this, there is the period of the institutionalisation and consolidation of white rule, starting with the establishment of the self-governing colony of Southern Rhodesia in 1923 and ending with independence from Britain in 1965. Of particular significance to the history of agriculture in this period was the British colonial government's establishment of the Land Apportionment Act in 1930. The act reserved about 51% of agricultural land for the

use of white farmers, 30% for the natives in what was now termed 'African reserve areas' and the remaining 19% for commercial companies and the colonial government (Palmer, 1977). In this way, the government created a dualistic system of agriculture which gave exclusive rights to the best arable land to whites while confining the black majority to much less suitable areas for farming (Robinson & Ndlela, 2007:1; Masiiwa, 2004). The Land Apportionment Act made official the placement of the natives into far less productive land that was marginal, densely populated and had poor infrastructure. Natives who could demonstrate that they were able to produce crops and that they required more land to expand their farms were allowed to buy small pieces of land in places called Native Purchase Areas (NPAs). However, access to these areas remained limited, given that they constituted less than 8% of the total land available for agriculture countrywide (Ndlela & Robinson, 2007). In this way, the act was used as an instrument for preventing black farmers from expanding agricultural production and competing with the white settler farmers. In addition, it compelled the natives to abandon their own farms and to work, instead, on white settlers' farms or in the mines. The Rhodesian government thus succeeded in the impoverishment of the African peasant, and secured their dependence on white employment for survival (Ndlela, 1981:72). The main purpose of this arrangement is thought to have been the establishment of cheap labour and exploitable markets (Paradza,2010:1). The Land Apportionment Act therefore represents a landmark in the history of Zimbabwe and its agriculture. During this time, Southern Rhodesia established itself successfully as a key source of food for the region, through intensive agriculture practise. Agriculture also brought wealth to the white farming community through the establishment of tobacco crops. This was, however, an agricultural economy based on the alienation and exploitation of the local people (Ndlela,1981: 72; Robinson & Ndlela, 2007).

The years falling between 1965 and 1979 can be described as the period characterised by challenges to white supremacy. It is defined by both internal and external contestation of the governance of the Rhodesian state, as represented by armed struggle and economic sanctions. This period began with the establishment of the Rhodesian government under the leadership of Ian Smith, who declared independence from Britain as the colonial ruler. Over the next decade, there was increasing pressure on Smith's administration from the British government, the Commonwealth and the United Nations to return land to its rightful owners, and to establish majority rule. The government resisted and in response the international community imposed trade and investment sanctions on Rhodesia. This period was also characterised by the birth of African nationalist movements, who rose in arms against the

colonial government. The main thrust behind their struggle was the restoration of land to the black majority population. Regardless of these sanctions, the agricultural sector is said to have grown rapidly and diversified during this period. Such diversification was necessitated by the reduction of tobacco exporting which was hard hit by sanctions (Minter & Smidht, 1988:123; Munangagwa, 2011; Ndakaripa, 2013).

The period of Zimbabwe's early independence can be traced from 1980 to the late 1990's. In the first years of independence, the Zimbabwean government embarked on a land redistribution programme which involved the acquisition of land from white farmers on a 'willing buyer, willing seller' basis. The programme was designed to alleviate population pressure in the communal areas, increase peasants' access to fertile land, improve the livelihood of the poor and bring abandoned or under-utilised land to full production (Kinsey, 1999; Paradza, 2010:2). The government also extended support to local communities in order to enable them to establish successful farming ventures. In addition, they offered the farmers access to commercial credit and provided them with subsidised and eventually free agricultural resources (Paradza 2010). However, this programme was not successful; the large farms still remained in the hands of the whites who occupied them in the colonial era. For this reason, the land issue became increasingly topical in national debates about transformation and development in Zimbabwe. It was repeatedly pointed out that land had not been redistributed as per the ideals of the struggle for independence. From 1980 onwards, pressure kept mounting from interested parties over the need to address land disparities in the new political dispensation (Masiwa, 2004; Tshuma 1997; Marongwe, 2002; Moyo, 1995).

The period subsequent to this, which stretches from the late 1990s to 2017, can be described as that of escalating internal conflict. Discussions were held in the late 1990s to map out means of addressing the land issue. However it was only in 2000 that the ZANU PF-led government articulated a response to such pressure, when they lost a constitutional referendum and realised that they were losing political ground (Shaw, 2003; Scoones et al, 2011). In a bid to regain the support that was slipping into the hands of the opposition party, the Movement for Democratic Change (MDC), the government launched the 'Fast Track Land Reform' programme. The aim was to speed up the pace of land acquisition and resettlement (Utete, 2003). Land was distributed among war veterans who spearheaded the programme in order to address the disparities between the white minority and the native majority. Veterans who participated in this process took over white owned farms, often by violent means. They distributed the land amongst themselves as well as other ZANU PF supporters who added their names to the list of those who were interested in being granted

land (Mhandara et al, 2013; Ndlela and Robinson, 2000). The system of land allocation under the fast track programme was divided into a model for small-scale farmers and another for commercial farmers who produced at a large scale. This division was achieved through subdividing the extensive commercial farms that existed before the program (Madhuku, 2004; Masiwa, 2003; Scoones et al, 2011).

At the time of completion of this dissertation, there are some indications that the situation in Zimbabwe is again undergoing change. This is suggested by the resignation in November 2017 of President Robert Mugabe owing to the internal pressure by the army and by citizens. A new transitional president, Emmerson Mnangagwa, was sworn in on the 24th of November of this year. It is possible that these events may point to the emergence of a new period in Zimbabwean socio-economic history, in which relations of power will again shift in ways that may impact on agricultural history. However, in the view of the researcher, it is unlikely that these shifts will lead to dramatic change in the circumstances that exist within agriculture in Zimbabwe, particularly from the perspective of small-scale farmers. The political figures who have now taken control of the Zimbabwean government are members of the same political party that has held power in Zimbabwe since independence, and are invested in its policies and practices. It is therefore still valid, in context of this study, to engage with the contemporary moment as forming part of what has been called in this chapter a period of ongoing internal conflict.

When one considers these different periods in Zimbabwean history, it is possible to identify distinct shifts in the role that agriculture came to play both within the country's economy and more broadly in the Southern African region. During the pre-colonial period, agriculture already played a central part in the livelihoods of the inhabitants of the region. It was, however, only during the periods of colonial settlement and the consolidation of white rule (from the 1920s onwards) that commercial farming became an important part of the economy and agriculture became central to the economy of the emerging state. As we have seen, the success of this economy was grounded in the structured exploitation of black people, and the marginalisation of black farmers. From the mid 1960s to the 1980s, in the period of challenges to white supremacy, commercial farming remained a source of prosperity for the white minority. In the early years of independence, in 1980s and early 1990s, this situation continued; the commercial farms which were under the ownership of the white minority remained productive. It is in fact in the early years of independence that the country earned its status as the 'bread basket of the region' (Scoones et al, 2011:2; Sachikonye, 2002:1). It retained this status until the early 2000's, when the fast track land

distribution programme was launched. However, from 2000 to the present, Zimbabwe's agriculture sector has been in a state of decline (Ndlela & Robinson , 2013:14).

Commentators argue that there is a direct correlation between the launch of the fast track land reform programme and the deterioration of agriculture in Zimbabwe (World Bank, 2007, Scoones at al, 2011). Production is perceived to have declined dramatically, so that within the first five years of the new millennium, only between 30 and 55% of arable land was being cultivated (Moyo, 2004; FAO/WFP, 2007). During this period, Zimbabwe also failed to contribute its expected quota of export beef to the European Union (Richardson, 2005:2). The country's status thus soon shifted from that of provider of food products to the region and beyond to that of a food importer. It was observed that from 2001 onwards, the country had to import maize to meet its population's nutritional requirements (Moyo, 2004). By 2008, maize plantations had reduced from 850.000 to 500.000 hectares, soya plantations decimated from 220.000 to 60.000 hectares and tobacco from 180.000 to 60.000 hectares (World Bank, 2007). The amount of land being utilised for agriculture has continued to shrink since this time, so that food production came to operate at below subsistence level (Mudzonga & Chigwada, 2009: 2).

It is generally argued that there are a range of factors that impacted on the decline in agricultural production in Zimbabwe. One important factor is thought to be the replacement, in context of the land distribution programme, of experienced commercial farmers with less experienced smallholders who were geared towards subsistence farming (Zikhali, 2008:2). Another is the fact that the new farmers often had limited access to farming implements and were faced, in particular, with a shortage of tractors and draught power (Brown et al, 2012). Many farmers were unable to obtain financial assistance from commercial sources due to a lack of tenure security. Financial institutions would not offer loans to new farmers due to the violent means by which land had been acquired. The resettled farmers did not have title deeds for their acquired land, and this has been cited as the reason why banks and other financial institutions would not offer them credit facilities (Richardson, 2005:2). As a result, no financial support has been offered to the newly established farmers except by government. One exception to this rule is represented by enterprises such as tobacco companies that provide farmers with financing for particular products. In the early 2000s, the state withdrew all its support to smallholder farmers for agricultural resources due to the weakening economy. Because these farmers were also unable to secure private finance, most of them became indebted (Fowler & Nelson, 2011:10).

Due to the sharp decrease in commercial agriculture, the country also experienced an acute shortage of foreign currency and this made it impossible to secure a constant supply of the fertilisers and chemicals (Richardson 2005:5). The destruction of the established commercial farms also deprived smallholder farmers of employment that they had depended upon in the past to raise financial resources for their own farming ventures. The smallholders would seek employment in the commercial farms and use the proceeds to purchase resources for their small pieces of land. Without such assistance, production decreased (Zikhali, 2008; Brown et al, 2012).

It has been pointed out, however, that the decline in agriculture cannot purely be explained in context of the land-distribution programme. Some factors impacting on the decline of agriculture can be traced back to social events that precede this programme. In particular, there is the fact that agricultural production slowed down due to a decrease in soil fertility which resulted from government policies from the period before independence. As we have seen, from the early twentieth century onwards, black farmers were forced off productive land and given communal areas on which to cultivate crops. These areas have been over-used for long periods, so that soil nutrients became depleted. When the natural soil fertility declined in this way, hybrid seeds and fertilisers were introduced. These resources were inaccessible to many farmers because they required large sums of money. Most farmers therefore had to scale down their production to a more manageable size (Masiiwa, 2004).

In addition, from the year 2000 onwards, Zimbabwe experienced an economic meltdown that was characterised by a swiftly rising inflation rate. Agriculture was faced with operational and market challenges which included escalating inflation rates and deterioration of the national currency (Richardson, 2005:3). The farmers' problems were doubled by the government's introduction of marketing and pricing controls which forced them to sell their products below production cost. Price controls were introduced to curb the possibility of social unrest caused by rising inflation in the early 2000s (Mhandara et al, 2013:11). The controlled prices of farm products made it impossible for the farmers to catch up with the rising costs of inputs and implements (Richardson, 2005). There is no doubt that the way in which the land-distribution programme was facilitated in Zimbabwe played a central role in the decline of agricultural productivity in this country. One should, however, be cautious of arguing that the land redistribution programme is solely responsible for such decline. There are, indeed, a range of complex socio-economic and political factors that have contributed to this situation.

In context of the purpose of this study, it is also important to note that a central theme that recurs within each of the periods discussed above has to do with knowledge of agriculture. More particularly, it is possible to trace a relationship between the history of such knowledge and the history of the appropriation of land. In the pre-colonial period, we see that early traders introduced knowledge about new kinds of crops, which impacted on local agricultural practices. In the period of early colonisation, white settlers again brought with them their own knowledge of farming and through this transformed agricultural practice in the region. In the period of the institutionalisation of colonisation, the white farming community consolidated their appropriation of land by establishing a successful agricultural industry which depended on their expertise as farmers. After independence, access to such expertise posed a key challenge to the Zimbabwean government, within their attempts to facilitate land reform. Agricultural production declined at least partly because ownership of land had passed from farmers with knowledge of the established approach to commercial agriculture to those who necessarily lacked access to such expertise.

The identification of this relationship between knowledge of agriculture and ownership of land has informed the design of the empirical component of this study, as described in subsequent chapters of this dissertation. It is understood to represent a key terms of reference for the examination of the role that access to media as a knowledge resource plays in the research participants' experience of farming generally, and of crop decline in particular.

Section Two: The environmental context

2.1 Climate change as a global phenomenon

There is a growing consensus amongst scientists that climate change represents a key threat to the welfare of humankind in the twenty first century (IPCC, 2007; Moss et al, 2010). The term 'climate change' refers to extreme shifts in weather patterns that fundamentally alter the conditions that exist within a particular environment. Such change is understood to be so radical and long-term that it often makes these environments inhospitable to local plant and animal life, which cannot adapt to the new conditions. Climate change is understood to be impacting generally on our planet, although this may be more acutely apparent in particular regions. Within such spaces it can be observed in an increase in seasonal dry spells, prolonged droughts, decrease in seasonal rainfall, erratic rainfall patterns and floods. Commentators note that these changing weather patterns are affecting the quality of life and

threatening the livelihoods of more than three quarters of the world's population (Moss et al, 2010; IPCC, 2007).

Experts propose that a central factor leading to climate change is global warming (Shanahan, 2013, 15; Pearce, 2016; IPCC, 2007). This phenomenon is represented by a rise in temperature of climates systems across the planet, both on land and sea. The simplest evidence of global warming comes from thermometer records, which show that the last thirty years in world history have been the warmest period in more than 800 years. Commentators note that global warming is leading to decreasing ice covers and rising sea levels (Pearce, 2016; IPCC, 2007).

Scientific evidence indicates that global warming is caused by human activity that increases the amount of greenhouse gases in the atmosphere, particularly carbon dioxide. This gas absorbs heat emitted by the earth's surface, which leads to an increased amount of heat being trapped in the atmosphere. Commentators point out that, from the industrial revolution onwards, there has been an increase in carbon dioxide resulting from the burning of fossil fuels. This has led to a 40% rise in the presence of such gasses in the earth's atmosphere, and more than half of this increase has occurred in the last half century. It has been reiterated that continued production of these gases will intensify climate change, leading to further increases in global temperatures and long-term changes in regional climates.

Commentators note that there is an important distinction to be made between the term 'climate change' and 'climate variability'. The latter term refers to the extent to which weather patterns divert from the long-term average within a particular environment (Shanahan 2013:14, Bates et al in IPCC, 2007). Variability can for example be identified in delays in the expected onset of rainy seasons, an increased unpredictability in rainfalls patterns and escalating droughts. It is argued that key drivers of climate variability are the El Niño and La Niña events. These are shifts of warm, tropical Pacific Ocean currents that affect atmospheric temperatures. Climate variability is also believed to be driven by volcanic eruptions and sunspots. However, unlike climate change, such variability manifests for a season or a number of years, after which weather patterns return to normal. The history of debate about the existence of climate change has been centrally concerned with whether recent shifts in weather patterns across the world are evidence of climate change or variability.

The weather phenomenon associated both with climate change and variability that is of particular relevance to this study is that of drought. Scholars have defined drought as a reduction in the amount of precipitation received over an extended period of time, often for

more than one season (Wilhite et al, 2000; Wilhite, Hays & Knutson, 2005). It occurs in all climatic regimes, in high- as well as low rainfall areas and is described as a temporary variation in weather patterns. This is in contrast to aridity, which is understood to be a permanent feature of the climate restricted to low rainfall areas (Wilhite, Hays & Knutson, 2005; La Red, O.S.S.O., ISDR, 2002). Drought is generally understood to be a normal recurring feature of climate variability. However, within the current context, it has become increasingly important to consider whether deviations in rainfall patterns are indicative of drought or whether they point to climate change.

For these reasons, an inherent aspect of society's response to climate change is represented by uncertainty about how to read changes in weather patterns. Indeed, climate change as a global phenomenon has been strongly linked by commentators to a growth in such uncertainty. It is noted that across the world, people have become less able to interpret the changes in weather patterns that they observe around them based on shared understanding (Painter, 2013:41; Moser, 2010:37). Participants in public debate on the topic bring widely differing perspectives and interests to the discussion and for this reason the credibility of knowledge about the environment is constantly challenged.

This discussion can be seen to have important implications for the approach that should be adopted to the empirical component of this study. As noted already, this research is concerned with how farmers in Nyanga make sense of changing weather patterns in their environment, in relation to the information resources available to them through media. Their experience of doing so may be better understood when it is read against the growing uncertainty, described above, about the credibility of scientific knowledge about climate change.

2.2 Climate change in Zimbabwe

Commentators now generally agree that climate change is making an impact on the Zimbabwean environment. It has been observed that the country has been experiencing droughts after every ten-year interval since 1982. The rate of occurrence has increased in the 21st century, so that now almost every season is characterised by a 'dry spell'. Drought is experienced every two to three years (Mazvimavi et al, 2007; Mhandara et al, 2013; Mutambanengwe et al, 2012). Rainfall patterns have become unpredictable and a recurring delay in the onset of the summer rains has been observed throughout the country. When the rains eventually fall, they have become concentrated within a short period of time. In recent history, Zimbabwe has also been struck by two prominent cyclones – Cyclone Eline and

Cyclone Japhet in 2000 and 2003 respectively. These cyclones caused severe floods in low-lying areas in Zimbabwe such as Muzarabani in the Zambezi valley. The increase in the incidence of both drought and cyclones are generally thought to be the result of climate change (Mhandara et al, 2013; Chaguta,2010; FAO, 2008).

Commentators argue that the shifts in weather patterns associated with climate change are impacting severely on agricultural practice in Zimbabwe, and on people staying in regions that are dependent on agriculture (Mugandani et al, 2012; Mutasa, 2008, Brown et al, 2012). Zimbabwe, like most sub-Saharan countries, survives on rain-fed agriculture, and for this reason agriculture in this region is understood to be particularly vulnerable to climate change (Chaguta, 2010). Indeed, it has been observed that Zimbabwe's agro-ecological zones (AEZ) are shifting drastically (Mhandara et al, 2013). The country's two main food producing regions, referred to as 'region II' and 'region III', have shrunk significantly. Agriculture in Region II is said to have been decimated by 49%, while farming in region III has shrunk by 14%. There has also been an expansion of the dry regions IV and V by 5.6% and 22.6% respectively (Mugandani et al, 2012:365- 367). This decline in crop productivity is impacting severely on employment in the agricultural sector, and also on the contribution this sector can make to the national Gross Domestic Product (Kudejira, 2008). This impact is felt most acutely by smallholder farmers, because they are particularly reliant on rain-fed agriculture and have a low capacity to adapt to changes in rainfall patterns (Mhandara et al, 2013).

Conclusion

It would seem, then, that it is not only socio-economic history, as described in Section One that has impacted on agricultural productivity in Zimbabwe. Of equal importance are the profound changes in weather patterns that are described above. This realisation adds a further term of reference to the analysis, in this study, of the role that access to credible knowledge is playing in relation to agricultural productivity in this country. In Section One we saw that knowledge about agriculture has been of central importance to the decline of such productivity. We can now conclude, from the discussion in Section Two, that knowledge about weather patterns and growing uncertainty about the credibility of such knowledge in context of climate change is of equal importance.

CHAPTER TWO: THE MEDIA AS CONTEXT

The chapter deals with the way that Zimbabwean media is likely to engage with the contextual changes mapped out in Chapter One. In order to establish a backdrop to this examination, the chapter presents a discussion of the development of different media sectors in this country and how these histories have shaped the current media landscape. The aim of this discussion is to identify shared understandings that have become established within this landscape regarding the role that media should play in Zimbabwean society. These understandings represent important reference point for the exploration, in this dissertation, of the role that media plays in providing Zimbabwean farmers with knowledge resources of relevance to climate change.

The discussion is informed by the review of Zimbabwe's socio-political and environmental history and the implications for agricultural productivity, as presented in Chapter One. We saw, in that chapter, that this history was profoundly informed by struggles around ownership of land and changes in public access to credible knowledge about agriculture. In addition, the impact of climate change has led to growing uncertainty about the credibility of knowledge about the implications of weather conditions for agriculture. With these insights in mind, this next chapter seeks to make sense of the role that media in Zimbabwe plays in providing audiences with access to knowledge about their social and natural environment. In this way, it establishes further terms of reference against which to make sense of the examination, in the empirical component of the study, of farmers' assessment of media content in context of their need for knowledge about climate change.

Section One maps out a theoretical framework which can be applied to the assessment of the normative purpose that media has come to fulfil in Zimbabwean society. In Section Two, this conceptual framework is then applied to a discussion of the history of Zimbabwean media and the way that this history has shaped the contemporary media landscape.

Section One: A conceptual framework

The conceptual framework presented in this section deals, firstly, with Hallin and Mancini's theorisation of the normative foundations of media systems and with the work of scholars that have expanded on such theorisation. This scholarship is understood to be of value to the broad-stroke analysis in this study of how the purpose of media is generally defined within the Zimbabwean media landscape. Secondly, the discussion deals with the contribution that Christians, Glasser, McQuail, Nordenstreng and White have made to defining the different

roles that media ought to perform in society. This scholarship is understood to provide terms of reference for the examination, in this study, of how such roles are defined within specific traditions of Zimbabwean media practice.

1.1 Hallin and Mancini's media models

Hallin and Mancini identify three 'models' of media systems, based on their examination of the historical development of media landscapes in Europe and North America. The first model, which they refer to as 'liberal', developed in the United States, Canada and Britain. It is informed by a strong commitment to an independent and politically neutral press, which operates freely from government or political party manipulation (Peri, 2012:19; Hallin & Mancini, 2012; Hadland, 2012). It is characterised, at the same time, by the dominance of market structures and with this by a strongly developed commercial media sector (Hallin & Mancini, 2004:75). Countries associated with the liberal model tend to have well-established regulatory systems, designed to ensure that media operates not only for profit but also as a 'public good' (Hallin & Mancini, 2012). Journalistic media tend to adopt a strongly 'professionalised' identity in which they claim vocational commitment to serving citizens and supporting democratic processes. Journalistic communities in these countries have traditionally claimed the right to operate independently from both the interests of government and market place, in order to achieve these vocational goals (Peri, 2012; Hadland, 2012).

Secondly, there is the 'polarised pluralist' model, which is descriptive of media landscapes in Southern Europe and can be observed in countries such as Greece, Spain and Italy. The authors explain that these countries have a shared history of authoritarian rule in context of the role played by a landholding aristocracy, an absolutist state and the catholic orthodoxy. The media systems that emerged from this history are characterised by state control, weak development of independent media markets and a relatively small commercial media sector. Mass media in these countries are regarded as a means of ideological expression and are mobilised for this purpose by the state. The normative conceptualisation of the social purpose of media that underpins this system therefore tends to emphasise service to the state and openly partisan coverage is regarded as acceptable (Hallin & Mancini, 2004; Hadland, 2012).

Finally, there is the 'democratic corporatist' model, which is understood to be of relevance to Northern and Central Europe. The authors point out that, as in the case of the environments within which the polarised pluralist model applies, the social histories of these countries were also characterised by authoritarianism. Nevertheless, the media systems that

emerged are characterised by more independence from the state. Within these systems, one can observe the coexistence of two kinds of media that locate themselves differently in relation to the authoritative institutions of the state. On the one hand, there is media that defines itself in terms of its own independence from the interests of the state. On the other, there is 'partisan' media, which locates itself as operating in service of political groupings. The state is still involved in relationships of support and control of media but to a more limited extent than in the polarised pluralist model (Hallini & Mancini, 2004:114). It is suggested that one factor in the establishment of a more independent press in this region was an early growth in mass literacy levels and industrialisation (Hallini & Mancini, 2012:149). There is also a strong emphasis on public service broadcasting that is well funded by the state. This model is therefore different from the polarised pluralist one, in that there is a stronger focus on the freedom of the press and the responsibility of the media to serve the public.

One of the central critiques of Hallin and Mancini's analytical scheme is that it depends heavily on research conducted in industrially advanced countries. It has been suggested that this puts into question the relevance of this scheme to the developing world and more generally to the global South (Carelli 2014; Hadland, 2014). Both Hallin and Mancini and other authors have acknowledged this critique and have responded by conducting further research in a wider range of social contexts, including those of developing countries (Hallin & Mancini 2012; Carelli, 2014; Shen, 2012; Hadland, 2014). It has been suggested, however, that such research may in itself work against the attempt to build universal theories that apply to all media systems across the globe. The argument is that media systems develop under divergent and complex historical conditions, which mitigate against the possibility of comparative analysis on a planetary scale (Shen, 2012). It has also been pointed out that Hallin and Mancini's scheme of analysis may not remain relevant over time, given the dramatic changes in social context that characterise many societies around the world (Carelli, 2014; Shen, 2012; Hadland, 2014). Such change makes it difficult to identify general trends and patterns that remain constant within different regions (Weaver, 2012).

Commentators nevertheless agree that one particular value of Hallin and Mancini's analytical scheme is that it demonstrate that history plays an important role in shaping contemporary media systems (North 1990 quoted in Hallini & Mancini 2004). In Section 2 this point will be illustrated in context of a discussion of the relevance of Hallin and Mancini's framework to the history of media in Zimbabwe.

1.2 Christians et al and the roles of media in society

Christians, Glasser, McQuail, Nordenstreng and White(2009) are recognised for the contribution they have made to defining different roles that media ought to perform in democratic society. They describe these roles, respectively, as that of collaborative, monitorial, facilitative and radical media (Christians et al, 2009). Each role is understood to be based on a distinctive relationship between the media and civil society. In each case, the media is also differently located in relation to dominant political and economic powers (Nordenstreng, 2004; Mcquail, 2005).

The monitorial role describes media that monitors the institutions of power in order to protect public interest. Such media strive to observe neutrally and to report objectively without manipulation from the institutions of power such as that of the state and market. They are expected to play the role of ‘watchdog’, protecting the interests of the public, and to raise alarm when these interests are threatened. Key tasks of monitorial journalism is to report on the abuse of power and to produce journalism that broadly serves the interests of citizens (Christians et al, 2009; Nordenstreng, 2004).

Collaborative media work in partnership with the state, based on a relationship of mutual trust and a shared commitment to serving society (Christians et al, 2009: 198). Within this partnership the media is responsible for promoting and strengthening citizen involvement in programs of social development. As part of this work, the media help to disseminate knowledge of relevance to development and information about government development policies and initiatives (Christians et al, 2009:197).

The facilitative role is one in which the media promote dialogue among audiences so that they become actively involved in public processes of deliberation and debate (Christians et al, 2009). In this way, the media helps to ensure that citizens participate in political processes and are able to express – and be listened to – as part of these processes. Such participation is also understood to contribute to the articulation of widely shared moral frameworks that guide social processes and give them meaning (Christians et al, 2009: 159; Nordenstreng, 2004).

The radical role is embodied by media that is driven by a commitment to equality and freedom of all members of a democratic society (Christians et al, 2009: 179). The main thrust of such media practice is the elimination of concentration of power, with the aim of enabling everyone to participate equally in the different facets of society. Radical media strives to do this by challenging injustices perpetrated by hegemonic alliances and supporting movements that oppose such injustices (Christian et al, 2009:179; Mcquail, 2005). Journalists

contribute to this purpose by exposing abuse of power by those in positions of authority. Such media also strives to support civil organisations that fight injustice (Nordenstreng, 2007:2).

It is possible to observe a relationship between Christian et al's list of traditional media roles and Hallin and Mancini's identification of media models. It is, for example, clear that news media in media landscapes that approximate the liberal model tend to define their own purpose as monitorial. They understand themselves, as such, to be holding institutions of power to account and to be contributing to informed democratic process. It is worth noting that, even though this conceptualisation of the role of media is specific to particular social contexts, it is one that has come to dominate globally shared understandings of what the media should be. It has been argued that one reason for this dominance is that countries associated with the 'liberal' model of media tend to hold economically and politically powerful positions within the international domain. One aspect of their international influence has manifested in the global exportation and reproduction of the monitorial conceptualisation of the purpose of media (Christians et al, 2009: 159, Nordenstreng, 2004).

Radical media, in contrast, is associated with media in environments that approximate each of Hallin and Mancini's models, when they are characterised by internal conflict and instability. Furthermore, such media tend not to remain sustained in the long term but either disappear or become assimilated within mainstream traditions as a social context becomes more stable or normal (Downing 2007:41). One example of this tendency has been observed in the context of South African media history. Here we saw the rise of the alternative press in the 1980's when the contradictions represented by apartheid society became extreme. From the 1990's onward, after South Africa began the process of transition to democracy, such media declined (Tomaselli & Louw, 1991: Switzer & Adhikari 2000).

Within systems that approximate the polarised pluralist or democratic corporatist model there is a high occurrence of media that adopts a collaborative role, working in close partnership with government to achieve developmental goals. This can be observed, in particular, in the establishment of development journalism and communication for development as traditions of media practice within such environments. Such practices are often associated with social environments that are located within the developing world (Nordenstreng, 2007:2; Christians et al 2012).

Within debates about the appropriate social purpose of media, the monitorial and collaborative conceptualisations have often been presented as existing in opposition to each other. This can be observed, in particular, within debates that have surrounded the emergence of development journalism as an alternative to the monitorial tradition. It has been argued

that collaborative media compromise their own credibility because they operate as part of the oppressive infrastructure of authoritarian government. This position is often adopted by commentators who associate themselves with the monitorial approach. (Banda, 2007:158; Shafer, 1998:42). Other commentators have suggested that, despite its stance of objectivity, the monitorial approach operates in service of the reproduction of established relations of power, including those of economic power (Christians et al, 2012; Nordenstreng, 2007).

It has been proposed that the failings of both the monitorial and collaborative approaches to media, as described above, can be addressed by drawing on guidelines for facilitative media practice (Nordenstreng, 2007; Christians et al, 2009). As we have seen above, facilitative media encourages active and broad participation of all members of society. The integration of such an approach can therefore be seen to improve the extent to which the media achieve their own normative goals both in 'liberal' contexts and in more authoritarian societies. Within contexts defined by the liberal model, facilitative approaches have for example been introduced by means of traditions such as that of public journalism. Similarly, within contexts defined by the polarised pluralist or democratic corporatist model, 'facilitative' media practice has helped to ensure that the media does not simply serve the interests of power but also empowers citizens (Christians et al, 2009; Nordenstreng, 2007).

Section Two: An historical overview

The discussion of the history of Zimbabwean media in this section has been organised around the historical periods identified in Chapter One. Review of each period deals with the normative purpose that media fulfilled in Zimbabwean society at that point in time. The discussion also draws on the argument presented in Chapter One with regards to the role that struggles around access to knowledge about context has played within Zimbabwe's agricultural history. The aim is to make sense of the role that media has played as part of such struggles. In order to engage analytically with this role, the discussion draws on the review of theories about the social purpose of media, as discussed in Section One of the current chapter. The focus is therefore on the normative foundations of different media systems in nations as described by Hallin and Mancini and normative media roles as set out by Christian et al. Finally, at the end of the section, this discussion is linked to a brief overview of the history and nature of climate change reporting in Zimbabwe.

2.1 Pre-colonial times

It is generally understood that social systems in pre-colonial Africa were defined by oral tradition. Knowledge, skills and norms were passed down from one generation to the next by word of mouth (Mosweunyane, 2013; Bourgault, 1995:2). People made use of daily rituals and practices including those of oral storytelling to recount their histories, pass on knowledge about ways of life and impart moral principles. In this way, knowledge of both social and physical environment was reproduced and shared within communities (Mosweunyane, 2013, 6). As part of this, within farming communities, knowledge about agriculture was passed on from one generation to the next (Muchenje & Goronga, 2015). This description can also be understood to have applied in context of the geographical space that would come to be known as Zimbabwe.

2.2 Colonial settlement (1890's to the 1920's)

The first mass medium to be introduced in Zimbabwe came in the form of print publications, which made their appearance in this country in the late 19th century. The first newspaper was *Mashonaland Herald and Zambesian Times* which began to circulate in 1891 in the form of a hand-written weekly newssheet, published in English. By 1892 it had transformed into a printed publication and had changed its name to the *Rhodesia Herald* (Keppel-Jones, 1983). It formed part of the Argus Group, a stable of newspapers based in South Africa with financial backing from the mining industry and specifically from Cecil John Rhodes. Given this connection, it is possible to conclude that the establishment of the *Rhodesia Herald* was embedded in the history of occupation that was taking place at this time in Zimbabwe.

The *Rhodesia Herald* came to represent the main source of news for the white minority groups that were claiming a space for themselves in the region. The newly settled white farming community formed an important part of the paper's audience and for this reason it carried news of relevance to farming. In this way, it helped to consolidate the existence of this community and the establishment of its agricultural work as central to a new economy. As such, the publication contributed generally to Rhodes' construction of the Rhodesian nation and in particular to the establishment of the agricultural system that supported it (Moyo, 2003; Banana, 1980; Shillington, 2005).

It would seem from the above commentary that the establishment of the *Rhodesia Herald* was of historical significance within the history of colonial settlement in Zimbabwe. It remained, however, the only newspaper to have become fully established during this period. Also, the institutional apparatus of the emerging Zimbabwean state was not as yet

fully developed. For this reason, it is not possible to speak about the existence, during this period, of a media landscape or social system to which Hallin and Mancini's analytical scheme can be applied.

Nevertheless, it is possible to observe in the establishment of the *Rhodesia Herald* the early emergence of a media system through which knowledge about context became produced and distributed. Furthermore, the role that this system played during this period can be described in Christians et al's terms as collaborative, given that it functioned in support of Rhodes and the colonial interests that he represented. This system existed in parallel to that of oral tradition, as described in the previous subsection. On one hand, oral tradition continued to define the reproduction of knowledge about agriculture and about social context more generally within the indigenous population of Zimbabwe. On the other hand, print media was beginning to shape the way that white settlers gained access to knowledge about their physical and social environment. In context of this study, the most crucial issue to note is the early emergence of a bifurcation in systems for the reproduction and distribution of knowledge important to agriculture. Native farmers maintained their reliance on oral tradition while the settler community relied on print.

2.3 Institutionalisation and consolidation of white rule (1923 – 1965)

From the 1920's onward, there was an increase in the number of print publications. In 1927, the Argus Group set up a subsidiary enterprise called The Rhodesian Printing and Publishing Company to run its newspapers in Southern Rhodesia (Gale, 1962; Chivaura & Mararike, 1998). This company introduced other publications, including the *Chronicle*, *Umtali Post*, *Sunday News*, *Sunday Mail* and the *Financial Gazette*. As in the case of the *Rhodesia Herald*, these papers were published in English and targeted the white minority groups living in the colony (Mukasa, 2010; Owomoyela, 2002: 58). They reinforced the authority of the colonial government, promoted its policies by supporting its agricultural and mining ventures and built unity between whites (Chivaura & Mararike, 1998:213; Gale, 1962:123-2).

Broadcasting also emerged towards the end of this period with the establishment of the Federal Broadcasting Corporation in 1958. The FBC, which was modelled on the BBC, existed until the end of 1963 when it was dissolved prior to the independence of Malawi and Zambia. Southern Rhodesia then became a separate country and the Rhodesia Broadcasting Cooperation was set up (Miller, 2007). The first television station, which was introduced in 1960, was run by a private company until 1963 and then taken over by the government as Rhodesia Television (RT). Both radio and television was only accessible in urban areas.

Programming targeted the white minority and a small group of educated urban black elite (Bittner, 1980; Deacon, 2009). Broadcasting propagated anti nationalist propaganda. It was also a source of information for farming and mining enterprises throughout the country (Moyo, 2003).

This description suggests that, during this period, one can begin to observe the emergence of a media system that resembles Hallin and Mancini's polarised pluralist model. As noted in Section 1.1, this model is understood to describe a media system with a weak commercial sector and a strong presence of state-owned media and state intervention. In the Zimbabwean context, this was a system in which the media played a collaborative role, acting as an apparatus of colonial government in order to contribute to the institutionalisation and consolidation of white colonial rule. The role that this system played in shaping access to knowledge about physical and social environment, as described in the previous section, was therefore consolidating along with the other apparatuses of colonial authority. Also, it should be remembered that this media system was primarily of relevance to urban communities. Until the mid-1960's it therefore still existed in parallel to the social system based on oral tradition that operated within the broader rural environment.

2.4 Challenges to white supremacy (1965 and 1979)

In Chapter One it was explained that the years falling between 1965 and 1979 were characterised by challenges of the Rhodesian state, particularly in context of its role in the disownment of local population through the appropriation of agricultural land. Such challenges emerged internally in context of the armed struggle and externally through economic sanctions. Reaction to these challenges from the Rhodesian government can be observed both in the context of print and broadcast media of this time. In particular, there was an increase in the degree of government control over critical engagement with social and physical environment. This can be seen, for example, in government censorship of print publications that carried articles thought to be in support of nationalist movements and that engaged, as part of this, with the question of land ownership (Masuku, 2011; Muchena, 2013; Moyo, 2004). The same measures of control were apparent within the broadcast sector (Mosia et al, 1994:12).

Nevertheless, there was also a growing presence within the Rhodesian state of a media of dissent. One important example was the Voice of Zimbabwe, a nationalist radio programme given airtime in neighbouring countries by Radio Tanzania, Radio Zambia and Radio Mozambique. Its purpose was to expose the plight of the suffering masses under

colonialism and to mobilise public opinion and support for the cause of nationalist movements (Mosia et al, 1994:12). Another example of a media of dissent can be observed in the growth of pirate radio stations. One such station was Voice of the Revolution which broadcast from Zambia under the auspices of The Zimbabwe African People's Union (ZAPU), a political party founded in 1961 to fight for national liberation. Voice of Zimbabwe and Voice of the Revolution broadcast on short wave from Mozambique and Zambia respectively and were based in independent African countries that sympathised with nationalist movements in this country (Moyo, 2010). The programmes were broadcast in indigenous languages and their availability on shortwave meant that they were accessible to the rural populace. These stations exposed injustices and subjugation that were being perpetuated by the Rhodesian government (Masuku, 2011).

Commentary during this period, as described above, suggest that during this period the Zimbabwean media landscape came to exemplify a particularly authoritarian version of Hallin and Mancini's polarised pluralist model. Within this model, the media played an intensely collaborative role by supporting the government policies and initiatives. At the same time, we see the emergence of radical media that directly challenges the authority of the state. This suggests that the polarised pluralist model and the knowledge system that it supported was under contestation. It is worth noting that radical media did not emerge from the establishment of an independent media sector within the country; instead, they existed at the margins of society, in direct rejection of the relationship of control of media by government. However, although this media of dissent was not part of an established independent sector, they nevertheless made an important impact on society, including the broader rural populace. In this sense, then, the role that they played in making interventions into the construction of knowledge about social and physical environment was not purely marginal.

2.5 Early independence (1980 - late 1990's)

As explained in Chapter One, in the first years of independence, the new government embarked on strategies geared towards the empowerment of the Zimbabwean people. In order to facilitate the achievement of its goals, the government took direct control of the media sector. It did so, firstly, by establishing the Zimbabwean Mass Media Trust (ZMMT) to manage the newspapers that previously operated under the Rhodesian Printing and Publishing Company. The Trust's mandate upon formation was to protect these publications from state interference. Such independence did not, however, materialise since the state soon

began to directly control the Trust and its member papers (Saunders 1991, Mukasa, 2003; Nyarota, 2006).

Also during this period, the government established two vernacular newspapers, printed respectively in Shona and Ndebele. Although such papers were only accessible in major towns and cities, this suggests that the government aimed to build a print sector that expanded beyond a white minority target audience to include the larger majority of people in Zimbabwe. Through the introduction of these papers, the government strengthened the role that print media could play in the construction of public understanding of the social and physical environment of the Zimbabwean people (Moyo, 2004). This understanding was informed by a commitment to nation building, the promotion of social development and patriotism.

The newly elected government also recognised the role that broadcast media could play in addressing the black majority in Zimbabwe. This recognition led to the incorporation of the existing broadcast sector into the Zimbabwe Broadcasting Cooperation (ZBC) and the expansion of its target audiences through the introduction of vernacular stations. These stations broadcast primarily in Shona and Ndebele but also included other minority languages spoken in Zimbabwe (Kupe & Ronning 2003; Chiumbu et al, 2009). Zimbabwe Television (ZTV) was also introduced in the mid 1980's. As in the case of the print sector, the purpose of such expansion was to promote nation building and social development under the new political dispensation. The ZBC operated, however, not as a public broadcaster geared towards the empowerment of its audiences but rather as a state broadcaster designed to bolster the authority of the governing party (Moyo, 2010). The main function of the media in this period was, indeed, to reinforce state policies and facilitate the spread the socialist ideology under the authoritarian government (Mukasa, 2003). The alternative media that existed in the previous period ceased to operate under the new black majority rule (Moyo, 2010).

The audiences addressed with this media system were, however, also changing. Of particular significance in this respect was the rise of a black middle class (Masuku, 2011). The government established newspapers and radio stations geared towards addressing this group. At the same time, there was a growing emphasis within state broadcasting on targeting rural audiences (Masuku, 2011; Kupe & Ronning, 2003; Chiumbu et al; 2009)

In this period, then, the Zimbabwean media system can still be seen as representative of a version of the polarised pluralist model. The strong emphasis on collaborative media continues but the nature of such collaboration can now be seen to be informed by the interests

of the Zimbabwean people. The media acted as a state apparatus aimed at promoting the initiatives of a democratic government that was generally understood to be legitimate. The reach of this system was also expanding to include rural audiences. There was, however, little evidence of the emergence of a facilitative relationship with audiences, in which spaces opened up for public engagement with physical and social environment. The media continued to serve, rather, as system for spreading official understandings of nation building, socialism, reconciliation and decolonization.

2.6 Escalating internal conflict (late 1990's to the early 2000's)

In Chapter One it was explained that during this period, political movements were advocating for a shift from a one-party state to a multiple party democracy, with the MDC spearheading the movement. In this context, the country witnessed the re-emergence of dissenting voices within the print media. One important example is represented by the establishment in 1998 of the country's first and strongest anti-government commercial publication, the *Daily News* by the Associated Newspapers Group. This newspaper gained popularity with the rise of the MDC and was soon perceived to be the opposition party's mouthpiece. Because the paper was gaining circulation and readership it was targeted by government by means of editorial interference. Finally, in 2003, the government bombed the paper's printing press, forcing it to shut down (Mukasa, 2010). Other private newspapers were also established during this period, including the *Financial Gazette*, the *Zimbabwe Independent*, the *Standard* and the *Mirror* (Moyo, 2010). Although these papers did not gain the same reputation for critical dissent as the *Daily News*, they were also outspoken critics of the Mugabe-led government and ZANU PF, exposing their excesses and providing incisive political commentary (Mukasa, 2010; Moyo, 2010).

This re-emergence of alternative and dissenting voices can also be observed in context of the broadcast sector. There was, in particular, a rebirth of pirate radio stations broadcasting on short wave and online to Zimbabwean audiences from beyond the borders of the state. Examples of such stations include Voice of the People, SW Radio Africa and Studio 7 (Chiumbu et al, 2009). The content of these broadcasters was political in nature, offering news critical of the state and its enterprises and engaging in dialogue about this with Zimbabwean audiences (Moyo, 2012:486; Mukasa, 2010). The stations offered interactive programmes in which citizens could phone in to participate in discussion of social issues (Moyo, 2010).

In context of television, voices of dissent were also intruding within the Zimbabwean media landscape from external sources by means of satellite services (Moyo, 2012). DSTV, a digital satellite TV service, began to operate in Sub-Saharan Africa in 1995 (Bamigbetan, 2015). In the observation of the researcher, some audience members in Zimbabwe came to rely at this time on DSTV rather than the country's sole television station. One possible explanation for this is that mainstream Zimbabwean television was strongly informed by the ideological viewpoints of either ZANU PF or MDC. News programmes available on DSTV offered alternatives to these frameworks. The satellite service was also far more widely available to audiences than the Zimbabwean broadcasters, penetrating into rural communities. Some members of rural audiences could access these services, if they could afford the costs of electricity and the payment of monthly subscriptions. There remained, however, a big gap between the rural and urban audiences in terms of access to the mainstream media, due to poor infrastructure in rural areas.

It can be argued that during this period it no longer becomes possible to describe the Zimbabwean media landscape by referring only to one of Hallin and Mancini's models. Instead, due to the intensifying instability of the Zimbabwean context and the high level of impact of external media systems, one can observe the co-existence of aspects of different models. Elements of the polarised pluralist model remained in place, but it is also possible to observe aspects of democratic corporatist model in the emergence of commercial print media. Within this highly complex and volatile media environment, the normative function of media can also be seen to become more divergent, with collaborative, monitorial and radical approaches existing in contestation with each other. The re-emergence of pirate radio stations broadcasting on shortwave made it possible for the rural populace to access political news. The Zimbabwean media landscape became a battlefield around the construction and dissemination of knowledge about physical and social environment.

2.7 The current landscape

Currently, the Zimbabwean government continues to control the bulk of the mainstream press. In 2009, it owned just over 51% of Zimpapers with 23% of the remaining shares being held by Old Mutual and 25% by private companies (Chiumbu et al, 2009). Zimpapers owns the *Herald*, the *Sunday Mail*, the *Chronicle*, *Sunday News*, the *Manica Post*, *Kwayedza* and *Umthunywa*. Of these papers, the two national dailies the *Herald* and the *Chronicle* are of particular importance, with a circulation of 40 000 and 22 300 respectively. The *Sunday Mail* is a weekly and has the second highest circulation of 38 000. Other publications include the

Manica Post with a circulation of 12 000, *Sunday News* with a circulation of 16 000, *Kwayedza* with a circulation of 7 000 and *Umthunywa* with a circulation of 5 000 (Chiumbu et al, 2009: 8). Only a small fraction of the population has access to these papers and this is because they are mainly accessible in major towns and cities (Chiumbu et al, 2009).

Private newspapers include the *Newsday*, the *Standard* and the *Financial Gazette*. All of these publications are managed by Alpha Media Holdings (AMH), a company owned by media business mogul Trevor Ncube. The *Daily News* has also been back in circulation since 2010, under the ownership of the Associated Newspaper Groups. These private newspapers offer a critical commentary of the political establishment in the country. However, as with the state owned papers, the impact that these papers are able to make on the Zimbabwean political context remains limited. Papers such as the *Standard* and the *Financial Gazette* target a readership which is, again, mainly urban and middle class (Chiumbu et al, 2009, Moyo 2010).

The broadcast landscape in Zimbabwe also remains broadly government owned and controlled. ZBC operates as government mouthpiece, with both radio and television producing programming that is in line with government policies (Kupe & Ronning, 2003). Two private radio stations have also been established, but in reality they do not have true independence from government. One of these stations, ZiFM, is owned by Supa Mandiwanzira who is the current ZANU PF's deputy Minister for Information. The other, Star FM, is owned by Zimpapers (Mabika, 2014).

This broadcast sector remains limited in its ability to reach audiences in Zimbabwe. ZTV mainly targets towns and cities. The bulk of its programmes are presented in English although there are a few presented in vernacular. ZBC's four radio stations target the whole nation but transmission is only clearly accessible in major towns and cities. One reason for this is that the state's medium wave broadcast infrastructure has not been sufficiently maintained since the mid 1970's, with the result that the transmitters that form part of this system have outlived their lifespan (Shamhu 2014; Chiumbu et al, 2009: 42). Even radio transmission remains concentrated in urban areas, with the main transmitters located in Harare and other major towns and cities (Kupe and Ronning, 2003; Chiumbu et al, 2009). The overall coverage for television is between 20 and 25% of the Zimbabwean population, while that of radio ranges between 30 to 35% (Chiumbu et al, 2009:41). Star FM can only be accessed in the country's major towns and cities while small towns have no coverage (House, 2015:12).

In context of the global emergence of digital media, internet usage has also penetrated the contemporary Zimbabwean media landscape (Freedom House, 2012:3). This can be observed in the emergence of online newspapers, including *Bulawayo 24*, *iHarare.co*, *Nehanda Radio*, *Zimeye* and the *Zimbabwe Daily* (Moyo, 2012). These online editions are available to everyone with an internet connection and act as an alternative to the mainstream media. The traditional mainstream print publications now also publish some of their content online, and the two private radio stations stream their programming (House, 2015). Government owned broadcast media are not available on the internet for live streaming but these stations use social media for interaction with their audiences (House, 2015: 9).

The rise and use of mobile phones in the last decade has also made it possible for people in Zimbabwe to access online environments, and more particularly to make use of social networks. The most prominent social platforms in the country include Facebook, WhatsApp, Twitter and Instagram, primarily accessed by the youth (Freedom House, 2012). This should be understood in context of the fact that Zimbabwe, along with many other African countries, has experienced a rise in the use of low-cost replica mobile phones from Asia. The country has three mobile service providers; Telecel, Netone and Econet. However, internet services are slow and tariffs are still above the reach of an average user (Freedom House, 2012).

To some extent, then, digital media has played a role in transforming the nature of the media landscape in Zimbabwe. It has, in particular, facilitated the breaking down of communication barriers that were created through government control and strict censorship. Digital media has, in this context, become an important platform on which knowledge is produced and circulated. However, due to high cost, access to digital media within the Zimbabwean context has remained constrained. Internet subscriptions are expensive and thus limited to the affluent minority. The majority of the population in Zimbabwe lacks access to telephone lines as well as the devices required to connect to the internet (Freedom House 2012). This lack of access is far more extreme in rural areas, due to their economic disadvantage and geographical isolation. Indeed, online media is more common among Zimbabweans living in the diaspora where they have the infrastructure and where cost is not as restrictive as back home (Chiumbu et al, 2009; Freedom House 2012)

The above description suggests that, within the contemporary context, the analysis put forward in the previous section regarding the relevance of Hallin and Mancini's analytical scheme still applies. The media landscape remains defined, in other words, by the impact of social and political instability and by the influence of external media systems. In this context,

it is possible to observe the co-existence of aspects of the polarised pluralist model and the democratic corporatist model. Collaborative, monitorial and radical approaches to the media exist in contestation with each other, each with its own divergent conceptualisation of the social purpose of media. These contestations are informed, furthermore, by struggles between different interest groups for control of the kind of knowledge about physical and social context that gains dominance within the public domain.

One important shift that has taken place in the last decade can be observed in context of the rise of digital media. In particular, the affordances of the internet and social media now enables Zimbabwean audiences to access more media content and to participate as agents in the production of such content. This trend can be said to point to the emergence within the Zimbabwean context of the fourth tradition of media that Christians et al refer to – that of facilitative media. It can be argued, furthermore, that the emergence of this tradition is opening up spaces within the Zimbabwean public domain in which audiences can gain greater epistemic access to knowledge about their physical and social context. Such access nevertheless remains uneven, given the disparities in distribution of media technology and resources between rural and urban areas.

This account of historical developments within the Zimbabwean print and broadcast sector, and more recently the domain of digital media, has played a central role in struggles around knowledge of physical and social context. It is against this backdrop that this study seeks to explore the role that the media plays in the more specific context of rural farmers' experience of the impact of climate change on agricultural practice.

2.6 The coverage of climate change in Zimbabwe

Commentators note that the media represents a key source of public information and definer of reality with regards to climate change in Zimbabwe (Nhamo & Mjimba, 2016). However, available literature does not provide substantial commentary on trends in the coverage of climate change in this country. Commentary that does exist tends to focus more generally on such trends as they exist broadly in the Southern African context.

Within such literature, it is noted that radio has been the primary medium in which such coverage has taken place, and this is attributed to the medium's capacity to reach rural communities (Mare 2011; Luganda, 2005). The general agreement remains, however, that climate change coverage has been given scant attention across all media platforms, whether print, broadcast or online (Mare 2011: 6).

From my perspective as a researcher based in Zimbabwe, I have observed that another space where audiences in this country can potentially gain access to content about climate change is online. Although such content tends to be international, and to contain little in the way of information about the Zimbabwean context, it still represents a valuable resource of knowledge about climate change. In context of the rise of engagement with digital media amongst Zimbabwean audiences as described in the previous section, the online availability of such material is a significant term of reference for this study. Commentators nevertheless point out that in the Zimbabwean context people do not as a rule go looking for online information about climate change. It is suggested that one reason for this may be that the topic is not generally on the news agenda as this is constructed by mainstream media – and for this reason audiences are not alerted to the importance of accessing knowledge about it (Chaguta 2006, Mare 2011, Valhorsen et al 2015).

Commentators also point out that where coverage of climate change in Zimbabwe exists, it tends to focus on short-term news events such as those surrounding floods, droughts and cyclones. It is generally explained that climate change becomes topical in such contexts because ‘natural’ catastrophes are understood to be newsworthy when measured against conventional news values. Conferences and conventions about climate change also make the phenomenon topical in the news (Chaguta, 2010; Mare, 2011; Ndlovu & Mpofu, 2016; Count-Evans 2013; Brazier, 2015).

It is further observed that the quality of climate change coverage is generally of a poor standard. Studies suggest that journalists generally lack the necessary training and specialised skills to report effectively on this topic (Nhamo & Mjimba, 2016). Furthermore, literature identifies that the current coverage lacks stories that demonstrate how climate change affects different people (men and women, old and young) in different ways. There is also little emphasis on business and development opportunities that climate change present (Shanahan et al, 2013:12). It is pointed out that journalist should consider writing fewer disaster narratives and focus more on success stories highlighting how people are adapting, developing solutions and using new technologies that can limit the impact of climate change on quality of life (Shanahan et al, 2013:12).

It is also noticeable that literature about the coverage of climate change in Zimbabwe tends to focus on hard news media rather than media produced for the purpose of communication for development. As should be apparent from the historical overview of developments in Zimbabwean media, a key stakeholder in developmental media is the Zimbabwean government. In the view of the researcher, it is in context of state-funded

development media that a more substantial coverage of climate change is likely to be found in Zimbabwe. Indeed, the researcher has observed such coverage particularly in context of media produced in collaboration with the Ministry of Environment, Water and Climate. This ministry has established a long-standing collaborative relationship with state-owned media around the production of content that operates in support of the government's agrarian reform processes. Within the contemporary context, such content does include coverage of climate change. This can be observed, for example, in context of the agricultural section of state-owned newspapers. The country's sole television station also has an agricultural program, "Murimi wanhasi", which addresses farmers and deals with climate change related issues that directly affect them. State-owned radio stations also tackle issues to do with the phenomenon, particularly in context of agricultural programming. The observations summarised above suggest that state-owned agricultural media operate as one of the more substantial sources of knowledge about climate change that is available to Zimbabwean audiences, and to Zimbabwean farmers more particularly. Such media form part of what Christians et al would call a collaborative tradition of media.

Conclusion

The aim of this chapter has been to establish a framework of analysis that can be applied to the exploration, in this dissertation, of the role that media plays in providing Zimbabwean farmers with knowledge resources of relevance to climate change. The chapter drew, for this purpose, on Hallin and Mancini's theorisation of the normative foundations of media systems and on Christian et al's review of normative traditions of media practice. These conceptual tools were applied to a review the development of different media sectors in Zimbabwe.

The discussion focused on how Zimbabwe's socio-economic history has shaped the country's current media landscape. It was pointed out that this landscape has been profoundly defined by the impact of social and political instability. Also in context of this volatility, the Zimbabwean social context is strongly impacted upon by external media systems. For these reason, conflicting ideas about the social purpose of media have come to co-exist within this environment. With regards to media systems, aspects of both the polarised pluralist and democratic corporatist models can be seen to co-exist. With regards to traditions of media practice, collaborative, monitorial and radical approaches exist in contestation with each other. In this way, then, the Zimbabwean media landscape can be described as a battlefield

around the construction and dissemination of knowledge about physical and social environment.

The final section in the chapter explored the implications of this analysis for the role that the media can play in the context of rural Zimbabwean farmers' experience of the impact of climate change on agricultural practice. Here it was argued that, rather than turning to hard news media, this audience should be engaging for this purpose with state-funded development media, that incorporates aspects of the collaborative and facilitative traditions of media.

It was further proposed, in the chapter, that the affordances of the internet and social media can be said to point to the emergence within the Zimbabwean context of facilitative media. The emergence of this tradition is opening up spaces in which audiences can gain greater epistemic access to knowledge about their context. Here it was noted that it is particularly in context of facilitative and digital media that farmers can potentially gain access media-based knowledge resources that would be of value to them.

The empirical component of this study, which follows in the next chapters, will explore the extent to which farmers in the Nyanga region can be said to benefit from such media.

CHAPTER THREE: THE RESEARCH DESIGN

Introduction

As explained in the introduction to this dissertation, this study explores the role that the media can play in facilitating Zimbabwean subsistence farmers' access to knowledge that is of relevance to their farming practices. More particularly, it investigates the role that media can play in providing such farmers with knowledge that assists them in making sense of the relevance of climate change to their experience of crop decline. The core aim is to find out how subsistence farmers in the Nyanga area of Zimbabwe evaluate the role that media plays in this respect within their current context.

This chapter presents a discussion of the research design that guides this study. Section One describes and motivates for each of the research design decisions. It deals with the location of the study within a qualitative paradigm; the decision to work with a case study design; the choice of qualitative interviewing as a research method; guidelines for the identification of research participants and guidelines for fieldwork and analysis. Section Two describes and evaluates my experience of putting this plan into practice. As such, this section comments on the extent to which the implementation of this plan resulted in a credible and valid research process.

Section One: The research plan

1.1 The research methodology

As mentioned above, this study is located within a qualitative research paradigm. The decision to do so was guided by the understanding that qualitative research is suited to the exploration of social experience (Bryman, 1988; Denzin & Lincoln, 1994). It is, in other words, a research tradition that is rooted in an acknowledgement of the importance of lived experience and the subjective interpretation of reality (Babbie & Mouton, 2001:28-33). Furthermore, it takes as its departure point the insider's perspective, with researchers typically striving to see the social world from the view of the people they study (Babbie & Mouton, 2001:34). The emphasis is therefore on understanding knowledge, attitudes and behaviours from the point of view of the actor (Babbie & Mouton, 2001:271; Bryman 1988: 107). This focus on subjectivity and meaning-making is of value to my study given that it deals with the ways in which farmers in Zimbabwe make sense of knowledge resources about climate change.

Qualitative methodology is also contextually specific, providing a rich, historically located understanding of an aspect of human experience. Because it offers a research practice through which a phenomenon can be understood as it exists within a particular context, unusual and unanticipated discoveries can often be explored (Merriam, 2002). This emphasis is of value to my research because my aim is to study the way farmers in Zimbabwe engage with their own unique context.

The study draws, more particularly, on an interpretative tradition of qualitative research. This tradition of empirical work seeks to gain insight into how people understand their own social context while guarding against imposing inappropriate conceptual frameworks on them (Babbie and Mouton, 2001:271; Bryman, 1988:2-3, Deacon et al, 1999). An interpretative approach responds to the unique requirements of my research because it enables me to explain my participants' engagement with knowledge about climate change from their own perspective.

1.2 A case study design

I decided to use a case study design because this enables me to deal in detail with subjective experience, located within a historically specific context. Case studies are effective when the social experience that one is exploring is informed by complex social relationships. As has been demonstrated in the first two chapters of this study, this is true for my chosen topic of research given the diverse set of factors that have shaped the history of farming and crop decline in Zimbabwe. A case study allows for the examination of such complex factors, in which the "...the boundaries between phenomenon and context are not clearly evident". (Yin, 1984:23). Multiple sources of evidence can be used, and the rich qualitative knowledge that can be generated in this way has the potential to generate insights into the complexities of real life situations (Yin, 1984).

As noted already, the case that I chose for this study is represented by the community of subsistence farmers who are located in Nyanga. My aim was, in particular, to interview research participants who can be seen as representative of this community. I understood Nyanga to provide a valuable context within which to explore questions of relevance to my particular study.

In order to appreciate the value of this choice, some background information is relevant. Nyanga is a town situated in the Eastern Highlands of Zimbabwe and is known for being a tourist resort. The town is located in a highly mountainous area, much of which is covered with vast pine tree plantations. These mountain ranges include Mount Nyangani, the

highest mountain in the country, standing approximately 2600 metres above sea level. The popularity of the area as a holiday destination stems from its majestic landforms and picturesque landscapes. It is situated in the highlands, where temperatures are relatively low and rainfall is high, so that it is suitable for production of fruits like apples and peaches. It is also well-known for being one of the main potato seed producing areas in the country. Potatoes also represent one of the crops primarily farmed by subsistence farmers in this area.

Over the past twenty years, this landscape has undergone a profound transformation. By the end of the 20th century, agricultural land in Nyanga was still divided into a few white owned farms that were geared towards the cultivation of potatoes, apple and peaches, as well as pine plantations. In the early 2000s, land redistribution led to the disintegration of this agricultural landscape with the division of the big farms into small pieces of land. These portions of land were given to so-called war veterans, who came from outside Nyanga from many different parts of Zimbabwe. Only a few local veterans benefitted from the exercise. Access to these land grants was based on loyalty to the ZANU PF.

It should be apparent that these events are representative of the broader history of change within the agricultural landscape that has characterised Zimbabwe from the late 1990's to the present moment, as described in Chapter One. The redistribution of land that can be observed in Nyanga forms part, in other words, of the Fast Track Land Reform process that was launched in the early 2000s in Zimbabwe. As elsewhere, this resulted in the allocation of land to ZANU PF supporters, through the subdivision of large commercial farms. As such, the community of small-scale farmers situated in Nyanga can be seen to represent an appropriate case study for this research. It allows, in other words, an opportunity to explore the role that socio-political factors have played in such farmers experience of the maintenance of their crops.

During the same period of twenty years, the physical environment in Nyanga also underwent profound changes. As noted in the introduction to this dissertation, it is my belief as a member of the Nyanga community that climate change is manifesting itself in this area and has had a strong impact on its farming operations. Decades ago, the summer rains used to commence in September and continue to April in the following year. In recent years, the rains have fallen within a much shorter space of time, from early December to mid or late January. Dams and perennial streams that the farmers could previously rely on for irrigation are now drying up around September every year. As a result, the correct calendar for planting crops has become unpredictable. In addition, there have been outbreaks of fungal diseases that seem directly related to the changing rainfall patterns. These changes again make Nyanga a

good choice of a case study for my research, given that it provides an opportunity for exploring the role that radical shifts in weather patterns play within farmers' experience of crop decline.

Finally, media that is available to farmers in the Nyanga region also enables me to explore some of the patterns identified within the broader Zimbabwean media landscape, as described in Chapter Two. From my own observation as a member of the farming community, the state newspaper, the *Herald*, is widely available to farmers. Broadcast media are less accessible, due to problems with reception caused by the mountainous topography of the area. More affluent members of the farming community refer to DSTV as a source of news, and many local residents also make use of cell phones to access media. These patterns in the availability and consumption of media can be seen to resonate with trends within the broader Zimbabwean context, as described in Chapter Two. The media environment of Nyanga enables me to explore the implications of these trends for subsistence farmers.

1.3 The research method

I decided to use qualitative interviewing as the main research method. In-depth, semi structured interviews are appropriate to this study because they are concerned with finding out the research subjects' individual understanding of their own world (Lunt and Livingstone, 1996:79). Such interviewing holds the capacity to elicit respondents' perceptions of past experiences, scenes and events (Lindlof, 1995; Silverman, 2013). This method is of value to my research process, given that my aim is to gain insight into the way farmers in Nyanga make sense of their own history and the history of the landscape in which they are situated.

The particular tradition of qualitative interviewing that I chose to employ is that of the narrative biographical interview. Such interviews are of particular value when the goal of research is to develop understanding of the subjective interpretation of historical change, both of the individual and their context. The eliciting of personal narrative is an important way of providing evidence of the way people interpret their own life experience and the way this impacts on their identity and engagement with their current context (Flick 1998: 101).

My research design does not, however, draw on inclusive biographical interviews, in which the researcher requires of participants to present exhaustive accounts of all aspects of their past lives. Instead, I drew on the technique referred to as the 'episodic interview', in which the researcher encourages participants to identify and describe moments in their lives that are of particular relevance to the study (Flick, 1998: 110). Such interviews allow social experiences to be analysed by means of a series of key questions concerning the overall

research topic (Flick, 1998:111). The general assumption is that participants' experience of the topic of research are stored and remembered in forms of narrative-episodic and semantic knowledge (Flick, 1998:106). This approach therefore deals explicitly with the social construction of reality during the presentation of past and present experience.

1.4 Choosing the people the interview

I selected my research participants using purposive sampling, which allows the researcher to identify individuals who can share experience of particular relevance to the focus of the study (Marshall, 1996). This technique is also of value because it enables the researcher to choose participants who are willing to share their experience in an articulate, expressive and reflective manner (Deacon et al, 1999:50, Cresswell & Plano Clark, 2011, Bernard, 2002; Spradley, 1979). The identification of such participants are of particular value to a qualitative study in which the aim is to gain intensive and in-depth understanding of social experience.

A central aim in choosing research participants was to find individuals who had been allocated farming land in Nyanga as part of the land reform process in the early 2000s. I aimed, furthermore, to include people who fought against the colonial regime during the Zimbabwean war of liberation. I was interested in interviewing members of this particular group of people because this resonates well with themes highlighted in the first two chapters of this dissertation regarding conflict over land ownership. I also decided to focus on people with a comparatively high degree of literacy, because I was interested in contributors who could speak about their engagement with print media. Finally, I aimed to choose participants based on their willingness to respond to my interviewing.

I decided to include only three such interviewees and then to focus on eliciting rich and detailed conversations with these individuals. I understood that by limiting the number of participants I would constrain my ability to generalise findings to a broader population of farmers. In my view, however, it was more important to facilitate a deep process of exploration of the experiences of a few individuals. In this way, I hoped to generate a subjective understanding of how and why they perceive, reflect, interpret, and interact (Adler & Adler, 2012:8). I was guided in this respect by the principle that the quality of responses in some cases are in some cases more important than the number of respondents (Adler & Adler, 2012:8).

Given my status as a resident of Nyanga, I had insider knowledge of the local farming community and was therefore well-placed to select those farmers who met the criteria for research participants as outlined above.

1.5 The research instrument: an interview guide

In order to inform the design of my interview guide, I conducted preliminary research by means of a focus group discussion with five small-scale farmers from the Nyanga region. It was apparent to me from this discussion that these farmers were concerned about the changing weather patterns in their environment. They identified a connection between such change and the phenomenon of climate change, but their ability to explain what climate change or how to respond to it remained limited. They were conscious of this limitation, and looked to the media as a resource for making sense climate change. Indeed, they saw the media more generally as an important resource of knowledge to assist them in their approach to farming. I concluded from this focus group that it would be of value to pursue a more detailed exploration of such farmers' engagement with media as a resource of such knowledge. I also drew the conclusion that it would be of greater benefit to pursue such research not in the context of a focus group but by means of individual interviews.

In designing the interview guide, I kept in mind that it would be of value to gain insight into the knowledge my participants had gained over time about farming and the way in which the environment in which they farm in Nyanga has impacted on their practice as farmers. I also wanted to learn more about their identities as farmers, and as part of this the extent to which each of them had invested in farming as a way of life. Based on this knowledge, I would then set out to make sense of the role that access to the media plays within these processes. In designing the guide (see Appendix 1), I therefore decided to divide the episodic interview into five stages, which would help inform me about all of these aspects of the participants' experiences and observations.

The first section of the interview focused on the participants' experience of growing up and included reference to their early childhood and education. In this way, I hoped to establish whether this stage of life played a role in their investment in farming as a way of life, their knowledge of agriculture and their familiarity with farming as it exists in Nyanga. I wanted to encourage the participants, as part of their account of this stage of life, to identify and describe events of relevance to these themes. The second section dealt in similar terms with the participants' account of significant moments in their lives as adults, focusing in particular on their experience of work. The third section focused on the role that land reform had played in their lives. Here I aimed for the participants to explain how and when they acquired farming land in Nyanga, how this impacted on their lives, and whether they felt that they were well prepared for taking on the role of farming. The fourth section looked at their experience of farming on the land that had been granted to them. Here I aimed to ask the

participants to describe the kind of agricultural production they pursued, the extent to which they succeeded in this work, the challenges that they faced along the way and the kind of support they were able to access from government. Particular attention would be paid to their experience of attempting to produce high crop yields and their interpretation of the contextual factors that impacted on their ability to do so. I hoped, in pursuing these themes, to establish the extent to which climate change operated as a term of reference in the participants' accounts of their experience of farming. The final section looked at the role that the media has played in providing the participants with knowledge of relevance to their experience of farming. As part of this discussion, I aimed to prompt participants to comment on the extent to which media enabled them to make sense of climate change as a factor that impacts on their practice as farmers.

1.6 Conducting the interviews

I decided to use an audio recorder and field notes to capture the conversations with participants. I also kept it in mind that I had to establish a venue for conducting the interviews that would enable my participants to speak freely. I understood this to mean the identification of an environment that made them feel comfortable. I decided to interview them at their respective farms. I chose their homes in a bid to foster an atmosphere that is conducive for sharing personal life histories and create a more reciprocal relationship with the participants (Longhurst, 1996 ; Goss and Leinbach 1996). With regards to the facilitation of the interview process itself, I planned to include a preliminary conversations with each participant, in order to establish rapport with them and familiarise them with the purpose of the research. Also, I would need to ensure that they understood how their participation in the research might impact on their own lives, in order to ensure that informed consent was achieved. In this way, I took into account the ideals of informed consent and confidentiality (Corbin & Strauss, 2015:13). In order to create an atmosphere in which interviewees felt free to talk about their personal lives, I planned to assure them that their identity would be concealed, so that confidentiality could be maintained. For this reason, I would replace their real names with pseudonyms. In order for my respondents to freely express themselves, I decided to use their first language, Shona.

1.7 Analysing the interviews and writing up the research findings

I aimed to first transcribe the interviews in Shona, and then to translate these texts into English. I then planned to adopt a thematic approach to the analysis of this material. Thematic analysis involves the establishment of pre-determined categories of content or

themes that are of relevance to the research question. Statements made in the interviews are then grouped according to these themes, and in this way brought together to form a comprehensive representation of the collective experiences of the research participants (Jwan & Ong'ondo, 2011:104). For such analysis, I decided that I would be guided by the same five categories of discussion established in the interview guide, as described in Section 1.5. I would, in other words, compare the participants' comments about each stage of their life histories and experiences. Finally, I would consider their comments on the role that media has played within their engagement with the challenges of farming. In writing up my findings, I would also organise my discussion according to these five categories of content.

Section Two: The implementation of the research plan

2.1 The research participants

As mentioned in the previous section, I used purposive approach to identifying interviewees for this study. In this way, I selected three subsistence farmers from Nyanga. Each of the participants were chosen because they had been awarded a land grant as part of the land reform process in 2002.

It should be noted that all three candidates were in fact native to the Nyanga region. This can be seen to constrain the validity of the research process, given that the study is supposed to be a 'case' of what has happened more generally in Nyanga. As noted in Section One of this chapter, farm land had in many cases been allocated to individuals who come from elsewhere in the country, and are not members of the local community. My decision to focus only on farmers native to Nyanga meant that I could not explore the dynamics that would result from this factor. My own location as a member of the Nyanga community meant, however, that the network of individuals with whom I had contact tended to be people who are native to this area. It is, in fact, my location within this network that provides me with particular advantage with regards to identifying candidates for interviews and successfully establishing their willingness to participate in the research process. My own 'connectedness' to the experiences of these individuals also provided me with a unique ability to interpret their explanations of their own experiences. In the end, I was satisfied that these advantages outweighed the importance of including 'outsiders' in the interview process.

Mr Garapo¹ was born in 1942 in Honde Valley, which is a 'growth-point centre'² situated 110km from the town of Nyanga town. He attended a primary school in the same

¹ Names of participants have been replaced with pseudonyms.

area and later enrolled for secondary school at St Augustine's. At this time this school had a reputation for high pass rates, and it was generally understood that its graduates were well-prepared to pursue successful careers. After school, Mr Garapo studied at the Institute of Bankers in South Africa (IOB). He then worked as a banker in Harare until the time of his retirement. In 2002, when he was 60 years old, he became a beneficiary of the land reform programme. At the time of this research project, he was based on the farm where he grows potatoes for a living.

Mrs Mhaka was also born in Honde Valley in 1955. She attended school in Nyanga but was only able to complete her schooling beyond Standard Six³, because her family could not raise money to further her education. In 1977, when she was in early twenties, she joined the liberation struggle in Mozambique and later went to Romania for training. She returned to Zimbabwe in 1979 after the ceasefire was announced, marking the end of the war. From 1981 to 2005, she served as a soldier in the Zimbabwe National Army. Like Mr Garapo, she was presented with a land grant in 2002, when she was 47 years old. When she retired in 2005, she began to farm this land. When ZANU PF war veterans established a district office in the town of Nyanga, she also began working in these offices.

Mr Muwi was born in the 1971 in Nyanga. He completed his primary schooling at Matema Primary School from Grade One up to Seven and then proceeded to Nyangani High School. He completed his secondary schooling, but did not receive university exemption. After high school, he went to Harare where he worked part time in the library at the University of Zimbabwe. Since then, he has worked as a gardener, first in the Lowfeld in Triangle, Chiredzi and later in Troutbeck, Nyanga. Throughout this time, he completed short courses by correspondence. He did courses in supervisory management and monitoring and evaluation. This provided him with the necessary qualifications to become employed by ZANU PF under the Ministry of Youth as a youth coordinator in 2000. In 2002, when he was allocated a land grant, he was 31 years old.

As the first stage in my fieldwork process, I contacted each of the participants by phone in order to establish their willingness to contribute to my research and to brief them

² Growth point centres are satellite urban areas, which were supposed to be nuclei for development (industrial and economic activity), created both to stimulate development and stem rural urban migration.

³ 'Standards' formed part of the levels of learning within the pre-independence state education system. The first two years of primary schooling were referred to as Sub A and Sub B (this is now described as Grades One and Two). Standards started at what is now referred to as Grade 3. The last year of primary school was Standard Five, and Standard Six then represented the first year of secondary school.

regarding the aims of the study. I later visited the respondents on their respective farms to establish dates, times and locations for interviews. I was also able, through these preliminary discussions, to establish that the participants were indeed well placed to talk to me about the role that media has played in their experience of farming. Each participant was, in other words, able to describe to me how they make use of different media. I was also able to observe that their different backgrounds and ways of life offered rich terms of reference for an exploration of the issues at the centre of this study.

2.2 Conducting the interviews

The interviews were conducted on the respondents' respective farm. At the commencement of each interview, I once again reminded each of the interviewees of the purpose of the study. I reiterated that I would not reveal their identities and would for this purpose make use of pseudonyms in the writing up of research findings. I also probed the participants regarding their willingness to participate in the interviews, in order to ensure that informed consent was established. I informed them that I was going to record the interviews and that the recordings were only to be used for academic purposes. All three participants were happy to proceed with the interviewing process.

In each case, I asked the respondents to feel free to say anything that they thought was relevant to my questions. I also told them that they were free to use any language that made them express their experiences better. Furthermore, I invited them to direct me when I needed to clarify any question, so that I could identify instances in which the phrasing of questions need to be expanded or simplified. In addition, I also made clear to them that they could speak for as long as they liked. During the interview itself, I made sure that I did not interrupt them while they were describing their experiences, intervening only when it was necessary. Two of the interviews lasted for more than an hour while the third lasted approximately forty-five minutes.

I asked all questions following the order on the interview guide. This provided me with a logical flow of the questioning, beginning with the participants' early childhood history and then the different stages of their lives. Their responses to these questions resulted in narratives that flowed coherently and that represented rich material for exploring the main objectives of the study. In some instances, the respondents would answer the questions yet to be asked in later parts of the interview guide. I allowed them to carry on with such explanations because at such moments they seemed more able to express themselves freely, without being restricted to a particular question. I also changed the phrasing of the questions

when this seemed to help the participants to engage better with the topic of discussion. In this way, I was able to gain detailed explanations of their life histories, even within the confines of a single interview.

One challenge that I faced throughout this fieldwork process was the occurrence of disruptions of the interviews. Each of the respondents were repeatedly interrupted by their mobile phones when the interviewing process was in progress. This is despite the fact that I had asked them to switch off their phones or put the device on 'silent' during the interviews. All three participants also kept going through their WhatsApp messages while responding to the questions. Despite this situation, they did not lose track of the interview process, and their conversation remained coherent. I was mildly frustrated by this situation, but concluded that the participants' behaviour in this respect was in itself a valuable term of reference for my research since it demonstrated the centrality of mobile phones in their daily lives.

The interviews were primarily conducted in Shona. There were, however, instances in which the interviewees used English words to explain certain concepts and this helped them articulate the points better. Mr Garapo was particularly fluent in English and used the language most of the times although he would sometimes mix the two. In my observation, the participants' ability to select the language in which they wished to communicate played an important role in enabling them to speak freely during the interview.

In this way, I learnt how each participant became involved in the land reform exercise, and why they accepted the land grants. Furthermore, I managed to establish a good understanding of their experience of farming this land, both with regards to the impact of socio-economic factors and environmental conditions. They were also able to speak to me freely about the importance of media as a knowledge resource, for making sense of the challenges that they face as farmers

I successfully recorded the interviews using a digital voice recorder. I used this device because of its sharpness and efficiency in recording interviews. The device automatically saves recordings in separate tracks, and I was able to listen back to a sample of these tracks before parting ways with my respondents in order to ensure that the interviews were loud and clear for easy transcription. All interviews were conducted indoors to allow a clear recording. I placed the recorder on the table to avoid moving the recorder from one place to the other. In my view, this also helped to ensure that my respondents were more relaxed since holding the recorder might have made them nervous. Generally, I think the respondents enjoyed being involved in the interview process, and seemed to also have interest in the subjects under

discussion. They seemed particularly interested in talking about the topic of climate change, indicating that they understood it to have direct impact on their farming operations.

2.3 Analysing the interview material and writing up research findings

I transcribed verbatim all three of the recorded interviews. I then also translated the interviews from Shona into the English language. The transcripts are available in my own personal files, and are also being held by my supervisor in the School of Journalism and Media Studies at Rhodes University.

In my view, the decision to pursue a thematic approach to the analysis of the interview material has resulted in meaningful research findings. I found that I was able to identify ways in which the participants' experiences could be meaningfully located within the aspects of Zimbabwean history that I had mapped out in Chapter One of this dissertation. This was possible both with regards to the way political change and changes in weather conditions had impacted on their experience of crop decline. I could also make sense of their observations about their engagement with media as a knowledge resource of relevance to farming, and read these observations against the analysis, in Chapter Two, of the Zimbabwean media landscape. This enabled me to draw conclusions regarding the role that media should ideally play in providing these farmers with relevant knowledge resources for engaging with climate change.

Conclusion

In my judgement as the researcher, this description in this chapter of the planning of the research process and the implementation of this plan demonstrates that this research has met the necessary requirements of validity and reliability. The focus on individuals who have benefitted from the land reform programme offered unique opportunities for exploring the specificity of small-scale farmers' social experiences within the Zimbabwean context. I believe, furthermore, that I was successful in implementing this research plan, so that it resulted in rich material that enabled me to satisfactorily address the research question.

CHAPTER FOUR: RESEARCH FINDINGS

Introduction

This chapter serves as a discussion of the interviews conducted with the three farmers who participated in the research process for this study. As noted in the previous chapter, all three of the research participants were granted land in 2002, as part of the Zimbabwean land reform process. We saw, in that chapter, that each of them came to the experience of farming from very different backgrounds. Mr Garapo, who at the time of being interviewed for this study in 2017 was 75 years old, spent most of his life working in banking. Mrs Mhaka, who was 63, has a history of involvement in the Zimbabwean liberation struggle and then in the Zimbabwean National Army. Mr Muwi, who was 46, had worked as a gardener for most of his adult life and was then employed as a youth coordinator by the ZANU PF under the Ministry of Youth. The discussion in this chapter will demonstrate that each participants' life experience fundamentally shaped their engagement with farming and with media as a resource of knowledge for making sense of the way climate change may impact on farming.

This discussion should be read against the backdrop of the review of the socio-historical context of agriculture in Zimbabwe presented in Chapter One. It was argued, in that chapter, that it is possible to trace a relationship between the history of the appropriation of land in this country and the knowledge that farmers have of agriculture. It will be demonstrated in the discussion, below, that as a result of their location within this history, lack of access to such knowledge plays a central role in the participants' engagement with farming. The discussion also takes place in context of the review, in Chapter Two, of the current media landscape in Zimbabwe and how this has been shaped by this country's history. It was argued in that chapter that this history has implications for the role that media in Zimbabwe plays in providing audiences with access to knowledge about their social and natural environment. It is now proposed that the participants' description of their engagement with media as a knowledge resource for making sense of climate change should be understood in this context.

The first section of the chapter deals with the participants' life histories as these unfolded until 2002, when they were granted land. It deals, respectively, with the participants' experience of childhood, of adult life and work, and finally their response to becoming beneficiaries of the land reform process. Throughout, there is an emphasis on the implications of this history for their knowledge of and interest in farming. Section Two

focuses on their experience of farming after they attained the land grants, and here the discussion focuses on the challenges that they faced in the successful establishment of their farms. It deals, as part of this exploration, both with the role that socio-political conditions played within this experience, and the role of environmental conditions. The section then considers the participants' description of strategies that they have adopted in order to engage with these challenges, and finally reflects on the knowledge resources that informed these strategies. Section Three explores the role that media has played as a resource of knowledge about farming in enabling the participants to develop these strategies.

It should be remembered, in reading this discussion, that I am myself a member of the Nyanga community. As such, I have personal and subjective knowledge of the issues and experiences that the participants comment on in the interview material. Where appropriate I have referred to this knowledge in order to tease out what I understand the participants to be saying. In such instances, I have explicitly indicated that I am referring to my own subjective understanding of the issues in hand. It should also be remembered that the interviews were conducted and transcribed in Shona and were then translated into English. In the discussion, I have sometimes inserted words in the source language in italics, when it seemed that this would help to capture the nuances of expression. In each case I have included the English translation of the term in brackets.

Section One: Life before the land grants

1.1 Growing up in a farming community

All three respondents explain that they grew up in rural environments in which their families practiced communal farming. Garapo calls himself a “typical rural boy” who was involved in such farming from early childhood. Muwi explains that his father was a “well known peasant farmer” and that consequently, for him, farming formed part of the daily rhythm of childhood life:

I was born into a farming family, my father was a communal farmer, we would go and till the land after school and during weekends (Muwi,2017:1).

Mhaka also describes herself as having a rural upbringing in which farming was the main source of livelihood (Mhaka, 2017:1). She notes that she grew up with a passion for farming, driven by her uncles who were “well known farmers”. Staying with them, she saw “how lucrative the business was”, and came to view farming as a desirable way of life (Mhaka,2017:1).

Although the participants all have this shared childhood memory of farming, there are also differences. This can be seen, for example, in their discussion of the kind of crops that were grown. All of them make reference to maize, but each also describes farming with other crops. Muwi explains that “back then”, his family “... grew maize, potatoes and cabbages mainly” (Muwi, 2017:1). Garapo notes that for his community, “...maize was the basic”, as well as “...rapoko, groundnuts or monkey nuts” (Garapo, 2017:1). Mhaka notes that “at the time there was not much to be grown” except for maize, yams and *tjenja* [the livingstone potato or *plectranthus esculentus*] (Mhaka, 2017:2). I understood her to refer, in this statement, to the fact that during her childhood people were preoccupied with the armed struggle and therefore did not have time to experiment with crops.

My own knowledge of farming in Nyanga suggests to me that these variations in references to crops can be explained by differences in time and place. Garapo’s family home was located at a lower altitude to that of the other two participants, which explains the reference to rapoko, groundnuts and monkey nuts. To my knowledge, the crop mentioned by Mhaka, *tjenja*, is no longer farmed extensively, because it was ‘banned’ by white farmers who ventured into potato production before independence. These farmers claimed that *tjenja* brought diseases to their own crops. At the time of Mhaka’s childhood, however, it was still widely farmed.

1.2 Formal schooling and education

The three respondents had different experiences regarding access to education which impacted on their experience of knowledge about farming. Garapo notes that he was fortunate enough to gain entry into the schooling system, despite certain challenges:

I am sure you take cognisance that in those early years, it was very difficult to access basic education but we managed to get through (Garapo, 2017:1).

Mhaka was less fortunate, because her father passed on when she was still very young. She, her siblings and her mother were forced to relocate to Dzembe, an area in Nyanga about 100km from her place of birth, where they stayed with her mother’s extended family. Mhaka dropped out of school and started working, partly because her mother could not pay her school fees. She also notes that her lack of education resulted from the fact that this was “a time when the second *chimurenga* [revolutionary struggle] began and there were so many disturbances in schools” (Mhaka, 2017:1).

Muwi’s basic schooling, in contrast to Mhaka and Garapo, began at a much later stage, after independence. He explains that for this reason he did not have any difficulties in

attaining education. His relationship to farming also contrasts sharply with that of the other two participants. He explains that when he and his peers were asked what they wanted to be when they grew up in the early years of independence, they never mentioned farming as one of their aspirations:

We targeted white-collar jobs like teaching, nursing and some would want to be drivers. We never mentioned wanting to be a soldier or farmer, never. We wanted the clean and smart kind of professions (Muwi, 2017:2)

I understood this statement to refer to a set of aspirations that were generally adopted by Muwi's generation, who grew up immediately after Zimbabwean independence. This period saw the emergence of a black middle class, and young people who grew up during this period generally aimed to become members of this class. Such aspiration to middle class life was encouraged by the Zimbabwean government of this time.

Muwi was, however, not able to complete his secondary schooling. He notes that he “did not perform well and got a few subjects [that I then had] to repeat”. This, he explains, was due to the “free for all” education system after independence, which allowed everyone to attend to school regardless of age (Muwi, 2017:1). Upon attaining independence, the Zimbabwean government encouraged all Zimbabwean citizens to access free education in order to assist those whose schooling had been disrupted by the struggle for independence. As a result Muwi only managed to do ordinary level and started looking for jobs out of his own will.

For Muwi and Garapo as the two participants who gained most access to schooling, primary and secondary school education played an integral role in equipping them with knowledge about agriculture. Muwi explains that he “managed to get a lot from agriculture as a subject from school” and “even passed the subject with an A grade” (Muwi,2017:1). He notes that the combination of his experience of communal farming as a child and the study of agriculture at school equipped him with basic but important knowledge about farming:

It helped me a lot because ... I got most of the ideas that are essential to agriculture, I had them right on my fingertips that is through my experience as a growing up man coupled with the knowledge that I got in schools (Muwi,2017:1).

Garapo speaks, similarly, about the value of learning about agriculture at school, noting that “... we would do what we call gardening, which was a subject on its own that gave me a solid background” (Garapo,2017:1). He further explains that learning about agriculture was understood to lead to possible employment as an agricultural officer, which many people targeted it as a career opportunity given that it had the status of a middle class profession:

....because then, it was a very important subject since most people wanted to be the agricultural demonstrators like the present day *madhumeni* (agriculture rural extension officers). Those were most open to most blacks besides teaching if you were male so it gave us a good background (Garapo,2017:1).

Unlike Muwi, then, Garapo understood knowledge about agriculture to provide possible access to a middle class way of life.

Garapo is the only one of the three participants who was able to pursue an educational trajectory after school, completing his studies at the Institute of Bankers in South Africa (IOB). He states that outside the classroom, his time at this institution also provided him with an informal education in political consciousness, so that he “got into the hullabaloo of politics of those years”. He explains that this growth of consciousness included the realisation of the need for black Zimbabweans to “fight for the lost land” (Garapo, 2017:1). In this way, his relationship to agriculture became framed by a particular ideological positioning.

Mhaka, in contrast to the other two research participants, explains that she never learnt about agriculture in her limited experience of school. This, she explains, was due to the period in history during which she attended school:

At that time in schools, we never learnt about agriculture because it was not part of the curriculum. This also was the time when the second *chimurenga* began and there were so many disturbances in schools. Agriculture was only available at tertiary level. We had the little agriculture that we practised at home that is growing maize, *tsenz*a and yams (Mhaka, 2017:1).

It would seem from the participants’ commentary that Mhaka experience of childhood was informed by a greater level of hardship than that of the other two. One reason for this may be that much of her childhood coincided with the period falling between 1965 and 1979, which was referred to in Chapter One as characterised by armed struggle against the Rhodesian state. Mhaka explains, as we saw above, that the political instability prevailing at the time limited the extent to which her own community could prioritise planting a wide diversity of crops. Furthermore, this context placed limitations on her access to education and therefore her knowledge of farming.

Drawing on my own knowledge of farming in Nyanga, it may be worth noting that the two crops that Mhaka mentions - maize and *tsenz*a - represent basic survival for many people during tough times. Maize, as mentioned in the first chapter of this study, replaced more traditional crops as a source of food from the 1920s onward, during the period of the institutionalisation of colonial rule. Much later, in the period of armed struggle, families strove to produce enough for survival, since the soldiers constantly disturbed them whilst

tilling the land. Maize and *tsenza* again represented the few crops that rural people could produce under these conditions.

Also drawing on my own knowledge of farming, the yams that Mhaka mentions are no longer widely farmed in Nyanga. This is due to the decrease in the amount of rainfall received and its distribution patterns throughout the year. These yams are usually grown in high rainfall areas. They have lost popularity in Nyanga because of the changes in rainfall patterns as well as the amount of rain that the area now receives.

1.3 Working life

After school, all three respondents pursued work that had little to do with farming. Only Garapo was involved in work that brought him into contact with people within the agricultural sector. After completing his studies at the Institute of Bankers in South Africa (IOB), he went to Salisbury where he was employed in an administrative position in a bank. He experienced this as a major achievement, because, as he explains, until this time to work in a bank “was a preserve for the whites” (Garapo, 2017:1). In Salisbury, he was introduced to knowledge about various duties encompassed in the financial management. He understood this as a process that augmented his understanding of the business side of farming:

The basics of finance where you would say, a man has brought money into the bank, the next day he wants to write a cheque, or withdraw, financial controls, and as we progressed, we then learnt how people access finances, like loans, overdrafts, from the bank to enable them to get into the farming field (Garapo, 2017:1).

Garapo’s work also gave him direct contact with the farmers who came to the bank to negotiate for financial aid. He was personally responsible for processing their applications. He explains that as part of such work “you interact a lot with the farmer, mostly the commercial farmer” (Garapo, 2017:1). I understand Garapo to refer, here, to white farmers who held the privilege of owning vast stretches of agricultural land. As part of the process of assessing their applications for loans he visited their farms and saw how they were operating. He explains that such experiences “drove me into wanting the land” (Garapo, 2017:1). His interactions with the farmers became “a chief motivator” for becoming a farmer, because he “would see people earning a decent living out of the land to a very reasonable extent” (Garapo, 2017:1). In this way, he developed a keen interest in farming.

Mhaka’s work experience stands in contrast with that of Garapo. At the height of the war of liberation, in 1977, she decided to join the struggle for freedom, and ended up attending a training programme in Romania. She returned to Zimbabwe two years later, on

the verge of independence, and joined the army in which she served until her time of retirement. She notes that this work did not prepare her in any way for farming (Mhaka, 2017:1).

Muwi also had a different experience after school, when he went to the capital where he worked ‘part time jobs’ in the library at the University of Zimbabwe (Muwi, 2017:1). Later, he was employed as a gardener by a “white man”, who took him to Triangle, a small town in the lowveld of Zimbabwe where sugar cane is grown in the country. Later, when he lived in Nyanga, he began working for the ZANU PF’s Ministry of Youth. Like Mhaka, Muwi feels that his work experience did not prepare him for farming.

When one compares the three respondents’ descriptions of their working lives, it is again apparent that Mhaka’s life trajectory was most directly shaped by the turbulence of the Zimbabwean context of this time. This, in my understanding, is typical of people of her age who grew up during the period of heightening challenge to the Smith regime. This experience of social turbulence constrained her preparation for life as a farmer. Muwi grew up at a different moment in time, and for this reason had more choices in life; nevertheless, he was also unprepared for a future in farming. In contrast, Garapo’s experience of stable middle class employment provided him with at least some access to such preparation.

1.4 The land grants

In 2002, all three respondents were awarded land grants by the Zimbabwean government. Mhaka notes that it “...was something that I was so excited about, I was happy to get the land” (Mhaka, 2017:2). To own a piece of land in Nyanga meant that she could fulfil her dream of growing potatoes, which was “an opportunity ... never open to the blacks in the previous decades” (Mhaka,2017:2). She praises the land reform initiative for providing her with this chance, and notes that it prompted her to make the life changing decision of retiring to become a farmer. She explains that the offer of land was the “force that pushed [her] to retire since [she] wanted more time on the piece of land” (Mhaka,2017:2).

Garapo also “embraced [the land grant]with open arms” (Garapo, 2017:1). He explains that one reason for this was that his working experience in providing financing for farmers enabled him to understand that “land is a very important asset” (Garapo, 2017:2. Secondly, he felt that land formed part of the fundamental identity of people of his generation:

We dealt with politics in the 60s and our main issue was fighting for land and I have always said to people today, you kids walk around, calling yourselves

comrade this or *camarada* that, our slogan was *mwana venhu* (son of the soil) (Garapo,2017:2).

Because of his political consciousness, Garapo understood the term *camarada* (the Portuguese word for comrade) to stand in contrast with that of *mwana wevhu*, which signalled a close relationship between identity and ownership of land. This was a relationship which he understood to be central to the African nationalist politics of this time.

Muwi was granted land as a result of his work for the ZANU PF under the Ministry of Youth. His initial response to the grant differed from Garapo and Mhaka, because to him farming had not meant anything until he was confronted with the possibility of its ownership. He, too, was “excited and honoured” by the grant (Muwi, 2017:2), but like others of his generation, he had never expected to benefit personally:

We were not at all prepared, it’s like we walk from here to Troutbeck⁴ and then meet a friend who offers me a free ride to Nyanga ... or someone just offers you beer from nowhere. I was not prepared when I got my piece of land, although the land is an important inheritance (Muwi, 2017:2).

In offering these comparisons, I understand Muwi to be explaining that the land grant came as a profound surprise to him. Ownership of land arrived in his life as an unlooked-for gift, freely given, but imposed on him as part of someone else’s agenda. At first, he felt “sceptical” about his own location as a beneficiary of the land reform programme. He explains that, “...during the first year, I tilled the land with fears that maybe the white men would come back and ‘sjambok’ us off the land”. But gradually, he began to think about the history that he learnt at school and this eventually led him to accept that the land was part of his heritage. He referred, in particular, to the statement of President Robert Mugabe that the land reform programme was meant to “give back land to the people who had formerly been underprivileged in the hands of the white man” (Muwi,2017:2). When he realised that there was not going to be any reversal on land reform he began appreciating the value of his newly found farm as “more spacious land and not as crowded as the communal areas” (Muwi, 2017:2).

The differences in the three participants’ description of their response to the granting of land can be seen to be indicative of their location within Zimbabwean socio economic history described in Chapter One. This difference in location meant that they had varying levels of access to knowledge about farming; that they exhibited different levels of investment in the idea of a future in farming and they drew on different ideological

⁴Troutbeck is a village in the province of Manicaland in Zimbabwe. It has the status of a tourist resort popular with anglers, and hosts a four star hotel.

frameworks in making sense of their right to own farm land. Muwi's responses, as described above, must be understood in context of the fact that he grew up after independence and that for his generation, farming was not a desirable goal. Mhaka and Garapo, in contrast, grew up believing that they were entitled to land and dreaming of farming their own land. As will be demonstrated in the next section, these differences in historical location was to play an important role in shaping the participants' experience of farming.

Section Two: After the land grants - an experience of farming

The discussion in this section takes into account the argument presented in Chapter One with regards to factors that need to be considered in making sense of the history of agricultural productivity in Zimbabwe. It was proposed, in that chapter, that this history has been shaped in unique ways by the intersection of two historical processes: that of struggles around ownership of land and that of changes in weather patterns. It was argued, more specifically, that both socio-political and climatic history have impacted profoundly on the degree of access that small-scale farmers have to credible knowledge about agriculture and about the factors that impact on agricultural productivity. The organisation of the discussion, below, is informed by this argument. It begins by considering the participants' description of the challenges that they faced in establishing their farms, first in relation to socio-political factors and then environmental conditions. It then examines their account of the strategies that they employed in engaging with these challenges. Finally, it deals with their explanation of the knowledge resources on which they were able to draw in order to develop these strategies. The section attempts to locate the participants' account of these experiences within the broader Zimbabwean history of agricultural productivity, as described in Chapter One.

2.1 Unprepared but resourceful

In describing their initial attempts to establish their farms, all of the participants note that they were unprepared for the challenges that they would face. Each had set out to produce potatoes, given that this was the primary crop grown in the area. Mhaka notes, however, that the new land grantees generally did not have the necessary infrastructure in place required by such farming, nor the financing to acquire these resources. Land, in itself, was not enough to ensure their success:

We did not have farming implements to till the land; we just took over land but did not have the capital (Mhaka, 2017:2).

Muwi also explains that producing potatoes during the first years was not easy because of lack of sufficient capital:

At first things were quite tough for me because I did not have enough resources to venture into successful farming. These are things like fertilisers and draught power since I got this land while I was young ... I did not have irrigation infrastructure (Muwi, 2017:3).

Garapo adds that he had to do a lot of land preparation in order to start operating:

It was quite difficult because this piece of land where we are was a thicket, nobody had worked on it before so we had to start from scratch, most of the little capital that was there went towards clearing off and infrastructure, water, roads. Without access to water you are not a farmer, you cannot rely on the seasonal rainfall because they may not come (Garapo, 2017:3).

Mhaka notes, further, that small-scale farmers such as herself could not find access to the capital that would enable them to develop the necessary infrastructure:

...at first, we could get loans ... but they were not substantial enough to enable us to purchase tractors and all. They were small loans so we had to resort to draught power to till the land (Mhaka, 2017:2).

In addition, all of the participants speak about limitations in their knowledge of potato farming. Mhaka explains that the knowledge that she had inherited through her background in communal farming and schooling was too general in nature:

I had a bit of knowledge from just seeing others doing, but not anything that we got from schools [was that relevant] ... It was just basic knowledge that this crop cannot be grown this way and that can be grown that way only (Mhaka, 2017:2).

Garapo shares this assessment of his own lack of knowledge, but adds that the little background that he did have combined with his personal commitment to farming helped to sustain him:

I was not fully qualified, coming from a banking background, but because of the interest and the little agricultural background that was there from communal farming, gardening at school and interaction with farmers at work. All these combined with the inborn passion for farming (Garapo, 2017:2).

Muwi, similarly, explains that although lack of resources and knowledge constrained his ability to make headway in farming, he remained determined to achieve some success:

I might fail to produce enough due to lack of resources but I try to manage as much as I can in order to get better produce although they may be very small yields (Muwi, 2017:2).

The participants' comments, as summarised above, point not only to the enormity of the challenges that they faced in establishing their farms but also to their resilience and willingness to engage with these challenges. As will be demonstrated in the next two sections, this resilience and resourcefulness has played a key role in their survival.

2.2 Socio-political conditions

Of the three respondents, Mhaka is the only one who achieved good agricultural returns in the early years of farming on her new land. She notes that she shares this experience with many of the other land grantees. She makes clear, however, that this success did not last in the longer term:

When we first got the land, our yields were pleasing ... and we managed to pay back the loans that we had from the banks. We got good harvests and if we had continued producing the way we did those years we would not be where we are (Mhaka, 2017:3).

Mhaka explains that the early years of success were largely due to the degree of support that she and other farmers received at that time. This included financial assistance from the government-owned Agricultural Development Bank of Zimbabwe (ADBZ), commonly known as Agribank. As Mhaka explains, support from Agribank came with terms and conditions and paying back was mandatory. She nevertheless understood this resource to be available to her because the government took responsibility for contributing to her success as a farmer:

The only thing that I think I got from the government came through the loans since Agribank is a government owned bank established to assist farmers... (Mhaka, 2017:5)

Muwi explains that, over and above such loans, the land grantees in Nyanga also received direct support from government in the form of agricultural inputs and equipment:

We were given ox drawn ploughs, fertilisers, maize seed ... I can say for us the A1 model farmers that is what we all got and we thank the government for the help because we managed to pull our way through (Muwi, 2017:3).

Muwi is referring, here, to categories that were applied to different kinds of farmers who were allocated grants within the land reform process. The terms 'A1' and 'A2' refer, respectively, to small-scale and commercial farmers. A2 farmers received larger and more established farms, and were also awarded more substantial support from government.

Garapo, in contrast to Garapo and Muwi, did not receive any material support from the government in those early years:

I got nothing; we would put in applications [for the resources and loans] so that we can have them too [tractors and ploughs], some coming from Iran and Brazil, even the irrigation equipment. We would hear about them but never saw them on the ground (Garapo, 2017:3).

I think that he failed to get access to resources because he was not as closely connected to Zanu PF like Mhaka and Muwi.

Makha also notes that support was represented not only by access to bank loans but also contributions in the form of seed potatoes from established white farmers in the area:

The economic environment would allow us to get assistance too from the local potatoes seed growers, a good example is Mr Johnson⁵ of Kylynne Orchards who assisted us with seed [and then we] pay him upon harvesting (Mhaka:2017:3).

As a member of the Nyanga farming community, I am able to add context to this statement. Before the land reform process began, this potato seed producer did not provide seed loans to the local black farmers. He began this practice because, in return, the war veterans agreed not to take over his farm. As explained in Chapter One, land reform in Zimbabwe involved a process in which land was taken by force from white farmers, often by means of violence. After the land occupations, some white commercial farmers were allowed to remain, but many were forced by the circumstances prevailing around them to share resources with the war veterans in the way that Mhaka describes. This practice did not last however because Mr Johnson succumbed to cancer and died. His wife, who took over the farm, does not offer seed to the resettled farmers.

All three of the participants explain that even if they produced successful crops in the early years, they were unable to build on this success by expanding their farming ventures. One reason for this was that access to adequate resources constrained their ability to plan ambitiously. Garapo explains that, "...the challenges are mostly in the assets that can make you productive; farming implements, water, inputs like fertilisers and seed" (Garapo, 2017:3). Mhaka also notes that without the appropriate farming implements, expansion is not possible:

If you do not have the farming equipment, there is no way you can get into a serious enterprise, you need to have a tractor, or enough draught power, then life will be easy for you (Mhaka, 2017:3).

Muwi speaks of the limitations that are placed on his plans for the future by lack of access to finances:

⁵ This was not his real name; I have used a pseudonym to conceal his identity.

The major one is that we have not been able to access enough money to fund our projects, we look forward to farming from five hectares onwards but financially [we are] under capacitated to do so (Muwi, 2017:3).

He argues, further, that A2 farmers did not experience the same degree of hardship, because they had been given more substantial support from the start:

We are still growing, [but] to those who were allocated land and had their good capital; they are well up even up to now. To those A2 farmers, they were also given farming equipment...(Muwi, 2017:3)

In many instances, the land allocated for A2 farmers used to belong to wealthier white farmers, which meant that these grantees inherited well-established buildings and infrastructure. Buildings and equipment on the A1 farms were not of the same quality:

...look we even stay in wooden houses; the A2 farmers were also given farmhouses and are staying there. Some even took over farms that had tractors and are using them (Muwi,2017:3).

Muwi's reference to wooden houses should be understood in context of the fact that the government stipulated that A1 farmers may not build permanent structures on their farms.

In addition, the participants note that rather than being able to expand their farming ventures, they have in fact experienced a decline in production. Garapo explains:

Yes actually now production has gone so low, we do not have any reserves anywhere, there is nothing. What we used to produce when we started has gone down (Garapo,2017:4).

Muwi also notes that what he used to produce on a small section of his piece of land and what he is now harvesting has changed (Muwi, 2017:4). Mhaka, similarly, confirms that her production has been going down (Mhaka, 2017:4). The participants note that this decline in production can be partly explained by the fact that the assistance that was given to farmers in those early years of production did not continue to be available to them. Garapo explains that this decrease in access to resources necessarily impacted on productivity:

It is this inability to access inputs, if you do not have the money to buy fertilisers chemical and so on then you have had it.so what do you do? You cannot produce on the same scale as you do when you have all in place (Garapo, 2017:4).

Garapo proposes that a central cause of this change in circumstance was corruption of the government officials responsible for the distribution of resources. He argues, in fact, that that such corruption is a key reason why agricultural production declined both in Nyanga and in Zimbabwe in general:

Sometimes you get to a situation where one block has 10 tractors allocated to one farmer when I only need one; I also do not need 100 bags of fertiliser, I just want enough to get my produce out of the field. They instead go on to hoard these things and keep them to themselves. That fails the country because when people are hoping that those items will help to produce, they are stored up in some warehouses so where do you expect to get production under such circumstances (Garapo, 2017:3).

Garapo explains that, in order to gain access to these provisions, farmers were expected to bribe government officials. He refused to do this, because he “would rather work hard rather than venture into bribing to get something out” (Garapo,2017:3).

My own observation of events in Nyanga during these years would lead me to conclude that there is validity in Garapo’s assessment of the situation. During the first years after the implementation of land reform, all A1 farmers enjoyed reasonable access to agricultural inputs. However, in subsequent years, the distribution of resources became increasingly ‘politicised’, so that the party loyalties of farmers impacted on their chances of receiving support. Support was, in fact, only accessible to people who actively fostered the appropriate politics affiliations. Within such a situation, fair distribution of resources was not possible, and became constrained by corruption.

Muwi suggests, in addition, that provision of assistance government was often ill informed. The decline in production therefore also had to do with the fact that the kind of assistance that the land grantees received from the government was not sustainable in their area. He explains, in demonstration, that both he and other farmers in Nyanga were given maize, “... though areas like ours are not good for maize, and it grows but does not perform really well” (Muwi, 2017:3).

Mhaka also notes that, over time, financial support from commercial sources became less accessible to small-scale farmers. Despite the land reform process, financial institutions became unwilling to support the land grant farmers, while they continued to support white commercial farmers. She explains that one reason for this is that the commercial farmers held title deeds, which were still understood to hold more credibility than the land grants. Mhaka suggests this withdrawal of assistance contributed to the financial ruin of many small-scale farmers:

Today we would not be where we are. Well, now things have changed over [the] years. And right now, we have gone bankrupt (Mhaka,2017:3).

Mhaka also argues, however, that these changes need to be understood in context of broader shifts taking place within the Zimbabwean economy. She explains that “...when the

economy went down, we lost all these opportunities” (Mhaka, 2017:3). She suggests, furthermore, that economic decline resulted from the pressure placed on Zimbabwean financial institutions by internationally instituted sanctions:

..when the bank was put under economic sanctions, it failed to come back to life and continue to sponsor farmers in their farming operations (Mhaka, 2017:3).

It was also economic sanctions that led to the emergence of a clandestine market for agricultural resources:

Fertiliser manufacturing companies are operating below normal due to those sanctions. The same as chemicals and these are some of the constraints that are making operating complicated. Every other farming input that you need, you only get it through the ‘mukoto’ (black market) and we just hope that things will change for the better one day (Mhaka, 2017:4).

All three participants’ description, in this section, of the challenges faced by the small-scale farmers of Nyanga in sustaining their crops resonates with the analysis, in Chapter One, of causes of the decline of agricultural productivity in Zimbabwe in the early 2000s. As we saw there, the government introduced fast-track land reform but did not establish a support system that was strong enough to empower the new cohort of farmers. This meant that the land reform process did not result in a transformation of the Zimbabwean landscape, in which ownership of agriculture could pass from a minority of white farmers to the black majority. Instead, the process of reform led to the breaking down of agricultural productivity. The participants’ experience of sustaining their land grants in Nyanga can be read as evidence of this process.

We have seen, within the above commentary, that Mhaka understands the failure of this process to have resulted from economic sanctions. I recognise this reference to sanctions as one that is often articulated by government officials to explain the economic situation prevailing in the country since the beginning of the land reform exercise. I understand her invocation of this interpretation of events to be informed by her identity as a veteran and a member of the Zimbabwean army. Garapo, in contrast, explains the same set of circumstances in terms of a narrative of corruption, which is a critique associated with opposition to the Zanu PF government. It would seem, from these commentaries, that these two participants’ experience of access to resources and their interpretation of the decline of such access is informed by the way they locate themselves within relationships of loyalty to the ZANU PF government. Their interpretation of their circumstances is, in other words,

rooted either in their allegiance to or defiance of dominant ideological positions and discourses.

My own ideological position is closer to that of Garapo, but I also believe that his interpretation of circumstances to be more objectively accurate than that of Mhaka. I would argue that this is because his interpretation of the world around him is better informed. This does, of course, remain my own subjective interpretation of the two participants' commentary. I would nevertheless argue that their commentary demonstrates their need for access to diverse and credible knowledge resources that can enable them to make sense of their circumstances in an informed way. It is such access to knowledge that represents the central concern of this study.

2.3 Environmental conditions

When speaking about environmental conditions, the respondents identify a decline in soil quality as being a major cause for the reduction in agricultural productivity on their farms. Mhaka explains that "... the soils around our area ... seem to have been exhausted" (Mhaka, 2017:4). Muwi and Garapo also confirm to be facing similar challenges (Garapo, 2017:4; Muwi, 2017:4)⁶.

Secondly, the respondents speak of changes in rainfall patterns, which have affected the performance of their crops. Garapo notes that he and other farmers "no longer receive rains as we used to when we first settled here in the early 2000s" (Garapo, 2017:4). He explains that as a result of such changes, farmers now have to plant their crops at different times:

...we usually used to plant our potatoes early October. In fact, we used to receive first rains around August called *bumharutsva* (a rain of brief duration that occurs in August or September before the onset of the rainy season) and this no longer comes as we used to experience back then. We are now getting first rains in December and plant late so sometimes our crops get affected (Muwi,2017:4).

Mhaka explains that farmers' attempt at changing the schedule of planting has not resolved the problem:

⁶ This section deals only briefly with the problem of poor soil quality and then moves to a detailed discussion of changing weather conditions. This should not be read as indication that the participants regarded the question of soil quality to be of lesser importance. As will be apparent from the next section, in which the participants speak about strategies that they have employed to deal with environmental challenges, they chose at that point in the interview process to return to the topic of soil quality. The limited discussion of this topic at this point relates, rather, to the fact that I prompted them to speak in particular about weather conditions.

We used to plant our potatoes in October back then and it would rain before the end of the month, right now things have really changed because the rains no longer come in October as they used to way back. The rains then come in November and pour heavily in December or January therefore affecting the crops ... sometimes the rains stop raining for good in January when the crops still need water so they eventually just die (Mhaka, 2017:4).

Mhaka and Muwi both note that these changing rainfall patterns have brought with them new plant diseases that have affected their crops. Mhaka explains that “...most of our summer crops are affected by the rains that pour and bring in diseases of different types” (Mhaka, 2017:4). Muwi describes these as “newly emerging diseases ... that we never experienced when we were still at school”. He explains that these diseases “usually come in March”, because the rains have become more concentrated within a short period of time during this part of the year (Muwi, 2017:4).

All three of the respondents argue that these changes in rainfall patterns are indicative of climate change. Garapo, for example, refers to the shifting patterns as “changing climatic conditions” (Garapo, 2017:4). Mhaka notes that “with this climate change we have since lost direction, most farmers are long lost” (Mhaka, 2017:4). Muwi says that “...we wonder where they are coming from [weather changes], and maybe it is climate change that is causing it” (Muwi, 2017:4). I have observed that of the three respondents, Garapo has a more nuanced understanding of what climate change is than Muwi and Garapo. I think to them climate change is simply a phrase that is used to refer to weather changes.

In my estimation, there is a need to conduct further research with participants such as the three farmers who contributed to this study with regards to their understanding of climate change – particularly as regards its causes. In the pilot research that I conducted for this study, as described in Chapter Four, one respondent claimed that climate change is the result of bombs that are being tested “in the West” by countries such as Russia and South Korea. Other participants suggested that climate change in Zimbabwe results from deforestation that had occurred immediately after the land reform process. Veterans who had taken over farmland had cleared large tracks of forest and burnt plantations, and this is understood to have resulted in permanent changes in rainfall patterns. In reality, it was mere coincidence that the allocation of land grants and the commencement of drought came in the same year. I was interested, in particular, in the fact that such accounts suggest a preoccupation with identifying who might be responsible for climate change. The story about deforestation can also be read as a claim that retribution has been visited upon farmers due to the destructive behaviour of veterans. To me, as the researcher, such explanations signal that this farming

community lack access to credible knowledge resources that can allow them to make objective sense of climate change.

2.4 Approaches to problem solving

All three of the participants note that they resort to crop rotation as a way of responding to the decline in soil quality. Muwi explains that crop rotation is sensible strategy for small-scale farmers to pursue because they do not, in any case, have the capacity to farm all of their land at one time:

We as A1 we have too much land which we cannot utilise all at once so we practise crop rotation and this is helping us to yield much better, this crop rotation is helping improve our soils (Muwi,2017:4).

Garapo explains that this strategy helps to ensure continued production. This is possible, in the case of his farm, because he has enough land to allow for rotation:

The crop rotation that we use [enable us to] still earn a living because with all the land that we have, we keep changing fields, that is use a field for some time then leave it idle for some time and this helps us get good harvests (Garapo,2017:4) .

Mhaka notes, however, that in the case of potato farming, crop rotation is only possible if a farmer owns enough land to enable them to leave tracts lying fallow for years. This is not possible for her, as a small-scale farmer:

Potatoes need a strict kind of rotation in which you till the land for two consecutive years then leave it idle for three more years, so with our five hectare pieces of land, we can no longer practise a meaningful crop rotation which leads to our soils losing fertility a condition which affects the production of potatoes (Mhaka,2017:4).

These comments in respect to crop rotation, demonstrate that the participants were able to make informed choices with regards to appropriate responses to the challenges that they faced with regards to environmental conditions. However, because of the severe constraints in their access to resources, their ability to respond strategically to such conditions remained limited.

With regards to adapting to changes in rainfall patterns, Muwi says that he does not have access to enough information to enable him to develop appropriate strategies. He explains that he, and other local farmers, "...do not have knowledge on how we can counter these changing patterns" (Muwi,2017:4). He mentions that one guideline that he has received is "not to randomly cut down trees...". In order to make sense of this comment about tree-

cutting, it is of relevance to remember farmers' belief, as described at the end of the previous section, that local deforestation has contributed to climate change in the area. It is in context of this belief that Muwi appears to accept that cutting down trees on his property could be contributing towards the climate's positive change.

All three participants make reference to the need to establish irrigation systems. Garapo explains that the establishment of such infrastructure is encouraged by government, as an appropriate response to changing rainfall patterns:

...in the government and ministry of agriculture, they said they want to implement mechanisation and irrigation (Garapo, 2017:4).

Garapo has responded to such advice by established irrigation on his farm since "irrigation is a supplement for rainfalls" (Garapo, 2017:4). Mhaka explains, however, that such systems are in themselves not enough:

We managed to establish irrigation on our pieces of land trying to counter the water problem, however with the current economic situation prevailing in the country we have not managed to do anything else meaningful to counter our problems (Mhaka,2017:4).

Muwi also notes that irrigation systems are only of use if there is enough water available to feed into them. Within the context of an extended drought, this is often not the case:

... since the rains are not falling as they used to, the streams are drying up therefore our pipes will not help sometimes. If we do not get sufficient rains, the rivers dry up easily and quickly (Muwi,2017:4).

He adds that this problem applies in particular to low-lying country, where streams are likely to dry up first. In this sense, farmers in Nyanga have an advantage:

... if it rains well we will not have problems, for high altitude areas like this one, stream water can take us into October but for areas downstream, that is not the case. Although it rained late, our rivers are still full (Muwi,2017:4).

As Mhaka indicates, however, in the context of extended drought, the establishment of irrigation systems cannot, in themselves, be seen as an adequate response to water shortage.

Although the respondents can be seen to share strategies of response to drought, it is possible to identify differences in their general stance that they adopt in their engagement with this problem. Mhaka adopts the position that the government is ultimately responsible for helping farmers to survive. The government should, for example, provide farmers with crops that can survive in conditions of drought:

We just hope if the government would intervene and ensure that everyone who got land is assisted; this can be so by identifying the type of crop suitable for every area and fund it accordingly (Mhaka, 2017:5).

Muwi talks, similarly, about assistance from government in ensuring that irrigation systems are connected to sources of water:

...we would like if we can get assistance to draw water from the big rivers, and then use it for irrigation particular for A1 farmers, this way we can then plant anytime with a more reliable schedule. We can just plant without any inconveniences even in winter we can plant (Muwi,2017:5).

But Muwi also sees an opportunity in context of private enterprise, as represented by the local tourism industry. In this context, he notes that if potatoes are no longer an appropriate crop to farm in Nyanga due to the changing climate, farmers could consider the alternative of market gardening, in order to supply local hotels:

There ... is the hotel next to us that uses farm produce which we can farm on our fields. We need knowledge on how to produce crops that they go and buy in towns yet we can still grow them here, if we can only get such, we can never be the same, such crops include carrots, spinach, lettuce etc. We have to diversify from just growing potatoes (Muwi,2017:5).

Such commentary suggests that Mhaka is more deeply invested than Muwi in a relationship of dependence on government resources. Muwi, in contrast, is considering the opportunities offered within the local market. This difference in stance can be seen to be informed by the two participants' ideological positioning in relation to trust of the government. Ideological positioning and the articulation of problem solving strategies are, in this sense, closely connected.

2.5 Knowledge resources

All three respondents affirm that knowledge is a key resource to their farming enterprise. Mhaka notes that, "knowledge is vital and we need to have it in order to perform well in this line of business" (Mhaka, 2017:4). Garapo argues that "farming as a business is not static; it keeps changing so you have to keep getting new farming ideas (Garapo,2017:4). Muwi also confirms that "without knowledge, one cannot venture into successful in agriculture" (Muwi, 2017:5).

In assessing their own knowledge of farming, the participants are affirmative regarding their own ability to learn. Muwi explains that although at first he did not have much knowledge of farming, he has succeeded, over the years, in developing a sound

understanding of what is required (Muwi, 2017:4). Garapo states, similarly, that he acquired such knowledge through trial and error. He states that the knowledge that he established in this way “... is on the spot learning to get to the nitty gritty of farming” (Garapo, 2017:2).

When asked to identify sources of knowledge about farming, Mhaka mentions the prominent commercial farmers in the area. She explains:

I rely on knowledge from the well-established farmers who were already producing at a large scale before the land reform program (Mhaka, 2017:5).

It is my understanding that Mhaka is related to some of the black commercial farmers in the area and it is for this reason that she is able to turn to them for guidance on agricultural matters. This, however, appears to be an unusual circumstance. It is more usual for small-scale farmers to look for guidance from AREX [Agriculture Rural Extension] officers. All three participants mention the role that these officers play in providing farmers with guidance. Muwi notes that they are “assigned to assist farmers” by the government (Muwi, 2017:4). Mhaka states that their assistance is of paramount importance because without them “you will not win in agriculture” (Mhaka, 2017:4). Muwi states similarly that assistance from agricultural officers have been of great value to small-scale farmers in Nyanga:

We are getting knowledge from *varimisi* (Arex officers) who come and teach us on the latest cultivars that are suitable for the changing seasons. They give us farming knowledge that helps us a lot. They also advise us on when to start planting crops and do the land preparations, winter plough and several other measures (Muwi, 2017:5).

Garapo also confirms value of the knowledge that the extension officers share with farmers, but is a more reserved in his praise:

Occasionally here and there you have to get Arex officers to discuss certain factors with the farmer, where they would bring in new technologies, ideas and also the farmer has to go to some of these refresher courses and learn (Garapo, 2017:4).

The refresher courses mentioned by Garapo are usually conducted by AREX officers in the Nyanga area.

It would seem, from these comments, that the participants generally value the role played by the extension officers in strengthening their knowledge of farming. However, when I asked them whether they thought the officers they had worked with were equipped to be a credible source of knowledge about farming, they refused to comment further. My own observation, as a member of this community, is that the guidance that these officers provide

to farmers tend to be of limited value to them. The extension officers who work in Nyanga attended national training institutions where they gain certificates which indicate that they have general knowledge of agriculture. Such training does not provide them with knowledge that is of particular relevance to farming in Nyanga. They do not, for example, receive any particular training with regards to the production of potatoes. In most cases, they are not familiar with the diseases that have emerged in Nyanga in context of the changes in weather patterns. In my observation, these officers have also not been exposed to credible scientific knowledge about climate change. Their comments on climate change tend, rather, to be informed by local interpretations of the causes of this phenomenon, as described at the end of the previous section. Typically, they subscribe to the understanding that the current conditions of drought have been caused by deforestation of farms. This argument seems to form part, furthermore, of a more general assumption that problems with agricultural productivity in Zimbabwe have been caused by the replacement of experienced commercial farmers with less experienced small holder farmers.

My comments in this respect are, of course, based on anecdotal evidence. There is, in my view, a need for further research in order to establish whether they represent a fair assessment of the extension officers and the nature of their contribution to credible knowledge about farming in Nyanga.

Section Three: The media as a knowledge resource

3.1 General media consumption patterns

All three participants confirmed that the media plays an important role in their lives. Muwi notes that he uses the media “in quite a lot of things” and Mhaka states that she accesses media “every day.” (Muwi, 2017:5; Mhaka, 2017:5). Garapo also says that he uses the media regularly “for news and entertainment” (Garapo, 2017:5). Their description of such usage also suggests that they engage with a wide array of media. Mhaka’s media consumption includes print, radio and television. The *Herald*, which is a state-owned newspaper, is delivered to the offices of the Zanu PF’s war veteran office, where she works:

We get a copy of the *Herald* in our office every morning ... I also listen to the radio and watch television. The radio station always accessible is Zifm and our ZBC TV sometimes gets signals, I however access it on DSTV where it is clearer and always available (Mhaka,2017:5).

ZiFM is one of two independent television stations that were launched in Zimbabwe in 2012, while ZBC is the state broadcaster. It is apparent, from this description, that access to

broadcast media is intermittent within Mhaka's environment. As we have seen in Chapter Two, intermittent reception is typical for both radio and television within many rural areas of Zimbabwe. Nyanga is a highly mountainous area and this is one reason why reception of both radio and television signals is uneven. Clearer reception of these signals is possible for Makha because she can afford the satellite service DSTV. In Chapter Two, we saw that many Zimbabweans have come to rely on this service. It was suggested, in that chapter, that one reason for this is that the service is more available to audiences than local transmission of the Zimbabwean broadcasters. This is true even for members of rural audiences, if they – like Makha – can afford the cost of electricity and the payment of monthly subscriptions. It is apparent, from Makha's explanation, that DSTV also makes access to Zimbabwean television possible, since these channels are available by means of the service.

Muwi also makes reference to print and broadcast media and, as in the case of Mhaka, this includes both the state broadcaster and commercial television. He notes that reception of broadcast signals is good on his farm because of its geographical positioning:

I also listen to the local radio stations and read the *Herald* newspaper. I listen to Zfm, Radio Zimbabwe because they are accessible on my piece of land... (Muwi, 2017:4).

He explains that in this respect he is "very lucky because most of the farmers here cannot access [local stations] on their radio sets" (Muwi, 2017:5). In addition, he says "I access the media via ... cell phone and also buy and read the newspaper" (Muwi, 2017:4).

Garapo, similarly, explains that he watches ZBC TV. He notes that this is only possible because he has established a source of electricity (Garapo, 2017:5):

Local television signals are a problem here so I had to come up with a strategy to connect myself with the outside world. I therefore switch on my generator ... when I feel the need (Garapo, 2017:5).

He, like Mhaka, also makes use of DSTV in order to access a clear television signal. He notes that he listens to radio as well, but because of the difficulties with reception on his farm, he is only able to do so when he is in town. In addition, when he visits town, he "[buys] newspapers, particularly the *Manica Post*"⁷. Garapo also notes that he makes use of his mobile phone to share and receive news within the local farming community:

...through WhatsApp groups we always share information among members on any matter affecting farmers in a particular area (Garapo, 2017:5).

⁷ The *Manica Post* is a weekly provincial newspaper published and circulated in Manicaland. It is owned by Zimpapers.

As already noted in Chapter Three, my observation during the interviewing process was that use of mobile phones forms an integrated part of all three of the participants' lives. My more general observation as a member of the Nyanga community suggests that use of mobile technology is in fact typical of small-scale farmers in this area. Farmers regularly establish WhatsApp chat groups in the way that Garapo describes here and use them to update each other both on issues prevailing in the agriculture and events within their social circles.

3.2 Purpose of media consumption

The three respondents' commentary suggests that they consume media for the purposes of gathering information of relevance to farming and also to gain access to more general news. Mhaka explains that when she reads the *Herald* every morning she "quickly looks at the main headlines and then also checks the weather" (Mhaka, 2017:5). She adds that she uses the media as a source of news, with a particular emphasis on reports framed by the views of the Zanu PF:

You know we are the war veterans and we would love to hear what our leaders are saying there in the capital (Mhaka, 2017:5).

She also talks in detail about the media as a source of information about the weather, and explains that such information is of great value to her as a farmer. She makes particular reference to the importance of gaining information about abnormal weather conditions. Knowing about these events in advance has enabled her to protect her farm from the impact of extreme weather:

The weather forecasts in the media have helped me plan my farming operations, I get information on what the weather is going to be like and this makes me aware of the possible dangers that I am likely to face. This year it was effective in informing me about the excessive rains that we experienced. I even went to my farm knowing that I was faced with a loss due to abnormal rainfalls using the knowledge that I got from the media. We were also informed in the media that we should expect frost this winter and that is the reason why I did not plant any winter crops because I took heed of the warning. If I had planted, I would be crying like my neighbours who planted winter crops but before they were a month old, the crops were destroyed by frost (Mhaka, 2017:5).

Muwi also places particular emphasis on the role that media plays in providing him with information about weather conditions:

It gives me news and weather forecast. That is; is it going to rain, are there going to be any floods, for how long is the sun going to be there as in the dry spell, how long is frost going to last and its intensity...(Muwi, 2017:5).

Garapo also mentions the important role that weather reports play in providing him with information of relevance to his farming practice. He explains that such information is of crucial importance to any farmer:

The weather reports and forecasts have helped me a lot in my practise. I can plan my planting dates judging from the information I get from the media. The major threat to agricultural productivity is the weather therefore knowing the climatic trends makes a life farmer easy. Have you noticed how people get worried when rains do not come within their expected time? (Garapo, 2017:5)

He goes on to explain that due to the urgent need for such information, farmers in the Nyanga area will make use of print media as a source of information about the weather even when they are illiterate:

Even a farmer who cannot read or write buys a copy of a newspaper and gives it to those who can read because they know that the paper obviously has something written about the weather (Garapo,2017:5).

Muwi notes that the media can also inform him about other events that may pose a threat to his farming practice:

...are there going to be any outbreak of dangerous pests like locusts or quelea birds among others. The media also informs me on the outbreak of crop thieves like those who come and steal our potatoes (Muwi, 2017:5).

Garapo adds that the media contains important knowledge regarding the available market for crops:

We also need to know about the performance of our crops on the market. Farmers use the media as a means of communication and that is for ideas and learn about markets trends as well (Garapo,2017:5).

Finally, participants also make reference to the media as a source of relaxation. Mhaka notes that "...television channels give my family and I entertainment" (Mhaka, 2017:5). Garapo explains that his satellite dish is not only there to provide him with news of the outside world; but also sport:

I am a soccer fan and love watching games on the television, and that is why I had to have this satellite dish installed here (Garapo, 2017:5).

3.3 Assessment of the media as a source of knowledge for farming

There is no doubt, then, that all three participants value the role that media plays within their lives. However, they are also critical of the quality of some of the content that they are able to access, with regards to the value to that it has to their farming practice. Each participant notes, in this context, that local weather forecasts cannot be trusted. Mhaka explains, in this

context, that the local media “lacks credible weather forecasts that help us make farming a success” (Mhaka, 2017:5). For this reason, she relies on more general forecasts that are available to her from outside the country through DSTV:

I also watch weather forecasts on these channels because their news offer more reliable forecasts (Mhaka, 2017:5).

Mhaka notes that she distrusts weather forecasts on state-owned media despite her loyalty to the Zimbabwean government. This, she explains, is due to her observation that the Zimbabwean state-owned weather service is no longer functional:

Of course, I am a war veteran but have you noticed the state of the country’s main meteorological centre in Belvedere? The buildings are dilapidated, the satellite dishes are dangling, there seems to be no sign of life there. I therefore find it hard to trust the forecasts on our local media (Mhaka, 2017:5).

Muwi also explains that he “... [relies] on forecasts from the South African channels accessible via DSTV because they tell us forecasts that are more credible” (Muwi, 2017:5).

Garapo makes use of the same sources of information:

I ... rely on DSTV for weather forecasts specifically from South African television channels SABC. Their reports and forecasts are much more worth trusting than those on ZBC (Garapo, 2017:5).

Garapo nevertheless goes on to note that despite this problem with credibility, he continues to monitor weather reports on ZBC. This is because such weather reports have more detail about the local context than those from South African satellite television:

We obviously tune into ZBC for a more detailed forecast although for me I give it five out ten trust in its forecasts. The little truth on ZBC actually helps me a lot in my agriculture (Garapo, 2017:5).

It is possible to observe, within Garapo’s statement, a tension between the need for credible versus locally specific information about the weather. This tension can be seen to apply generally to all three participants, who balance the monitoring of weather reports from local media with that of international satellite TV. As we have seen, this applies even to Mhaka, who clearly articulates her sense of patriotism towards state media.

When prompted for comment on the way media reports on climate change, all three respondents state that there is a need for media coverage that helps them to make sense of this phenomenon. Garapo feels particularly strongly about this, stating that climate change “needs so much attention in order to equip everyone with enough information” (Garapo, 2017:6). More particularly, the concept of climate change “needs a lot of unpacking to do in order for

the people to understand” (Garapo,2017:5). There is a particular need for increasing farmers’ understanding of the connection between climate change and the changing weather patterns that they observe around them:

People need to be informed on the weather patterns and the general physical environment, particularly about climate change since it is a broader term that may help people make sense of the changing weather patterns (Garapo, 2017:5).

Furthermore, there is a need for media that can help farmers to make informed decisions about how to adopt to shifts in environmental conditions that result from climate change:

As farmers, we also need information on how we can adapt to the changing patterns and remain productive in our fields contrary to the experiences that we have had in the past two decades (Garapo,2017:5).

All three participants suggest that the media to which they currently have access do not provide them with such content. Garapo argues that there is not enough depth and detail to the available coverage of the topic:

I think the media lacks in-depth information on climate change considering the high levels of impact it has had to the farming communities. Most of the times the concept ‘climate change’ is just mentioned in passing (Garapo, 2017:5).

Garapo poposes that there is a need for media that provides farmers with guidance as to how to adapt farming practices to the new conditions created by climate change. Currently, the media does not supply such content:

The media also lacks information on the type of potato cultivars that we can try under these emerged climatic conditions. I understand there are short season potato varieties that were recently introduced and our Arex officers do not know about them, the media should also help in filling that gap (Garapo, 2017:5).

Mhaka also notes that “...the media is not quite explaining well how climate change has come into existence” (Mhaka, 2017:5)

I ... think in situations like these we currently have, that is where we have weather and seasonal changes, the media should give us more in-depth information on what is causing these changes and how we can deal with the changes (Mhaka, 2017:5)

Muwi, similarly, feels that the media is not doing enough to unpack the phenomenon and that it is “failing to tell us why there is climate change and what we can do to reduce the effects” (Muwi,2017:5). He explains that farmers “would also want to hear about what we can do to reverse the changes in climatic conditions” (Muwi, 2017:5). He mentions that the media does provide information about climate change but coverage of the issue is limited. His comment

on this issue suggests that he views the media as a source of knowledge that plays a similar role to that of schooling:

We hope to get such knowledge through the media since we no longer got to school and the newspapers and radio are now our source of knowledge. Such knowledge will be very important in our farming operations but unfortunately, we do not get as much information (Muwi, 2017:5).

Garapo's articulates a similar point of view, saying that the media, "...are a source of information for those who do not go to schools so I think it is not doing enough justice to equip people with knowledge about climate change" (Garapo, 2017:5).

All three participants also note that they would prefer explanations about climate change to involve the adoption of simple language, without resorting to scientific jargon. Mhaka gives an example of a story that she read in the newspaper and failed to understand due to the scientific jargon used by the journalist who wrote the article. To her, "it would have made more sense.... if it was written in simpler terms and language". She goes on say "...maybe it is because I am not that educated" (Mhaka, 2017:5).

The participants suggest, furthermore, that explanation of climate change should be presented in local vernacular languages (Garapo, 2017:6; Muwi, 2017:5; Mhaka, 2017:5). Garapo argues that this need for content in the vernacular is important because not all farmers have had the opportunity of a basic education. He suggests that it is primarily in context of such education that farmers will have gained enough fluency in English to be able to interpret complex media content in this language:

It even has to be explained in our local languages because it is not everyone who got basic education and can understand English, remember our generation has so many people who were academically disadvantaged. Imagine the people deep in the rural areas, how will they understand the jargon used by the journalists when writing climate change articles? (Garapo, 2017:6).

Muwi offers a similar argument:

The media should have assisted us to understand about the weather, I would expect reading about the changing weather patterns and climate change in *rurimi rwaamai* [mother language] so that those who did not go to school also get to understand the messages being conveyed (Muwi, 2017:6).

It is of interest to note that, in explaining these points, all three participants make reference to the extent to which audience members' ability to make sense of complex media content is informed by their level of education and, as a related point, their fluency in English. It is also noticeable that the kind of media that they refer to, in describing content that would be of

particularly help to farmers, is clearly educational in nature, rather than being framed as hard news content.

The participants also talk more generally about other kinds of knowledge that they would like to be able to access through the media, as a resource for farming. Within context of such discussion, there is again a strong emphasis on media with educational content. Muwi proposes, in this context, that he would like to see general guidelines on the planting and cultivation of crops that are suited to the local context. He explains that this would need to involve detailed, instructional information:

I think what is missing is the knowledge on how to grow some crops, I would respect the information like, and if you want to grow carrots, you mix soil with sand then plant seeds into it. This way we can buy seeds knowing that the source of knowledge is there unlike now where we are ill informed about agriculture. Such information should come to us through either the radio, newspaper or any other medium that we can access (Muwi, 2017:5).

It is interesting to note that, as Muwi understands it, such media content would help to address a problem that is caused by the existence of a language barrier. We have seen, above, that this barrier occurs in context of English-language media. Muwi explains that it can occur, similarly, in context of Chinese instructions on packaging for farming products:

[Media that provides instructions for farming] will make us more knowledgeable, for instance, some seed packs are now written in Chinese and we do not know the language thereby making it tough for us to comprehend (Muwi, 2017:5).

It is worth noting that the kind of content that the participants describe, here, is typically not present in ‘hard news’ media. Instead, it can be found in educational, developmental media – for example in agricultural radio programming. It was noted in Chapter Two that such programmes are, in fact, available in Zimbabwe. It would appear, however, that such media is generally absent from the participants’ media worlds.

Conclusion

It is demonstrated in Section One of this chapter that all three respondents have an early childhood involvement in communal agriculture. Their experiences in this respect differ, however, due to variations in their geographical and historical location. Later, these differences also shaped their experience of schooling and work. It is demonstrated that the differences in experience impacted on the degree of access that each of them were able to establish to knowledge of agriculture, investment in the idea of being farmers and entitlement with regards to their right to claim a future for themselves as farmers. It is argued in the

section that these differences have important implications for the extent to which the participants were prepared for becoming farmers, when they were given land grants in 2002.

Section Two focused on the way that the participants experienced the process of taking ownership of their farms and maintaining crops. We saw that, from the beginning, they faced severe constraints in context of socio-economic and environmental conditions. On one hand, they did not have adequate access to farming implements, financial aid and credible knowledge about the production of their crops. Often, such lack of resources appeared to have less to do with the lack of availability of the necessary resources, and more with power struggles taking place within the local political context around control of such resources. In addition, there is evidence that this political environment was not supportive of the interests of small-scale farmers, tending instead to foreground the needs of larger commercial farms. With regards to environmental challenges, the participants make reference both to a decline in soil fertility and dramatically changing weather conditions, which they describe as resulting from climate change. It was argued, in this section, that the participants' descriptions of both socio-economic and environmental conditions can be read against the history of agricultural productivity in Zimbabwe, as mapped out in Chapter One. In that chapter it was demonstrate that this history has been profoundly shaped both by socio-economic and environmental circumstances. The impact of these circumstances can be observed within the life experiences of the participants. The participants' approach to finding solutions to these problems have, furthermore, also been shaped by this history. It impacts, firstly, on the degree of access that they have to relevant knowledge resources, and also shapes the ideological framework that they apply as part of their interpretation of the value of such resources.,

Section Three dealt with the way in which the participants drew on media as a knowledge resource that could enable them to deal better with these challenges. We saw, in this section, that the participants experience a tension between a need for media that represents credible knowledge, and media that deals in detail with their local context. Media that is of local relevance often lacks credibility, while media that they regard as trustworthy tends to come from international sources and therefore is less grounded within the local context. It also emerged that the media that they access for the purpose of farming tend be framed as hard news media. Such media, as we saw in Chapter Two, tends to be constrained in terms of the extent to which it can deal in nuanced, in-depth ways with the topic of climate change. It is, instead, in context of educational, developmental media, such as agricultural programming that the topic can be covered in-depth, and in a way that is grounded in local

context. The kind of content that the participants stipulate as being of relevance to them as farmers would fall into this category – and it is exactly this kind of media that appears to be lacking within their media worlds.

This chapter has presented a close examination of these three participants' experience of farming, and of their ability to draw on the media as a knowledge resource for engaging with the possibility of climate change. This examination suggests to me, as the researcher, that the media does have a valuable role to play in providing these farmers with such resources. However, I would argue that this value will only be fully realised if they could have more access to media that is specifically targeted at farmers and relevant to their needs. In my view, such media should be locally produced, in vernacular languages, by journalists who have the necessary background in both issues of climate change and agriculture. Only by means of such media would one be able to produce content that is sensitive to the variations in the needs and interests of small-scale farmers in Nyanga. As we have seen in this chapter, the three research participants share many such needs and interests, but they also differ from each other in important ways due to differences in their background and circumstance.

In addition, there is need to strengthen the knowledge systems that would need to be in place to make such media production possible. This should include, firstly, a process of training and education for the agricultural extension officers who work in the context of Nyanga. If this goal is achieved, these officers could potentially play a key role in contributing to the production of locally produced agricultural media. Secondly, if there is to be an improvement in available information about local weather conditions, current weaknesses within the Zimbabwean meteorological department would need to be addressed. Such a project would, of course, have to be pursued outside the domain of this particular dissertation, which concerns itself with the institutions of media.

CLOSING COMMENTS AND RECOMMENDATIONS

This study investigated the role that media can play in providing farmers in Zimbabwe with access to knowledge that assists them in making sense of the relevance of climate change to their experience of crop decline. Chapter One established contextual and conceptual terms of reference for this study by tracing the history of agricultural productivity in Zimbabwe. It demonstrated how this history has been shaped both by shifts in the socio-political environment and in climatic conditions. It was argued that these shifts have impacted on the degree of access that farmers have to credible knowledge of their context, both with regards to agriculture and weather patterns. Such access has impacted, in turn, on agricultural productivity.

Chapter Two added to this framework by means of a review of the way that Zimbabwean media is likely to engage with the contextual changes mapped out in Chapter One. The discussion drew on Hallin and Mancini's theorisation of the normative foundations of media systems and on Christian et al's review of traditions of media practice. It focused on how these models and traditions operate within the Zimbabwean media environment. It was argued that because this environment is characterised by extreme levels of social and political instability, conflicting ideas about the social purpose of media have come to co-exist. Aspects of both the polarised pluralist and democratic corporatist models can be observed, and collaborative, monitorial and radical approaches to media exist in contestation with each other. The chapter explored the implications of this analysis for the role that the media can play in the context of rural Zimbabwean farmers' experience of the impact of climate change on agricultural practice. It was argued that, rather than turning to hard news media, this audience should be engaging with state-funded development media, that incorporates aspects of the collaborative and facilitative traditions of media. Furthermore, the rise of digital media in this country points to the possibility of establishing a facilitative and participatory media tradition. The emergence of these possibilities open up spaces in which audiences such as small-scale farmers can gain greater epistemic access to knowledge about their context. The farmers can also be co-producers of the knowledge.

These first two chapters informed my approach to the design of the empirical component of this study, as set out in Chapter Three. Here it was explained that I interviewed three people from the Nyanga farming community who were given government land grants in 2002. They provided me with a unique opportunity of exploring the specificity of the

experiences of small-scale farmers in Zimbabwe in dealing with the challenges posed both by their social context and by climatic conditions.

Chapter Four provided a description of the findings of this research. It is demonstrated, in this chapter, that differences in the life histories of the participants impacted on their preparedness for becoming farmers. This is due to the degree of access that each of them established to knowledge of agriculture, investment in the idea of being farmers and entitlement with regards to their right to claim a future for themselves as farmers. At the same time, all three participants speak in very similar terms about their engagement with media as a resource of knowledge for the purpose of farming. We saw that they experience a tension between a need for media that represents credible knowledge, and media that deals in detail with their local context. In order to address this tension, the kind of media that they would find of greatest value would be developmental, educational media. Such media is, however, generally absent from their environment.

In my view as the researcher, it is unlikely that the participants' need for such media will be met by means of the intervention of government. I draw this conclusion based on my observation of the current instability of Zimbabwean society and the lack of commitment from the state towards equipping small-scale farmers with knowledge that can aid their empowerment. The recent political developments in the country, in my view will not bring much change to the operation of the media. A more appropriate strategy would, perhaps, be represented by the development of a radical, facilitative and clandestine media movement. Such media should be community-based and locally grounded, and should also be presented in local languages in order to cater for everyone regardless of limited access to education. With the lack of broadcast infrastructure in areas like Nyanga, it may also be important to utilise alternative technology such as social media and satellites as a way of reaching out to the farmers. Such an intervention would need to be externally funded, by stakeholders in the transformation of Zimbabwean society.

There is, in my view, also a need for further research in order to fully explore the implications of this study. The interview material collected for the study provided compelling evidence of the specificity of the Nyanga small-scale farming community's experience of maintaining crops, and of the role that their access to media plays within this. The depth and scope of the research was, however, limited and would benefit from expansion by means of further interviews with a wider spectrum of small-scale farmers, either in this community or one that is similar. Candidates for such interviews should, ideally, also include individuals who are not from the area in which the research is based. As we saw in Chapter Three, many

such individuals have benefited from the land reform programme in Zimbabwe. Their experience as ‘outsiders’ to a particular rural area would add a further dynamic to the challenges that they faced in accessing knowledge about the local social and environmental context.

In addition, it would be of value to conduct research with editors and journalists based at the media organisations that serve farming communities such as Nyanga. Research conducted with staff at the *Herald* and ZBC could, in this context, probe these media practitioners’ understanding of the service that they provide to small-scale farmers such as those described in this study.

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APPENDICES

Appendix 1: The Interview guide

Aims:

1. To inform myself about the participants' life history and background, in order to better understand
 - a) What kind of experience \ knowledge of farming they have.
 - b) The extent to which they are invested in farming as a way of life
2. To inform myself about the participants' experience of farming in context of the land that had been granted to them by the land reform process. As part of this, I want to better understand
 - a) How each participant has experienced farming, particularly in relation to declining productivity, and the difficulties faced in establishing productivity.
 - b) What knowledge resources they have acquired in order to make sense of this experience
 - c) To find out how they assess media content relating to climate change and agriculture, and the role that it plays as a knowledge resource in context of the above. More specifically, how relevant they see this content to be to their own experiences of farming

Interview guide

STAGE ONE: GROWING UP (10 minutes)

- Tell me about your early years. Where did you grow up? What was your life like, as a child and as a teenager?
- When did you first become involved in farming? Tell me about that.
- Tell me about your education. Where did you go to school? What knowledge did you gain from your education? Did this prepare you for farming? How?

STAGE TWO: WORKING LIFE (10 minutes)

- Where did you work after school?
- What did you learn from this work?
- Did this prepare for farming?

STAGE THREE: THE ROLE OF LAND REFORM IN YOUR LIFE (10 minutes)

- Tell me about the time when you were first granted land. What happened?
- How did you feel about this? Was farming something that you always wanted to do? Why did accept this grant?

- How prepared were you? Did you feel you had the necessary experience and knowledge?

STAGE FOUR: EXPERIENCE OF FARMING (25 minutes)

- Tell me what happened over the next few years how did the farming go?
- How successful have you been at producing good harvests?
- What has helped you along the way in your attempts to make a success of farming?
- What support did you get from the government?
- What challenges have you faced along the way, in making a success of farming?
- Did you experience any cases of crop decline?
- What do you understand to be the possible causes of the decline?
- Prompt here: different kind of factors: weather, soil, support, conflict, knowledge...
- What solutions and strategies have you developed to some of the problems you face as a farmer?
- What kind of help do you think you need in order to deal with these challenges?

STAGE FIVE: THE ROLE OF THE MEDIA (20 minutes)

- How do you use the media in your life?
- What is available in the media that has helped you in your farming practise?
- What do you think is missing out in the media, to help you with the challenges you are facing?

Appendix 2: The consent form

CONSENT FORM FOR PARTICIPANTS



Rhodes University

School of Journalism & Media Studies

Dear respondent,

I am a post-graduate student at the School of Journalism and Media Studies at Rhodes University, pursuing a Master of Journalism and Media Studies. As part of the fulfillment of my degree, it is required of me to carry out a research. I intend to carry out a research on, ENGAGING WITH MEDIA AS A KNOWLEDGE RESOURCE FOR MAKING SENSE OF CLIMATE CHANGE: A CASE STUDY OF THE FARMERS OF NYANGA, ZIMBABWE

I am intending to purposively select three participants comprising of farmers who benefited from the government's land reform. The study will investigate how the Nyanga farmers engage with the media as a knowledge resource for making sense about climate change. It will explore the role that the media plays in informing the farmers about climate change and the physical environment. The core is to get an understanding of how you conceptualise the knowledge that you get through the use of the media in relation to the changes on the physical environment. You will be requested to voluntarily participate in an in-depth interview with me.

The findings of the study will be purely for academic reasons and a copy of the complete project can be provided upon request. Thank you in advance.

Yours Sincerely,

Blessing Mandikonza

Researcher

Informed Consent Sheet

**** To be signed in duplicate – one copy to be returned to the researcher and one copy to be retained by the participant.**

Thank you for your participation. By submitting this form you are indicating that you have read the description of the study, are over the age of 18, and that you agree to the terms as described in the short questionnaire that follows:

I have read this form and received a copy of it. I understand the purpose and nature of this study and I am participating voluntarily. I understand that I can withdraw from the study at any time, without any penalty or consequences. **I have had all my questions answered to my satisfaction.**

Yes ☐

No ☐

I agree to take part in this study and I hereby grant permission for the data generated from this research to be used in the researcher's publications on this topic.

Yes ☐

No ☐

I grant permission under the following conditions:

I grant permission for the research to be recorded and saved for purpose of review by the researcher, supervisor / principal investigator, and ethics committee.

Yes ☐

No ☐

I grant permission for the research recordings to be used in presentations or documentation of this study.

Yes ☐

No ☐

Participant's names and signature _____

Date _____

Researcher names and signature _____

Date _____

Contact

If you have any questions at any time about this study or the procedures, you may contact the researcher Blessing Mandikonza on this email blessingmandikonza@gmail.com or cell +263772819770.

Thank you for taking the time to read this information sheet.