

Colonised fields and private gardens

– The changing role of farming in rural Eastern Cape,
South Africa

Elin Johnson



Colonised fields and private gardens

- The changing role of farming in rural Eastern Cape, South Africa

Elin Johnson

Supervisor: Klara Fischer, Swedish University of Agricultural Science, Department of Urban and Rural Development

Examiner: Flora Hajdu, Swedish University of Agricultural Science, Department of Urban and Rural Development

Assistant examiner: Malin Beckman, Swedish University of Agriculture Science, Department of Urban and Rural Development

Credits: 30 credits

Level: Second cycle, A2E

Course title: Master thesis in Rural Development, A2E - Agriculture Programme - Rural Development

Course code: EX0890

Course coordinating department: Department of Urban and Rural Development

Programme/Education: Agriculture Programme - Rural Development

Place of publication: Uppsala

Year of publication: 2020

Cover picture: View of a village in Xopozo, Eastern Cape, Elin Johnson 2020.

Online publication: <https://stud.epsilon.slu.se>

Keywords: smallholders, lifeworld, system, colonisation, agriculture, livelihood

Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences
Department of Urban and Rural Development

Abstract

Smallholder farmers are defined as key actors in the implementation of Agenda 2030, based on their importance for food security and poverty reduction, particularly in Sub-Saharan Africa. This is also true for South Africa, where smallholder farming has attracted considerable policy attention in an attempt to break the trend of rural poverty and the legacy of the apartheid era. One issue of concern is the long-term decline in arable production in fields, reflecting a wider trend of de-agrarianisation among peasantries and smallholders all over the world. In South Africa this withdrawal from field cultivation is compensated to an extent by intensification in garden cultivation. This thesis explores how smallholders perceive the role of these two different crop cultivation practices in their daily lives. The empirical data were collected during an ethnographic field study in rural South Africa in early 2020 using a variety of qualitative research methods. Drawing on the theoretical concepts of lifeworld and system world together with perspectives of livelihoods, the study shows that household agricultural production is being downscaled, with most households prioritising the continuation of garden cultivation. Garden cultivation draws upon capabilities that most households can access and is viewed as a taken-for-granted activity within the lifeworld of smallholders. Field cultivation emerges as a deliberate choice made by households who are able to access sufficient family labour and financial capital. Furthermore, arable production in fields is based on long-term experience of government involvement, resulting in a commonly shared view that a government presence in field farming is something to be expected even today. It would appear that this commonly shared view enables agricultural projects and certified seeds to be introduced that are disembedded from smallholders' local conditions, mirroring a policy belief in a New Green Revolution for Africa. This finding suggests that garden cultivation can serve as an example of crop cultivation that is attuned to local conditions, indicating the direction smallholders could take if they are to fulfil their role as promoters of sustainable development in line with Agenda 2030.

Keywords: smallholders, lifeworld, system, colonisation, agriculture, livelihood

Acknowledgements

I would like to express my sincere gratitude to everyone who has contributed to this thesis and supported me along the way. First and foremost, thank you to all the participants in this study. I wish to extend my deepest gratitude to you for generously sharing your time and answering all my questions, and for welcoming me into your homes. It has been a privilege to conduct this fieldwork and have the opportunity to meet you all. Thank you!

Klara Fischer, thank you for your support and guidance throughout this entire thesis project. I am forever grateful for having such a dedicated supervisor. Thank you for so generously sharing your time and for always guiding me with such great patience, humility and encouragement!

I would like to give my greatest thanks to Nomahlubi Mnukwa for being an excellent interpreter and field assistant. Without your great knowledge, humility and guidance, none of this would have been possible. Thank you for all my happy memories in the field, for always making me laugh and for your endless patience during long working days. I would also like to extend my gratitude to the whole Mnukwa family in Sipaqeni. Thank you for showing me so much warmth and hospitality and for letting me be part of your (busy) weekend life! I also want to say thank you to Charlie Shackleton for welcoming me to Rhodes University and for helpful discussions about my research. To my friends in Pietermaritzburg, thank you for always making me feel at home.

Thank you to Kjell Hansen for your theoretical advice and invaluable feedback, as well as to Malin Beckman, who reminded us all of the importance of taking breaks from writing.

I would also like to take this opportunity to say thank you to my family and friends for always believing in me. A special thank you to Felicia, Kornelia, Izabel and Emma for your critical comments, moral support and great friendship in these past months. Everything has felt so much easier thanks to you!

Finally, thank you Emil for your invaluable support throughout this entire journey. And to Lina, thank you for being a wonderful sister always ready to encourage me when I need it most. Thank you for your endless patience and support in the final process of writing this thesis.

Uppsala, August 2020
Elin Johnson

Table of contents

1	Introduction.....	7
1.1	Aim and research questions.....	8
1.2	The concept of smallholder	9
1.3	Thesis outline	9
2	Methodology and methods	10
2.1	An ethnographic case study	10
2.2	Selection of the study site and informants.....	11
2.2.1	Description of the study site	11
2.2.2	Description of the informants	11
2.3	Data collection methods	12
2.3.1	Semi-structured interviews	13
2.3.2	Village and social mapping	13
2.3.3	Wealth ranking and focus group interview	14
2.3.4	Participant observations and field notes.....	14
2.4	Working with an interpreter	15
2.5	Validity and credibility.....	15
2.6	Ethical considerations	16
2.7	Analysing the empirical data	16
3	Background.....	18
3.1	Smallholder farming in South Africa	18
3.1.1	Historical situation	18
3.1.2	Present situation	19
3.2	Government initiatives to support smallholders.....	20
3.2.1	The Massive Food Production Programme.....	20
3.2.2	Recent agricultural development interventions	21
3.2.3	High-yielding seed.....	22
3.3	Supermarkets and social grants.....	23
4	Theoretical entry points	25
4.1	Lifeworld and system	25
4.2	Embeddedness	27
4.3	Livelihoods	28
5	Empirical findings.....	30
5.1	The role of farming	30
5.1.1	Changes over time	30
5.1.2	Why we plant	32
5.1.3	Home gardens and field cultivation	33
5.2	Capabilities in smallholder farming.....	36
5.2.1	Money, land and labour.....	36
5.2.2	Women's gardens and men's fields	38
5.2.3	Production inputs	40
5.2.4	Cultivating a garden is natural.....	43
5.3	Support from the outside as a colonisation of the lifeworld ..	44
5.3.1	A brief historical overview	44
5.3.2	Project maize and the 'new' practices of today	46

5.3.3	Disembedded inputs and access to money.....	48
6	Discussion	51
6.1	The changing role of farming	51
6.2	Smallholders' capabilities.....	52
6.3	The lifeworld and livelihood of smallholders.....	54
6.4	Colonised fields and private gardens	55
7	Conclusions	58
	References.....	59

1 Introduction

It is frequently argued that agriculture can play a key role in reducing poverty, particularly in Sub-Saharan Africa where the majority of the rural poor depend directly or indirectly on agriculture for their livelihoods (Diao *et al.*, 2010; World Bank, 2007). Of particular importance are smallholder farmers who provide about 80 % of the food supply in Asia and Sub-Saharan Africa (FAO, 2012). Against this backdrop, it is easy to comprehend why smallholders have such a large role to play in the Sustainable Development Goals (SDG) and Agenda 2030 (Terlau *et al.* 2017; Abraham and Pingali, n.d.). SDG 2 – *Zero Hunger* – is directly addressed at smallholders, with the goal of doubling smallholders’ agricultural productivity and income by 2030 (Global Goals, 2019). However, smallholders’ potential to be promoters of sustainable development can only be realised if all the challenges of smallholder farming are properly understood and addressed.

One of these challenge concerns the decline in smallholder farming, a trend that can be seen all over the world. The decline in smallholder farming is sometimes discussed as a process of de-agrarianisation, where smallholders or peasantries are disappearing due to a combination of several factors such as out-migration, land scarcity or a lack of appropriate government support (Bryceson *et al.*, 2002). This is also the case in rural parts of South Africa where there is an accelerated trend of reduced engagement in field cultivation among rural smallholders. Shackleton *et al.* (2019) point out that several research studies have shown a decline in field cultivation in the former homelands¹ of Eastern Cape over the past two decades, and de la Hey and Beinart (2017) suggest that it might go back even further than that. For much of the post-apartheid era, the South African government has focused on policies supporting smallholder farmers to break the trend of rural poverty (Aliber & Hall, 2012; Fischer & Hajdu, 2015). Nevertheless, research shows that these attempts have been expensive and produced limited results. Some research indicates an existing ‘gap’ between agricultural development interventions and the reality and local practices of smallholders, where strategies developed for capital-intensive and large-scale farming have been introduced without being adapted to the conditions of smallholder farmers (Jacobson, 2013a; Aliber & Cousins, 2013; Fischer & Hajdu, 2015).

Previous research also shows another interesting trend among smallholders in the former homelands of Eastern Cape: in contrast to field cultivation, there is a stable (and sometimes even increasing) level of cultivation in homestead gardens (Hajdu *et al.* 2020; Fay, 2013; Andrew & Fox, 2004). Fields in the former homelands are often larger and at some distance from the homesteads, while gardens are smaller and located near people’s homes. The abandonment of one smallholder activity – field cultivation – and intensification of another – garden cultivation – raises several questions. How do these two different, but both important, agricultural activities differ from one another? What are the reasons behind the two visible trends and what can policy-makers learn from this?

This thesis examines these questions by considering smallholders’ own perceptions and experiences. What role does agriculture in general, and homestead gardens and field cultivation specifically, play in people’s day-to-day lives? This question is explored using the theoretical concept of lifeworld, as explained by Habermas

¹ The former homelands or bantustans, also sometimes referred to as communal land, were segregated areas where black South Africans were forced to live during the apartheid era (Kepe, 2009). Eastern Cape Province today consists of the former homelands of Transkei and Ciskei, home to Xhosa-speaking people.

(1985), which has been applied to identify smallholders' everyday practices when it comes to farming. Furthermore, ideas from the concept of livelihood are used to structure more clearly the activities and different capabilities that smallholders have at their disposal to engage in these two cultivation practices. Furthermore, in order to understand the wider system of agricultural policies surrounding smallholders and their local cultivation practices, the concept of system world is used. The integration of a wider system of agricultural policies is also analysed through what Habermas (1985) calls the 'colonisation of the lifeworld'. These interlinked concepts are applied to examine how smallholders develop a shared understanding of the role of farming, and more specifically the role that field cultivation and garden cultivation play in people's daily lives.

Applying the theoretical concept of lifeworld involves investigating what is a taken-for-granted reality and what is not. With the help of what Habermas (1985) refers to as the social integration and cultural reproduction of the lifeworld, this study examined the smallholders' constructed shared lifeworld. Furthermore, in order to gain a deeper understanding of visible trends, the concept of system was also used, which can be understood as an experience of governmental presence. This thesis examines smallholders' experience of governmental presence using the example of different agricultural projects from the past and present. Last, but not least, in order to understand the impact of the system world on the smallholders' local lifeworld, the concept of *colonisation* is examined. A colonisation of the lifeworld can be understood as an increased system integration in the smallholders' lifeworld, and this thesis intends to look at ways in which the colonisation concept can be used in order to achieve a greater understanding of visible trends. To investigate this issue, a case study was conducted in the rural area of Xopozo in the Ingquza Hill Municipality in South Africa's Eastern Cape Province.

1.1 Aim and research questions

The overall aim of this thesis was to examine how smallholders in Xopozo experience the role of farming in their day-to-day lives, and more specifically how they experience the role of homestead gardens and field cultivation. The specific research questions for this study were:

- *What role do field cultivation and homestead gardens each have in the lifeworld of the smallholders?*
- *How do the smallholders' different capabilities enable them to engage in field and/or home garden cultivation?*
- *How is the smallholders' lifeworld 'colonised' by a larger system of agricultural policies from an historical and current perspective?*

This study was part of a wider research network collaboration between Sweden and South Africa (SASUF) on the theme '*Changing patterns of smallholder farming in South Africa: Implications for livelihood and food security in the context of climate change*'. The purpose of the research network is to investigate the reasons behind, and effects of, the decline in field cultivation in the Eastern Cape and Limpopo provinces of South Africa. This study was designed so as to contribute to this debate.

1.2 The concept of smallholder

Central to this thesis is the term ‘smallholder’. Before moving on the study itself, it is important first to clarify the meaning of the term and how it is used in the thesis. First and foremost, there is no single definition for the term and thus no strict differentiation between, for instance, smallholders, small-scale farmers and subsistence producers (Khalil *et al.*, 2017). Smallholder farmers are sometimes defined as producers who have limited access to resources, markets and technology, and are often surrounded by structural constraints (Dixon *et al.*, 2004). Others emphasise the size of their land, stating that smallholders often manage fewer than two hectares of land (Kremen *et al.*, 2012). Sometimes a differentiation is made between subsistence and small-scale producers, which is also seen in South African agricultural policies; subsistence producers refer to those who mainly or entirely produce for the purpose of household needs, and small-scale farmers or smallholders as those who also produce for selling with the goal of generating income (DAFF, 2017). However, Khalil *et al.* (2017) point out that even though the term small-scale farmers often refers to production levels, the meanings of small-scale farmers often overlap with other terms such as subsistence farmers, and the two terms are used interchangeably. This thesis follows the example of Khalil *et al.* (2017) by not making any strict differentiation between smallholders, small-scale farmers and subsistence producers. Instead, it is left as an empirical question about whether the informants in this study produce food solely for their household’s needs or also for the purposes of selling. The term ‘smallholder’ here includes both groups of farmers. Furthermore, the term smallholder also acknowledges that people do not rely on farming alone to secure a living. This is also in line with how Jacobson (2013) and Hajdu (2006), for instance, have used the term. By using the word smallholder to describe the informants in this study, it is acknowledged that they also rely on other sources of income than farming alone.

1.3 Thesis outline

The next chapter of this study (chapter two) presents the methodology and methods used in the case study. Chapter three provides background information on smallholder farmers in South Africa from an historical and present-day perspective, including changes in rural livelihoods and agricultural policies relevant to the aim of this study. The fourth chapter presents the theoretical concepts used in the analysis of empirical data. The empirical findings from the study are presented in chapter five, followed by a discussion in chapter six. The study is summarised and the main conclusions presented in chapter seven.

2 Methodology and methods

The empirical material in this master's thesis was collected during a field study in rural South Africa between 28 January and 18 March 2020. This chapter presents the selection of the study site and informants, followed by a description of the qualitative research methods that guided the entire research process. The use of qualitative research methods provide contextual knowledge about a specific issue by examining how people experience and perceive the issue in its natural settings (Creswell & Creswell, 2018). There are several types of research designs within qualitative research, and a case study design with an ethnographic approach was found to be suitable for this study. The aim was to use a variety of qualitative research methods to increase the validity of the research findings (Gillham, 2000).

2.1 An ethnographic case study

A case study is defined by Yin (2006) as an empirical study of an actual phenomenon in its real-world context. The researcher uses a variety of methods to collect detailed information over a sustained period of time in order to obtain in-depth knowledge of a case (Creswell & Creswell, 2018). A case study is mainly inductive, meaning that patterns and themes of the studied phenomenon are gradually developed until a complete set of themes can be established (Creswell & Creswell, 2018). Case studies are suitable when the aim is to develop a rich analysis of a social phenomenon, and when the boundaries between phenomenon and context are not clearly evident (Yin, 2006). One example of this is that during this research it was not always evident how to separate farming activities from other activities and assets in the socioeconomic context of Xopozo. Gillham (2000) also points out that, even though the design of a case study should always be guided by a theoretical framework, it is not until the researcher starts to study the case, collect the data and understand the context that she or he knows which theories will be of most help. It was therefore an ongoing process in this study to find suitable conceptualisations of the case, both when designing the study and deciding on brief research questions, but also when all the collected data had been transcribed, thematised and analysed.

Ethnography as an approach is a qualitative research design that often involves the research methods of participant observation and interviews (Creswell & Creswell, 2018). The researcher participates and studies a social setting or a group of people in order to find shared patterns of actions, language or behaviour during long periods of fieldwork (Bryman, 2016; Creswell & Creswell, 2018). By living in the social context in which the studied phenomenon takes place, it is possible to participate and observe the case more closely, and hence gain a deeper understanding of the case being studied. Through my supervisor, I established contact with a family with whom I could stay during my time in the field. I was living in one of the selected case villages with my interpreter during the week when doing fieldwork. In relation to the data collection for this study, the observations and field notes from day-to-day life were therefore of great importance for the empirical findings in addition to the more structured methods of data collection. The two months of fieldwork carried out for this thesis is not long enough to be considered a full ethnographic study because more time in the field is often required to gain an in-depth understanding of the social context and the shared patterns of behaviour or actions (Bryman, 2016). However, Bryman (*ibid.*) suggests that it is possible to conduct a 'micro-ethnographic study' for a limited period of time (such as two months) for the purposes of a degree thesis.

2.2 Selection of the study site and informants

The study site for the data collection was determined prior to my arrival in South Africa. My supervisor had undertaken fieldwork for her doctorate ten years earlier in and around the rural location of Xopozo, a study site she suggested when I contacted her with my research idea in September 2019. The selected area had the potential to exemplify some of the structural and agricultural changes that South African smallholders have faced in the past few decades, changes that need to be investigated in order to understand the role of small-scale farming in South Africa today. Furthermore, relatively few research projects have been carried out in the area in which the study site is located. Much of the research on small-scale farming in Eastern Cape has been carried out near the coast and closer to Rhodes University in Grahamstown and the University of Fort Hare. Research from this study site in the inland, eastern part of the province can therefore contribute new findings. It also offered an excellent opportunity to compare my findings with the research that had been undertaken in the villages ten years earlier.

2.2.1 Description of the study site

Xopozo is a rural location in the Ingquza Hill Municipality in South Africa's Eastern Cape Province. It comprises several villages that all belong to the same traditional authority. Ingquza Hill is one of five local municipalities in the OR Tambo district, which covers 80 % of the former homeland of Transkei (Eastern Cape Provincial Government, 2019). The district has estimated unemployment of 77 % and is considered one of the poorest districts in the province (Ingquza Hill Local Municipality, 2016). However, actual unemployment in the study site might be even higher since many of the inhabitants are not officially registered as unemployed and therefore are not included in the statistics. The municipality also struggles with low educational levels, with only 2.4 % of the population having finished Matric (final year of high school) and around 42 % of the adult population being illiterate (*ibid.*). The historical background of the area, which is in a former homeland, is given in the background chapter (chapter three).

The vast majority of the population of Ingquza Hill Municipality lives in rural areas (Ingquza Hill Local Municipality, 2016). From Xopozo it takes about 45 minutes by car to reach the nearest town, and driving local taxis back and forth is an important income source for some of the households. Each village in Xopozo has one or several spaza shops (a small store with basic groceries) and there is also a larger shop in one of the villages where groceries and to some extent building equipment and furniture can be bought. Despite this, most people regularly travel to town to buy stocks of food and other necessities in supermarkets.

2.2.2 Description of the informants

Data collection was concentrated in three villages in Xopozo since it would offer a greater opportunity to obtain in-depth knowledge about the case within a limited time frame. These three villages were selected due to the fact that several smallholders with active field cultivation lived there, hence they could become key informants in relation to the overall aim of the thesis. During my time in the field, 36 individual smallholders were interviewed. Of these, 16 only planted their gardens, while the remaining 20 planted both their gardens and one or more fields. Of these 20 smallholders with active field cultivation, 11 had at some point participated in a governmental agricultural project in the past five years run in the local municipality by the Department of Agriculture. As the informants were chosen deliberately so as

to have a focus on smallholders with active field cultivation, it is important to note that a random selection of informants would probably have resulted in a smaller number of farmers with active field cultivation. By way of indication, approximately 15 fields were being cultivated in a village of 100 households. Bryman (2016) describes the deliberate selection of informants of relevance to the research aim as a strategic choice, used in the initial step of the fieldwork. Furthermore, the method of snowball sampling was used in which informants recommended other informants who might be of relevance for the study (*ibid.*). In order to establish initial contact with informants, my supervisor's previous fieldwork in the area was of great help. However, in the data collection process, I gradually noticed that the smallholders recommended to me by other farmers were mainly people who could be viewed as relatively rich by local standards, although many would still be considered poor according to the World Bank's measurement, for example. In order to counteract this, I started visiting other households besides the ones that had been recommended. In doing so, I was able to include a broader selection of informants with a different socio-economic status in the research, which helped me gain a greater understanding of the variety of capabilities available to smallholders in Xopozo to engage in farming.

Of the 36 interviewed smallholders, 22 were women and 14 were men. There is more than one possible explanation for the overrepresentation of women among the informants. Firstly, in the municipality of Ingquza Hill, 37 % of the households are headed by men and 63 % by women (Ingquza Hill Local Municipality, 2016). There are no specific statistics for Xopozo, but the social mapping I conducted in one of the villages indicated a similar trend of overrepresentation of female-headed households in Xopozo as well. Secondly, it was often the women who were available to do the interviews. In a few cases, the men were working away from home during the day, and in some cases the households consisted of women only. The majority, but not all, of the informants were also aged 40 or older. When introducing myself (as a student of agronomy and rural development) and asking whether I could interview them to learn more about life in Xopozo and farming in the area, I was often referred to the elders. It is possible that a different way of introducing myself and explaining the purpose of the interview might have produced a different outcome.

In addition to interviewing smallholders, I also interviewed the chairperson of one of the farmer groups participating in the governmental agriculture project and the local chief of the traditional authority in Xopozo. I also had the opportunity to interview two agriculture officials in the Department of Agriculture of the Ingquza Hill Local Municipality who were working with agricultural support in Xopozo (including the project mentioned above). I also conducted one interview with an extension officer from the Department of Rural Development and Land Reform in the OR Tambo District in Mthatha.

2.3 Data collection methods

As outlined above, the study was conducted as a qualitative case study. A variety of qualitative research methods was used in order to increase the validity of the research findings (Gillham, 2000), such as participant observation, interviews and methods of participatory rural appraisal (PRA). I then used the material from these different qualitative methods to present a detailed and thick description of the empirical

findings from the selected case study villages, which according to Creswell and Creswell (2018) also increases the validity of the findings.

2.3.1 *Semi-structured interviews*

Semi-structured interviews were conducted that, in contrast to structured interviews, offer more flexibility and the possibility of asking follow-up questions as well as adapting the interview to the informant's own knowledge or interests (Kvale & Brinkman, 2013; Teorell & Svensson, 2007). All the interviews were conducted with an interview guide, which had predetermined themes and questions. The interview guide was revised and developed after the initial pilot interviews, and I had a constant dialogue before and after all the interviews with my interpreter to evaluate the level of clarity and the relevance of the guide.

Most of the informants were interviewed once. The interviews varied in length and depth and some of the households were visited more than once, giving some of the informants an (informal) opportunity to develop their thoughts more deeply than others. These variations in interviews were something I considered when analysing and concluding the empirical findings, which is also emphasised by Creswell and Creswell (2018) as being important in terms of trustworthiness and validity. Additional interviews and informal conversations that took place during my fieldwork are not included in the analysis, but they served to enhance my understanding of the context and helped triangulate information from other informants.

2.3.2 *Village and social mapping*

Village and social mapping are the best-known methods in participatory rural appraisal (PRA). The core idea of PRA is to involve and acknowledge local people's knowledges and, through a set of different methods, deliberately create conditions for them to analyse their own life conditions (Chambers, 1994). This approach aims to initiate an inclusive discussion where all participants can be heard, and where the researcher's primary role is to listen and respect the discussions that are taking place (*ibid.*). Two of the methods within PRA are village mapping and social mapping, and visualisation techniques play an essential role here. Mapping a certain area is an effective method for generating knowledge about factors such as settlements, natural resources, meeting points or other places of value for local people. The knowledge acquired from this mapping can be understood as a 'mental map' of the studied area from the participants' perspective (Cavestro, 2003).

A village mapping exercise was conducted in one of the three case study villages with six participants of different genders and ages (ranging from 21 to 70 years old). It was valuable to have elderly people participating as bearers of the village's history, but it was equally important to have younger people take part because this allowed an intergenerational discussion. I briefly explained the purpose of the mapping, and after the participants started the exercise by drawing a map of the village, they took control of the discussion and I took a step back to observe and listen (through my interpreter) to what was being said. The discussion continued for 90 minutes. The mapping of the village was resumed the next day with three of the participants. The procedure was similar to the day before, but with the method of social mapping added as well, and the discussion therefore focused more on understanding the social structures within the village. Social mapping can be seen as involving questions on changes in the numbers of households or differences in household wealth or religion for example (Cavestro, 2003). Overall, I found that village and social mapping

helped me gain a greater understanding of village life, especially in relation to the changes to settlements and livelihoods over time.

2.3.3 Wealth ranking and focus group interview

During my time in the field, I conducted one focus group interview. Six smallholders of different genders and ages participated in the group interview; three of the participants cultivated just gardens and three cultivated both gardens and fields. It might have been an advantage for my thesis if I had conducted further group interviews, but this was not possible because people were reluctant to participate in a group setting. However, the accomplished focus group interview made a valuable contribution to the data collected as it gave me the perspective of a group beyond the individual interviews.

In line with the idea of a focus group interview (Bryman, 2018), the session was delimited to focus on one or more specific themes. Firstly, I wanted to gain a deeper understanding of how the participants as a group perceived the role of farming today, as well as how it had changed over time. I also wanted to understand more about the capabilities and assets that the participants as a group believed were necessary today in order to succeed with food and crop cultivation. Therefore I asked questions related to this theme. The second part of the group interview consisted of a wealth ranking discussion. A wealth ranking exercise is also a method within PRA and is a tool to understand relative wealth in a community (Cavestro, 2003). Through the wealth ranking exercise, I wanted to gain a deeper understanding of how wealth was perceived in the local context. Thematic questions were therefore asked about how participants perceived wealth and poverty in the village, including what different wealth categories they could identify in the area.

2.3.4 Participant observations and field notes

Participant observation was used throughout the fieldwork. In the observations I focused particularly on how smallholders worked in fields and gardens, but I also observed the surroundings in which the informants lived. Staying with a family in one of the villages during my time in the field was of great help in terms of observations. It enabled me to learn more about the daily routines and work tasks in relation to farming than would otherwise have been the case. Furthermore, it helped me build trust with people in the community, which Gillham (2000) highlights as an important factor in conducting participant observation. During my time in the area, I tried to take part in village life as much as possible. For instance, I helped with bean harvesting, traditional cooking of a maize drink and planting vegetables.

During my time in the field, I also took notes of what I observed and experienced. I chose to make my field notes what are described by Kaijser and Öhländer (1999) as empirical, reflective and methodological field notes. The empirical field notes focused on writing down what happened during the day in chronological order. The reflective notes were incorporated in the empirical field notes, and consisted of thoughts, ideas or questions that occurred to me during the observations and interviews. In the methodological field notes, I wrote down the choices I made or aspects that could possibly have affected the interviews. Self-reflection was an important aspect of the methodological field notes, as I was continuously asking myself how I might have influenced the interviews and what I could do differently in the next interview. Choosing to take field notes during the data collection period gave me the opportunity to start the thematisation and analysis of the empirical material in field. It also enabled me to try out different theoretical concepts or frameworks, in line with the procedure of the case study design (Gillham, 2000).

2.4 Working with an interpreter

With a few exceptions when interviews could be held in English, all the interviews were conducted in the local language isiXhosa with the help of an interpreter. This interpreter had previously worked with my supervisor as an interpreter and field assistant, and she has extensive experience of interpreting. She had also previously worked in the study site of this research and had good knowledge of the area, as well as established contacts with some people in the villages. The trust that she, as well as my supervisor, had built up in the area through their previous work was of great benefit. Furthermore, the fact that both my interpreter and I lived together in the field opened up to a deeper relationship and a more open communication, and reassured me that she was translating the questions correctly, which is important for the reliability of the data. Throughout the fieldwork, I was able to ask her questions and clarify aspects I had not yet fully understood. However, using an interpreter in fieldwork is also a limitation since some things could be lost in translation, such as accuracy and nuances. Therefore the quotations cited in this thesis should not be seen as a literal representation of the informants' words.

2.5 Validity and credibility

Throughout the study, I applied different validity procedures in order to present my findings as accurately as possible. Triangulation of data was sometimes used to confirm information. This can be described as a validity strategy in which information is cross-checked by different sources or through different methods (Bryman, 2016). Subjective experiences, thoughts and opinions could not, or should not, be triangulated. Creswell and Creswell (2018) also point out that contradictory information and perspectives sometimes give a more realistic picture of the case, making the findings more credible and accurate. As outlined above, a variety of research methods as well as a rich and thick description of the empirical material were used in order to contribute to the validity of the study (Gillham, 2000; Creswell & Creswell, 2018). Moreover, I involved other people in discussions about my findings in order to entail an interpretation of the results beyond my own. This applies to both my supervisor, who has good insight into the research topic and context, as well as external auditors who could provide an objective view of the result (Creswell & Creswell, 2018).

The method of semi-structured interviews allowed the informants to speak openly during the interviews. Nevertheless, even though interviews can largely be characterised as open conversations, as the researcher I was the one who decided the overall theme of the interview and how the questions were framed and asked (Kvale & Brinkmann, 2009). The interpretation of the data was also influenced by my own subjective understanding of the case, which is important for readers of this thesis to bear in mind. An equally important factor to acknowledge is the power dynamics between the informants and me, where my role as a researcher and foreigner with certain privileges might have affected how the informants chose (or not) to answer the questions. Therefore, being self-critical and constantly reflecting on my own role as a researcher and a foreigner was crucial during the fieldwork.

The empirical material presented in this thesis also represents the perspectives of the informants. General conclusions about the results can therefore not be drawn. Nevertheless, as Kvale and Brinkmann (2009) point out, there is a value in knowledge about the specific, suggesting that the results of this thesis can be used to

understand similar cases (Teorell & Svensson, 2016). The conclusions drawn from this study can contribute to discussions about smallholder farming and rural livelihoods in South Africa today, with specific contributions regarding the role of homestead gardens and field cultivation in local livelihoods.

2.6 Ethical considerations

Before all the interviews, I explained the purpose of the interview as well as the study. I also introduced myself as a student and explained that the information I was gathering would be used for a master's thesis. I also made sure to always ask and obtain permission to record the interviews on my voice recorder, which I ensured was always visible. According to Bryman (2018), these procedures are essential in order to obtain informed consent from the informants. I chose to anonymise the informants in the study due to the fact that some of the topics discussed during the interviews were of a sensitive and political nature. The informants have been given pseudonyms here.

It is important to acknowledge my role as a researcher and foreigner. Conducting research in an unfamiliar culture and where poverty is severe requires the researcher to have ethical awareness. Firstly, power hierarchies between the researcher and the informants might affect what people choose to share in the interviews. This is especially relevant given that most of the informants perceived themselves as poor and that I, with my foreign status (and with the financial possibility to travel to South Africa and everything that comes with it), was seen as privileged. Additionally, with the legacy of apartheid and racial discrimination still present, my position as a white person reinforced the view of me as privileged. Although my presence at the study site became more normalised with time, it is important to be aware of the fact that my foreign status and privileged position can never fully disappear. This required me to be thorough in my analysis and to problematise how I presented myself as well as how I connected with the informants when spending time in fields. Moreover, it is also important to acknowledge the fact that it can be problematic that I, as part of the research aim, was dependent on the time given by informants who had nothing to gain in the near future from participating in the study. It was my goal to understand and pass on the informants' perspectives with the greatest respect. Additionally, I found it important to 'give back' something during my time in the villages. Living in the villages, and spending time with people or participating in activities outside my daily research work, was one way of doing that. Furthermore, it is highly desirable to share the study result with the informants who contributed with their time. Unfortunately, as I do not live in South Africa, this is unlikely to be anytime soon after publication of this thesis.

2.7 Analysing the empirical data

There were several steps in the process of analysing the gathered data. At the start of the fieldwork, I began to develop broad themes and categories for the collected data. This was done in the field, on days allocated for rewriting field notes and starting to transcribe the interviews. I gradually noticed that some of the topics recurred in interviews and eventually I was able to define broader patterns and generalisations from the data. These patterns and generalisations could then be contrasted with previous research and different theoretical entry points in order to reach a deeper analytical understanding. I was therefore following an inductive research process where the analytical process begins with the thematisation of the empirical data

(Creswell & Creswell, 2018). In contrast to a deductive process, in which the results are tested against a pre-decided theory, the researcher with an inductive approach does not choose an explicit theory beforehand (Bryman, 2016). In other words, theorisations start taking place at the same time as the data are being analysed, and theories are decided along the way. This allows an empirically driven study where theories serve as a tool to acquire a deeper understanding of the case, and not the other way around. Therefore, I used an iterative process, going back and forth between collecting empirical data and analysing the material in relation to relevant theories (Bryman, 2016). After the fieldwork was completed, I continued to analyse my empirical material in Sweden, where I also continued to transcribe the interviews. By this stage, using the techniques of coding (see Creswell & Creswell, 2018) and more specific thematisation, I was able to uncover further connections between different themes and multiple perspectives in the case.

The following chapter provides the background to smallholder farming in South Africa and the Eastern Cape Province. It outlines some of the political developments in the past that are of relevance to how smallholder agriculture in rural South Africa functions today, followed by a description of the current situation and trends. Examples are then given of how governmental agriculture development programmes and policies aim to support smallholder farming today, followed by a brief background to some of the ideas about modern technology that have influenced these policies. Lastly the concept of smallholders and how it has been used in this thesis is described, together with some other factors of importance for understanding rural livelihoods in South Africa today. The overall aim of the chapter is to outline the structures surrounding the smallholders studied in this thesis in order to acquire a better understanding of their lifeworld.

3 Background

3.1 Smallholder farming in South Africa

3.1.1 Historical situation

South Africa's farmers today can roughly be divided into two separate groups: i) large-scale commercial (often white) farmers and ii) marginalised black subsistence and small-scale farmers (Aliber & Cousin, 2013; Ngcoya & Kumarakulasingam, 2017). This dual structure can largely be explained by historical events. Throughout the 20th century, racially discriminatory policies had a negative impact on African farmers, with the Native Land Act of 1913 as an important starting point (Jacobson, 2013b). This legislation was the first to implement territorial segregation between people categorised as 'black' and 'white' and to separate the rights to land (Hebinck, 2013). The areas created for people categorised as black (called 'native reserves') were gradually transformed into independent 'homelands' after the apartheid government was established in 1948 (*ibid.*). The homeland system was a culmination of previous legislation that had restricted black people's access to land, resources and political rights (people in homelands did not have South African citizenship), along with white landowners simultaneously receiving state support and beneficial land rights (Jacobson, 2013b; Hebinck, 2013). The homelands, which are where the majority of the black population ended up living, comprised 13 per cent of the land in South Africa (Kepe, 2009).

At the same time that the homelands were being established, the mining industry started to emerge, further reinforcing unequal opportunities for black versus white farmers. Revenues from the mines were partly invested in the development of commercial farms owned by white farmers, with the homelands as a source of cheap labour for the mining industry (Hebinck, 2013). This resulted in a stream of migrant mineworkers being more or less forced to leave their homes in the homelands for seasonal or permanent work (*ibid.*). The consequence was a labour shortage for homeland agriculture (Jacobson, 2013b). The homelands as 'labour reserves' for the mining industry can hence be seen as one of the central pillars of the political segregation system, and a major contributor to the development of the unequal conditions between black and white farmers that still exist today (Hebinck, 2013). With black farmers having limited access to land (due to overpopulation in the homeland areas) as well as labour (due to enforced labour migration), farming in the homelands was negatively impacted and households gradually became increasingly dependent on the wages of migrant workers to secure a living (McAllister, 1992; Hendricks, 1990).

What was called 'betterment planning' is another historical development of relevance to this study. 'Betterment planning' was implemented in the homelands from the late 1930s onwards (Hendricks, 1990). Its official purpose was to boost agricultural activity and target the issue of overcrowding and degradation of land in the homelands (McAllister, 1991). The number of livestock in the homelands was seen as a cause of overgrazing and land degradation (Hebinck, 2013) and therefore part of the betterment planning was aimed at strictly limiting the number of cattle and implementing practices of rotational grazing (Hendricks, 1990). In order to prevent soil erosion, so-called contour banks were also created (Hebinck, 2013). Investments in tractor services and irrigation schemes, for example, were included (*ibid.*). However, the most noticeable change arising out of betterment planning was

the reorganisation of land and homes. The land was divided into three different types: arable, grazing and residential land (McAllister, 1992). Houses that had previously been spread out were now reorganised into more nucleated villages, with less space between the different homesteads. The previous large homestead gardens, which had expanded in size and become increasingly important for subsistence from the 1940s onwards, were now limited in size and impossible to expand (McAllister, 1992). Fields were also allocated to areas outside the residential areas, with increased distances between the homestead and the field compared with before betterment planning (De Wet, 1990). The fields were also fenced as part of the reorganisation, which took place in the villages in this study in the 1970s (Fischer & Hajdu, 2015). The concentration of fields into larger units also enabled the use of tractor schemes and monoculture production, which was in line with the betterment plan's overall aim of increasing agricultural production. Betterment planning was initially carried out by the South African government through the Department of Agriculture, and later by the homeland governments (Fay, 2012). Although one of the formulated aims of betterment was to support agricultural production, it has been criticised for doing exactly the opposite by further undermining people's opportunities to support themselves through farming (De Wet, 1990; McAllister, 1992). Some also argue that rather than supporting farming, the underlying motive was to continue to ensure a supply of labour for the mining industry as well as reinforce control over the black rural population in line with the racial segregation policy of apartheid (McAllister, 1991).

3.1.2 Present situation

South Africa entered a new era after the first democratic election in 1994. With the end of apartheid more than two decades ago, it might now be considered as in the past. South Africa is categorised today as an upper middle-income country with a diversified economy, and an economic hub in Sub-Saharan Africa (World Bank, 2018). Nevertheless, South Africa is also considered one of the most unequal countries in the world (World Bank, 2018). One reason for this is that the legacy of apartheid is still very present. The definition of homelands ceased to exist when new state provinces were created in conjunction with the abolition of apartheid in 1994. However, black South Africans are more likely to face poverty than any other racial group in the country, and rural areas in the former homelands have less access to piped water and much higher unemployment, for example, than urban areas (Statistics South Africa, 2019; World Bank, 2018). The Eastern Cape, where this study was conducted, was ranked as the poorest province in 2015 (World Bank, 2018).

Addressing the challenges of inequality and poverty is defined as a main goal in the National Development Plan (NDP) 2030. In line with Agenda 2030, small-scale and subsistence agriculture is also addressed in South Africa's development policies. The NDP identifies one milestone for reducing poverty by 2030 to be the realisation of "a food trade surplus, with one third produced by small-scale farmers or households" (NDP, 2012:24). The NDP further states that the agricultural sector, including both the commercial and smallholder sectors, has the potential to create one million new jobs by 2030.

In 2016, South Africa had 2.3 million agricultural households, of which the vast majority (83 %) were garden farmers (Statistics South Africa, 2016). This group are considered to be subsistence producers who mainly or entirely farm for the purpose of their household needs (*ibid.*). These households are also shown to be more food secure than households that do not engage in farming at all (World Bank, 2018),

which is an important factor to point out considering the high rate of monetary poverty, especially among black South Africans in rural areas (Statistics South Africa, 2019; World Bank, 2018). The magnitude of agricultural production in smallholder farming, however, is decreasing; research points to a trend of de-agrarianisation, particularly in the former homelands (Shackleton *et al.* 2019; de la Hey & Beinart, 2017; Blair *et al.* 2018). As stated in the introduction to this thesis, in South Africa this trend refers particularly to the abandonment of crop cultivation in fields. Many of the studies covering this topic have been undertaken in Eastern Cape, which is why this province also provides the geographical scope for much of the literature that has been reviewed in this thesis.

The reasons for this decrease in field cultivation are multilevel and complex, from structural and socioeconomic changes in South African society to declining soil fertility and limited agricultural inputs at a local level (Aliber & Hart, 2009; Shackleton *et al.* 2019). De la Hey and Beinart (2017) highlight potential reasons as to why South African smallholders have largely abandoned arable production in fields. These include high costs of inputs compared with the expected output, new income sources (such as social grants) resulting in less dependence on farming, and high risks of cattle damaging the crops. They argue that the last point is connected to changes in family labour; with increased access to and a higher value ascribed to education, young people and boys in particular are no longer willing to herd the livestock (which had previously been a common practice). They also point to the change in patriarchal structures and thereby reduced control of family labour as a factor hindering the possibility of mobilising agricultural labour. However, Ferguson (2012) stresses the importance of looking beyond crop cultivation as the only use of (arable) land. In addition to being an asset for other rural livelihoods, such as collecting firewood or edible plants, land can also be a place that embodies heritage and identity. Owning land can also be seen as a symbol of liberation from the past (Ferguson, 2012). In view of the current focus of policy on smallholder farming and its importance for food security and poverty reduction in South Africa as well as internationally, there are good reasons to examine potential solutions, including the outcomes of previous agrarian policies and reforms.

3.2 Government initiatives to support smallholders

3.2.1 *The Massive Food Production Programme*

One government initiative to support smallholder farming and rural livelihoods in South Africa is the Massive Food Production Programme (MFPP). It offers a very good illustration of how government initiatives have usually been carried out in the Eastern Cape Province and at the particular study site of this thesis, and therefore has been deliberately chosen as an example of initiatives of this kind. The MFPP was a South African agricultural development programme run by the Department of Agriculture in the Eastern Cape Province. It was launched in 2003 with the ambition of addressing rural poverty and unemployment in the province. It had two main objectives: to increase food production and to create employment for the poor by boosting the development of rural entrepreneurship (Madyibie, 2013). Maize production was one of the programme's main targets (*ibid.*), in line with the long trend of maize as the dominant staple crop for South African households (McCann, 2005). The core idea behind the programme was that higher maize yields would reduce poverty, and it introduced smallholders to fertilisers, mechanisation, and hybrid and genetically modified (GM) maize seeds (Fischer & Hajdu, 2015). According to Madyibie (2013), the programme emanated from the idea that a

rationalisation from small individual fields to blocks up to 50 hectares would enable the smallholders to benefit from economies of scale. It was also assumed that public-private partnerships would facilitate commercialisation of the smallholder sector, and the private sector was therefore involved to provide technical assistance and inputs, for example (*ibid.*).

The MFPP was active until 2009, but research carried out on the programme showed limited outcomes overall in relation to targeting poverty and boosting agricultural growth. In a case study of three projects in the programme, Madyibie (2013) notes that even though higher yields were attained with profits, especially in the fourth year, it mainly benefited other actors involved in the projects (e.g. mechanisation contractors and input suppliers) rather than the smallholders themselves. Jacobson (2013) further argues that the seeds of hybrid and GM maize introduced to smallholders were not fruitful, due for example to limited possibilities of seed storage and recycling, and that the programme mainly became an opportunity for wealthier households. Moreover, the MFPP was based on an idea of implementing methods for large-scale and commercial farming. However, it is important to note that as these reforms were also influenced by an idea of market-integrated agriculture, which favours well-capitalised and commercial farmers, their contribution to small-scale production and rural livelihoods was limited (Aliber & Cousins, 2013).

3.2.2 *Recent agricultural development interventions*

After the MFPP ended, other agricultural programmes addressing smallholder farming were launched. During the period of data collection for this thesis, one maize-planting project was still active in the case study villages. This project is part of a so-called Cropping Programme, which is part of the provincial Food Security programme run by the Eastern Cape Department of Rural Development and Agrarian Reform (DRDAR) (previously the Department of Agriculture). The overall goal of the Food Security programme is to bring about a food-secure province in line with the objectives of the Integrated Food Security Strategy of South Africa (DRDAR, 2018a). The guiding framework for the programme is DRDAR's provincial Food Production policy, which seeks to address the issue of food insecurity through agricultural development interventions. The provincial policy has three main objectives: "to improve food and nutrition security in the province, to encourage and support partnership between smallholder farmers and private investors, and to increase the capacity and the capabilities of subsistence, smallholder farmers to become commercial farmers that contribute to the economic growth of the Province" (DRDAR, 2018b:2). The policy defines one of the major obstacles behind the low agricultural economic output in the province to be the limited capacities for smallholders and subsistence farmers to operate commercially, with a lack of access to larger areas of land as well as to markets for high-value commodities.

Moreover, the policy recognises crop and livestock production as two major focus areas in the province. These are both promoted through different programmes in order to enhance food security and economic activity. One effort to increase crop production is the Cropping Programme, which subsidises production inputs and/or mechanisation services to smallholders, and is coordinated and administered by local municipalities (DRDAR, 2018b). The Department of Agriculture at the local municipality organises the programme as local projects, with smallholders within one geographical area encouraged to apply and participate in the project as a group. The local municipalities also have a role to provide agricultural advisory services.

There are other projects under the programme of Food Security that also address homestead gardens in order to increase household food security. Interviews with the agricultural advisors involved in the Cropping Programme clarified that the Cropping Programme not only aims to support production for household consumption, but also for the purpose of selling surplus crops. Similar to the intention of the MFPP, the participants in this maize-planting project receive fertilisers, herbicides, and hybrid and GM seed varieties at a subsidised price. The difference from the MFPP, where smallholders got all inputs for free, is that this time participants have to pay a subsidised price for the inputs before receiving them. In broad terms, this new programme has continued along a similar path to the MFPP, underpinned by the assumption that mechanisation and capital-intensive inputs will target the issues of rural poverty.

When putting these two agricultural programmes in an historical context, it is evident that to some extent they reflect how smallholders in the homelands were targeted during the apartheid era. Along with betterment planning and its intention to promote monoculture production and large-scale mechanisation, smallholders were also introduced to fertiliser and high-yielding hybrid maize varieties (De Wet, 1990). Hebinck (2013) argues that the agrarian and rural government reforms in the past, both before and after apartheid, were based on a top-down approach with regards to development. He highlights that these policies have been strongly influenced by an expert discourse, with scientists and experts setting out the direction for agrarian and rural development. The belief in modern technologies and market integration have been embedded in the policies, and with the support of the commercial farming lobby it has become the dominant view in the agrarian development debate in South Africa today (Hebinck, 2013). One of the strong ideas underpinning these policies is the belief in modern technology and high-yielding seeds. In order to understand the wider (agrarian) structures surrounding the smallholders studied in this thesis, it is important to understand how and why the belief in high-yielding hybrid and GMO seed has become one of the most dominant ideas today in the debate around South Africa's agrarian development.

3.2.3 High-yielding seed

South Africa's Official Yearbook of 2018/2019 provides an update on government programmes and policies for the agriculture sector and states that:

Genetic modification (GM) provides a way to meet the growing demand of food without placing greater pressure on scarce resources. South Africa has commercialised three different GM crops, namely maize, cotton and soya beans. South Africa is the ninth largest producer of genetically modified crops in the world and remains the pioneer for the adoption of genetically modified crops. This is aligned to Section 24 of the Constitution, which advocates for sustainable use of biodiversity. (Government Communication and Information System [GCIS], 2019:17)

There are three types of GM crops that dominate in South Africa today: insect-resistant (IR) crops, herbicide-tolerant (HT) crops and BR crops, which are both insect-resistant and herbicide-tolerant (also known as "stacked" versions) (Gouse, 2012; Schnurr, 2019). IR crops were the first to be approved for commercial production (BT cotton in 1997 and BT maize in 1998) (Gouse, 2012). BT crops are genetically modified with a gene from the soil bacterium *Bacillus thuringiensis* (BT), which makes the crop resistant to certain insects (Schnurr, 2019; Kruger *et al.* 2009). IR crops were followed by the introduction of HT maize in 2003 (Gouse, 2012). HT

maize is tolerant to glyphosate, such as Roundup Ready Herbicide from Monsanto ² (Schnurr, 2019). Lastly, BR maize (BT and HT maize combined) was approved in South Africa for commercial production in 2007 (Gouse, 2012). This expansion of GM crops can be explained by the belief in their potential to lead to higher yields, increased food security and a reduced environmental impact. For example, it is suggested that it will lead to reduced pesticide use (with the adoption of IR crops) and improved soil fertility (through the introduction of HT crops combined with no-tillage practices) (Mannion & Morse, 2012; Ammann, 2005). Gouse et al. (2016) also found that HT crops can save labour with regards to weeding for smallholders, which is addressed at female smallholders in particular due to weeding being considered a female duty.

In the context of Sub-Saharan African agriculture, the so-called improved seed varieties mentioned above are considered by some to be a hopeful solution to the yield gaps found in the region today (Schnurr, 2019). However it is part of a wider debate around a New Green Revolution for Africa, with the increased use of external inputs such as hybrid and GM seeds in order to enhance agricultural production (Moseley *et al.* 2015; Schnurr, 2019; Jacobson, 2013). Public-private partnerships play a central role in the discussion, reflecting a broader neoliberal agenda on agricultural development (Mosley *et al.* 2015). This is exemplified by the way in which seed companies, such as Monsanto, have been key actors in introducing BT maize to South African smallholders, for example (Schnurr, 2019). It is controversial, especially in relation to the issue of GM crops, which generates conflicting views and opinions among researchers and policy makers around the world. Some critics of GM crops point to glyphosate-resistant weeds, legal regulations (patents) preventing farmers from sharing seeds, and unresolved questions about the effect that GM crops may have on human health and the environment in future (Bonny, 2016; Mannion & Morse, 2012; Jacobson, 2013). Another limitation of both GM and hybrid seeds is that they prevent seed recycling, both biologically and legally. This is in contrast to open-pollinated (OPV) seeds, which are suitable for seed recycling but also accessible at a generally much lower cost than both GM and hybrid seeds (Schnurr, 2019). OPV seed is what the majority of South Africa's smallholders predominantly rely on (*ibid.*).

3.3 Supermarkets and social grants

Apart from the background to smallholder agriculture in South Africa mentioned above, it is important to highlight a few other crucial factors related to current conditions in smallholder farming and rural livelihoods. Agriculture is one of several livelihood strategies by which people in the rural areas of Eastern Cape make a living (Fischer & Hajdu, 2015). It is therefore important to understand the role of farming in a wider livelihood context, but also to understand how rural households' access to food has changed in the past decade. Since the late 1990s, there has been a rapid growth in supermarkets in South Africa (Weatherspoon & Reardon, 2003). The food retail market is dominated today by four supermarket chains, with Shoprite and Pick n Pay the two largest (Nair & Chisoro, 2016). Initially, supermarkets focused on higher-income consumers in urban areas (Weatherspoon & Reardon, 2003), but over time they have expanded to target consumers across different income groups, including the rural poor (Nair & Chisoro, 2016). The supermarket's entrance into rural life was visible from the early 2000s. A case study of two rural communities in

² In 2018, the American agrochemical corporation Monsanto was taken over by the German company Bayer, another multinational company working in the field of crop science and biotechnology.

the Eastern Cape Province by D'Haese and van Huylenbroeck (2005) established that the majority of the studied households at that time bought most of their food items from supermarkets. It can be assumed that this development has continued to the present day, which was also confirmed during the fieldwork for this thesis. D'Haese and van Huylenbroeck further concluded that local stores and smallholders encountered difficulties competing with supermarkets because these can benefit from economies of scale and offer a variety of food items at lower prices.

The establishment of supermarkets should also be understood in relation to other societal changes in South Africa, such as the deracialisation and expansion of the South African welfare system. The welfare system in South Africa today is one of the largest among Sub-Saharan countries in terms of its proportion to GDP (World Bank, 2018). The South African welfare system offers every citizen aged 60 and above access to an old age pension, while all primary caregivers of children under the age of 18 receive a monthly child support grant (CSG). In addition to the fact that these social grants have proven effective in terms of reducing poverty among the poorest (World Bank, 2018; Satumba *et al.* 2017), the social grants have also had other positive effects. For example, research indicates that social grants have led to improved nutrition and greater food security (DSD, SASSA, & UNICEF, 2012), reduced gender inequality within households (Granlund, 2020) and help pay for children's educational costs (Gutura & Tanga, 2017a). Some research also indicates a correlation between social grants and household agricultural production, such as von Fintel and Pienaar (2016) who reveal that female-headed households in particular use the old age pension to invest in cultivation inputs. However, Gutura and Tanga (2017b) state that the grants do not provide sufficient income to cover all basic needs, and Granlund (2020) stresses that even though the social grant (in this case the CSG) improves the livelihoods of poorer households, its potential contribution to poverty reduction in a long term is limited.

4 Theoretical entry points

This chapter presents the theoretical concepts that were used to analyse the empirical data. The concepts of lifeworld and system enabled attention to be paid to how smallholders develop a shared understanding of their local world. The concepts of lifeworld and system also explain how this may be affected by a wider system of agricultural policies and market processes. Ideas from the concept of livelihood further allowed a clearer structuring of the activities and material circumstances that shape the resources and opportunities open to smallholders to secure their living. The livelihood concept also provides an analytical tool for understanding the role of farming in a wider livelihood context. Finally, the combined use of the lifeworld and livelihood concepts offers a greater awareness of smallholders' everyday practices when it comes to farming.

4.1 Lifeworld and system

The theoretical concept of lifeworld was introduced in the literature as a phenomenological concept by Husserl in 1936 (Harrington, 2006), and later developed and positioned within a wider theory through the 1981 work by Habermas: *The Theory of Communicative Action* (Fairtlough, 1991). Central to Habermas' conceptualisation is also how the lifeworld is understood from a system perspective, with Habermas differentiating between *lifeworld* and *system*. The use of lifeworld and system in this thesis is mainly inspired by Habermas (1985), even though I have also drawn upon others' usage of the concepts that I believe to be relevant for this study.

Lifeworld refers to everyday practices in our everyday life. It is defined by Schütz (1932) as the 'taken-for-granted common-sense reality of the social world as it is lived by ordinary individuals' (Harrington, 2006:341). The lifeworld should not be mistaken as the physical environment; rather it is the 'horizon' of socially shaped experiences that helps us to understand the world (Engdahl & Larsson, 2006). In other words, lifeworld refers to everything we take for granted in our social and daily life.

How we understand and act in our day-to-day life is always dependent on the kind of society in which we live. This is where the concept of system, or system world, comes in. Habermas – as explained by Fairtlough (1991) – believes that there are two main examples of the system: the market economy (governed by money) and the legal state (governed by administrative power). There is one main difference between these two 'different worlds': while the lifeworld is governed by interaction and orientated to reach mutual understanding between people, the system is governed by instrumental aspects and orientated to achieve efficiency and pre-defined outcomes (Habermas, 1985; Fairtlough, 1991). In this thesis I have chosen to understand this as two different rationalities: a *practical rationality* and an *instrumental rationality*. Practical rationality refers to a group of people sharing a mutual understanding about what they see as important and self-evident in their daily life – their lifeworld. Instrumental rationality refers to the rules or regulations through which institutions are governed – the system. However, it is important to note that the lifeworld and the system should not be understood as two separate worlds or parallel systems. Interaction between the two will always be taking place in all kinds of societies. The system is anchored and present in our daily life through different institutions, such as companies or government institutions. The daily life (and lifeworld) of citizens and consumers who make use of these companies and

institutions will automatically be interacting with the system (Höckert & Ljung, 2013). Hence, system-lifeworld interactions are always present, but to differing extents in different contexts or situations.

A conceptualisation of Habermas' lifeworld and system undertaken by Höckert and Ljung (2013) exemplifies how interactions can be understood in a farming context. Höckert and Ljung used the concept of lifeworld to understand advisory services to Swedish farmers, stating that a lack of a shared lifeworld between farmers and advisors hindered farmers from developing more sustainable and competitive production. The advisory efforts were shown to pay little attention to farmers' lived experiences and lifeworlds. The advisors' actions could be seen as reflecting a major system where farmers were addressed from a top-down perspective, often through business ideas, which did not always match farmers' realities. Habermas (1985) suggests that interactions between the system and lifeworld have increased in line with the development of modern society, creating a process that Habermas refers to as the rationalisation of the lifeworld. Habermas – again explained by Fairtlough (1991) – maintains that the lifeworld undergoes a process of rationalisation when new information or norms come to challenge those assumptions that would normally be considered as self-evident. A rationalisation of the lifeworld, according to Habermas, is thus closely interlinked with the development of modern society since the interactions between lifeworld and system have increased since then (Fairtlough, 1991). Furthermore, rationalisation of the lifeworld can be seen as a process in which people create a common understanding of both 'old and new' knowledge, information and beliefs.

The basis for social life and interaction will always be the subjective lifeworld of individuals and social groups. This means that "systemic mechanisms must be anchored in the lifeworld: they have to be institutionalized" (Habermas, 1985:154). There are two processes in relation to this institutionalisation of systems mechanisms in the lifeworld that are important to highlight since they are also central to how people create a shared lifeworld. The first is what Habermas refers to as "the cultural reproduction of the lifeworld" (Habermas, 1985:140-141). The lifeworld consists of shared common understandings, including values and knowledge, which have been developed through social interaction over time. The reproduction of knowledge and values creates a common stock of knowledge from where the actors can act to reach a mutual understanding in everyday life, and it is from these actions in everyday life that the knowledge will be accepted as valid within the lifeworld. A reproduction of cultural knowledge "secures a continuity of traditions and coherence of knowledge sufficient for daily practices" (*ibid.*). New information or situations must be connected to this cultural reproduction of knowledge if it is to be accepted as valid by the actors. Habermas further maintains that a disturbance of cultural knowledge, including where the stock of cultural knowledge is not sufficient to make sense of new information, will result in a situation where the actors will start to question what is accepted as valid and legitimate knowledge and actions.

The other process that enables a creation of a shared lifeworld, and facilitates the institutionalisation of new information and ideas in the lifeworld, is what Habermas calls "the social integration of the lifeworld" (*ibid.*:140). It focuses on a "coordination of actions" between group members, which contributes to a shared group identity strengthening a shared lifeworld. Habermas writes: "The coordination of actions and *stabilization of group identities* are measured by the *solidarity* among members" (*ibid.*:140). A disturbance of social integration is recognised by decreased mutual understanding and social solidarity among members, where it is hard to coordinate either actions or views when new information or norms enter the local world and challenge those meanings or assumptions that were previously taken for granted.

Moreover, it is when these processes are not taking place that the system starts to impact our lifeworlds to a greater extent, and when mutual understanding in the lifeworld decreases that colonisation of the lifeworld takes place (Fairtlough, 1991). Colonisation of the lifeworld can be understood as instrumental rationality – the system – having an increased impact in our daily lives. This should not necessarily be considered as negative; an increased presence of democratic and administrative mechanisms (such as the welfare system with social security assistance) can have a tremendous value in people’s daily lives. However, sometimes the presence of the system will take a less clear form in our everyday lives, making it hard to really grasp the system effects in the lifeworld. The most obvious example of this is probably the market economy, which can be understood as the “invisible hand” (Fairtlough, 1991:553). The colonisation of the lifeworld can also be understood as an increased system integration in our lifeworld, with a greater presence of *instrumental rationality* governing our daily life, and its various effects.

In this thesis, the concept of lifeworld is used to understand how people experience the role of farming in their daily life. What is a taken-for-granted reality and what is not? The use of what Habermas (1985) refers to as the social integration of the lifeworld and the cultural reproduction of the lifeworld allows a better understanding of how smallholders construct a shared lifeworld. First and foremost, the concept of system in this thesis refers to an experience of *governmental presence* in the smallholder’s lifeworld, with a direct impact on local farming practices. One example of such a system presence is the various agricultural policies or projects of the past or present day. As stated in the background chapter, South Africa’s agricultural policies are interlinked with market processes, for example through public-private partnerships with multinational seed companies, and these have a direct and indirect impact on smallholder farming. This is essential to acknowledge. However, I decided to limit the scope of the study to examine primarily smallholders’ experiences of governmental presence in terms of different agricultural policies or projects. Furthermore, the system (both government mechanisms and market processes) is also present in other ways in the local world, impacting on smallholders’ lifeworld in different ways. Given that farming is just one of the smallholders’ livelihoods, it is also important to acknowledge how their lifeworld is impacted by other system mechanisms that do not directly address farming. Lastly, the colonisation of the lifeworld in this thesis is understood as an *increased system integration in the smallholders’ lifeworld*, resulting in less mutual understanding within the scope of the lifeworld and a greater impact of the instrumental rationality governing human interaction in daily life.

4.2 Embeddedness

Building on the usage of lifeworld and system, I have also included one specific conceptualisation of the lifeworld concept. Stone and Glover (2017) drew upon the lifeworld concept to examine different varieties of rice. Their aim was to identify shared meaning and ideas about different sorts of genetically modified (GM) rice in the Philippines, and the extent to which they were embedded in the local (agroecological) context. GM seeds not only represent new aspects of technology in agricultural production, but also different lifeworlds (or in Stone and Glover’s terminology: “rice worlds”) with separate ideas and thoughts about how rice should be produced and used. Apart from studying the ‘rice worlds’ as socially shared ideas, Stone and Glover (2017) asked which institutions could benefit from ideas adhering to particular rice worlds. Central to their analysis was the concept of *geographical embeddedness*, which they define as “the extent to which local agroecological context is valorised or nullified in the crop’s construction” (Stone & Glover,

2017:89). They argued that these modern seed varieties have been constructed out of a “systemic placelessness” (*ibid.*), resulting in an introduction of seeds *disembedded* to place-specific and local agroecological conditions. Inspired by this, I found the use of *embeddedness-disembeddedness* valuable for understanding in greater depth the system integration in the smallholders’ lifeworld. This was achieved by asking how newly arisen information, norms or production inputs are understood and valued from the informants’ perspective.

4.3 Livelihoods

As previously mentioned, the literature analysing rural livelihoods was used in order to understand the resources and opportunities available to smallholders to engage in farming and by extension to secure a living. Livelihood is a well-used concept in research on rural development and poverty reduction (Scoones, 2015; Ellis, 2000), and can in its simplest sense be defined as a means to earn a living (Chambers & Conway, 1992). In contrast to more conventional and linear measurements of poverty, such as the level of income, livelihoods offer a more holistic grasp of the complex and diverse realities of both poverty and rural lives (Chambers & Conway, 1992). The important feature of livelihood studies and associated frameworks is the acknowledgement that rural households secure their living through multiple activities and income sources (Ellis, 2000; de Han & Zoomers, 2005; DFID 1999). Livelihood is defined by Ellis (2000:10) as:

the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household.

In line with other scholars’ definitions of livelihood, Ellis (2000) includes five categories of *capitals* as important assets. *Natural capital* refers to water or soil, *physical capital* to infrastructure and machinery, *human capital* to educational level, health or physical strength, *financial capital* to cash or savings, and lastly *social capital* to the social relations and networks that can serve as a resource for their livelihood. Social capital can also be understood as the level of trust, reciprocity and social networks among people or in a community (Martin *et al.* 2004). Moreover, these capitals identified by Ellis are to some extent similar to Bourdieu’s (1986) description of capitals in his theorisation of fields and capitals. However, the use of capitals in general livelihood literature can be seen as more purely method-orientated compared with Bourdieu’s (1986) richer theorisation of capitals. Bourdieu’s capitals might be of different importance in different contexts, and the interplay between the capitals are often crucial in order to understand the different livelihood strategies (DFID, 1999). Others, such as Scoones (1998), also include *capabilities* as an important part of the livelihood concept. Capabilities not only refer to assets or material possibilities, but also to a person’s own capacity to achieve certain goals out of his or her personal entitlements (including economic and social factors) (Scoones, 1998; Ellis, 2000).

Central to the definition of livelihood by both Ellis (2000) and Scoones (1998) is the question of access. What opportunities are there for people to convert available livelihood assets – capitals – into a possible income source? Arable land could be available and provide a good opportunity for individuals to develop a farming enterprise and increase their income. However, without financial capital to pay for the land or human capital such as sufficient agricultural knowledge for farming, the land loses its value as a possible livelihood activity. In many contexts, factors such as gender, ethnicity and class will determine which people have the ability to access

or claim certain livelihood resources more easily than others (Ellis, 2000). The acknowledgement that rural households can access livelihood assets to a different extent, mediated by social factors or structural constraints, highlights one of many explanations as to why rural communities should not be considered as one homogenous group. Level of access is also mediated by different institutions and organisations. Understanding the institutional processes of both formal and informal institutions can help in the process of identifying which factors might hinder people's access to livelihood resources (Scoones, 1998). For example, this could be a formal land tenure system or informal market structures, which both shape the possibilities of finding grazing land or accessing a market for example (Ellis, 2000; Scoones, 1998). These formal systems for land might interfere with local rules and practices of land use, whereby local informal institutions are as important as formal ones in understanding the different institutional processes that mediate people's livelihood.

Drawing on different activities and assets, a household can create different livelihood *strategies*. Livelihood strategies refer to a set of different activities undertaken to secure a living (Ellis, 2000). For example, a household can be engaged in crop cultivation with the aim of selling their produce, but selling the surplus to a market would require activities of marketing, accounting and ensuring that sufficient transportation to the market is provided. Scoones (1998) defines three broad categories of livelihood strategies: migration, agricultural intensification or extensification, and livelihood diversification. These three categories are all relevant for the purposes of this study. First, Ellis (2000:15) defines rural livelihood diversification as “the process by which rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living”. In other words, they do not just rely on one or a few livelihood activities. Livelihood diversification mainly refers to households engaging in non-farm activities (Ellis, 2000). Livelihood diversification can be both opportunity-led or survival-led, referring to the fact that it might come out of (positive) possibilities to pursue additional income sources, as well as a need for diversification in order to cope with (negative) risks or shocks (Alobo Loison, 2015). According to Alobo Loison, (2015) opportunity-led diversification involves a diversification of non-farm activities with profitable outputs, while survival-led diversification often comes from a need due to an increased vulnerability, with the result that households often engage in low-revenue activities. The second category, migration, refers to the linkages between urban and rural wage labour (both seasonal and permanent migration) and the way in which it can serve as a crucial diversification strategy for rural households (Ellis, 2000). Lastly, the category of agricultural intensification or extensification speaks for itself. However, on-farm intensification (high output per hectare) does not necessarily overlap with diversification since it can often imply specialisation in a particular product.

In this thesis I draw on the different perspectives on livelihood presented above. The five categories of capitals and access to them – mediated both by social factors and institutional processes – have been used in this thesis to help focus on smallholders' different capabilities for engaging in farming, as well as how it can be shown. The term ‘capabilities’ is central in this discussion because it refers to smallholders' material possibilities as well as their personal abilities to engage in farming. Personal abilities can be seen here as being interconnected with factors such as gender or class, which could determine which people – more easily than others – are able to access or claim certain livelihood assets.

5 Empirical findings

This chapter provides the empirical findings and discussion related to the research questions listed in section 1.1. The role of farming in the lifeworld of smallholders is explored, specifically the role of homestead gardens and field cultivation. There is also a discussion about how this lifeworld is colonised by a larger system of agricultural policies in the historical and current context, and how smallholders' different capabilities enable them to engage in field cultivation and/or homestead garden cultivation.

5.1 The role of farming

5.1.1 *Changes over time*

The first week of fieldwork had not even ended before numerous people were all saying the same thing: farming is not as important as it used to be. The elderly explained that there was a time when each and every household was dependent on farming, but that had changed. Mama Msindo is in her sixties and has lived in Xopozo her entire life. She invited us into her house and explained how it used to be in the past:

Large numbers of people in Xopozo used to do farming, but now it is decreasing day by day. Each and every person used to have their own field and you would find both men and women working there. We also used to have a Farmers Day where we showed our products, but a day like this no longer happens. (Mama Msindo, smallholder with two gardens)

Even though the informants identified different reasons for this change, there were some factors on which many of them agreed. First, several pointed out that it has become more and more common to buy food in town. Local taxis offer transportation back and forth to the nearest town where food can be bought in supermarkets at relatively low prices. The past two decades of rapid development in South Africa's supermarket sector – as explained in the background chapter – has had a large impact overall on both food consumption and production in rural areas. Almost every day, but especially at the end of the month after pay day, taxis are often packed with passengers carrying plastic bags from Shoprite (one of the largest supermarket chains in South Africa) with food items. Some informants said that it is not only the food stores themselves, but also the easily accessible transportation system that has enabled the increased purchase of food items. Subsequently, this has diminished the need for household agricultural production. Equally important to this is the expansion of the South African welfare system and the introduction of social grants. Almost all the informants in this study stressed the importance of grants. For some they supplemented other livelihood strategies, while for others they were crucial to their survival. Nevertheless, several of the informants said that the grants – particularly the old age pension and child support grant (CSG) – had had an impact on the role of farming. The elderly explained that before the grants started, most households were dependent on farming to secure a living, but thanks to the grants most households today have the means to buy some food and other necessities in the stores. It is important to stress that the grants offer very little money in relation to average living costs in South Africa today. However, according to the informants themselves, the grants are a major income source, and for some households their only one. This is in line with previous research revealing that South Africa's social grant system has had positive effects for poorer households, as explained in the

background chapter. Besides this, social grants are used to pay schoolchildren's education costs and other costs within the household (as also described by Gutura & Tanga (2017a)). Some informants in this study also used the grants to buy seed for crop cultivation. Older informants in particular also said that the grants had made people 'lazy' and allowed them to abandon farming. Yet, without diminishing the experience of the informants in this study, it is important to stress that the trend for uncultivated fields and de-agrarianisation in the former homelands probably started before the grants were introduced (de la Hey & Beinart, 2017). Another factor described as connected with the reduced importance of farming was the change of diets. Middle-aged or older informants said that young people are not interested in farming or keen on eating maize. Mrs Buxoki believed that it is mainly older people who are interested in planting maize:

The reason why farming is not as important anymore is because children today don't eat maize. You go and buy more groceries even if maize is in the house because they won't use it. But for us, we know about using maize because we cook imifino [a dish where maize is mixed with edible herbs/weeds often grown in the garden] and we cook ithanga [pumpkin]... But these kids don't eat those things. We only do farming for the sake of the chickens and us old people. (Mrs Buxoki, smallholder with one garden)

When I talked to younger people, a slightly different picture emerged. Even though some of the young people I met seemed to agree with older people that the youth are not interested in farming, according to some of them it was also a question of money. Mr Paya Songezo is in his thirties and he explained that he would like to make a living out of farming, but a lack of capital had stopped him from making the necessary investments:

My friend and I went to my place to do a calculation on poles and fencing material, but I realised that I couldn't afford it since I'm unemployed. Today I survive through piece jobs, but I would rather spend my days in the field. (...) Now young people are into alcohol and drugs and there is nothing to keep them busy. They want something that will give them money, but the problem is that they don't have the capital to start a small business. (Mr Paya, smallholder with one garden).

Mr Paya was not the only person to raise the question of capital; it was something highlighted by informants of different ages. Increased costs for agricultural inputs such as seed, fertilisers and tractor-ploughing prevented households from scaling up their farming activities and increasing their income (if they wanted to). As Hajdu et al. (2020) also point out, farming, and in particular field cultivation, turns out to be a low-profit as well as high-risk activity, especially in view of increased access to purchasing food in supermarkets. Moreover, the wish to find employment was something expressed by many informants, especially the younger ones. The historically important mining industries, where many men in the area had found wage labour, no longer offer the same job opportunities (Granlund & Hochfeld, 2019). In 2018, the national unemployment rate was 27 % and, as pointed out in the background chapter, was even higher in rural areas in the former homelands (Statistics South Africa, 2019). The unemployment rate of 77 % in OR Tambo District, which is located in the former Transkei homeland, exemplifies this. However, as mentioned in chapter two, this figure is probably still too low to represent the actual percentage of people who are jobless in the case study villages because the statistics only count those who are officially registered as unemployed. People like Mr Paya, who wants a job and is able to work but has never registered as unemployed, are invisible in the statistics. In many ways the structural issue of high

unemployment is one of the main challenges faced by the informants in this study. In relation to this, there is also the diminishing contribution of farming to food security and household income, as experienced by many of the informants. However, that is not to say that it makes no contribution at all. In the field I gradually came to understand that farming is still highly valued.

5.1.2 *Why we plant*

Mrs Ncedani is 34 years old and lives with her husband and their three children. Her husband has been working for a company in Johannesburg for several years but recently lost his job and is now back home full-time until he finds new employment. Mrs Ncedani agreed that fewer people seem to engage in farming these days, but she has always considered it important to plant some of the food they consume. It is even more important now, with her husband no longer having a salary and needing to rely on child support grants:

Farming is still very important. My husband is unemployed, and I want to send my kids to school and they need food (...) In some household there's only older people who no longer have the energy to plant. Some people don't have the means to buy seed since they depend on grants and they use the money for education. But it's wrong that some people don't do farming, you know, I get 1360 rand for three children and I try by all means to have money for seeds". (Mrs Ncedani, smallholder with one garden)

Cultivation adds to household resources and complements the social grants. During our discussion it also became clear that cultivating is not only a deliberate choice in order to save money and put food on the table, it is also a 'way of life' embedded in the social and cultural context. Mrs Ncedani and her husband explained that farming has been a natural part of their life since they were children, and like many others they learned farming from home. Mrs Ncedani's parents live in another village in Xopozo and she and her husband moved to this homestead a couple of years ago, but many other households I visited are intergenerational, where grandparents (often a grandmother) live with one of the children and his or her family. The elders are important knowledge holders when it comes to agriculture, as demonstrated by the fact that several of the informants often referred to their grandmother or grandfather as the one who taught them or gave advice about farming. The elderly – who are the heads of the households – also have an influence on the decisions made in the household, and especially decisions regarding farming. It was not unusual for informants to say that they planted a certain crop because their grandmother or grandfather preferred it.

Even though most of the informants saw cultivation as a natural thing to do, the smallholders in this study are clearly not a homogenous group and the level of engagement and interest in farming varied between them. While some saw it as a necessity for the household economy, others saw it as a passion and a central part of their identity. Ms Ngonyolo was one such person. She is in her sixties and moved to Xopozo when she married in the late 1970s. Today she lives with her son and his family. My translator and I visited her in the morning and she explained that she had just returned from herding the goats. Like many others with livestock, she moves the goats to the grazing land in the morning and brings them back to the homestead in the afternoon. Early in our conversation she explained that she is very passionate about farming, and that she sees several reasons why farming is important:

I want to tell you my reasons for farming. First of all, you get food from maize. Once I have planted, I'm able to sell a bag of maize and then buy other things to

eat, like rice, cooking oil or mielie meal. I sell this maize and I buy what I want to eat. The money is in the maize. But I've never sold it on a large scale, it's just for a few people in the village who don't want to plant. When someone comes here and asks if I can sell 20 litres of maize, I will, but in the end, the most important thing is my stomach and my children. (Ms Ngonyolo, smallholder with one garden and two fields)

In contrast to Mrs Ncedani, Ms Ngonyolo and her family have more than one major income source to rely on. Her son runs a *spaza* shop and works as a part-time guard at the local clinic. They also have the CSG and her old-age pension to depend on, and in addition to that Ms Ngonyolo is a traditional healer (a '*sangoma*') and she receives payment for her services. As the quotation above shows, Ms Ngonyolo places great value on maize. With time I gradually understood that several of the informants use the term farming when they refer to maize cultivation. Like Ms Ngonyolo, many of them see maize as one of the most important crops to plant. This is easy to understand since maize is a central asset for several livelihood activities. Firstly, as the main staple crop in the area, maize is the core ingredient in several drinks and food dishes and makes an important contribution to food security at a household level. Secondly, several informants also explained that one motivation for planting maize is that it enables them to feed their livestock, which in turn are highly valued. Thirdly, maize is also a source of income. There is no formal market at which smallholders can sell their maize; instead it goes through informal channels in the village. Mr Zim, a 37-year old man, explained how it can work:

The good thing with farming is that we can feed our livestock and our children. And sometimes it is a source of income; when someone needs maize urgently, you can just sell the maize to them. But when someone is struggling and coming to ask for maize, I am also able to give them some. (Mr Zim, smallholder with one garden)

Thus it is not always a question of selling, but also of giving maize to those in need. It seemed to be common practice among several of the informants to give away maize if someone asked for it. This was not to say that they did not have reservations about it. Some of the informants explained that they would prefer to sell the maize, but they said it was hard to say no when someone struggling asked for maize for free. I came to realise that good relations with neighbours and people in the community, which includes sharing the small resources one has with others in need, were of great value for farming life. The social network as a resource – the social capital – would enable smallholders without livestock to be assisted with ploughing for instance. The positive relationship between the level of social capital and access to livelihood assets in rural communities is well studied in livelihood research (e.g. Abenakyo *et al.* 2007; Ali, 2005). Actions that strengthen the social relations, such as giving away maize, can subsequently increase the social capital, which is an important livelihood asset in everyday life. Nevertheless, several of the informants also managed to sell maize in larger amounts. However, this was mainly a reality for smallholders cultivating one or more fields. The gardens were not large enough to enable crops to be sold in larger amounts and most of the informants used the harvest from their gardens for their own household needs.

5.1.3 Home gardens and field cultivation

One of the things that caught my attention during my first days in the field was that almost every household had a garden in their backyard. Many were fenced, either by bushes or chicken wire. The gardens varied in size but were rarely larger than half a hectare. When I arrived in Xopozo at the end of January, it was between planting

and harvest season, and from a distance it was easy to see the maize plants growing in the gardens. A closer look at the gardens revealed that the maize was often intercropped with beans and pumpkins, and that one portion of the garden was allocated for other vegetables, such as spinach, cabbage and potatoes. At the time of the year when I did my fieldwork, much of the agricultural workload is concentrated on weeding. Mrs Hathi is 58 years old and was busy weeding with hoes with her teenage son when my translator and I visited. She said that the garden helps her to save money as she needs to buy less food from the store to feed her family. She also said it was a way to get maize to feed her chickens, which is another motivation for her to plant the garden. With her children in school and her husband working as a taxi driver in the daytime, she explained that for the last few years they had stopped planting their field:

I'm the only one who is here at home; the children are at school and are no longer able to assist me. (Mrs Hathi, smallholder with one garden)

In contrast to the home gardens, which were easy to recognise, at the start of the fieldwork I was confused about the location of the fields. What to me looked like large areas of grazing land, with a few planted areas here and there, was some of the allocated land for arable fields created under the betterment planning in 1977 (as explained in the background chapter in section 3.1). Ms Ngonyolo helped me to understand this:

All on this side are fields, even over there. What you can see now is grass, but it used to be other people's fields. They were abandoned more than five years ago. The problem is that some people are still interested in planting, but the challenge is the fencing. Most people try by all means to make sure that their fields are fenced. (Ms Ngonyolo, female smallholder with one garden and two fields)

The decline in field cultivation is something that several other informants had witnessed, and is a trend clearly visible in other communal land areas in Eastern Cape as well (Shackleton *et al.*, 2019, de la Hey & Beinart, 2017). In contrast to the home gardens, not all the cultivated fields were fenced. Many informants saw this as one of the main challenges with field cultivation, since a non-fenced field means that that crops run the risk of being eaten by livestock and large portions of the harvest might be lost. This is a challenge that Jacobson (2013) also saw during the fieldwork undertaken in Xopozo between 2006 and 2012, indicating that it is a challenge smallholders in the area have faced for at least a decade. The fields are around one hectare in size, and normally planted with either only maize or maize intercropped with pumpkins and beans. Mr Qwalela, a smallholder who with his wife plants two gardens and two fields, explained that the question of what you plant is connected to the amount of available land:

It's not like it's the culture to mix maize, pumpkin and beans. Most people do that because of the small portion of land they are planting, but otherwise there is no rule that says you must plant them together. (Mr Qwalela, smallholder with two gardens and two fields)

In contrast to what Mr Qwalela said, however, intercropping is defined as a common practice among smallholders in the former homelands in Eastern Cape, especially in garden cultivation (McAllister, 1992). The technique of intercropping – cultivation of two or more crops in the same place at the same time – can increase the productivity per unit of land and make more efficient use of natural resources (Seran & Brinta, 2010). A successful intercropping system with compatible crops has several ecosystem and production benefits, such as nitrogen fixation in a cereal-

legume intercropping system (e.g. maize and beans) and sometimes better control of weeds, diseases and pests (*ibid.*). Drawing on the observations and interviews undertaken in this case study, it seems that smallholders prioritise cultivating a wide range of crops in their gardens first, but if they have the opportunity to extend their cultivation to fields rather than being confined to home gardens, cultivation of maize is then prioritised. This is also in line with maize being the dominant staple crop for South African households in the last century (McCann, 2005). With their two gardens and two fields, as well as a large number of cows and goats (compared to many others), Mr Qwalela and his wife are considered to be one of the households in the area with large production. They explained that they sometimes sell some of their maize, but that their main purpose with farming has never been to sell. Mr Qwalela explained that farming is a passion and that the farming life just lives within them. He viewed farming mainly as a way to feed his family and livestock. Another smallholder with active field cultivation, who in contrast to Mr Qwalela sees the opportunity to sell maize as a main motivation, is Mr Mqgada. By local measures he is also considered to be a smallholder with comparatively large-scale production. With two gardens and three fields (in total about four hectares), he says that he now makes more money from farming than he used to in the mines, mainly through the maize he sells. Even though other informants said that field cultivation of maize gives them extra income, Mr Mqgada was one of the few I met for whom farming was the major income source and was considered a job. A few other of the informants with active field cultivation also argued that it has become easier to sell maize within the community. One of them is Mr Xhama:

Those people who are not planting, they need this maize, so they are the target market. It was difficult to sell before when almost everyone was engaged in farming, so yes, it's easier today. But even so I don't discourage them from planting. The problem is that those people who don't plant end up stealing our maize. (Mr Xhama, smallholder with one garden and two fields)

Theft of maize from the fields was something that not only Mr Xhama raised as a problem; it was something that several of the informants with field cultivation had experienced. Others with field cultivation also agreed with Mr Xhama that the decreased number of cultivated fields has opened up local selling opportunities. However, some said that it could still be hard to sell maize for other reasons. Mrs Rhatya explained that as soon as they harvest the maize and remove the cobs, people come in large numbers because they know she and her family are selling. Nevertheless, she said that changes over time have made it harder to sell maize:

These days people don't consume maize like they did before. They prefer rice and other things, and they rely more on groceries from the shop. (Mrs Rhatya, smallholder with one garden and one field)

Mrs Rhatya is in her fifties and cultivates one garden and one field with her husband. They are nine people in total in the household, and one of her daughters lives with her family in a house nearby. Neither Mrs Rhatya nor her husband have employment and she explained that farming is therefore a central livelihood strategy and a way to feed her family. She thinks that the reason why so many others have stopped cultivating the fields and rely less on farming in general is because people have more money these days. Some of the informants said that they could also occasionally sell potatoes or vegetables, but that it was not common practice (in contrast to maize). Many of the informants, as well as Mrs Rhatya, therefore viewed the vegetables produced in their gardens as something primarily for household needs.

One major difference between the gardens and the fields are also their respective locations. While home gardens are located just outside the door, due to top-down reorganisation by the Transkei government during betterment, fields are concentrated in a few allocated areas of varying distances from the households, depending on the village. Ntokozo is a 34-year old smallholder who plants one garden with his family, and he views the long distance to the fields as a problem:

It's too far to the fields and you can't see if animals are eating the maize or not. In the garden it's closer for hoeing. (Ntokozo, smallholder with one garden)

As explained in the background chapter in section 3.1.2, one idea of the reorganisation of fields into larger units was that it would increase the efficiency of agricultural practices through large-scale mechanisation and monoculture production. This is a rationalisation process that normally requires a sufficient amount of resources in terms of labour and agricultural inputs, often more than that needed to cultivate a garden alone. The question of resources – and access to them – is crucial when it comes to understanding the different engagement levels between field cultivation and home garden cultivation.

5.2 Capabilities in smallholder farming

5.2.1 Money, land and labour

The labour required for gardening is something that most households stated that they were able access, irrespective of their financial situation or the number of household members. In most cases, a mother or a grandmother was responsible for gardening with the help of other family members, but also that the daily work in a garden can be handled by someone on their own. For obvious reasons, field cultivation requires more labour; instead of having just a garden, there is also a field that requires time and hands for planting, weeding and harvesting. What I came to understand is that the majority of households with field cultivation consisted of at least two adults (e.g. a couple) living permanently in the household. With at least two able-bodied household members, the chances of the family having enough labour to cultivate a field are increased. This was particularly the case when households relied on livestock for tillage and manpower for weeding. According to the informants, children cannot be relied on today when it comes to agricultural work. Informants explained that until one or two generations ago, the parents could rely on young people to perform agricultural work such as weeding and livestock herding. Nowadays it cannot be taken for granted that the children will help out to the same extent. Mr Mgqada is in his fifties and explained how he remembered it used to be:

In the past, the whole family would go to the field and work. The kids would only do grade one and two and after grade three they would be considered finished with school and sufficiently educated. (Mr Mgqada, smallholder with two garden and three fields)

The reduced access to family labour, and especially young people's role in it, is therefore also connected to the decreased number of cultivated fields, according to several informants. They explained that even though there are fewer livestock in the area, the ones there are still cause damage to the fields. With no youngsters to herd the livestock and limited capital to employ someone else to do it, the fields are less protected from livestock damage. As also pointed out by de la Hey and Beinart (2017), this change in family labour is one of several reasons for decreased field

cultivation in the former homelands. For example, a single mother is less likely to cultivate a field. However, it is not only a question of labour but also a question of money. In the penultimate week of fieldwork, my translator and I visited Ms Swana, a 35-year old woman who lives with her sister and their children. By this time, I had started to get an overall understanding of what characterised richer and poorer households in the area. When entering Ms Swana's homestead, both my translator and I could see that her household appeared to be struggling more than many others. Ms Swana welcomed us into the house and, while looking after two small children running around the room, explained what she liked about Xopozo. She said it was nice because they live in peace and sleep well at night, and that there had been a development regarding electricity. She also found the people in Xopozo very nice "because if you need something you can go next door and ask for it". However, she also explained that the poverty in the area is higher now than before and that she and her family are struggling more nowadays:

It was easier before when our parents were still alive. Now it's harder when we only have the child grants. The old people get a grant, which is important money, but now we're left being poor. (Ms Swana, smallholder with one garden)

Ms Swana and her sister have a field, but since last year have lent it to somebody else. She explained that the village chief had said that if you do not plant your field, you should let somebody else use it. Ms Swana would like to plant the field, but she does not have the money for it. Like the homesteads, the fields are inherited, and most households have access to at least one field. Even though many fields were uncultivated during the period of my fieldwork, I came to understand that an unused field is not necessarily the same as an abandoned or unvalued field. Some households were lending their fields if someone else was interested in cultivating it (as in the case of Ms Swana), which the local chief encouraged, but it seemed to be far from everyone who did so. Ms Mdolo, a smallholder who does not own a field of her own and had therefore borrowed a field for a couple of years, explained that she was no longer planting the field because the owner had wanted it back. She would like to borrow and plant a field again, but she thinks that people do not like to lend their field to others since they are afraid of not getting them back. According to her, it is a shame as the consequence is that there is no land for new fields and that many existing fields are not planted. Some other informants agreed with Ms Mdolo that it is hard to borrow field from others, but others were of the opposite opinion; just borrow a field if you want to. It was therefore hard to fully grasp the issue of access to fields, and the land tenure system is also not one of this study's objectives. However, I gradually understood that the question of borrowing fields partly related to who you are in the community. The better-off households with good social relations and networks seemed to have a greater chance of borrowing someone else's field, as well as being in a position to deny lending out a field if they did not want to.

The quote by Ms Swana above also shows another important asset for the smallholders in this study, namely access to the old-age pension. Ms Swana was not the only person who stressed the importance of living with elderly people. Young black South Africans' dependence on parents' or grandparents' grants, due to a limited labour market with few opportunities for wage labour, is also something that Bähre (2011) has highlighted. In South Africa, a person of retirement age will qualify for an old-age pension. This is an amount of money that would make a considerable difference for a household that had no income from a paid job for instance. Mr and Mrs Qwalela, who are mentioned in the previous sub-chapter, explained that now that both of them are getting the grant they can afford to buy more fertiliser from the

shop, instead of relying on manure as in the old days. A household with access to an old-age pension could also boost their financial stability, but also have the capital for agricultural investments. Briefly mentioned in the previous chapter is that some of the informants used the CSG to buy maize seed for their gardens, but an old-age pension also coming into the household increases the chances of affording the necessary inputs for field cultivation.

Another interesting aspect regarding the social grants, and particularly the old-age pension, is how it allows participation in a government maize-planting project currently running in some of the villages. As explained in the background chapter, the project is part of the provincial 'Cropping Programme', is administered by the Department of Agriculture at the local municipality, and focuses on maize cultivation in the fields. The smallholders participate in the project as a group, not individually, and those I met who were participating in the project said that there were around 25 participants in a group. The group as a whole is responsible for contracting a tractor owner for tillage and planting, for which each participant pays around 200 rand per season. This is in addition to the costs of participating in the project, which is around 2000 rand per hectare and season, but each participant pays according to the size of their field. Mrs Ntsingizi is one of the 11 project participants I interviewed. With her husband, she has participated in the project for the last three years. She explained that she was born in a township in Queenstown, and therefore did not have a background in farming. It was when she met her husband and they decided to move to his birthplace in Xopozo that she became involved in farming. In her youth she worked in Johannesburg, but she stopped when she had children. Her husband meanwhile had worked his entire life in a factory in Pretoria until he recently retired. The field is not fenced, but her husband checks the fields once or twice a day to make sure animals are not eating or destroying the maize. The main motivation behind planting the field is to feed the family and to get money to "feed the car with diesel". It has been many years since they last owned any cattle, and today they only have chickens and sheep that one of their grandchildren helps them look after. Previously they used oxen for ploughing, but now they pay for a tractor to come and plough (organised through the farmer group in the project). Mrs Ntsingizi can be considered an example of what several of the participants in the project seem to have in common, namely pensioners with previous experience of wage labour. When I met the chairperson of one group in the project, Mr Makaula, he explained that most of the participants in the project are elderly people:

The only people who are particularly involved and engaged in farming are old people, those who depend on grants... And most of them are women. (Mr Makaula, chairperson for one farmer group in the maize-planting project)

When I asked why it is mainly women enrolled in the project, he replied that it is probably because many men are old and some have passed away. Through the social and village mapping that I conducted in one of the case study villages, I understood that there are more female-headed than male-headed households. However, there are also other possible explanations for the overrepresentation of women in the project. During my fieldwork it became clear that gender is an important factor in how gardening and field cultivation is practised and valued.

5.2.2 Women's gardens and men's fields

Even though a gender analysis was not one of the main objectives of this study, it is practically impossible to discuss the role of farming and issues such as agricultural labour without touching upon gender norms and other relations of power. As

explained in the section above, I found family labour and financial capital to be some of the assets that had an impact on whether smallholders can engage in garden cultivation alone or field cultivation as well. There are some different gender aspects connected to this; most explicit is the fact that it often seemed to be the women in the households who had main responsibility for the garden, in line with what has been found by other studies in this research field (Connor & Mtwana, 2017; Shackleton & Hebinick, 2018). The location of the gardens right next to the house allows gardening to be done while also ensuring that other female-coded tasks within the household can be continued such as cooking, washing and minding children. This can partly be explained by historical events; when a large number of men left for wage labour in urban industries, the women and the elderly were often the ones who stayed at home and had prime responsibility for the homesteads, with a greater focus on gardens since they were easier for them to manage (McAllister, 1992). Ploughing fields and taking care of livestock were still also considered typically male activities (Hajdu, 2006). While in the field, I also learnt that if a household consisted of both men and women – for instance a married couple – it was primarily the man who would find himself working but also being responsible for the field, reflecting the past. The man was also more likely to have a non-farm income, such as piece jobs or in some cases full-time employment. Furthermore, if the household were also participating in the government's planting project, the man would be the one expected to represent the household in the project. However, the reality was never so straightforward. With fewer jobs opportunities in the historically important urban industries, the informants believed that it is less common for men to leave for seasonal wage labour. During my time in the field I therefore saw both men and women working in the gardens and fields. Many of the female informants also lived without a husband or male partner, either because their husbands had passed away or because they had never lived with a husband. It did not appear unusual for a woman to be living on her own (in a separate homestead from her parents). Furthermore, their responsibility for the household meant that the women were also expected to feed the children. This expectation extended to ensuring that the garden at least is cultivated, but sometimes also the field. Ms Zitumane was one of the female participants from a single household participating in the project whom I interviewed. She believed that it is not a coincidence that there are more women than men in the project:

The majority [in the project] are women, yes. Why? Because the women are responsible for the homes. They are the ones who feel the pressure if there are no meals at home, if the plate is empty. (Ms Zitumane, smallholder with one garden and one field)

Ms Zitumane cultivates her field without many family members to rely on, which makes her situation different from quite a lot of the other single (as in not living with any partner or other adults) female smallholders I met. She is a retired nurse who lives with two of her younger grandchildren. She sells maize and potatoes too when there has been a good harvest. She explained that she pays a younger man in the village to work in the field now and then, but also that when she adds up all the costs for the field in relation to what she gets out of it, she barely breaks even. However, since she sees farming mainly as a hobby, she still thinks it is worthwhile. Ms Zitumane is one example of how access to financial capital, partly through the old-age pension, can overcome the challenge of not having family or neighbours to rely on for agricultural work. Ms Zitumane therefore also contradicts a previous statement that most households who actively cultivate fields consist of at least two adults living permanently in the household. With a university education and many years of full-time employment behind her, she also has certain capabilities that serve

as important livelihood assets, which is why it is clearly not only gender aspects that matter, but educational level, life experiences and access to financial capital as well.

Nevertheless, even though gender is a factor that has an impact on what agricultural practices the household can undertake and by whom, access to the necessary resources seemed to be slightly more crucial. It is ultimately a rather pragmatic decision: if you have access to labour or financial capital (and interest in cultivating) you will cultivate the field, regardless of whether it is a female or male-headed household. What I found interesting, however, is how it seems to be self-evident that the field will be the man's responsibility if it is a gendered mixed household. There are several possible explanations for this and the fieldwork for this study did not provide enough data to provide a comprehensive answer. However, some aspects are clear. First, it can be seen as a reflection of the past where fieldwork was mainly a male activity. Yet, it is also possible that this is reinforced as a male activity today due to changes in intrahousehold relationships. Granlund (2020b) shows how the CSG has led to a change in gender relations and an improved status for the primary caregivers who receive the CSG, who are often the mothers or grandmothers. When women are in a position to access money – with increased decision-making power and consequently an improved status both in the household and the community – men may be in a situation without employment or the possibility of providing money for the family to the same extent. Bähre (2011) reveals how the lack of a job tends to be perceived as individual failure and a sign of laziness, rather than a structural issue of the labour market. It therefore seems reasonable that men would experience feelings of uselessness and shame for not being able to find a job and also not fulfilling the role of breadwinner for the family, something which both Granlund (2020b) and Hajdu (2006) have observed in a rural community in Eastern Cape's former homeland. Here the fields can offer a possibility to contribute to the household and, in the absence of employment, in a way also provide a sense of belonging. When the households and gardens lie within the female sphere, the fields are more open for men to 'reclaim' as a male-coded arena. This points towards a gender-coded assumption in the present lifeworld of fields being a male responsibility and gardens a female responsibility.

5.2.3 Production inputs

Something that can also exemplify smallholders' different material possibilities is how they obtain the necessary inputs for crop cultivation. Two central resources in all crop cultivation, which also shines a light on other livelihood assets for the informants of this study, is access to seed and manure (natural animal dung) or fertiliser (synthetic fertiliser). Far from every household had cattle, but several had goats, sheep or pigs and most had chickens. As mentioned earlier, informants believed that there are fewer cattle in the area today. According to Mrs Notyotyoty, the smaller number of livestock has had negative effects on collective work within the community:

In the past, it was easier for everyone to plant in the fields compared with these days. And people had cattle back then. So, they would combine their cattle and use neighbours to assist in the fields to do the farming. But these days people don't help each other out and one of the problems is that they no longer have cattle to do that. (Mrs Notyotyoty, smallholder with one garden and one field)

Historically important 'work parties' where cattle served as an important asset for collective agricultural work (McAllister, 1992) have become less common over time

and have partly been replaced by family labour or hired labour (Shackleton & Hebinick, 2018). During the wealth ranking exercise and focus group interview, the participants stated that the cost of cattle had increased dramatically in the past decade. This was in line with the general price development of food and other goods according to the participants; everything is more expensive these days and they are more dependent on money to survive. The price of livestock was no exception. One of the participants explained that she would like to have cattle again after her previous ones had died, but it is not only the costs for the cow itself that stop her, but the money she would have to pay for medication as well. The group therefore agreed that cattle were the one thing that mainly richer households could afford, simply because they have money. Nevertheless, they also believed that not everyone would like to have cattle since they might prioritise spending on other things.

Furthermore, the need for cattle for agricultural purposes has decreased. Fewer people cultivate their fields and no longer need oxen for ploughing; several of the smallholders who still cultivate their fields have started to pay someone to come with a tractor instead. However, this mainly seemed to be the case for people enrolled in the government's maize-planting project, where the group contracts a tractor owner for tillage and planting. Others with field cultivation still rely on oxen for ploughing (either their own or hired or borrowed from someone else in the community). The decreased number of cattle, on a household level as well as a community level, would imply reduced possibilities for accessing manure to improve soil fertility. The informants explained that after harvest season, the fields are purposely left open for the livestock to graze. The livestock, both cattle and sheep or goats, are kept in a fenced enclosure in the homestead at night and decomposing manure from there will subsequently be used in both gardens and fields. The informants explained that for a number of years they have mixed manure with fertiliser to use in the fields and gardens. For several smallholders it was viewed as quite obvious to go into town and buy fertiliser, at least for the purpose of gardens. It was seen as a slightly larger investment to buy sufficient fertiliser for a whole field, for which access to financial capital has become essential. Nevertheless, manure from livestock was still the dominant practice in both field and garden cultivation.

Something that also exemplifies smallholders' different material possibilities is how they obtain the necessary inputs for crop cultivation. One essential input is access to seeds, which is also worth highlighting because it exemplifies some of the system-lifeworld interactions found in the smallholder's lifeworld. Smallholders in the case study villages normally save and recycle seeds for crop production, which is a common practice among smallholders in South Africa (Netnou-Nkoana *et al.* 2013). Saving and recycling maize seed is particularly important, reflecting its importance among the informants as one of the key crops to plant. These recycled seeds come from local maize populations and are often referred to as 'Xhosa maize' and used in both garden and field cultivation. The Xhosa seed is often differentiated as either red or white Xhosa seed. The seed is saved from the previous year's harvest and often kept in a storage tank in the yard, but it was also a common practice for households to supply each other with seeds. If the last year's harvest had been limited or the household had not managed to save enough seed for recycling, many could rely on their social capital and be given seed by a neighbour or a friend. However, seed supply within the community only seems to happen when it is for the purpose of gardens; the amounts of seed required for a whole field is often more than a household can afford to give away. However, the practice of seed recycling was not strictly followed since quite a few of the smallholders also bought maize seeds from town. This variety of maize seed was referred to as 'English maize' or seed from the store, and described as a 'seed you cannot save', with new seed being bought every

season. This is a very clear, shared assumption in the smallholders' lifeworld. Some of the smallholders showed me packs of maize seed they had bought. After visiting one of the agricultural stores in the nearby town, I understood that what they called 'English maize' was often an open pollinated maize (OPV), which in contrast to hybrid and GM seed works well with the practice of seed recycling. Mama Msindo uses both seed varieties in her garden:

Sometimes I save seed and sometimes I buy new seed, but this year I planted Xhosa maize. The difference is that the seed from the store gives two cobs more per plant, but on the other hand you need to use more fertiliser for it. Yes, it is expensive, but it's worth it because you get more food. (Mama Msindo, smallholder with two gardens).

Like Mama Msindo, many of the informants seemed to choose seed for pragmatic reasons; sometimes you save and sometimes you buy. It was often a question of how much maize you had harvested and could save for the following year. Many of the informants preferred the bought maize since they believe it grows faster and gives more food, but the Xhosa seed was considered better for the animals. Mr and Mrs Dutshwa cultivate three fields in addition to their garden. This year they planted two of the fields with recycled seed (Xhosa seed) and one with what they referred to as new seed bought from the agriculture store:

We are used to the Xhosa seed so that one is the best... When we plant late, we usually use the one from the shop because it is very quick. (Mrs Dutshwa, smallholder with one garden and three fields)

Planting on time was something that several of the informants stressed as very important, with one explaining that those who plant on time will be rewarded with good maize. Even though the type of maize seed the informants ended up using (recycled or bought) was a rather pragmatic decision, it also seemed to be a question of tradition and pride. Some people, like Mrs Dutshwa, said that Xhosa seed is what they have always used, and it seemed to be a matter of pride to continue to do so, while others would question continuing with Xhosa maize. I learned that for some, the type of maize seed is an indication of wealth. When we visited Mrs Sotiya, a smallholder with one garden and one field, we had just left her neighbour's house after finishing an interview. She explained that she plants English maize and that she likes it because it grows fast; Xhosa maize is too slow. She went on to say that her neighbours still plant Xhosa maize because they do not have the means to buy any other seed since their parents passed away. She said that it had been tough for them, which is why people had also given them seed. According to her, a lot of people still plant Xhosa maize but she does not understand why since the new maize is much better. Mrs Sotiya also explained that she buys fertiliser from town as she does not have any livestock (only chickens), and she thinks that it is hard to ask for manure. I asked if she had ever participated in any of the maize-planting projects in the fields, where she would be given both seed and fertilisers. She emphatically replied:

No, the project is too expensive! Instead my son and his wife help me to pay for English seed. (Mrs Sotiya, smallholder with one garden and one field)

Hence, family members can be seen here as a valuable resource in order to be able to afford agricultural inputs in terms of seed and fertiliser. A correlation was identified between non-farm income and agricultural production, particularly with regard to field cultivation.

5.2.4 *Cultivating a garden is natural*

As shown above, the empirical findings of this thesis indicate that the role of farming has decreased over time, but that cultivation is still considered important for food security on a household level. My findings also point to garden cultivation in particular as something smallholders with different socio-economic conditions can practice, while field cultivation is more of a reality for smallholders who are able to access sufficient family labour or financial capital. Nevertheless, it is not only the material possibilities that differentiate the two cultivation practices; the informants also valued them differently. One shared understanding among the informants was that field cultivation has undergone a rapid decline, with it being an accepted reality today that few households in the area cultivate a field. It is therefore not seen as strange if a household does not plant their field. In contrast, cultivating gardens was seen by all informants as a natural and expected thing to do. Garden cultivation as a common-sense reality can be exemplified by how a household without any cultivation at all was viewed by others in the villages:

A household that does not plant a garden or a field is problematic... It is an unserious household. (Participant in the wealth-ranking exercise and focus group interview)

Through the wealth ranking exercise, I understood that farming is a way to categorise people; if you have neither maize nor livestock, not even chickens, you are considered very poor, while the richer households have those things but also cattle, education and the money to employ someone if needed. The fact that almost all households have a garden, but not an active field, highlighted the view of garden cultivation as the most expected cultivation practice. When I asked why they planted their garden, some of the informants practically laughed at me; of course, we plant the garden. During my time in the field I only came into contact with four households who did not plant a garden. Upon further investigation of the reasons for this, it was revealed that all four households were newly established and had not yet had time to plant a garden. The informants also shared a mutual understanding about garden cultivation as something taken for granted. This shared construction is based on a clear reproduction of knowledge and values, which Habermas (1985) describes as the cultural reproduction of the lifeworld: knowledge in that several informants had learned cultivation practices and gardening from home, and values in that they had been taught that it is a natural part of rural life and something everyone can and should do, regardless of their financial or social conditions. The latter is also connected to the fact that the required resources for garden cultivation, such as sufficient labour, are something that most households can access. Drawing from this, it can again be stated that garden cultivation is something that lies within the capabilities of both richer and poorer households and that it goes without saying that a garden should be planted. In contrast, the fields were surrounded by different and sometimes conflicting views and values. Field cultivation was more of an active choice and more dependent on the material possibilities of different smallholders, but also connected to a wider system of agricultural policies impacting the local world.

5.3 Support from the outside as a colonisation of the lifeworld

5.3.1 A brief historical overview

One expression I often came across was what the informants referred to as ‘the project’. As previously explained, I also met smallholders who are currently participating in a government planting project administered by the Department of Agriculture at the local municipality. However, the term ‘the project’ did not always refer to this particular project; rather it pointed to both a historical experience and a present expectation of government support, in particular arable production in the fields. One day when my translator and I crossed one of the areas allocated for fields – which now consist more of pasture than actual arable production – we came across a woman who started talking to us. She explained that she was on her way back home after a visit to the local clinic in Xopozo. She lives in one of the villages on the outskirts of the centre of Xopozo (the centre being where the local clinic and most of the schools are located). Since I had not yet visited or talked to any households in that village, I took the opportunity to ask her some questions about it. The trend of reduced importance of farming seemed to be a reality there as well, but what struck me is what she said about ‘the project’. She said that it would have been easier if the project had also come to their side. I asked what kind of project she was referring to, and she explained it was the project where you get assistance with planting fields. Through other informants, as well as from my supervisor’s knowledge of the area, I understood that the village she lives in resisted the betterment planning of the 1970s, which was why there had not been any relocation of field sites and residential sites. The village had therefore not been targeted in some of the governmental agricultural interventions carried out in Xopozo, since one requirement was that there must be fields concentrated in larger units that can facilitate tractor schemes. The three case study villages included in this study had participated in the betterment planning undertaken by the Transkei government. Ms Ngonyolo, who had great knowledge of the history of the area, talked about when it started:

The project started in around 1977; it was the first thing that was called the project. When it started, people were planting crops and vegetables in small gardens, and then they ended up planting maize as well. (Ms Ngonyolo, smallholder with one garden and two fields)

What Ms Ngonyolo described as the first project is possibly the betterment planning when the fields were arranged and concentrated together into larger units. The fields have since been targeted by different agricultural and rural development interventions under the Transkei government, and later on by the South African government after the first democratic election in 1994. During my time in the field, I heard people talk about all kinds of different projects in the past. One informant said he loved the projects because it eliminated poverty, while another said the projects eat your money; you produce food and it is sold to companies like SPAR, but they are the ones who get all the money. One informant said that there had not been any project for a long time, while someone else explained that projects were more common nowadays. It is hard to really grasp when and how these different projects were carried out and with what purpose and outcome. What became clear from all these statements, however, was the long-term experience of government involvement in crop production in the fields. No one mentioned any experience of governmental support for the purposes of garden cultivation (if such an initiative exists). One shared experience among several of the informants was how the government used to support them with fencing:

We fenced our field last year, but in the past the government helped with fencing, Our fence had become so old which was why we fenced the field last year. More people were interested in farming before and the government assisted with fencing, but now, as the number of people in farming has decreased, the government hasn't continued with it. (Mrs Rhatya, smallholder with one garden and one field)

Some people, like Mrs Rhatya and her family, have erected a new fence around their field. So has Mr Xhama, but he does not consider it to be proper fencing:

It is always better when the government fences all the fields, because this is just a minor thing we do for ourselves. It is not considered real fencing. (Mr Xhama, smallholder with one garden and two fields)

Even though some of the informants had managed to fence on their own, most smallholders had not. To buy fencing – poles and steel wire – for one field was an investment that many of the informants did not prioritise or could not afford. It appears that the authorities last fenced the fields at least a decade ago, but it was still something people believed the government should assist with. Those who could and were willing to invest in fencing on their own would do so, even though it seemed to be with some hesitation, but most of the informants seemed to believe or hope that the government would assist them eventually. This collective memory of government support for fencing was reproduced as a shared assumption today. It was not unusual for smallholders who were not currently cultivating their field to say that they would start to plant as soon as the government fenced the fields. This can also be seen as a mutual understanding in the informants' view of field cultivation, namely an embedded view of system-lifeworld interactions stretching over time. What are considered to be self-evident practices in field cultivation are strongly governed by previous government support with fencing, representing an integration of a wider system of agricultural policies. However, this is no longer a common fact, but more a question open to debate; should we erect a fence on our own or will it be provided by the authorities? Drawing on Habermas' (1985) conceptualisation of lifeworld, this is a situation where the social integration of the lifeworld is restricted, demonstrated by the lack of coordinated actions, but also where the stock of knowledge is not sufficient to create a shared construction of the local world. Habermas further writes that the "coordination of actions and *stabilization of group identities* are measured by the *solidarity among members*" (*ibid.*:140). While some informants believed that the government should do the fencing, others viewed these people as lazy and having the wrong mindset. Some argued that it is each individual's responsibility to ensure that they have the necessary resources to cultivate the field. Ms Zitumane, a retired nurse who is mentioned in the previous sub-chapter, believed that cultivation can offer a potential solution to the high unemployment in the area, especially for youngsters, given the right circumstances. However, she believed that people do not seem to have the right motivation for it, and that some seem to expect others to do things for them:

It is this new development, if I could put it like this. People are too lazy to do things and they keep on saying "this department is not doing this for us, the municipality is not doing that for us"... They've been persuaded that they can't do anything for themselves. But they want housing and they want this, and they want that. When we were growing up, we knew that in order to have something, you must do it for yourself. (Ms Zitumane smallholder with one garden and one field)

Fairtlough (1991) writes that the lifeworld undergoes a process of rationalisation when new information or norms come to challenge assumptions that would normally be considered self-evident. This new development, as Ms Zitumane called it, which she believes became more common after 1994, has certainly introduced changes to the local world. Yet, if these new changes are to make sense in people's lives, and if a new shared understanding is to be constructed, these changes must be anchored and institutionalised in people's lifeworld (Habermas, 1985). The informants' divided opinions and understandings of the government's role in crop cultivation in fields in particular reveals that such new, shared meanings have not been achieved. Rather, it points to a lack of a homogenous understanding of the system and uncertainty about what to expect from the government. This is also demonstrated in how individual life stories are not synchronised with collective actions in the present time, whereby it is harder to make sense of new norms from the historical perspectives of the lifeworld (Habermas, 1985). Yet, even though government presence in field cultivation has to some extent changed, it is still highly present in terms of the maize-planting project. Central to this project, and with possibly the greatest impact on the smallholders' lifeworld, are the inputs that are provided.

5.3.2 *Project maize and the 'new' practices of today*

As explained in the background chapter, one government maize-planting project is currently active in the area. It is part of a so-called 'Cropping Programme' within the provincial Food Security programme administered by the Department of Agriculture in the local municipality, and it organises smallholders into local groups. From the interviews, both with the smallholders but also with the agricultural officials involved in the project, I learned that this project is similar to the Massive Food Production Programme (MFPP) active in the area between 2003 and 2007 (Jacobson, 2013). It is similar in that project participants are provided with subsidised production inputs in terms of fertilisers, herbicides and hybrid and GM seed varieties, but differs in that the MFPP requires participants to pay a subsidised price for the inputs before receiving them. The maize variety used for the 2018/2019 season was a stacked version (BR maize), which as explained in the background chapter is a combination of Bt and HR seeds. During the second week of fieldwork I met Mr Vatsha. He has been participating in the maize-planting project for a few years and overall was satisfied that he was involved in it:

It has helped me a lot, because before that we would only use cow dung. But now we have the opportunity to learn more about farming and what other chemicals we can use. (Mr Vatsha, smallholder with one field and one garden).

Mr Vatsha was not the only one who seemed to be satisfied with the project. Of the 11 smallholders I interviewed who had participated in the project in recent years, several of them said that they had learned more about farming. These smallholders explained their decision to join the project in different ways. One informant said that she could see that others got very nice (and more) maize by planting through the project, which motivated her to join herself. Mr Vatsha, mentioned above, explained that he was initially introduced to the project at a meeting with agricultural officials in the chief's house around five years ago, and he subsequently decided to join the project. Another informant explained his decision to join the project being motivated by the fact that he had become tired and lazy. Irrespective of their different motives or reasons for taking part, it seemed to have been quite a strategic choice to increase their livelihoods. The inputs and farming practices introduced by the project also seemed to meet some of the challenges faced by the smallholders in relation to crop cultivation. This mainly relates to the use of herbicide-tolerant (HT) maize and the

herbicide glyphosate (Roundup). Many (but not all) of the smallholders interviewed for the thesis were older than middle-aged, and so too were most of the participants in the project. They said that now that they are old and have less energy, it is convenient to spray instead of weeding with hoes. It also fulfilled their wish to produce more food; in line with the participants' perception that newly-bought maize ("English maize") gives more cobs, this was also the view when it came to what many referred to as "project maize". This exemplifies how already existing shared meanings in the local world facilitate the introduction of new ideas or inputs that are similar to the stock of knowledge and shared meanings people already share, which in this case enables newly emerging systemic mechanisms to become institutionalised in the local world (Habermas, 1985).

However, one interesting aspect is the term 'the project', which points to an historical experience and a present expectation about governmental support for crop cultivation in fields in particular. In the present case, the continuing presence of government projects could be seen most clearly in how new maize varieties are frequently referred to as 'project maize' (sometimes used interchangeably with the terms English maize or maize from the shop). In line with previous projects or government support in the fields, this maize project represents a system interaction in field cultivation, but in the present day. Not everyone referred to this maize as project maize, however; a handful of smallholders called it Roundup maize (the official name for the herbicide-tolerant maize is Roundup Ready [RR] maize, with Roundup referring to the glyphosate containing a broad-spectrum herbicide to which Roundup Ready maize is resistant). It was not only smallholders who participated in the project who mentioned the name Roundup maize; I met two smallholders who – according to them – planted Roundup maize and a few others who did not plant it but said that they knew about it. One of the two was Mr Maboza, a highly engaged smallholder. Two of his fields are cultivated with RR-maize, and he thought that he was planting RR-maize in the third one as well, but he said that the store had "robbed" him with that seed:

They say it's Roundup [seed] but it's not... because it has no name you see... So I didn't know what sort of seed it was and when I used Roundup [herbicide] they died (...) But Roundup is the best, and what makes me not like Xhosa seed is that you cannot use the chemical when you're removing the weed. (Mr Maboza, one smallholder with one garden and three fields)

Mr Maboza explained that he became familiar with these seed varieties through other people coming to the village to teach them about farming. That seemed to have been quite a long time ago, but he only started planting RR-maize exclusively in the fields a few years ago. While Mr Maboza showed us his fields, another man, Mr Ndlala, came by. Mr Ndlala cultivates a field next to Mr Maboza's fields, and he explained that he started to plant RR-maize around three years ago after Mr Maboza had advised him about the strength of the seed and the herbicide (but I later learned that Mr Ndlala and his family had also been participating in the maize-planting project for a few years). Both of them said that there were very few people planting that kind of seed since it was quite expensive. Mr Ndlala would be coming back to his field the following day to plant beans and pumpkins between the rows of maize. He sprayed with Roundup once in January, and now he could plant beans and pumpkins:

If you plant Xhosa maize you can plant beans and pumpkins at the same time. The difference is that you need to use your energy for hoeing. (Mr Ndlala, smallholder with one garden and two fields)

Like all the other smallholders I interviewed for this thesis, neither Mr Maboza nor Mr Ndlala and his family were planting RR-maize or 'project maize' in the gardens; it was solely used in the fields. One explanation given by some of them was the fact that the use of glyphosate and RR-maize is not compatible with the practice of intercropping vegetables in the gardens. Hence, the practice of RR-seed is for monoculture crop production. This hinders the intercropping of pumpkin and beans in the field, something several households have previously been doing, although some people like Mr Ndlala have adapted this 'new' practice by planting other crops after using glyphosate. The experiences of these external inputs reveal a clear system integration in field cultivation, resulting in new norms and practices in the local world. However, not everyone had the same experiences of RR-maize or had the same positive view of it as Mr Ndlala and Mr Maboza. With different and sometimes conflicting views on field cultivation, this is also something present in the questions of 'new' production inputs and the idea of the project itself. One central aspect for these divided views appeared to be the question of money.

5.3.3 *Disembedded inputs and access to money*

Mr Msongelwa and his family stopped cultivating their field around 15 years ago due to a lack of fencing, but the garden still provides a mix of vegetables for the households a few months per year. Mr Msongelwa had heard about Roundup from other people, but had never seen it as an option buy:

The reason I'm not using the Roundup chemical is because I'm fully aware that when you use the Roundup chemical you have to be using Roundup seeds... and Roundup seeds are very expensive (Mr Msongelwa, smallholder with one garden).

This is also the case when it comes to participating in the project itself; many said that they could not afford it. As described earlier in the thesis, the informants believed that older people, and particularly women, with access to the old-age pension were most often project participants. Besides a correlation between social grants and project participation, the correlation between labour migration and on-farm intensification has been revealed earlier in this thesis. This is not only the case in relation to this project, but also for field cultivation in general as both field cultivation and participating in projects requires money. A few of the informants said that their grown-up children living in town were helping them to pay for seeds and herbicides but also for someone to herd the livestock. When looking at the project in terms of non-farm income, new norms and farming practices have been introduced and their position in the local world reinforced with the help of social grants and/or migration labour. One example of this is the acceptance of external inputs at relatively high costs, such as the RR-seeds, even though not everyone can afford them. The informants expressed satisfaction with the maize-planting project and the ensuing farming practices, but a level of frustration and confusion was also apparent. The introduction of these farming practices has had negative effects too, at least according to Mr Mdlawuzeli. When I asked him who was participating in the project alongside his family, he gave the following explanation for the decline in the number of cultivated fields:

The reason why people have stopped farming is because the project introduced the chemical that kills weeds, and now the project has left they have become lazy and don't plant anymore. So that is the main thing I think stopped them farming. (Mr Mdlawuzeli, smallholder with one garden and two fields).

This reveals another dimension of the projects (the present project and similar projects in the past). The quotation further points to a change in norms and practices, particularly in field cultivation. Mr Mdlawuzeli used the word 'lazy' to describe the effect the project has had on people. However, I believe this can be understood more as the projects having an impact on how people perceive their own capabilities. The long-term experience of governmental support in fields (but not in gardens) has created a shared assumption of governmental presence as a taken-for-granted reality in the lifeworld related to field cultivation. This government support has – at least in more recent times – required outgoings that mainly only better-off households can afford. Drawing on how Alogo Loision (2015) explains livelihood diversification, this shows an opportunity-led diversification, where wealthier households have had the opportunity to engage in agricultural intensification and increase the resilience of their livelihoods (both increasing food security as well as opportunities to sell and earn extra income). Poorer households, meanwhile, said that they could not participate in the project or realise this increased agricultural production to the same extent. This maize-planting project is a clear example of opportunity-led diversification.

Drawing on Stone and Glover's (2017) conceptualisation of geographical embeddedness, I have tried to understand how new information, norms or production inputs are understood and valued from the informants' perspective. It can be argued that the project design and production inputs provided show a level of disembeddedness from smallholders' financial realities. This is especially the case if these types of government planting projects are aimed at reducing poverty, since the poor(est) smallholders I met during my time in field did not have the capabilities to participate in the project. At the same time, it became clear that those who cultivate a field in particular are the ones who also can sell and bring in extra income, which they define as an important motivation for engaging in field cultivation. A project like this also seems to encourage people who would not otherwise plant the field. This was also something also mentioned by the agricultural officials at the local municipality, explaining that really interested smallholders would continue to plant even though there was no project. Moreover, another aspect revealed in the interviews was the sense of being abandoned or 'dumped' by the project:

There are also the rumours that the government is saying that now we've been shown and taught how to farm, we will no longer be helped by the project. (...) If they leave us, what are we going to do? Because the government used to support us, to assist us. (Mama Ntsoyana, smallholder with one garden and field)

Mama Ntsoyana explained that she and her family planted through the project until three years ago. The reason that they left was due to a combination of factors. First, she explained that their field is in a bad area with lots of stones, which made it hard for the tractors to operate. Secondly, she explained that there were too many people in the project (in the farmers group) which made it hard to cooperate, something also highlighted by others. Thirdly, they were also short of money. One thing that stood out in her explanation was the rumour of being abandoned by the government, as it shows how long-term experience of government support in the fields as well as a shared assumption of how government presence are a taken-for-granted reality in the practice of field cultivation. Similar experiences of being 'dumped' or left by the project were expressed by others. From the perspective of the informants, no clear distinction was made between the various projects; all government initiatives were

referred to as ‘the project’. I believe that the experiences of Mama Ntsoyana and others in the current maize-planting project could therefore possibly be representative of an experience stretching back over time and different projects, and not just relate to the current maize project.

6 Discussion

This thesis focuses attention on how farming, and especially crop cultivation, is practised and understood in the rural area of Xopozo in the Eastern Cape Province. The empirical entry point for this thesis is the long-term trend of a general decline in field cultivation among rural smallholders in South Africa. This trend is particularly evident in South Africa's former homelands and is often discussed as a process of de-agrarianisation. In the South African research context, the term de-agrarianisation mainly refers to the de-activation of field cultivation (Shackleton & Hebinck, 2018; Mtero, 2014; de la Hey & Beinart, 2017). However, it also carries an underpinned assumption of the decreased importance of farming in general, assuming that farming no longer provides a firm foundation for rural livelihoods. The intention of this thesis was to examine the topic of de-agrarianisation in more depth, with the aim of understanding the role of farming in the informants' day-to-day lives. This chapter discusses empirical findings in relation to the theoretical concepts introduced in chapter four, together with previous research on smallholder farming and rural livelihoods in South Africa and the Eastern Cape Province.

6.1 The changing role of farming

In terms of the number of cultivated fields, the findings of this thesis indicate a continued decline in the past ten years based on a study in the same area undertaken by Jacobson (2013). Similar patterns are found elsewhere in the Eastern Cape Province (de la Hey & Beinart, 2017; Andrew & Fox, 2004; Shackleton *et al.* 2019). For some of the informants in this study, the de-activation of field cultivation was ultimate proof of the decline of the role of farming itself. This was shown by how older informants in particular referred to the past as a time when people would do farming in large numbers and every household would cultivate a field. Despite the decline in field farming, the interviews showed how those smallholders who continue with field cultivation are very engaged in their farming. Furthermore, many of those who do not cultivate their fields do not consider their fields as permanently abandoned. This is similar to the research findings of Shackleton and Hebinick (2018), which show that despite this decline, rural households are still actively engaged in farming, including field cultivation (even though field farmers are in minority). They argue that this continuity of farming is not always acknowledged, and that the de-agrarianisation literature tends to see the general decline in field farming as a permanent change of agrarian life. Most profound is how de-activation of field farming is being replaced by an intensification of garden farming, which has also been revealed by several studies from the Eastern Cape (Fay, 2013; Andrew & Fox, 2004). The present findings show similar patterns; most households in the study site cultivate a garden, but only a few (approximately 15 %) have an active field.

As discussed throughout this thesis, gardens and fields differ from one another in several ways, from fields located far away to fenced gardens next to the house, and with a generally higher crop diversity in gardens compared with a more dominant cultivation of maize in the fields. Nevertheless, as also defined by Shackleton and Hebinick (2018), my findings show how both field farmers and garden farmers share the view of farming as a 'way of life' embedded in the social and cultural context. All informants, regardless of whether they cultivate just a garden or both a garden and a field, shared similar motivations for their engagement in crop cultivation. The most distinct reason revealed in the interviews was that crop cultivation is a source of increased food security and a more resilient household economy. The latter refers to a reduced need to purchase food, which emerges as a strategic choice in order to

save money. This also demonstrates a shared lifeworld, pointing to all smallholders sharing similar views on the role of farming. Although these findings show that garden farmers mainly or entirely cultivate for household needs, several field farmers (who cultivate both a garden and one or more fields) also cultivate fields for the purpose of earning extra income. Shackleton and Hebinick (2018) define these differences as two 'styles of farming', pointing to different motivations and assets governing how rural households operate in crop cultivation. The first style refers to farmers who express a clear passion for farming and often farm with a stated idea of earning money (called 'keen farmers'), while the second refers to those whose motivation for farming is a way of saving money (called 'cash farmers'). Most (but not all) field farmers in their study fall into the category of 'keen farmers', while garden farmers are mainly represented in the category of 'cash farmers'.

6.2 Smallholders' capabilities

I believe that the categorisations of smallholders as keen farmers or cash farmers, as defined by Shackleton and Hebinick (2018), capture well what is indicated by my findings as well. While garden farmers mainly farm for the purpose of saving money and boosting the household's food security, field farmers were also more likely to farm to earn additional income. Shackleton and Hebinick (2018) emphasise the fact that 'keen farmers' often have previous experience of labour migration, resulting in them having capital to invest in resources for cultivating fields over the years (e.g. cattle and ploughs). This provided common ground for several smallholders with active field cultivation whom I interviewed for this thesis, namely previous experience of migrant work in urban industries. This has allowed a continuation of field cultivation, where farming as a 'way of life' has become self-evident and part of the identity for members of these households. Access to financial capital through migrant wages has also been an enabling factor for the continuity of field cultivation, reflecting the relationship between wage labour and agricultural production in the past in the former homelands (de la Hey & Beinart, 2017). The correlation between migrant labour and agricultural production has continued to the present day, including in the form of grown-up children sending home money from wage work in towns. This is exemplified by couples such as Mr and Mrs Magusha explaining how their grown-up children helped them to pay for seed and for someone to herd their cattle.

However, the amount of financial capital has now also been complemented or replaced by social grants. Particularly prevalent in my findings was access to the old-age pension. Old-age pensions are used strategically by some of the informants in this study to invest in cultivation inputs. This is in agreement with the findings of von Fintel and Pienaar (2016) in their research on the role of cash transfers for smallholder farming in South Africa's former homelands. While von Fintel and Pienaar (2016) have mainly shown this to be particularly common for female-headed households, my findings indicate that this also happens in male-headed households. The household of Mr and Mrs Pama is one such example, with Mr Mgqada explaining that old-age pensions had enabled them to purchase larger amounts of fertiliser from the store. My findings also indicate that there is a possible relationship between the CSG and household agricultural production, exemplified by how some of the female informants said that some of the CSG was used to buy seed. This is supported by Fay (2013) who points out a positive relationship between CSG (which in practice mainly reaches women) and an intensification of garden cultivation. At the same time, the informants in this study said that the introduction of welfare payments was one of the reasons behind the decline in farming, particularly the decline in field cultivation. De la Hey and Beinart (2017) suggest that it is hard to show a causative link between increased

welfare payments and withdrawal from field cultivation. However, Fay (2013) proposes a possible correlation between the CSG and increased school attendance by children, which has also reduced the contribution made by young people to agricultural labour. This was also revealed in my interviews, namely in how the informants thought that children today should go to school instead of help out with farming. This change in the division of labour within the family is suggested by de la Hey and Beinart (2017) as one of many interrelated drivers behind the de-activation of field cultivation. Interestingly my findings, as well as the work by Shackleton and Hebinick (2018), show how reliance on family labour is what several of the smallholders with active field cultivation have in common. Shackleton and Hebinick (2018) stress how young people are still actively engaged in agricultural work in those households, but this is not supported in my findings to the same extent. In this thesis the question arose of whether the household consisted of at least two able-bodied adults, such as a couple, who had an interest and ability to engage in field cultivation.

Shackleton and Hebinick (2018) argue that all smallholders in their study (both cash farmers and keen farmers) mainly rely on a “self-controlled resource base” (*ibid.*:285). This refers to the majority of the production inputs being locally obtained inputs, such as recycled maize seed, family labour and manure obtained from the farm or within the community. This is also mirrored in my findings. However, I argue that a third category or ‘style of farming’ is apparent among the smallholders in the present study. One group of smallholders in this study has gradually replaced locally obtained inputs with purchased inputs to be used in the fields (but not in the garden), implying a greater use of fertilisers, herbicides and certified seeds compared with the vast majority of smallholders in the area. They share similar characteristics to those defined by Shackleton and Hebinick (2018) as keen farmers, with a passion for farming and an aim to earn money from farming, but they are differentiated by what sorts of inputs they rely on and how those are obtained. The majority of these farmers are active in the government’s maize-planting project in the area, meaning that at least 11 of the 20 smallholders with active field cultivation are included in this category. Participation in the project is also an enabling factor to access these inputs at a local level.

Nevertheless, this does not suggest that these smallholders have entirely abandoned the practices of seed recycling or applying locally produced manure. Firstly, these are still what these smallholders mainly rely on in the gardens. Secondly, during the interviews a rather pragmatic approach towards production inputs was revealed among most farmers, with the widespread perception that sometimes you save seed and sometimes you buy it. Similarly, a common practice was to use a bit of both manure and fertiliser in the garden as well as in the fields. This increased intensity of externally provided production inputs in both gardens and fields is something also identified by Fay (2013). However, my findings show how there is an increased number of smallholders farming fields who use external inputs compared with what Shackleton and Hebinick (2018) discovered in a different part of the Eastern Cape, and – especially – that these farmers say it is a rather self-evident to use external inputs. Hence, part of these farmers’ lifeworld has changed in that external inputs in field cultivation are to a larger extent taken for granted. This is mirrored in Fay’s (2013) work, which shows that a continuity of field cultivation has been followed by an increased application of purchased inputs. As demonstrated in the previous section of this chapter, smallholders with active field cultivation draw upon strategies of migrant labour and welfare payments to enable crop cultivation. This was also the case with the project, pointing to a correlation between non-farm incomes and participation in the project.

Furthermore, one of the shared experiences among several of the garden farmers in this study was a lack of sufficient labour for arable production in fields. This is exemplified by the experience of Mrs Hathi, who said that with children in school and her husband working during the day, there was no one to assist her in the field. Shackleton and Hebinick (2018) argue that a common finding among garden farmers in general was that they had stopped field cultivation due to the older age of members of their households or limited access to resources, and instead decreased their cultivation practice to gardening alone. This is also reflected in my findings, with a common account of a lack of energy, equipment and inputs to maintain arable production in the fields. This mirrors other agrarian changes in the local world relating to a decreased number of oxen for ploughing and work parties (gatherings for collective agricultural work) being less common, for example. This has led to increased reliance on family or hired labour (Shackleton & Hebinick, 2018), reflecting a greater focus on the family and its members' own capacities (Trefry *et al.* 2014). The capabilities of different smallholders to engage in field cultivation and/or garden cultivation therefore mainly becomes a question of the resources and skills that exist within the households. Most smallholders interviewed for this thesis had the necessary resources for garden cultivation, but less so for cultivation of fields.

6.3 The lifeworld and livelihood of smallholders

The value of drawing upon the two theoretical concepts of lifeworld and livelihood together, as has been done in this thesis, is that it reveals how smallholders produce a shared understanding of their local world out of the resources they can obtain. The challenge of a lack of fencing and ensuing damage by livestock was a commonly shared experience in the informants' lifeworld, as well as the shared view on the costs of production inputs being too high in relation to the expected outputs. De la Hey & Beinart (2017) also suggest these two obstacles to be drivers of the de-activation of field cultivation in the former homelands. These shared assumptions, present in the smallholders' lifeworld, have an impact on how they view field cultivation as a possible livelihood activity, as well as their own capabilities to engage in field cultivation. The latter refers to their limited amount of money, which implies that they do not see themselves as capable of investing in new fencing or paying for hired labour when they are unable to mobilise family labour. Eventually this lack of resources enabling field cultivation has led to a shared assumption in the local lifeworld, such that no one is particularly surprised by the withdrawal from arable production in fields. This is in contrast to garden cultivation, which among the smallholders was seen as self-evident and a practice taken for granted and strongly present in their lifeworld.

As Ellis (2000) stresses, livelihoods should be understood as an ongoing process in which households can change or adapt their activities in order to sustain a living over time. As demonstrated in this thesis, the local world as the informants know it has undergone several changes since South Africa's democratisation in 1994. Besides access to welfare payments, as discussed above, the opportunities for rural households to purchase a variety of food items has increased in line with the rapid development in South Africa's supermarket sector in the past two decades (Weatherspoon & Reardon, 2003). Besides having an impact on rural households' access to food, it has also implied that smallholders find it difficult to compete with supermarkets that can benefit from economies of scale and offer a wider variety of food items at affordable prices. These are some of the changing circumstances impacting local livelihood processes. The decline in arable production in fields can be understood as one adaptation to these changes over time, with rural households today making use of other strategies/activities and assets to secure a living. Gardening is one such activity and

relies on capabilities and assets that most households can access, allowing continuity over time. This implies a coordination of actions, where most people who practise gardening draw on similar activities and assets as the majority of the households in the study site. This is what Habermas (1985) suggests facilitates the creation of a shared lifeworld. Gardening as being self-evident of the informants' lifeworld is demonstrated in how it entails a high degree of practical rationality; the informants share a mutual understanding of gardening as an important and self-evident part of their everyday life. Moreover, it can also be argued that a continuation of gardening is a way to hold on to one of those activities that build and strengthen a 'farming identity', reflecting how all informants see farming as a 'way of life' strongly embedded in rural life. This can also be viewed in relation to the desire to build a home, something Masterson (2016) argues is done partly through agricultural activities and that is essential for what people perceive as a home in the rural context of Eastern Cape. Nevertheless, a continuation of field farming is partly driven by the same reason, that is to say a wish of the informants to hold on to a farming activity that they see as an expected part of rural life. This is exemplified by how the motivation for several of the field farmers to cultivate their fields was that it is a 'passion' or a 'way of life'. This also gives a potential answer to the question of 'why do people hang on to cultivation rather than abandon it', which Hajdu et al. (2020) suggest could be a better question to investigate instead of 'why have people have abandoned cultivation'. The difference, however, is that the continuation of field cultivation, in contrast to garden cultivation, relies more on access to family labour and financial capital.

6.4 Colonised fields and private gardens

My interviews with smallholders in Xopozo revealed the long-term experience of governmental presence in crop production in fields. This did not emerge as a shared experience in garden cultivation, either from a historical perspective or in the present day. In my view, it is highly relevant to how these separate cultivation practices operate today. The collective memory of government involvement in field cultivation has become institutionalised in people's lifeworld, and in reference to Habermas' (1985:140) definition of a 'cultural reproduction of the lifeworld', this institutionalised experience can be seen as facilitating a continuation of this shared understanding in the present day. Hence, the collective memory of government involvement in field cultivation in the past can be seen as having created a shared assumption and expectation of further government involvement in fields today. This is demonstrated for example through the informants' expectation or hope of support with fencing or planting of the arable fields. Moreover, it means that newly arising norms or ideas regarding crop cultivation in fields can be introduced and accepted more easily today, compared with norms or ideas in relation to garden farming. This can be understood through the wide acceptance of new practices and norms regarding purchased inputs, where my findings have shown that farmers who cultivate their fields and are participating in the project are more likely to use and have a positive view of external inputs such as RR-seeds and glyphosate. The findings reveal how the smallholders who use herbicide-tolerant maize find it convenient because it means spending less time on weeding. This is valuable for the older smallholders who expressed a decreased capability for agricultural work, but also for the households with limited access to family labour. These production inputs also face two distinct challenges for informants: aging household members and a lack of family labour. At the same time, it implies a greater dependence on external inputs and access to financial capital. Participating in the project (and receiving subsidised inputs) or purchasing these inputs

out of their own pocket is a possibility open to only a few of the households. This increased system integration of external production inputs is also only beneficial for a few, reflecting the findings of Jacobson (2013) who concludes that the MFPP (which was similar to the project discussed in this thesis) was mainly an option for better-off households. What is also revealed in this thesis is how these local inequalities are reinforced by the institutionalised experience of governmental presence in field cultivation; government support in fields is expected within the smallholders' lifeworld, but the forms it comes in are mainly only an option for those who can afford it.

In contrast to gardens, the fields themselves are built on a system integration and embedded instrumental rationality, where the betterment reorganisation had a pre-defined goal of boosting agricultural production (and maintaining access to cheap labour for urban industries) through large-scale mechanisation and monoculture production. However, one difference from the informants' previous experience of government support, which in the interviews revolved around government fencing, is how the current support is more clearly influenced by market processes. As stated in the theory chapter, the two most distinct examples of the system are, according to Habermas' work (1985), the legal state (governed by administrative power) and the market economy (governed by money) (Fairtlough, 1991). The maize-planting project mentioned in this thesis, as well as the MFPP in the past, make use of public-private partnerships to introduce hybrid and GM maize to South African smallholders (Schnurr, 2019; Fischer & Hajdu, 2015). The construction of the GM seed implies the biological and legal prevention of seed recycling, which challenges the widely used practice of saving and recycling seeds in smallholder farming in the area. The findings show how smallholders have different opportunities to adapt to this change, resulting in a disturbance in 'the social integration of the lifeworld' (Habermas, 1985:140). This is revealed in the findings by a lack of coordinated actions, where one group of field farmers continues to rely on locally obtained inputs while another makes greater use of externally provided inputs, as well as by a decreased mutual understanding about how field cultivation 'should' be undertaken.

These in some parts conflicting views among the smallholders regarding the norms and practices of farming in fields (in terms of local and external inputs, for example) can be understood here through the concept of colonisation. In this thesis, the colonisation of the lifeworld refers to an increased system integration in the smallholders' lifeworld, resulting in decreased mutual understanding and an increased impact of instrumental rationality governing human interaction in people's everyday lives. As Fairtlough (1991:555) states, this process of colonisation has the effect that "traditional ways of life are suddenly overturned by market influences." As I see it, newly arising norms and practices in crop cultivation challenge previous views about how crop cultivation should be undertaken, which is not something negative *per se*, but rather something expected in the globalised world in which we live. However, the question that emerges is what possibilities do the (generally) marginalised smallholders have to adapt to this change? Drawing on the findings of this thesis, those opportunities are few and far between for the vast majority of the smallholders in this study. This adaptation points to a more vulnerable livelihood system (Ellis, 2000), with decreased reliance on a self-controlled resource base that Shackleton and Hebinick (2018) argue facilitates a continuation of farming over time. It also demonstrates a top-down approach to (agricultural) development, where local people themselves have limited power to set the agenda for future development. With

reference to the work of Stone and Glover (2017:89), these ‘new’ seed varieties and cultivation practices carry a dimension of “systemic placelessness”, reflecting a belief in a New Green Revolution for Africa with an increased use of external inputs such as hybrid and GM seeds in order to enhance agricultural production (Moseley *et al.* 2015; Schnurr, 2019; Jacobson, 2013). This influence of modern technologies and market integration, which Hebinick (2013) argues is the dominant view in the agrarian development debate in South Africa today, also has a considerable impact on local livelihood strategies.

7 Conclusions

This thesis provides further evidence of what most previous studies within this research field have revealed: namely a decreased engagement in field farming in South Africa's former homelands. At the same time, by examining the experiences of those still active in field farming, but also in garden farming too, a slightly more complex picture has emerged beyond the rather narrow term of de-agrarianisation. The findings show how crop cultivation and garden cultivation both provide an important foundation for local livelihoods and are strongly embedded in the rural context. However, changes over time have resulted in a downscaling of household agricultural production, with most households giving priority to garden cultivation. One important reason for this is the fact that garden cultivation draws upon capabilities that are accessible for most households. Garden cultivation is therefore seen as a taken-for-granted activity within the lifeworld of smallholders, while field cultivation appears as a deliberative choice for those households who can access sufficient family labour and financial capital to enable field farming to continue. Arable production in fields is also based on a long-term experience of government involvement, resulting in a commonly shared view that the government's presence in field farming is something expected today as well. This facilitates an implementation of government projects and the introduction of external production inputs in field farming, demonstrating one clear difference between how field farming versus garden farming operates. This can be understood through the concept of colonisation outlined by Habermas (1985). The title of this thesis – colonised fields and private gardens – can be seen here as a metaphor for the different levels of system integration in the smallholder's lifeworld. A higher presence of instrumental rationality can therefore be seen within the smallholders' lifeworld when it comes to field cultivation, while a higher level of practical rationality and mutual understanding can be identified in relation to garden farming.

Nevertheless, this embedded experience of interaction between field farming and a wider system of agricultural policies should not be seen as something negative *per se*. In order to address the problems of poverty and unemployment in the area, government presence is crucial. Considering the importance of smallholder farming to food security in South Africa's rural areas (World Bank, 2018), as well as its role in achieving the objectives of Agenda 2030 (NDP, 2012; Terlau *et al.* 2017), it is suggested that agriculture is one of several important sectors that need to be prioritised. The government's maize-planting project mentioned in this thesis is one example of an effort to reduce poverty through agricultural development, alongside the similar Massive Food Production Programme previously undertaken in the area (Jacobson, 2013; Madyibie, 2013). However, both of these projects have been ineffective since the provided inputs are not adapted to the financial realities or cultivation practices commonly used by the vast majority of smallholders. Based on the findings of this thesis, it is suggested that the role of smallholder farming in rural livelihoods in these areas should be acknowledged. Even though it 'only' serves as a subsistence activity, it has a substantial impact in a context of high poverty and unemployment rates. Lastly, garden cultivation can serve as a good example of crop cultivation that is attuned to local conditions and has the potential to be expanded further with external support. However, any support given needs to be much more in tune with local conditions than has been the case with field cultivation projects of the past.

References

- Abraham, M. & Pingali, P. (Unpublished). Transforming Smallholder Agriculture to Achieve the SDGs. In Riesgo, L., Gomez-Y-Paloma, S., & Louhichi, K. (eds) *The Role of Small Farms in Food and Nutrition Security*. New York: Springer.
- African Centre for Biodiversity (ACB) (2018). *Inputs supply in South Africa's smallholder farmer support programmes*. Johannesburg: The African Centre for Biodiversity. Available at: <https://www.acbio.org.za/sites/default/files/documents/SA%20FISP%20report%20WEB.pdf> [2020-07-22]
- Abenakyo, A., Sanginga, P., Njuki, J.M., Kaaria, S. & Delve, R.J. (2007). *Relationship between Social capital and Livelihood Enhancing Capitals among Smallholder Farmers in Uganda*. African Association of Agricultural Economists. Second International Conference, 20-22 August, Accra, Ghana. Available at: <https://ageconsearch.umn.edu/record/52191/> [2020-06-22]
- Ali, A. (2005). Livelihood and food security in rural Bangladesh – the role of social capital. Diss. Wageningen: Wageningen University.
- Aliber, M. & Cousins, B. (2013). Livelihoods after Land reform in South Africa. *Journal of Agrarian Change*, vol. 13(1), pp. 140-165. Available at: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/joac.12012> [2020-07-22]
- Aliber, M. & Hall, R. (2012). Support for smallholder farmers in South Africa: Challenges of scale and strategy, *Development Southern Africa*, vol. 29 (4) pp. 548-562. DOI: 10.1080/0376835X.2012.715441
- Ammann, K. (2005). Effects of biotechnology on biodiversity: herbicide-tolerant and insect-resistant GM crops. *Trends in Biotechnology*, vol. 23 (8), pp. 388-394. DOI: <https://doi.org/10.1016/j.tibtech.2005.06.008>
- Andrew, M., Fox, R.C., (2004). Undercultivation' and intensification in the Transkei: a case study of historical changes in the use of arable land in Nomp, Shixini. *Development Southern Africa*, vol. 21 (4), pp. 687–706. DOI: 10.1080/0376835042000288851
- Alobo Loison, S. (2015). Rural Livelihood Diversification in Sub-Saharan Africa: A Literature Review, *Journal of Development Studies*, vol 51 (9), pp. 1125-1138. DOI: 10.1080/00220388.2015.1046445
- Blair, D., Shackleton, C.M., & Mograbi, P.J. (2018). Cropland Abandonment in South African Smallholder Communal Lands: *Land Cover Change (1950-2010) and Farmer Perceptions of Contributing Factors*. *Land*, vol. 7 (4), pp. 2-20. DOI:10.3390/land7040121
- Bonny, S. (2016). Genetically Modified Herbicide-Tolerant Crops, Weeds, and Herbicides: Overview and Impact. *Environmental Management*, vol. 57, pp. 31-48. DOI 10.1007/s00267-015-0589-7
- Brooks, J., Cervantes-Godoy, D. & Jonasson, E. (2009). *Strategies for smallholders in developing countries: commercialisation, diversification and exit*. European Association of Agricultural Economists 111th Seminar, 26-27 June, 2009, Canterbury, UK. Available at: <https://ideas.repec.org/p/ags/ea111/52867.html> [2020-08-09]
- Bryman, A. (2016). *Samhällsvetenskapliga metoder*. 3. ed. Stockholm: Liber AB
- Bryceson, D., Kay, C. & Mooij, J. (2002). Disappearing Peasants: Rural Labour in Africa, Asia and Latin America. *Canadian Journal of African Studies*, vol. 36 (3), pp. 579-581
- Bourdieu, P. (1986). The Forms of Capital. In N. W. Biggart (d.), *Readings in Economic Sociology*. Malden: Blackwell Publishers, pp. 280–291.
- Chambers, R. (1994). Participatory Rural Appraisal (PRA): Analysis of Experience. *World Development*, vol. 22 (9), pp. 1253-1268.
- Cavestro, L. (2003). P.R.A – Participatory Rural Appraisal: Concepts, Methodologies and Techniques. Available at: https://liberiafti.files.wordpress.com/2013/08/cavestro_participatory-rural-appraisal-concepts-methodologies-techniques.pdf [2020-06-14]
- Chambers, R. & Conway, G. (1992). Sustainable rural livelihoods: practical concepts for the 21st century. Brighton: Institute for Development Studies (IDS) (IDS Discussion Paper 296). Available at: <https://www.ids.ac.uk/publications/sustainable-rural-livelihoods-practical-concepts-for-the-21st-century/> [2020-06-19]
- Connor, T. & Mtwana, N. (2017). Vestige garden production and deagrarianisation in three villages in the eastern Cape, South Africa. *South African Geographic Journal*, vol. 100 (1), pp. 82-103. DOI: 10.1080/03736245.2017.1301268

- Cousins, B. (2013). Land reform and agriculture uncoupled: the political economy of rural reform in post-apartheid South Africa. In: Hebinck, P., Cousins, B. (eds), *In the Shadow of Policy - Everyday Practices in South Africa's Land and Agrarian Reform*. Johannesburg: Witwatersrand University Press, pp. 47-62.
- Creswell, J.W. & Creswell, J.D. (2018). *Research Design – Qualitative, quantitative & mixed methods approaches*. 5 ed. Los Angeles: SAGE Publications
- De Haan, L. & Zoomers, A. (2005). Exploring the Frontier of Livelihoods Research. *Development and Change*, vol 36. (1), pp. 27-47. DOI: [org/10.1111/j.0012-155X.2005.00401.x](https://doi.org/10.1111/j.0012-155X.2005.00401.x)
- De Wet, C. (1990). The socio-ecological impact of development schemes in the 'homelands' of South Africa. *South African Journal of Science*. vol. 25 (2), pp. 440-447.
- Department of Agriculture, Forestry and Fisheries (DAFF) (2013). *Strategic Plan for Smallholder Support 2011-2014/15*. Pretoria: DAFF. Available at: <http://www.nda.agric.za/doiDev/sideMenu/SmallHolder/docs/Strategic%20Plan%20for%20Smallholder%20Support.pdf> [2020-06-13]
- Department of Rural Development and Agrarian Reform (DRDAR), Province of the Eastern Cape. (2018a). Operational Plan 2019/2020. Available at: <http://www.drdar.gov.za/wp-content/uploads/2019/08/DRDAR-Operational-Plan-2019-20.pdf> [2020-09-21]
- Department of Rural Development and Agrarian Reform (DRDAR), Province of the Eastern Cape. (2018b). Food Production Policy. Available at: <http://www.drdar.gov.za/wp-content/uploads/2018/06/FOOD-PRODUCTION-POLICY.pdf> [2020-09-21]
- Diao, X., Hazell, P. and Thurlow, J. (2010). The Role of Agriculture in African Development. *World Development*, vol 38 (10), pp. 1375-1383
- Dixon, J., Taniguchi, K., Wattenbach, H. & Tanyeri-Arbur, A. (2004). *Smallholders, globalization and policy analysis*. Rome: FAO
- Department for International Development (DFID) (1999). Sustainable Livelihoods Guidance Sheets. Available at: <https://www.enonline.net/attachments/872/section2.pdf> [2020-04-10]
- DSD, SASSA & UNICEF (2012). *The South African Child Support Grant Impact Assessment: Evidence from a survey of children, adolescents and their households*. Pretoria: UNICEF South Africa.
- D'Haese, M. & van Huylbroeck, G. (2005). The rise of supermarkets and changing expenditure patterns of poor rural households case study in the Transkei area, South Africa. *Food Policy*, vol. 30 (1), pp. 97-113. DOI: [10.1016/j.foodpol.2005.01.001](https://doi.org/10.1016/j.foodpol.2005.01.001)
- De Haan, L. & Zoomers, A. (2005). Exploring the Frontier of Livelihoods Research. *Development and Change*, vol 36. (1), pp. 27-47. DOI: [org/10.1111/j.0012-155X.2005.00401.x](https://doi.org/10.1111/j.0012-155X.2005.00401.x)
- de la Hey, M. & Beinart, B. (2017). Why Have South African Smallholders Largely Abandoned Arable Production in Fields? A Case Study. *Journal of Southern African Studies*, vol. 43 (4), pp. 1-8.
- Eastern Cape Provincial Government (2019). OR Tambo District Municipality – Geography, History & Economy. Available at: <https://municipalities.co.za/overview/106/or-tambo-district-municipality> [2020-04-17]
- Ellis, F. (2000). Rural Livelihoods and Diversity in Developing Countries. Croydon: CPI Group.
- Engdahl, O. & Larsson, B. (2006). *Sociologiska perspektiv – Grundläggande begrepp och teorier*. 4. ed. Lund: Studentlitteratur.
- Fairtlough, G.H. (1991). Habermas' Concept of "Lifeworld". *Systems Practice*, vol. 4 (6), pp. 547 – 563. DOI: [10.1007/BF01063113](https://doi.org/10.1007/BF01063113).
- FAO (2012). Smallholders and family farmers. [Pamphlet]. Available at: http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Factsheet_SMALLHOLDER S.pdf [2019-10-21]
- Fay, D.A. (2012). "The Trust is Over! We Want to Plough!": Social Differentiation and the Reversal of Resettlement in South Africa. *Human Ecology*, vol 40, pp. 59–68. DOI [10.1007/s10745-011-9452-5](https://doi.org/10.1007/s10745-011-9452-5)
- Fay, D. (2013). Cultivators in action, Siyazondla inaction? Trends and potential in homestead cultivation in rural Mbhashe Municipality. In: Hebinck, P., Cousins, B. (Eds.), *In the Shadow of Policy. Everyday Practices in South Africa's Land and Agrarian Reform*. Witwatersrand University Press, Johannesburg, pp. 247–262.

- von Fintel, D. & Pienaar, L. (2016). Small-scale farming and food security: The Enabling Role of Cash Transfers in South Africa's Former Homelands. (IZA Discussion Paper No. 10377). Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2879784 [2020-0813]
- Fischer, K. & Hajdu, F. (2015). Does raising maize yields lead to poverty reduction? A case study of the Massive Food Production Programme in South Africa. *Land Use Policy*. Vol. 46, pp. 304 - 313.
- Gillham, B. (2000). *Case Study Research Methods*. London: Continuum.
- Global Goals (2019). *The 17 goals*. Available at: <https://www.globalgoals.org> [2019-10-27]
- Granlund, S. (2020). *The Promise of Payday: exploring the role of state cash transfers in post-apartheid rural South Africa*. Diss. Uppsala. Swedish University of Agricultural Science.
- Granlund, S. & Hochfeld, T. (2019). 'That Child Support Grant Gives Me Powers' – Exploring Social and Relational Aspects of Cash Transfers in South Africa in Times of Livelihood Change. *The Journal of Development Studies*, vol. 56 (6), pp. 1230-1244. DOI: <https://doi.org/10.1080/00220388.2019.1650170>
- Gouse, M. (2012). GM Maize as Subsistence Crop: The South African Smallholder Experience. *AgBioForum*, vol. 15 (2), pp. 163-174. Available at: <https://www.agbioforum.org/v15n2/v15n2a05-gouse.htm> [2020-08-04]
- Gouse, M., Sengupta, D., Zambrano, P. Zepeda, J.F. (2016). Genetically Modified Maize: less Drudgery for Her, More Maize for Him? Evidence from Smallholder Maize Farmers in South Africa. *World Development*, vol. 83, pp. 27-38. DOI: <https://doi.org/10.1016/j.worlddev.2016.03.008>
- Government Communication and Information System (GCIS). (2019). *South Africa Yearbook 2018/2019 – Agriculture, Forestry & Fisheries*. Pretoria: Republic of South Africa. Available at: <https://www.gcis.gov.za/south-africa-yearbook-201819> [2020-07-15]
- Gutura, P. & Tanga, P.T. (2017a). The Intended Outcomes of Social Grants in South Africa: A Case Study of Ngquswa Local Municipality in the Eastern Cape Province. *Journal of Economics*. Vol 6 (3), pp. 238-249. DOI: 10.1080/09765239.2015.11917613
- Gutura, P. & Tanga, P.T. (2017b). 'Income for the Whole Family': Exploring the Contribution of Social Grants to Rural Household Income in Ngqushwa Municipality, Eastern Cape Province of South Africa. *Journal of Social Sciences*. vol 50(1-3), pp. 172-181.
- Habermas, J. (1985). *The Theory of Communicative Action volume two*. Boston: Beacon Press.
- Hajdu, F. (2006). *Local worlds: Rural strategies in Eastern Cape, South Africa*. Diss. Linköping: Linköping University.
- Harrington, A. (2006). Lifeworld. In: Lash, S. (eds) *Experiences. Theory, Culture & Society*, vol. 23 (2-3), pp. 335-341. DOI: <https://doi.org/10.1177/026327640602300262>
- Hebinick, P. (2013). Post-apartheid land and agrarian reform policy and practices in South Africa: themes, processes and issues. In: Hebinck, P., Cousins, B. (eds), *In the Shadow of Policy - Everyday Practices in South Africa's Land and Agrarian Reform*. Johannesburg: Witwatersrand University Press, pp. 3-28
- Hendricks, F.T. (1990). *The Pillars of Apartheid: Land Tenure, Rural Planning and the Chieftancy*. Diss. Uppsala: Uppsala University
- Höckert, J. & Ljung, M. (2013) Advisory Encounters towards a Sustainable Farm Development— Interaction between Systems and Shared Lifeworlds, *The Journal of Agricultural Education and Extension*, vol. 19 (3), 291-309, DOI: 10.1080/1389224X.2013.782178
- Ingquza Hill Local Municipality (2016). Situational analysis. Available at: <http://www.ihlm.gov.za/about-us/situational-analysis/> [2020-04-08]
- Jacobson, K. (2013a). From Betterment to Bt maize: Agricultural Development and the Introduction of Genetically Modified Maize to South African Smallholders Diss. Uppsala: Swedish University of Agricultural Sciences.
- Jacobson, K. (2013b). The Massive Food Production Programme: a case study of agricultural policy continuities and changes. In: Hebinck, P., Cousins, B. (eds), *In the Shadow of Policy - Everyday Practices in South Africa's Land and Agrarian Reform*. Johannesburg: Witwatersrand University Press, pp. 205–215.
- Kajiser, L. & Öhlander, M. (1999). *Etnologiskt fältarbete*. Lund: Studentlitteratur.

- Kepe, T. (2009). Unjustified optimism: why the World Bank's 2008 'agriculture for development report' misses the point of South Africa. *The Journal of Peasant Studies*, vol. 36 (3), pp. 637-643. DOI: [org/10.1080/03066150903143012](https://doi.org/10.1080/03066150903143012)
- Khalil, C.A., Conforti, P., Ergin, I. & Gennari, P. (2017). Defining Small-scale Food Producers to monitor target 2.3 of the 2030 Agenda for Sustainable Development. (FAO Working Paper Series ESS/17-12). Available at: <http://www.fao.org/3/a-i6858e.pdf> [2020-08-03]
- Kremen, C., Iles, A. & Bacon, C. (2012). Diversified Farming Systems: An agroecological, Systems-based Alternative to Modern Industrial Agriculture. *Ecology and Society*, vol. 17(4), 44. DOI: 10.5751/ES-05103-170444
- Kruger, M., Van Rensburg, J.B.L. & Van den Berg, J. (2009). Perspectives of the development of stem borer resistance to Bt maize and refuge compliance at the Vaalharts irrigation scheme in South Africa. *Crop Protection*. vol 28(8), pp. 684-689. DOI: 10.1016/j.cropro.2009.04.001
- Kvale, S. & Brinkman, S. (2009). Den kvalitativa forskningsintervjun. 2. ed. Lund: Studentlitteratur.
- Madyibie, Z. (2013). The Massive Food Production Programme: does it work? In: Hebinck, P., Cousins, B. (eds) *In the Shadow of Policy - Everyday Practices in South Africa's Land and Agrarian Reform*. Johannesburg: Witwatersrand University Press, pp. 2017 - 230.
- Mannion, A.M. & Morse, S. (2012). Biotechnology in agriculture: Agronomics and environmental considerations and reflections based on 15 years of GM crops. *Progress in Physical Geography*, vol. 36 (6), pp. 747-763. DOI: <https://doi.org/10.1177/0309133312457109>
- Martin, K.S., Rogers, B.L., Cook, J.T., & Joseph, H.M. (2004) Social capital is associate with decreased risk of hunger. *Social Science & Medicine*, vol. 58 (12), pp. 2645 – 2654. DOI: 10.1016/j.socscimed.2003.09.026
- Masterson, V., (2016). *Sense of Place ad Culture in the Landscape of Home: Understanding Social-ecological Dynamics on the Wild Coast, South Africa*. Diss: Stockholm. Stockholm University.
- McAllister, P. (1992). Rural Production, Land Use and Development Planning in Transkei: A Critique of the Transkei Agricultural Development Study. In: Donaldson, A., Segar, J. & Southall, R. (eds) *Undoing Independence – Regionalism and the Reincorporation of Transkei into South Africa*. Grahamstown: Rhodes University, pp. 200-22
- McAllister (1991). Reversing the effects of 'betterment planning' in South Africa's black rural areas. *Africa Insight*. vol. 21 (2), pp. 116-118. Available at: <https://journals.co.za/docserver/fulltext/afrins/21/2/1420.pdf?expires=1596393659&id=id&accname=guest&checksum=F72ED0A172449922329BA2F4AB6A2A39> [2020-04-19]
- McCann, J. (2005). *Maize and grace: Africa's Encounter with a New World Crop, 1500-2000*. Cambridge: Harvard University Press.
- Mosley, W., Schnurr, M. & Kerr, R.B. (2015). Interrogating the technocratic (neoliberal) agenda for agricultural development and hunger alleviation in Africa. *African Geographical Review*. Vol 34 (1), pp. 1-7. DOI: 10.1080/19376812.2014.1003308
- Mtero, F. (2014). *De-agrarianisation, livelihoods diversification and social differentiation in rural Eastern Cape, South Africa*. Diss. Cape Town: University of Western Cape.
- das Nair, R. & Chisoro, S. (2016). The expansion of regional supermarket chains and implications for local suppliers. United Nations University (UNU-WIDER) (Working Paper 2016/169). Available at: <https://www.wider.unu.edu/publication/expansion-regional-supermarket-chains-and-implications-local-suppliers> [2020-05-18]
- National Development Plan 2030 (NDP) (2012). *Out future – Make it work*. (executive summary). Pretoria: Republic of South Africa. Available at: <https://www.gov.za/sites/default/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf> [2020-05-12]
- Ngcoya, M. & Kumarakulasingam, N. (2017). The Lived Experience of Food Sovereignty: Gender, Indigenous Crops and Small-Scale Farming in Mtubatuba, South Africa. *Journal of Agrarian Change*, vol. 17(3), pp. 480-496. DOI: 10.1111/joac.12170
- Satumba, T., Bayat, A. & Mohamed, S. (2017). The Impact of Social Grants on Poverty Reduction in South Africa. *Journal of Economics*, vol. 8 (1), pp. 33-49. DOI: 10.1080/09765239.2017.1336304
- Schnurr, M.A. (2019). *Africa's Gene Revolution – Genetically Modified Crops and the Future of African Agriculture*. Montreal & Kingston: McGill-Queen's University Press.
- Scoones, I. (1998). *Sustainable Rural Livelihoods: A Framework for Analysis* [online]. Brighton: Institute for Development Studies (IDS). (IDS Working Paper 72). Available at:

- https://www.researchgate.net/publication/251873585_Sustainable_Rural_Livelihoods_A_Framework_for_Analysis [2020-06-19]
- Scoones, I. (2015). *Sustainable Livelihoods and Rural Development*. Rugby, Warwickshire: Practical Action Publishing.
- Seran, T. & Brintha, I. (2010). Review on Maize Based Intercropping. *Journal of Agronomy*. Vol 9 (3), pp. 135-145.
- Silverman, D. (2014). *Interpreting qualitative data*. 5. ed. London: SAGE Publications
- Shackleton, S.E. & Hebinick, P. (2018). 'Thick and Thin' of farming on the wild Coast, South Africa. *Journal of Rural Studies*, vol. 61, pp. 277-289. DOI: <https://doi.org/10.1016/j.jrurstud.2018.01.012>
- Shackleton, C.M., Mograbi, P.J., Drimie, S., Fay, D., Hebinck, P. Hoffman, M.T., Maciejewski, K. Twine, W. (2019). Deactivation of field cultivation in communal areas of South Africa: Patterns, drivers and socio-economic and ecological consequences. *Land Use Policy*. vol 82, pp. 686-699
- Statistics South Africa (2016). Community Survey 2016 – Statistics Release P0301. Available at: <https://www.datafirst.uct.ac.za/dataportal/index.php/catalog/611> [2020-07-22]
- Statistics South Africa (2019). *Inequality trends in South Africa – A multidimensional diagnostic of inequality*. (eport No. 03-10-19). Pretoria: Statistics South Africa.
- Stone, G.L. & Glover, D. (2017). Disembedding grain: Golden rice, the Green Revolution, and heirloom seeds in the Philippines. *Agric Hum Values*. Vol 34, pp. 87-102. DOI: 10.1007/s10460-016-9696-1
- Teorell, J. & Svensson, T. (2007). 3. ed. *Att fråga och att svara – Samhällsvetenskaplig metod*. Malmö: Liber AB
- Terlau, W., Hirsch, D. & Blanke, M. (2017). Smallholder farmers as a backbone for the implementation of the Sustainable Development Goals. *Sustainable Development*, Vol. 27, pp. 523-529
- Trefry, A., Parkins, J. & Cundill, G. (2014). Culture and food security: a case study of homestead food production in South Africa. *Food Science*, vol. 6, pp. 555-565. DOI: <https://doi.org/10.1007/s12571-014-0362-4>
- United Nations (2019). About the Sustainable Development Goals. Available at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> [2019-10-29]
- World bank. (2007) *World Development Report 2008 - Agriculture for Development*. Washington: World bank. Available at: <https://siteresources.worldbank.org/INTWDRS/Resources/477365-1327599046334/8394679-1327614067045/WDROver2008-ENG.pdf> [2019-10-20]
- World Bank (2018). *Overcoming poverty and inequality in South Africa – An Assessment of Drivers, Constraints and Opportunities*. Washington: The World Bank. Available at: <http://documents1.worldbank.org/curated/en/530481521735906534/pdf/124521-REV-OUO-South-Africa-Poverty-and-Inequality-Assessment-Report-2018-FINAL-WEB.pdf> [2020-07-21]
- Weatherspoon, D.D., & Reardon, T. (2003) The Rise of Supermarkets in Africa: Implications for Agrifood Systems and the Rural Poor. *Development Policy Review*. vol. 21 (3), pp. 333-355. Available at: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/1467-7679.00214> [2020-06-25]
- Yin, R. (2006). *Fallstudier: design och genomförande*. 3. ed. Stockholm: Liber AB