

Knowledge Transfer Through a Farmer to Farmer Approach:  
a Case Study of the Kingdom of Eswatini

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## Abstract

This master thesis studies the transfer of knowledge through a social learning approach, namely Farmer to Farmer (F2F). It is a case study of the Kingdom of Eswatini where small-holder farmers attend an organic farming training that aims for improved livelihoods and the mitigation of climate change effects. Training participants (Lead Farmers LF) are expected to impart permaculture knowledge with small-holder farmers (Follower Farmers FF) of their pre-established Savings Groups (SG). In evaluating the success of the F2F programme, determining the detailed process and the project's reach, this study contributes to the literature on the under-researched F2F approach. It may further be helpful for operational development actors by providing detailed insight in the F2F process. Forty-nine qualitative semi-structured interviews with quantitative components showed that by exerting this F2F approach, specific knowledge reaches a large number of people in a short period of time: A majority of the LFs learn, apply and transfer the entire training content to the FFs by means of variable theoretical and practical teaching lessons. The FFs show fewer practical implementations of the learnt than the LFs, which however is mainly conditioned by external factors and not by personal motivations. Permaculture knowledge is even transferred across SGs' boundaries and a large network of small-holder farmers sharing agricultural knowledge was observed. Furthermore, the SGs show characteristics of a Community of Practice (CoP).

Key words: Farmer to Farmer, Knowledge Transfer, Kingdom of Eswatini, Permaculture, Social Learning

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## Acronyms

ACAT	Africa Co-operative Action Trust Lilima
CoP	Community of Practice
EO	Extension Officer
F2F	Farmer to Farmer Approach
FF	Follower Farmer
LF	Lead Farmer
NGO	Non-Governmental Organisation
NPO	Non-Profit Organisation
OF	Ordinary Farmer
OTC	Organic Training Centre, Mbuluzi
PELUM	Participatory Ecological Land Use Management Association
SG	Savings Groups
SZL	Swazi Lilangeni (Currency)

# 1 Introduction

One out of nine people go to bed hungry at night and most of them live in developing countries. Three-quarters of these individuals come from rural areas where food is being produced (Lundsgaard-Hansen, 2018).

Such hunger in rural regions also occurs in the Kingdom of Eswatini (former Swaziland), where 11% of the population lives below the minimum level of dietary energy requirements (UNDP, 2019e). The Food and Agriculture Organization of the United Nations (FAO) emphasises that one in three people in Eswatini are undernourished (FAO, 2018).

One of the reasons why rural agriculture is not sufficient to meet all food needs can be traced back to climatic conditions such as droughts and floods, that, according to the FAO (2018), are linked to climate change: the drought in Southern Africa of 2007 resulted in half of the population being in need of food assistance (Manyatsi et al., 2013; Masih et al., 2014). This was followed by extreme rainfalls in 2009 which resulted in floods, washing away newly planted fields, and thus jeopardizing the food security of small-scale farmers in rural areas (IRIN, 2009). Furthermore, the cropping season of 2014/15 was characterised by storm events, uneven rainfall distribution and dry periods because of an extended el Niño (NDMA, 2015). This contributed to a national drought disaster in 2016, as declared by the Government of Eswatini (UNDP, 2018c). Recurrent water scarcity combined with erratic rainfalls, floods and soil degradation, due to overgrazing, have negative impacts on agricultural productivity (NDMA, 2015; USAID, 2018).

Agriculture is both the largest sector for formal employment as well as crucial for subsistence (The World Bank, 2017). Indeed, 1.2 million Swazis - the vast majority of the population - produce food for their own consumption, without direct economic compensation (FAO, 2018). Hence, Swazis are heavily dependent on agricultural productivity for their survival but, due to the aforementioned climatic conditions, producing food is a challenging matter. Climate change has direct social and economic consequences, or in other words, it increases vulnerability and prevents human development (COHA, 2013).

In order to nourish the population, food production in Eswatini must be increased. However, food production must be changed sustainably to ensure the livelihoods of vulnerable rural households (Tiffin, 2014). One strategy to do so is by means of farming organically. Organic farming is associated with diversification, small scale, and low-input strategies, such as the renunciation of synthetic fertilizers and pesticides. The absence of genetically modified crops, improved animal husbandry and enhanced water storage are further characteristics of organic agriculture which aims at sustainable

food production, animal welfare and soil fertility. Hence, organic agriculture protects the environment better than intensive conventional agriculture (Garibaldi et al., 2017; Nielsen, 2019). In developing countries, small scale farmers are likely to increase their food production, stabilise economy and secure food for their families through organic farming (Nielsen, 2019). According to Panneerselvam et al. (2010), this is attributed to the lower production costs, mainly because available natural substances are used for fertiliser and pesticides and no chemical inputs are purchased.

Such insights explain why many development actors (e.g. FAO, Helvetas, Swissaid, UNDP, PELUM, FiBL etc.) aim to promote organic agriculture to farmers in developing countries. One of these development actors is the Non-Governmental Organisation (NGO) Africa Co-operative Action Trust Lilima (ACAT) Swaziland. With the financial support of the Swiss NGO EcoSolidar, ACAT has implemented a project aiming to improve the livelihoods of rural small-holder farmers sustainably through organic farming. Part of this project is teaching small-holder farmers of the two most vulnerable regions of Eswatini – Shiselweni and Lubombo – on how to establish and maintain a permaculture vegetable garden. Permaculture is an organic, sustainable and quasi input-free gardening technique that aims to mitigate the effects of climate change and hence, improve livelihoods and food security.

ACAT operates through Savings Groups (SGs): a SG is composed by ten to 20 small-holder farmers who regularly meet and who together undertake saving and agricultural activities. Each SG can send one to two members to each of ACAT's training which take place on the organisation's demonstration farm in Mbuluzi. By mid-2019, 83 small-holder farmers of Shiselweni and Lubombo had participated at the theoretical and practical three-day training on permaculture backyard gardening. The farmers attending trainings – here called Lead Farmers (LFs) – are supposed to share their newly acquired knowledge and skills on permaculture with the other members of the SGs – the Follower Farmers (FF) –, who did not attend the training. Therefore, I am interested in exploring the exact functioning of this knowledge transfer from farmer to farmer and consequently, the reach of the project's outcome. For this, the following main research question will guide this case study:

*“How and to what extent is permaculture knowledge passed on from training participating small-holder farmers to other members of the Savings Groups?”*

To be able to explore the procedure of the knowledge transfer and its consequences in detail, the above main research question was further divided into five sub-questions:

1. Who transfers knowledge to whom?
2. What knowledge is transferred?

3. How is knowledge transferred?
4. Why is knowledge transferred?
5. What happens with the transferred knowledge?

Moreover, the approximate reach of the project is investigated by exploring on whether LFs and FFs impart knowledge to Ordinary Farmers (OFs) who are not involved in the vegetable garden project. Many development actors invest large amounts of money in projects where knowledge is transferred between farmers. Thus, this research can be useful by showing the approach's advantages and challenges and consequently, implementing agencies can adapt accordingly.

The here investigated knowledge transfer can be considered a social learning process. Thus, in the next chapter, the theories and the respective scientific literature on social learning are presented. This is followed by the derived concepts, Communities of Practice (CoP) and Farmer to Farmer (F2F) approach, which take the theory into the applied field. The latter builds the basis of this master thesis, meaning that the F2F is explored and how it is applied in a specific context: the transfer of permaculture knowledge in rural Eswatini. In the next section, the detailed case study and the research questions are explained. This is followed by the methodology, incorporating the exact methods on data collection and data analysis that were necessary to answer the research questions. These mainly qualitative methods that are interwoven by quantitative methods were applied during an eight-week fieldwork in the Kingdom of Eswatini. Interviews were conducted with 49 small-holder farmers, ACAT employees and F2F-implementing NGOs. These findings figure in a following chapter on results that is divided into three sections: the contextual results present the research area and the content of the permaculture training. The Swazi context provides explanations of the findings of the actual F2F approach, which are presented in the second section. Furthermore, all the research sub-questions are answered in that section. The third section is dedicated to the results concerning the CoP. Chapter 5 presents the discussion of these results, in which this case study is compared to other case studies investigating the F2F approach. In the last chapter, conclusions of this case study are drawn, and suggest future researches are suggested that allow to explore observed phenomena and processes of the F2F in more detail.

## 2 Problem Statement

In the introduction we learnt that different development actors take action against food insecurity in developing countries through the promotion of alternative agricultural systems that are better adapted to the local context – climatic changes included. To begin with, the concept of food security must briefly be explained: *Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life*” (FAO, 1996). It is mostly seen as a construct of three dimensions or pillars: food availability, access to food and utilisation of food (Tiffin, 2014; Vink, 2012; Woller et al., 2011). ACAT acts on food availability and food access by teaching LFs about permaculture vegetable gardening. In a second step they are meant to impart the knowledge to their ten to 20 FFs. It is hoped that permaculture techniques are dispersed in the communities through a process of teaching and learning. Very few experts are involved in this process, but the teaching and learning is preponderantly undertaken by the beneficiaries themselves: the small-holder farmers of Shiselweni and Lubombo.

Until a few decades ago however, the promotion of alternative agricultural techniques and systems was approached somewhat distinctly. New agricultural technologies and innovations were developed in experimental centres by experts alone. Local farmers, to whom these technologies were given, were expected to adopt and use them. However, this linear approach did not meet the expected outcomes: due to a lack of interest and no possibility of adaptation of the technologies to the farmers’ personal preferences, they often did not apply them (Barrantes & Yagüe, 2015).

Professionals realised that in order to make a change, farmers have to be put at the centre of their own development (Barrantes & Yagüe, 2015). The local knowledge produced by the farmers as individuals, as dialogue groups and as networks has also increasingly become the focus of scientific literature concerning rural development and farmers’ learning (Compagnone, 2004; Goulet, 2013; Murdoch, 1968; Sligo & Massey, 2007). Cundill and Rodela (2012) emphasise that learning in the natural resource management, hence organic agriculture, is omnipresent. Farmers, who have their own experiences, cultures and worldviews, have their own knowledge that may differ from that of the experts (Barrantes & Yagüe, 2015). The stakeholders, here small-holder farmers in Lubombo and Shiselweni, need to learn from one another through social interactions. Social interactions allow the sharing of knowledge and, consequently, the successful diffusion of new agricultural techniques or systems, such as permaculture (Cundill & Rodela, 2012).

## 2.1 Theoretical Frame

Diffusing new agricultural techniques and systems by means of learning through social interactions and by putting the farmer at the centre of process, nowadays, conveys the impression of being a successful approach. This chapter explains the notion of “social learning” from a theoretical perspective and then more closely discusses two concepts – F2F and CoP – that form the theoretical basis of this research and structure its empirical part.

### 2.1.1 Learning Theories

Glasser (2009, p.46) defines learning as *“the process of acquiring knowledge, skills, norms, values, or understanding through experience, imitation, observation, modelling, practice, or study; by being taught or as a result of collaboration.”* This process of learning can be examined from an either neurological or a psychological perspective (Wenger, 1998). Neurophysiological theories study the biological mechanisms of learning, where learning is associated with a new stimulus response connection in the brain (Khan, 2009). I will however, not go further into these biological and natural mechanisms.

Learning has traditionally been more a topic of psychological theories, some of which I will discuss here. Firstly, behaviourist theories define learning as a change in behaviour in the learner (David, 2007). It ignores issues of meaning and explores automatisms and dysfunctions (Skinner, 1974). Much behavioural work has been done with animals and generalised to humans (David, 2007; Skinner, 1974). Secondly, cognitive theories focus mainly on the mental processes and view learning as transformations in cognitive structures (Anderson, 1983 ; Hutchins, 1995 ; Wenger, 1987 cited in Wenger, 1998 ; Sincero, 2011). Cognitive theories examine intrinsic and extrinsic factors that lead to the learning process in an individual, ideal biological and environmental conditions for instance (Sincero, 2011). Thirdly, constructivist theories say that through learning the individual constructs its own mental structures (Papert, 1980 ; Piaget, 1954 cited in Wenger, 1998), subjective representations and objective realities. Learning is seen as an active process (David, 2015). Lastly, the social learning theories equally focus on the cognitive processes by which observation can become a source of learning, but they take social interactions into account. Thus, the interpersonal relations are at the centre of interest (Bandura, 1977), hence *social learning*.

This paper mostly concentrates on the ways in which agricultural knowledge can be passed on, hence learned, between different farmers in order to improve their livelihoods, and consequently, ensure food security. The different theories presented here above are all useful for different purposes and problems, yet, merely one theory will be exploited to base this research on. In this perspective, behaviourist theories concentrate too strongly on the behaviour *per se* of – here – the farmers.

Cognitive theories are rather unsuitable as well, because the detailed mental processes of the farmers are not the focus of this specific study. The mental structures – the emphasis of the constructivist theories – cannot be investigated here either. However, the focus on the learning process through the interactions between different actors makes the social learning theory highly appropriate as a theoretical framework for this case study. Further, Morgan (2011) justifies this choice of theoretical framework saying that the social learning theory has become prominent in understanding farmer's learning and knowledge production in agricultural contexts. This, as shown below, is especially the case in the promotion of sustainable agriculture – organic for instance – and in development studies.

### **2.1.1.1 Social Learning Theory**

In this section, social learning theory will be further analysed, at first in a broad context and second, in the context of agriculture. Two underlying concepts – F2F and CoP – are presented in subsections 2.1.1.1.2 and 2.1.1.1.1. Scientific and secondary literature explain and exemplify the mentioned theories, concepts and approaches.

The concept of social learning arose in the field of psychology and education and focuses on learning through social relations and interactions (Reed et al., 2010). It was once defined by Bandura (1977) as the individual learning that occurs in a social context and is shaped by social norms, like imitating role models. Reed et al. (2010) however, argue that this conceptualisation of social learning is not helpful, since most learning happens in some social contexts. The literature is often too broad and unprecise with defining the concept of social learning and the term has no clear disciplinary heritage, language or theoretical perspective which renders it complicated to practice and explore its functioning (Parson & Clark, 1995; Reed et al., 2010). Reed et al. (2010) notes that a second school of social learning, different from the psychological one, has arisen in the last decade that narrows the focus to the dynamic interaction between people and the environment (literary examples: Pahl-Wostl et al., 2008; Reed et al., 2010; Stringer et al., 2006). Hereby, social learning is seen as *“a process of social change in which people learn from each other in ways that can benefit wider social-ecological systems”* (Reed et al., 2010, p.3). But, even within this school of thought not all contributors agree on the meaning of social learning (Wals, 2009).

According to Parson and Clark (1995) the word *social* has different understandings, depending on the discipline. Parson and Clark (1995, p.429), who believe in sustainable development through social learning, acknowledge the deepest difference of the concept: *“for some, social learning means learning by individuals that takes place in social settings and/or is socially conditioned; for others it means learning by social aggregates.”* The first part of this statement is confirmed by Bandura's (1977) definition stated above and that of Goldstein (1981, p. 237) who says that *“social learning is a*

*higher form of learning occurring in a social context for the purpose of personal and social adaptation.”* Cundill and Rodela (2012, p.3) however, define social learning as in the second part of Parson and Clark's (1995) statement: *“a change in understanding that goes beyond the individual to become situated within wider social units or communities of practice through social interactions between actors within social networks.”* It is that understanding – learning by social aggregates, e.g. communities and groups, that this paper will refer to when mentioning social learning. It is best adapted to this case study since the focus lies with explaining the functioning of teaching and learning through social networks (SGs) and through social interactions (between LFs and FFs).

Keen et al. (2005) specify that during these interactions experiences, ideas and environments are shared with others, which, through a process of iterative reflection, results in learning. Fernandez-Gimenez et al. (2008, p.3) base their definition on the one of Keen et al. (2005) and restrict it to this research-relevant field: *“we define social learning in the natural resources context as an intentional process of collective self-reflection through interaction and dialog among diverse participants (stakeholders). This definition emphasizes learning through interactions in a group setting embedded in a particular biophysical and sociocultural context, and the nature of learning as a conscious act of collective self-reflection.”* In this paper, this definition will be used, as actors of a similar bio-physic and sociocultural context who decided intentionally to interact in a group setting in order to learn and hence, benefit from one another, were considered in this study.

But in what ways can one apply social learning theory to a real situation? To explain and illustrate this, two concepts being based on social learning theory will be elucidated more closely: the Farmer-to-Farmer (F2F) approach and the Communities of Practice (CoP).

#### 2.1.1.1.1 Farmer to Farmer

The first concept of social learning pertinent to this investigation on knowledge transfer between small-holder farmers in Eswatini is the F2F approach (F2F). The F2F, which is specific to the agricultural context, is also known as Campesino a Campesino (Nicaragua), *kamayog* (Peru), farmer promoters (Bangladesh) or farmer teachers (Kenya) (Kiptot & Franzel, 2015). It is an approach practiced in many countries by development actors of the public, private and civil society sectors (Kiptot & Franzel, 2015; Nakano et al., 2018). The F2F involves farmers that spread their knowledge on agricultural innovation amongst their community (Lukuyu et al., 2012). According to Meena et al. (2016, p.78) the F2F extension approach *“is a systematically [sic] utilization of community leadership and informal communication between farmers. This approach aims to strengthen the information flow and enhance the agricultural production.”* The following paragraphs will firstly contextualise F2F and its evolution in time. Thereupon, several case studies will be presented, including two in the Kingdom of Eswatini.



F2F is one of the tools commonly used in agricultural extension programs (Franzel et al., 2014; Meena et al., 2016). In recent decades, however, this approach to diffuse knowledge amongst farmers has developed into a less pronounced top-down approach. In 1990 *agricultural extension* was described by Saito and Weidemann (1990) as an imperative for a widespread and sustained agricultural development. The authors further describe it as an educational process with two objectives. Firstly, information and technologies are brought to the farmers who are taught and trained to use them in order to improve their productivity. Secondly, the agricultural extension allows farmers to give feedback on the effectiveness of the specific extension advice. By means of this two-way communication the transfer of technology and information can be adapted on the farmer's own needs (Saito & Weidemann, 1990). A tool of the agricultural extension was the *Training and Visit (T&V)* system, highly promoted by the World Bank in the 80s. T&V's approach was the following: an extension agency or extension worker transferred the knowledge and technologies discovered by researchers to the farmers (Saito & Weidemann, 1990). If the advice and technologies indeed led to an improved agricultural productivity in one region, it was considered a "best practice" and consequently applied in other regions and countries as well. This standardised model of agricultural extension, whose implementors ignored different contexts, is not a promising strategy (Birner et al., 2009). T&V lost policy backing in the 90s due to fiscal constraints in the era of structural adjustments and changing governmental priorities (Feder et al., 2006).

Today, the term of agricultural extension is still used, but has slowly been replaced by the less top-down *advisory services*<sup>1</sup> (Birner et al., 2009; Niu & Ragasa, 2018). Since the World Development Report 2008 (World Bank, 2007), this strategy has been back on the international development agenda and is linked to the pro-poor development that has thus been "rediscovered". Today, it seeks to provide advisory services that best fit the specific conditions and development priorities of the relative country or region (Birner et al., 2009) by putting the farmer in the centre of the process (Kiptot & Franzel, 2015). Advisory services aim to support agricultural productivity, growth and food security and are defined by Birner et al. (2009, p.3) as "*the entire set of organisations that support and facilitate people engaged in agricultural production to solve problems and to obtain information, skills, and technologies to improve their livelihoods and well-being.*"

The former agricultural extension system has evolved into a more context adapted, pro-poor advisory service<sup>2</sup>. Advisory services have also more recently evolved to not only provide information about agricultural technologies and skills, but also about nutrition and livelihood strategies (Niu &

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<sup>1</sup> In this paper the terms agricultural extension, extension service and advisory service are used interchangeably.

<sup>2</sup> However, many researchers still refer to extension system (e.g. Franzel et al., 2014; Kiptot & Franzel, 2015; Simpson et al., 2015).

Ragasa, 2018). A further transformation away from the “former” agricultural extension, is the governance structure: in the past, it was solely been provided by the public sector. Today, it is a pluralistic system with three possible sectors involved (Klerkx et al., 2016). They are the public sector (including state agencies and public administrations), the private sector (farm households, agribusiness enterprises and other profit-oriented firms and actors) and the civil society sector (NGOs, Non-profit Organisations (NPOs), farmers organisations and civil society organisations) (Birner et al., 2009). Another transformation – especially crucial for this paper – is the shift from the mere transfer-of-technologies approach to the promotion of learning processes (Davis & Heemskerk, 2012).

A top-down approach has evolved into a more farmer-centred bottom-up approach that is based on social learning theories focalising on livelihood strategies, food and nutrition, market linkage, income and improved well-being. Many development organisations realised that solving the problems of small-holder farmers requires observation, joint learning, negotiation and feedback. Rather than being the final vessel of the process, the farmers now occupy a central role in the whole process and can actively contribute to its success (Kiptot & Franzel, 2015). Multiple extension models exist, but in order to be effective, the extension model should provide accessible information and not only target male and commercial farmers, but also reach women and marginalised groups (Ssemakula & Mutimba, 2011 ; Wellard et al., 2013). The F2F approach meets these criteria (Kiptot & Franzel, 2015).

A standard example of the F2F approach – a programme applied by many development actors – is the following: 20 farmers participating at a training at an institute where they learn about new cultivation technologies. In the aftermath of the training, each of the 20 farmers must train five additional farmers of their respective community. And they, in return, are expected to provide trainings to a third group of farmers. Thus, the knowledge on the new cultivation technologies is widely spread through a social network of farmers by means of social learning. (Nakano et al., 2018).

In the F2F approach the advisory services choose local farmers to work with them: instead of hiring expensive extension workers, farmers carry out their programs (Franzel et al., 2014). This is an alternative that is cost-effective and implemented horizontally (Taylor & Bhasme, 2018). The social network of F2F, as illustrated by Nakano et al. (2018), mostly consists in training participating farmers and farmers that are to receive their knowledge. The farmers participating in the course, who are expected to spread the knowledge amongst their community, are variously called *lead farmers*, *model farmers*, *master farmers*, *key farmers*, *farmer trainers*, *community knowledge workers*, *show farmers* and many more (Flachs, 2017; Franzel et al., 2014, 2014; Nakano et al., 2018; Taylor &

Bhasme, 2018). In this paper, the term *Lead Farmer (LF)* will be used. The LFs are a common “tool” of the F2F approach.

The diffusion of agricultural knowledge and skills presented by Nakano et al. (2018) is very similar to the case of ACAT in Eswatini. This leads me to assertion that ACAT uses a F2F approach in order to transfer permaculture techniques amongst the small-holder farmers of Lubombo and Shiselweni.

F2F approaches are implemented in diverse ways. This section reviews a number of examples, including five from the literature and two from interviews in Eswatini (see Table 1).

Table 1: Review of F2F approaches

Organisation/ Author	F2F approach	Advantage of F2F/positive findings	Disadvantage of F2F/ negative findings
<b>Guba Swaziland</b> Operating NGO interviewed for this study	30 farmers attend permaculture training (3 days/month for one year) which includes teaching on information sharing. Interested OFs can ask LFs questions on training content. Metal sign on participants house states that questions on permaculture can be answered.	<ul style="list-style-type: none"> <li>- Ensure quality of information: Farmers are not expected to share knowledge, hence do not spread erroneous information (but are able to inform on request)</li> <li>- Graduate ≠ teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Limited reach: F2F (knowledge transfer) is voluntary (each LF teaches 8 FFs on average)</li> </ul>
<b>NGO2</b> Operating NGO interviewed for this study	In addition to the trainer, a farmer who previously attended training and now implements it at home tells the class first-hand experiences and advantages of (permaculture) techniques.	<ul style="list-style-type: none"> <li>- High adoption rate: FFs are more likely to adopt the techniques when hearing experiences from an “equal” than by being taught by experts</li> <li>- No spreading of incorrect information</li> </ul>	<ul style="list-style-type: none"> <li>- Limited reach: F2F is mostly limited to class room. No knowledge transfer is expected to take place outside the training</li> </ul>
<b>Taylor and Bhasme (2018)</b> Investigation on spreading of agricultural techniques through demonstration plots	Private and public sector agencies, who wished to showcase particular products, gave e.g. subsidised rice seeds to LFs who then cultivated them on a demonstration plot, visible for the whole community.	<ul style="list-style-type: none"> <li>- LFs can translate the knowledge into terms and processes more accessible to the local context (agroecological and cultural)</li> <li>- Successful adoption of techniques or purchase of product by FFs (lucrative for firms)</li> </ul>	<ul style="list-style-type: none"> <li>- Uncomfortable power relations between the agency and the LF (influence on what is cultivated in the region)</li> <li>- Uncomfortable power relations between LFs and community (dependency and social differentiation through gained prestige).</li> </ul>
<b>Nakano et al. (2018)</b> Investigation on pathways of the dissemination of agricultural technologies (Tanzania)	Training of 20 LFs on new rice cultivation technologies at a training institute. Each one of them had to invite five additional farmers (FFs). They were expected to train the OFs who did not participate at the training.	<ul style="list-style-type: none"> <li>- Quick adoption rate of technologies shortly after training by LFs</li> <li>- The productivity and profitability rose immediately after the training (LFs)</li> <li>- With time, a gradual diffusion of the technologies from key farmers to intermediate farmers to ordinary farmers took place</li> <li>- F2F training programme is effective</li> <li>- Proximity between OFs has a positive effect on the adoption rate</li> </ul>	<ul style="list-style-type: none"> <li>- Delayed success for FFs and OFs</li> </ul>

<p><b>Simpson et al. (2015)</b> Investigation of F2F implementation in Cameroon, Kenya, Malawi</p>	<p>80% of studied organisations provide initial training for preselected LFs. LFs then provide training, advice, follow-up contact, they organise meetings and demonstration plots for FFs. 88% of the interrogated model farmers have weekly or bi-weekly contact with their groups (ca. 25 FFs).</p>	<ul style="list-style-type: none"> <li>- Large numbers of farmers and areas can be covered with this F2F.</li> <li>- LFs communicate better to their community than external extension experts</li> </ul>	<ul style="list-style-type: none"> <li>- High drop-out rate: farmers have high expectations on the financial and non-financial outcomes of the projects</li> <li>- Quality of the information and knowledge LFs extend to the FFs cannot be assured</li> </ul>
<p><b>Franzel et al. (2014)</b> Investigation on F2F implementation of 30 organisations in Kenya</p>	<p>Most organisations assign LF to work with farmer groups (ca. 50 FFs). LFs are selected by organisations according to criteria like availability, accessibility, acceptability, ability to communicate, passion, literacy and expertise.</p>	<p>Reasons for F2F implementation:</p> <ul style="list-style-type: none"> <li>- User-friendliness and simplicity</li> <li>- Early access to technology,</li> <li>- F2F is altruism with social benefits</li> <li>- F2F leads to job benefits and increased income</li> <li>- Much learning is achieved</li> </ul>	<ul style="list-style-type: none"> <li>- Insufficient research has been done on F2F approach</li> </ul>
<p><b>Kiptot and Franzel (2015)</b> Research on LFs that are part of the East Africa Dairy Development (EADD) project (Kenya, Uganda, Rwanda)</p>	<p>Farmers acquire knowledge and information on livestock feed technologies through an intensive course, given by government extension staff and project staff. Demonstration plots are set up to test different livestock feed practices. Each LF returns home to set up his/her own demonstration plot where the members of their Dairy Management Groups (ca. 20-30 FFs) are trained.</p>	<ul style="list-style-type: none"> <li>- Large number of farmers are reached within a short period of time (communication accelerated through the use of cell phones)</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of relevant training materials (sample seeds, notebooks etc.)</li> <li>- Expectation of payment for assisting training. Non-payment can represent a barrier for the good implementation of the new practices</li> </ul>

Through this selection of scientific articles and narratives Swazi NGOs, it was shown that this social learning approach between farmers can have various forms. Different implementors, respectively government, private agencies and NGOs, operate through distinctive structure in order to spread agricultural knowledge and technologies. These structures may be assisted classes, organised groups where LFs are awaited to pass on knowledge to the other members, or incidental information sharing. Material elements, such as garden signs and demonstration plots, are used to arouse curiosity of OFs and hence, commence a transfer of agricultural knowledge, skills and technologies. The authors and directors of NGOs identified numerous challenges and advantages linked to these multifaceted F2F approaches.

#### 2.1.1.1.2 Communities of Practice

A second concept based on the social learning theory can both be identified as a concept and as a social learning system that allows one to study individual and social learning behaviours across a large range of contexts (McDonald, 2015). In this thesis, it will be illustrated that a CoP can contribute to a facilitated implementation of the F2F programme, such as the permaculture backyard garden and hence, simplify the transfer of knowledge.

The CoP concept is based on the study of social nature of human learning that is inspired by anthropology and social theory (Lave & Wenger, 1991). The term *Communities of Practice* originates from Lave and Wenger (1991) and its central focus is the acquisition and production of knowledge. Acquisition of knowledge happens through a learning process in a group setting, or in other words in a *community*. At the same time, through the sharing of each one's individual knowledge, new knowledge is produced (Denscombe, 2008).

But, if the production of knowledge is such a central theme of this concept, why does the term *Community of Practice* not explicitly include the term "knowledge"? This is because it was formulated within a postmodern framework which tends to be sceptical of the term *knowledge*. According to post-modern scholars, the term knowledge is often associated with self-declared and appointed experts monopolizing their possession and creation and using it as a source of power. Instead, the term emphasises the terms practice and community. The word *Practice* refers to "*a set of frameworks, ideas, tools, information, styles, language, stories and documents*" (Wenger et al., 2002, p.29) on which we will learn more later. As far as the word *Community*, Wenger (2000, p.5) sees the participation of different actors as essential to the learning process and justifies it with the naturalness of it: "*Since the beginning of history, human beings have formed communities that share cultural practices reflecting their collective learning: from a tribe around a cave fire, to a medieval guild, to a group of nurses in a ward, to a street gang, to a community of engineers interested in brake design.*"

In this quotation a large variety of types of communities are mentioned. So, who exactly participates in the social learning system of CoPs and why? CoPs are composed of groups of people who have the same concerns, real-life problems, enthusiasms, interests, purposes etc. Through this they are likely to have the same understandings of things. On that basis, these people interact regularly to learn together and from each other (Allan, 2000; Wenger et al., 2002). Wenger (1998) strongly emphasises that CoPs are born of learning. An individual can participate in multiple CoPs, ranging from full participation to more occasional and peripheral participation. Often, people are not even aware of being members of a CoP. But it is through facing the same preoccupations that they experience a sense of togetherness. They often spontaneously and naturally organise themselves around this shared concern to negotiate the practice they identify themselves with (Pyrko et al., 2017 ; Wenger, 1998). Each member brings his or her own knowledge and experience and perspective into the circle. Through their interactions their domain knowledge grows, and they start to develop trust, a sense of identity and even create documents that prove the shared history of learning. Hence, the dynamic social structure of a CoP is built (McDonald, 2015). Many CoPs are part of everyday life, like forms of associations or work clusters. The members do not necessarily have to be physically bounded, or in other words, they do not need to have face-to-face interactions, but they can also be virtually bounded through, for example, participatory websites and be spatially and relationally dispersed (Johnson, 2007; Morgan, 2011). A CoP is a social structure that does not transfer knowledge in a linear fashion from master to learner, but more likely a process of sharing knowledge between all members (Morgan, 2011).

However, Wenger (1998) argues that even though a residential neighbourhood is often called community, it is not a CoP. The two words *Community* and *Practice* should therefore, not be considered separately, but *Community of Practice* as a unit. To associate *Community* and *Practice*, Wenger (1998) suggests that three structural elements or prominent characteristics are necessary: Mutual Engagement<sup>3</sup>, Joint Enterprise<sup>4</sup> and Shared Repertoire<sup>5</sup>. These three dimensions join the *Community* to *Practice* and distinguishes CoPs from ordinary communities, teams, groups or networks.

In one of his works Wenger (2000) reflects upon social learning systems – such as the CoP – in order to enable the process of learning in organisations. He puts forward six elements one needs to reunite

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<sup>3</sup> The interaction via any means of communication between individuals that leads to the creation of shared meaning on issues or a problem (Li et al., 2009).

<sup>4</sup> A set of problems and topics the community care about and through negotiations the individuals work towards a common goal (Li et al., 2009; Wenger, 1998).

<sup>5</sup> “Routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice” (Wenger, 1998, p.82).

when wanting to set up a CoP: First of all, events – informal or formal – must be organised in order to create a sense of identity amongst the members and to help the solving of problems. Secondly, leadership is important to help the community develop. Thirdly, the connectivity between the members must be ensured through interactions or other ways of communication. Fourthly, the membership of each participant is important. Fifthly, learning projects must be developed to fill the existing gaps of knowledge within the CoP. And lastly, useful artefacts must exist, such as documents, tools etc. to make the CoP evolve. Pyrko et al. (2017) however, argue that CoPs need to build spontaneously through the process of *thinking together* around the same preoccupations and not necessarily being set up intentionally with the objective to accelerate the learning. The authors researched two CoPs in the healthcare system that aimed to improve professional practices through the CoP in order to achieve better care. One of the CoPs was formed naturally and the second one has intentionally been set up. The set-up CoP did not thrive as much as the naturally formed one, because of the lack of *thinking together*.

The concept of CoP is applicable in nearly every context, including sustainable agriculture and development studies (Morgan, 2011). Nonetheless, Dolinska and d'Aquino (2016) emphasise that the functioning of CoPs in agricultural innovation are – with a few exceptions – largely under-researched. The authors use this to justify their research on how CoPs of farmers influence three innovation projects in Tunisia. They discovered that farmers that are organised in CoPs successfully produce knowledge and are more empowered for innovation than those who worked individually or with expert support. They grouped the farmers of a certain region into three groups according to their connectedness to other farmers and CoPs. Those who worked individually felt limited in their access to knowledge. On the other hand, those being member of a CoP had very good access to different sources of knowledge; new ideas could be shared, discussed and developed. Equally, in a study on knowledge production for international development through CoPs, Johnson (2007) found that it was thanks to the heterogeneity of the members that new knowledge was created: The differences between members (identity, life experience, types of knowledge, livelihoods, access to resources and means of expression) sparked conversations, debates, and consequently, new knowledge. On the contrary, Oreszcyn et al. (2010) discovered in his research that the farmers did not feel that they had learned anything from each other and considered the farmers groups as non-influential to their practices.

Summarised, a CoP is a social learning system composed by heterogenous people who share the same concerns and interests, and who learn from each other and produce new knowledge through social interactions. In addition to the research questions mentioned in chapter 1, I hypothesise that



the small-holder farmers in rural Shiselweni and Lubombo are members of a CoP, which contributes explanations to research question 3 on how knowledge is transferred.

## 2.2 Case Study: F2F in rural Eswatini

I identified ACAT's project on permaculture backyard gardening as an F2F programme. And like the studies above, the detailed functioning, structures, challenges and advantages of ACAT's F2F are analysed. In this chapter, the case study is presented and the detailed research questions and background information on the Kingdom of Eswatini are provided<sup>6</sup>.

Africa Cooperative Action Trust (ACAT) is an African rural community development agency with Christian values that was established in 1982 in the Kingdom of Eswatini. Its mission is to empower vulnerable and disadvantaged people, notably women and children, in the rural parts of the country.

One of the approaches of this NGO is to operate through the structure of SGs. ACAT mobilises people to organise themselves in groups of about ten to 20 people. Most SG members are women. Members of a group, who are usually from the same community, meet two to four times a month. At every meeting, each member contributes between two and five Emalangeneni (the local currency; 1 CHF = 14.6 SZL at time of research) to the SG fund. Members can borrow money from this fund at a low interest rate, use it for their private needs and repay it once it is available. In comparison to the bank, the interest rate is very low and therefore affordable for most of them. Through the interest rate and the regular member contributions, the fund is meant to grow steadily. Consequently, more investments in private projects may be undertaken. Not every SG functions the same: some allow loans for any activity, such as the reparation of roofs, the paying of school fees or the start of small businesses. Others restrict the loans to agriculture related investments such as the purchase of gardening tools or fences, or the hiring of tractors. Still others determine biannual agendas: the entire fund is used at once for the purchase of seeds and seedlings, which are distributed between the members. In order to stay organised, SGs have a chairperson, a treasurer a secretary who documents the meetings.

Extension Officers (EO) are persons trained by ACAT who ensure the well-functioning of the SGs in a specific area. In case SG members have questions, the EOs assist them. They are experts in savings and agriculture related topics due to their regular assistance of workshops especially designed for them (Programmes Manager, 2019; EO1, 2019; EO2, 2019; Interviewees, 2019).

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<sup>6</sup> Much of the information is drawn from observations, interviews and informal discussions I undertook during my three-month stay in the Kingdom of Eswatini.

SGs are not only used for saving money but serve as basic structure for others of ACAT's activities. The NGO is specialised in sustainable farming and runs an Organic Training Centre (OTC) which alongside the head office, is located on a hill in Mbuluzi (see Figure 2). OTC is a farm with cows, goats, indigenous chickens, fields and gardens that serve a demonstration purpose. Each time a training is held, SGs send one or two of its members on ACAT's demonstration farm. On average the trainings last three days, have around 20 participants and cover different topics: from office skills (e.g. accounting), to coping skills (e.g. living with HIV/AIDS), to farming skills (e.g. rearing of indigenous chicken). During a training, the participants are fed and accommodated on the demonstration farm. Theory is taught in classrooms on the OTC and in case of organic farming trainings, practical work is done in the field or garden. Participants are supposed to teach the other members of their SG about what they have learned in Mbuluzi. This makes them multipliers of knowledge: one person is trained by ACAT and subsequently teaches about 15 people (see subsection 2.1.1.1.1). If need be, CFs and EOs assist the LFs in teaching the FFs. ACAT does not stipulate a specific teaching method.

The objective of ACAT's operation and structure is to render vulnerable people more self-sustainable, less vulnerable and to improve their livelihoods. By operating through SGs, knowledge is not only cost-effectively multiplied, but people also become self-responsible and active.

My research is interested in determining how and to what extent this social learning within the SGs is successful.

The NGO EcoSolidar from Basle, Switzerland supports an ACAT project which aims to improve livelihoods for small-holder farmers through the promotion of organic farming. By organic, ACAT refers to a way of food production without chemical and synthetic inputs. From 2017 to 2020 ACAT provides ten different organic farming trainings for small-holder farmers originating from Eswatini's two most vulnerable regions: Lubombo and Shiselweni. The ten organic farming trainings are taught theoretically and practically as independent trainings in Mbuluzi: establishing and maintaining a backyard garden (permaculture); the rearing of indigenous chickens; food and seed storage; diversified food sources; open pollinated varieties and indigenous maize; fruit trees; ventilated improved pit latrines; legumes; indigenous seeds; water harvesting techniques. Principally, every SG is supposed to send a member to each of these trainings. As a consequence of the F2F approach, every SG member should then become acquainted with the content of every training.

Due to time restrictions, it is not possible to investigate the transfer of the project's entire knowledge. By narrowing the study down to one training – the permaculture backyard garden

training – more precise results can be awaited. I chose this specific training due to my pre-existing knowledge on permaculture vegetable gardens.

At the time of research, five identical trainings on backyard gardening have been conducted: three in March 2017 and two in April 2018. Trainings conducted in 2019 are not considered in this research. Trainings last three days and hosted 13 to 23 participants, which results in a total of 83 persons trained in permaculture gardening. Twenty of them participated actively in my research (see Table 3).

## 2.3 Research Questions

In this research I explore the functioning and indirectly the impact, of the social learning approach of ACAT's F2F programme by answering the following research question:

*“How and to what extent is permaculture knowledge passed on from training participating small-holder farmers to other members of the Savings Groups?”*

This research question refers to the description of a detailed procedure of the knowledge transfer, as well as to the results of it. Based on the data-information-knowledge-wisdom (DIKW) hierarchy (Rowley, 2007) in this paper, knowledge is seen as procedural and refers to processed information, hence organised data. More precisely, data are a set of unorganised, unprocessed signals or symbols (here e.g. spinach). By applying systems to organise and classify the data, they become useful and are turned into information. Information allows us to understand relationships (here e.g. spinach needs soil, water, sunlight and nutrients to grow). To turn information into knowledge, the process of learning is required. This means that all the available information can be organised in a way that it is useful. Knowledge allows us to detect patterns (here e.g. when I layer my garden bed with compost, newspaper and topsoil and irrigate it regularly, my spinach will grow fine) (Figueroa, 2019). Zeleny (2005) defines procedural knowledge as “know-how” that is gained through practical experience. Through the oral and practical backyard garden training LFs learn how to combine different strategies to best cultivate vegetables. Hence, the acquired know-how and experience equals knowledge, which also includes practical skills.

In order to comprehensively understand the transfer of knowledge from LF to FF, the main research question was divided into more specific sub-questions (see below). These sub-questions additionally helped structuring the methods of data collection and data analysis.

### 1. *Who transfers knowledge to whom?*

This sub-question seeks to quantify the LFs who transfer knowledge, as well as the FFs and OFs who receive it. Additionally, the relationships between the LFs and FFs are investigated.

2. *What knowledge is transferred?*

I am interested in what specific taught information is transferred from LFs to FFs. To investigate this more easily, the content of the training was divided into six lessons: compost, liquid manure, planting methods, pest control, crop rotation, grey water filtering<sup>7</sup>. Furthermore, the quantifying of the transferred topics allows to partly investigate onto *what extent* the knowledge is transferred.

3. *How is knowledge transferred?*

This sub-question seeks to explore the LF's respective methods of teaching the six lessons to the FFs. Concrete mechanisms, SG internal procedures and teaching auxiliaries such as notebooks or blackboards are of interest. Furthermore, a special emphasis is put on the fact if the transfer takes place theoretically, practically or both.

Furthermore, spatiality and temporality are closely linked to the teaching methods and hence, the three dimensions analysed jointly in this paper (see subsection 4.3.3.3).  
Spatiality: *Where is knowledge transferred?* The focus is put on the spatial location of the teaching.

Temporality: *When is knowledge transferred?* This factor explores the instant and the time span of the knowledge transfer. I am interested in figuring whether the teaching is punctually or over a long period of time, repetitive or not.

4. *Why is knowledge transferred?*

This sub-question allows to investigate on the LFs' motives to (not) pass on the knowledge to the FFs. Only by knowing the reasons behind their actions can we comprehensively understand the phenomena. Further on, I am interested in the farmers' reasons for the practical (non-)application of the six lessons.

5. *What happens with transferred knowledge?*

I explored the consequences of the knowledge transfer, meaning that I am interested in whether or not the knowledge is actively applied in the interviewed farmers' home gardens. By this means, the effects and impact of the F2F, and the project, could somewhat be estimated.

A combination of these five sub-questions' answers will respond to the main research question. In sum, this research investigates two major foci. Firstly, the detailed procedure of the knowledge transfer on permaculture techniques. And secondly, the reach of the permaculture backyard garden training.

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<sup>7</sup> Division based on the permaculture manual used by ACAT for the training (LUSIP, n.d.).

## 2.4 Temporal Stages of Knowledge Transfer

Knowledge transfer is a process in time and therefore has stages before the transfer and stages following the transfer. I aim to understand the entire process of this transfer of permaculture knowledge. This is why for my classification of data I divided the process into six stages (see Figure 1). These temporal stages structured the data analysis as well as the chapter on results (see sections 3.5 and 4.3)

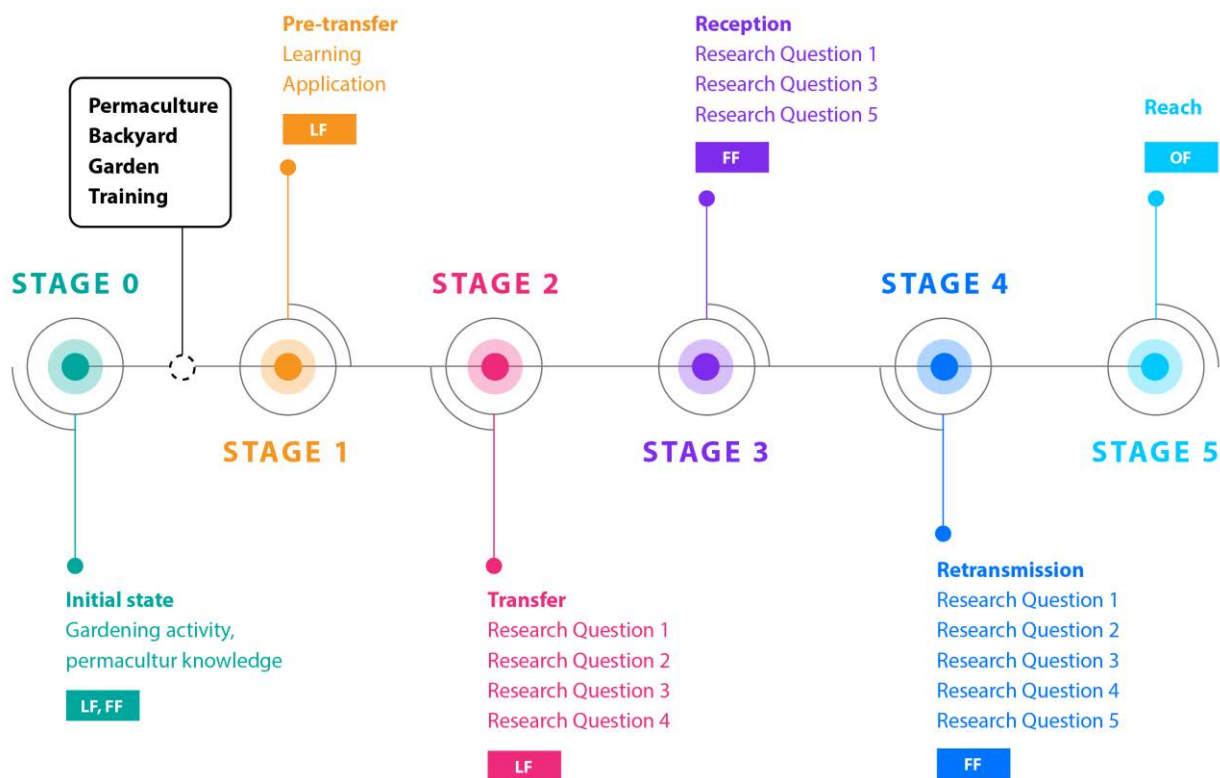


Figure 1: Temporal Stages of Knowledge Transfer (Source: Alisa Autenried)

Stage 0 is the initial situation before the backyard garden training and refers to the agricultural production before ACAT's involvement. Knowing the farmers' situations and way of production is necessary to make out whether there are any changes induced by the project. Stage 0 is investigated with each agricultural group, respectively LFs, FFs and OFs. This will figure in the chapter on contextual results (see section 4.1)

This is followed by stage 1 (Pre-transfer) that takes place during and shortly after the training. It refers to the LFs' learning of the new permaculture gardening techniques at the training and the practical application of the techniques in the LFs home gardens. Stage 1 is explored in this research because before investigating on the transfer of knowledge, it is crucial to make sure that the LFs

possess the respective knowledge. The practical application of the knowledge hypothetically leads to a more efficient/effective transfer.

Stage 2 (Transfer) is concerned with the actual transferring or sharing of the knowledge that was acquired during stage 1. In this stage I investigate on whether or not the LFs transfer the knowledge and if yes, the exact procedure of this transfer is closely looked at. Stage 2 is, together with stage 3, the heart of this F2F case study.

Stage 3 (Reception) takes place at the same time as stage 2 but examines the transfer of knowledge from the opposite perspective: stage 3 focuses on the FFs and their acquisition of the knowledge through the LFs of their SG. The received knowledge and the exact procedure of the acquisition is explored. By merely highlighting the F2F from the LFs perspective important information would be missed. Focussing also on the FFs' acquisition of knowledge allows to investigate on the quality of the LFs' teaching and on the receptiveness of the FFs. In case of overlapping information, meaning by interviewing an FF of whose SG I already interviewed the LF, I can control the truthfulness of the interviewee's answers and expose different perspectives. In stage 3 the FFs are additionally asked whether or not they practically apply what the LFs taught them and the related motives to do so.

Stage 4 (Retransmission) is identical to stage 2, but this time the FFs teach OFs. Or in other words, I hereby interrogate the FFs if they spread the knowledge, they received from the LFs further to people who are not involved in ACAT's permaculture project. By doing so, the reach of ACAT's permaculture garden training can somewhat be measured.

Stage 5 (Reach) concentrates on the OFs. It is shown if and how the OFs got in touch with permaculture knowledge and also practically apply it. Through this, it can be determined how far knowledge from an ACAT training is transferred.

## **2.5 Background: Kingdom of Eswatini**

Prior to the empirical part of this thesis, this section provides some socio-economic and geographical information on the Kingdom of Eswatini that are relevant for this study.

### **2.5.1 General Information**

The Kingdom of Eswatini is, with around 17'000km<sup>2</sup> surface, the second smallest country on the African continent (Manyatsi et al., 2013; SADC, 2012). It borders Mozambique to the east, whereas the rest of the country is encircled by South Africa. In 2018, fifty years after the country's independence from the British rule, the head of State, King Mswati III, renamed the Kingdom of Swaziland to Kingdom of Eswatini. The new term equally signifies "Land of the Swazis", but it is in the

local and second official language called Siswati; a Southern Bantu language (Advameg, 2019; Informal discussions, 2019).

Eswatini has about 1.2 million inhabitants who are scattered over 385 chiefdoms, divided into 55 local authorities called *Tinkhundla* (World Population Review, 2019). They are located in the four regions Hhohho, Manzini, Lubombo and Shiselweni which are the country's major administrative subdivisions (see Figure 2) (The Government of The Kingdom of Eswatini, 2019). The largest town, Manzini, lies in the eponymous region, and Hhohho holds the country's administrative capital Mbabane. There are also a few smaller towns situated in the regions of Lubombo and Shiselweni. Yet, with only 21% of the population living in these urban areas, the Swazis are a largely rural nation (World Population Review, 2019).

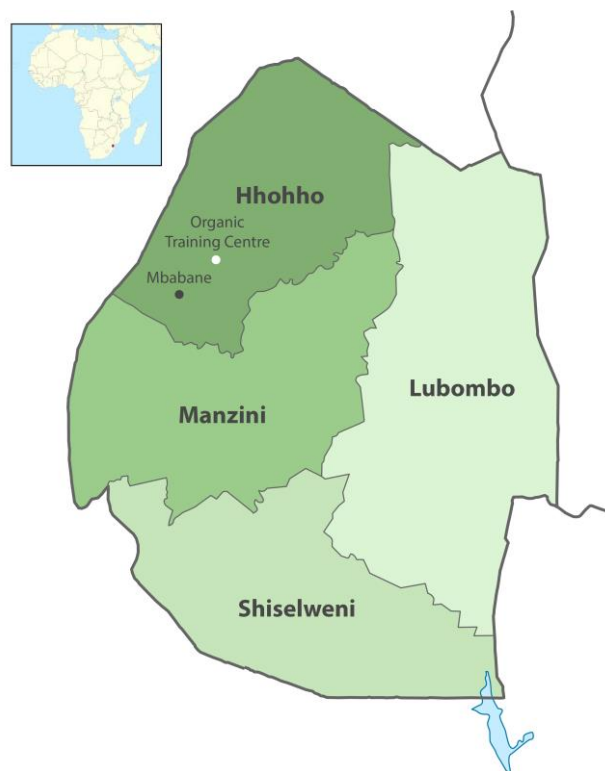


Figure 2: Administrative Regions (Source: Alisa Autenried)

This lower middle-income country had strong economic growth in the 1980s and 1990s, which decelerated from the 2000s on due to fiscal challenges. With 85% of its imports and 60% of its exports, Eswatini has a strong economic dependence from South Africa (The World Bank Group, 2019). The country has a very high unemployment rate (26%) which clearly contributes to Eswatini's elevated poverty level of 63% (UNDP, 2019a). Many of the unemployed people live in the rural areas since most employment opportunities are concentrated in the urban areas (IFAD, 2007; Trading Economics, 2019). Especially, areas with a poor road development tend to have very little means of livelihood, are underdeveloped and impoverished (Manyatsi et al., 2013). Wealth is highly unequally

distributed amongst the population: the highest ten percent of income earners cumulate 41% of the national wealth, whereas the lowest ten percent of income earners solely 1.6%. Or in other words, 69% of the population live below the poverty line of 1\$ per day (Manyatsi et al., 2013; UNDP, 2013). This important poverty gap between urban and rural areas is ever-widening: 84% of the country's poor people live in rural areas. Rural people's food consumption is two times lower and their per capita income four times lower than the one of urban people (IFAD, 2007). People in rural areas have less access to education, because families struggle to pay the children's school fees. Particularly the number of illiterate women in rural areas is far above the national average. The national average of education is 6.5 years, the one of my rural interviewees is slightly higher, 7.2 years (UNDP, 2018).

It is a growing and with over half of the people being under 20 years old, quite young population (UNDP, 2019d). The Swazis' life expectancy at birth is solely at round 58 years (UNDP, 2018), which can partly be explained through malnutrition and the world's highest HIV/AIDS rate: 28% of the Swazis are infected with this lethal disease (UNDP, 2019a). As stated by the United Nations (UNDP 2019d), the unprotected sexual violence against women is very high and according to informal discussions, HIV is prevalently passed on through intergenerational rapes within families. The HIV/AIDS pandemic leads to an increase of child-headed households. Young people already are vulnerable because of their growing number and the lack of employment opportunities in the country (IFAD, 2007).

The high corruption, discrimination against women and strong patriarchal traditions enhance the inequalities within the Swazi population even more (UNDP, 2019a). Despite the formulated poverty reduction strategy and action plan to eliminate poverty and accelerate economic growth by 2022, the State is said to lack pro-poor strategies in various sectors, such as health and agriculture (IFAD, 2007; UNDP, 2019a). Especially small-holder farmers face a number of obstacles preventing them from overcoming poverty. Their agricultural productivity is limited by poor linkages to markets, limited availability of water, difficult road accesses and vulnerability to climate change (IFAD, 2007; Lindsay & Kongolo, 2014).

Climate change has significant effects on agriculture in the Kingdom of Eswatini. A large majority of the population is dependent on agriculture for their livelihoods. The recent droughts jeopardised food production and led to many people suffering from food insecurity (Manyatsi et al., 2013; USAID, 2018). Likewise, the country's economics are affected by climate change: maize must increasingly be imported at high prices, which in turn makes it less affordable for the already vulnerable and food insecure population (Manyatsi et al., 2013). Interviewee nr 36 illustrates this food scarcity, saying that she and her family happen to skip meals and substitute them with warm water to fill the



stomach. They collect wild fruits and due to their unemployment must beg for money to purchase food.

In a following subsection, the country's climatic conditions in four different agroecological zones will be presented.

### 2.5.2 Agroecological Zones

This research focuses on the transfer of agricultural knowledge, and agriculture is heavily dependent on the climate, which is highly variable in Eswatini.

In the Kingdom of Eswatini generally prevails a subtropical climate with summer rains, meaning that 75% of all rain falls between October and March (Manyatsi et al., 2013). However, due to changing altitudes, climate varies strongly within the country. Four clearly distinguishable agroecological zones can be observed (Masson, 2018; Southern African Development Community, 2012). Reflecting the topography, the ecological zones extend longitudinally in parallel belts (see Figure 3) (Masson, 2018). They differentiate themselves in terms of elevation, landforms, geology, soil type and vegetation (Manyatsi et al., 2013). From west to east, these are the Highveld, Middleveld and Lowveld, which each occupy approximately 30% of the country, and then in the far east the Lubombo Plateau, which covers the remaining ten percent of the country (Manyatsi et al., 2013; Masson, 2018). According to the ecological zone, hence the climate, different crops are cultivated.

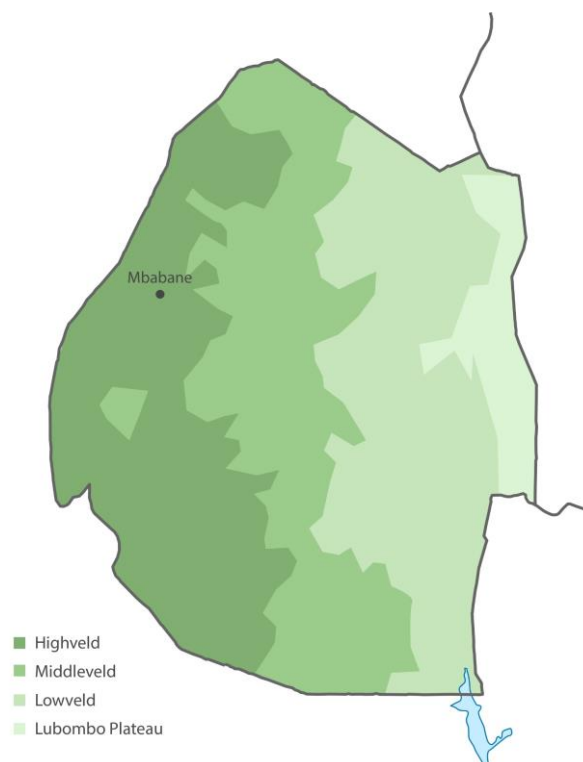


Figure 3: Agroecological Zones (Source: Alisa Autenried)

The study relevant administrative region Lubombo contains two ecological zones: Lubombo Plateau and Lowveld. The region of Shiselweni hosts the following ecological zones: Highveld, Middleveld and Lowveld. The climatic and ecological characteristics vary from zone to zone and with it also the crops suitable for commercial purposes. They are presented in the following paragraphs. Commercial and subsistence farming do not grow the same crops, this is why, subsistence farming is more closely looked at in subsection 4.1.1.4.

In the West, the Highveld hosts the capital city Mbabane and is connected to the South African Drakensberg. With an average altitude of about 1300 meters above sea level (Masson, 2018), the climatic conditions in this region are temperate and subhumid with 950 millimetres of rainfall (eSwatini, Ministry of Works, 2000). This would be conducive for good yields and suitable for cultivating a large variety of crops. However only three percent of Highveld provide fertile and arable soils and consequently, mainly grazing activities take place (Murdoch, 1968; The Government of the Kingdom of Eswatini, 2019). The dominant crop cultivated in the Highveld for commercial purposes is maize. Sweet potato and legumes are other crops that can be grown in this region (The Government of the Kingdom of Eswatini, 2019). This ecological zone is mostly hill-embossed and quite cooler than the other ecological zones (personal observations). Further, the Highveld is where ACAT's head office is located and where the organic farming trainings take place.<sup>8</sup>

The adjacent subtropical Middleveld lies at 610 to 760 metres above sea level and receives annually between 700 and 1200 millimetres of rain (The Government of the Kingdom of Eswatini, 2019). This ecological zone consists of fertile soils that are ideal for a diversified agriculture and consequently, it is where most agricultural activities are located. The Swazi population even grant it the name *Inkabave* which translates to 'navel': with its valley and rivers it represents the heartland of the nation (Masson, 2018). The crops maize, beans, cowpeas, peanuts, sweet potatoes, cassava, sorghum and cotton are suited for the climate of the Middleveld (The Government of the Kingdom of Eswatini, 2019). Furthermore, pineapple and sugarcane, which has formerly only been cultivated in the Lowveld, recently started to prevail in the Middleveld (Manyatsi et al., 2013; Masson, 2018; personal observations).<sup>9</sup>

Although maize is monocropped in all four ecological zones, its yields are much lower in the Lowveld than in High- and Middleveld. This is because maize is generally rainfed and the Lowveld is, with annually 475 millimetres of rain, considerably more drought prone than the two zones in the west (Manyatsi et al., 2013; Swaziland, Ministry of Works, 2000; The Government of the Kingdom of Eswatini, 2019). Consequently, large cotton fields replaced maize because of the crop's drought

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<sup>8</sup> Interviewees nr 37 – 40 live and cultivate in the Highveld

<sup>9</sup> Interviewees nr 6 – 14 live and cultivate in the Middleveld

tolerance (Manyatsi et al., 2013). Irrigated citrus can also be found in this region (Masson, 2018; The Government of the Kingdom of Eswatini, 2019). The Lowveld, a semiarid flat land, is also called Bushveld or *lihlanze*, meaning warm place with trees, and represents the typical African savanna (Masson, 2018). Its average altitude ranges between 60 and 730 metres above sea level (The Government of the Kingdom of Eswatini, 2019). The Lowveld is the hottest and driest zone and productivity is lowest in comparison to the other zones. Consequently, poverty is widespread in this climatic unfavourable and particularly rural zone (IFAD, 2007).<sup>10</sup>

East of the Lowveld rises abruptly the Lubombo Plateau to 700 metres above sea level (The Government of the Kingdom of Eswatini, 2019). It is the smallest agroecological zone, borders Mozambique and gets 700 millimetres of rain annually (eSwatini, Ministry of Works, 2000). The climate is subtropical and quite similar to the Middleveld, thus the local agricultural activity is mixed (Masson, 2018).<sup>11</sup>

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<sup>10</sup> Interviewees nr 1 – 5 and 15 – 28 live and cultivate in the Lowveld

<sup>11</sup> Interviewees nr 29 – 36 live and cultivate in the Lubombo Plateau

### 3 Methodology

The preceding chapter presented the issue animating this research, which is the knowledge transfer between Swazi small-holder farmers aiming to improve food security and placed it in its broader context of literature on social learning. I investigate this topic, specifically the functioning of a F2F approach, by focusing on a specific training on permaculture backyard garden provided by ACAT. The research questions and the underlying sub-questions presented above are addressed using the methodology presented in this chapter. The chapter proceeds as follows: In a first step, the different methods that I used to collect the necessary data for answering the research questions are illustrated. This is followed by the strategies of sampling the 49 interviewees. Next, details about the two-month fieldwork I undertook, and the research ethics are presented. The methods of analysing the data will follow, as well as the limits and biases of this study's methodology.

#### 3.1 Methods of Data Collection

In order to examine the F2F approach I undertook a two-month fieldwork in the Kingdom of Eswatini where I held 49 interviews with three different target groups:

1. Forty-three small-holder farmers from three agricultural groups: twenty Lead Farmers (LFs) who took the permaculture backyard garden training and acquired the knowledge first-hand from ACAT's training facilitators. Eighteen Follower Farmers (FFs) who are members of SGs but did not attend the training. They were supposed to be taught by the LFs about permaculture gardening. And five Ordinary Farmers (OFs) who are not involved with ACAT's permaculture training. Meaning that either they are not part of ACAT's structures, or else they are SG members without any LF who attended a permaculture garden training. The OFs give an idea of the project's reach.

With each farmer an individual interview with qualitative and quantitative components was undertaken (mean duration: 45 minutes). Each interview started with profile questions; structured questions about the interviewee's social, economic and agricultural situation. This was followed by semi-structured questions which varied according to the agricultural group. The interview was interwoven with closed questions on the processing of permaculture lessons. With processing I refer to the learning, application, transferring and receiving of the training's content on backyard gardening (consult interview guides in appendix 8.2 (LF) and 8.3 (FF)).

2. Four semi-structured interviews were conducted with ACAT employees in order to gather information on the project and its context (consult interview guides in appendix 8.5).

3. Two semi-structured interviews were undertaken with Swazi NGOs who apply F2F approaches (consult interview guides in appendix 8.6).

In addition to the interviews, participant observations, informal discussions and the keeping of a fieldwork journal added important data to the interviewee's answers.

The following sections firstly describe the quantitative components of the interviews (structured interviews), followed by the qualitative components (semi-structured interviews and participant observation).

### **3.1.1 Quantitative: Structured Interviews**

The individual interview sessions with the 43 small-holder farmers started with a structured interview. Structured interviews are not as rigidly constructed as questionnaires but follow a fixed series of questions that bring up topics for discussion. This type of interview primarily includes closed questions but may also involve open questions and, therefore, allows one to collect not only hard facts but also opinions and behaviours. Hence, structured interviews tend to cross boundaries between qualitative and quantitative data collection techniques (Scheyvens & Storey, 2003).

All the interviewees were asked the same questions in predominantly the same order. This rigid standard frame collecting categorical, nominal and numerical variables allowed me to compare and statistically analyse the interviewees. Furthermore, I was able to get interesting data on the interviewees' and Eswatini's context. During the interview, the respective answers were put down in writing on the individual interview sheet and, at the same time, audio-recorded for later verification. Structured interviews were conducted concerning two main topics: firstly, the small-holder's profile and secondly, his/her processing of permaculture lessons. The structured interview allowed me to find answers to the research questions *1. Who transfers knowledge?* *2. What knowledge is transferred?* and *5. What happens with transferred knowledge?* The answers of these structured interviews were statistically analysed.

#### **3.1.1.1 Profile**

The interviews with the 43 small-holder farmers started with structured questions on their respective social, economic and agricultural profile. It lasted 15 to 30 minutes and comprised two main categories: personal information and agricultural information.

The collected information on the interviewee's social, financial and agricultural situation proved to be very useful for multiple aspects. First of all, asking the interviewee personal questions was a gentle and easy start into the interview that helped them open up. Additionally, I was able to collect precious contextual data on the interviewee, livelihoods, agriculture, climate, Eswatini and its culture etc. (see section 4.1). This helped me understand the interviewees' answers and consequently limits

misinterpretations. By knowing the situation of my counterpart, I could adapt the subsequent semi-structured interview accordingly<sup>12</sup>.

Concerning the structure and questions of the interview guide, I was inspired by a household questionnaire of Angelsen et al. (2011), by a previously conducted questionnaire of Helvetas Madagascar, and by an agricultural survey of Waha et al. (2016) conducted in Africa. As the fieldwork progressed, I slightly adjusted the interview guide: several questions were changed or eliminated because of missing data, unconformity to context (e.g. distance to next LF, plot size etc.) and irrelevant information.

Restricted time resources prevented a profound analysis of the profile categories (consult appendix 8.4 for full list of investigated profile categories). The results of the structured interviews on the profile conducted with OFs are not included in this paper. Nevertheless, the collected data can be used for future research.

#### **3.1.1.2 Processing of Permaculture Lessons**

Structured interview questions were also used to explore the farmers' processing of permaculture lessons. Or in other words, for ascertaining whether or not the farmers learnt about permaculture, applied the learnt in the home garden and received or transferred the knowledge to other individuals. The resulting nominal variables were analysed statistically.

For this, I divided the training's content into six key lessons (later also referred to as "topics"). This division is based on the permaculture manual (LUSIP, n.d.) used by ACAT for the respective training: compost, liquid manure, planting methods, pest control, crop rotation and grey water filtering (see subsection 4.2 for detailed content). During the structured interview I listed these six lessons by asking the closed question whether the farmers learnt, applied, transferred or received the lesson.

According to their agricultural group, the farmers answered to different processing categories because they are involved in different stages of the knowledge transfer and therefore have different tasks. The LFs, for instance, were asked closed questions on which of the six lessons they learnt at the training, which ones they apply in their home garden and which ones they transferred to the FFs of their SGs. The LFs were firstly invited to mention the topics, before I listed them. Later in this paper it will be shown whether or not these *unprompted lessons* are the ones that are the most applied (see subsection 4.3.2) and most transferred (see subsection 4.3.3.2) to the FFs. The FFs were interrogated about the lessons they were taught by the LFs and the ones they apply in their home

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<sup>12</sup> Because of time restrictions the investigation of patterns on the type of small-holder farmer who is most likely to learn, transfer, apply and receive permaculture knowledge is left for future research.

garden. Likewise, the OFs were asked about which lessons they were taught by the FFs or LFs and which ones they apply in their home garden.

The different lists regarding learning, application, transfer and reception were collected during the semi-structured interviews, according to the discussed topics and in order not to interrupt the natural flow. Furthermore, they are complemented with the qualitative responses explaining the reasons for answering *Yes/No* to the processing of lessons.

### **3.1.2 Qualitative: Semi-structured interviews**

Semi-structured interviews are the second method of data collection for this research. These in-depth interviews allowed me to gather information about the individuals' situations, experiences and perspectives on this research's topic. In this method, interview guides based on the research questions are prepared before conducting the interviews. The questions are posed in a neutral manner and the researcher asks follow-up questions based on the content of the answers (Mack et al., 2005). As opposed to a structured interview, the semi-structured interview incorporates a conversational style and hence, allows a quite undisturbed flow of speech. The semi-structured interview is mostly guided but still offers a big flexibility where the interviewee can influence the topics he or she wants to discuss. Consequently, this may reveal aspects and information the researcher has not thought of in advance or has had no knowledge about. Additionally, many contextual and cultural facets can be evoked, which in turn may give explanations to other statements or observed phenomena (Statistics Solutions, 2017). At the end of the interview the researcher should have gathered answers to all the prepared questions.

This qualitative method of data collection seemed very pertinent for this case study, because before entering the field, I had limited knowledge about Eswatini, its culture and habits. Letting the interviewee partly guide the interview helped me gather interesting and important data, and at the same time get responses to the questions I prepared in advance.

I conducted semi-structured interviews with the totality of my interviewees, which is to say 43 small-holder farmers, four ACAT employees and NGO directors. The interview guides and comprised questions varied according to the interviewees. The interviews were audio-recorded and transcribed for their analysis afterwards (see appendix 8.7 for interview transcriptions with LFs, FFs and OFs).

### 3.1.2.1 Project's Context

Four interviews of contextualisation with ACAT were conducted before visiting the small-holder farmers in Lubombo and Shiselweni in order to understand the project and structures of the implementing organisation.

#### 3.1.2.1.1 Programmes Manager

The hourlong semi-structured interview with ACAT's Programmes Manager was located in ACAT's head office in Mbuluzi and was held in English. The interview was audio-recorded and structured into three topics. First of all, the interviewee answered my questions related to the functioning of the SGs and to the project of improved livelihoods through organic farming. This led me to the second topic which was the more specific permaculture backyard garden training. The third topic was concerned with the actual knowledge transfer within the SGs: I was interested in an explanation of its detailed functioning and in his evaluation of it. Along with the answers of the Training Facilitator, this interview provided the information needed to construct the interview guides for the small-holder farmers involved in this project.

#### 3.1.2.1.2 Training Facilitator

A second semi-structured interview was held with one of the two persons who conducted the permaculture backyard gardening training; the Training Facilitator.

This interview lasted 20 minutes, was audio-recorded and located in the dining hall in Mbuluzi. It was held in Siswati and the answers were simultaneously translated into English by an ACAT intern. The Training Facilitator explained the procedure of the training and its rough content. The exact content of the training was further compiled by the small-holder farmers' and the EO's explanations, and the manual ACAT uses to give the training (LUSIP, n.d.).

#### 3.1.2.1.3 Extension Officers

SG members visit workshops about money saving and organic agriculture. The EOs' objective is to supervise the SGs, which means to make sure that, with time, the SGs can become self-sustainable and independent from ACAT. Two semi-structured interviews with EOs were conducted to comprehensively understand the role of the EOs and consequently, the operating structure of the said NGO.

The interviews were both held in English at ACAT's head office and were audio-recorded. The emphasis of the interviews were largely distinctive but helped me to get a deeper understanding of the structures of knowledge transfer.

The interview with EO1 focused on the EO's tasks which is assisting the SGs. Hence, monitoring activities, answering questions and, through home visits, motivating the SG members to persevere



the project related activities. Indeed, because of specific workshops EOs have broad knowledge about permaculture gardening that they mediate towards the SGs. It is therefore crucial for this study to know which knowledge was transferred to the FFs by the LFs and which was taught by the EOs. Additionally, I was interested in how the SGs operate in detail. The semi-structured interview with EO2 concentrated on his knowledge of the principles and techniques of permaculture gardening. He further mentioned reasons why the farmers do not apply them.

### 3.1.2.2 Transfer of Knowledge and Skills

During their individual interview, the small-holder farmers underwent a semi-structured interview, in order to specifically investigate the transfer of knowledge. According to their agricultural group, hence their role in the F2F, the interview guides varied slightly between LFs, FFs and OFs.

As fieldwork progressed, the interview guides were slightly adapted, or questions replaced, according to the interviewees' realities (consult final interview guides in appendix 8.2 and 8.3).

The semi-structured interviews with the farmers allowed answering the following research questions: 1. *Who transfers knowledge to whom?* 3. *How (when and where) is knowledge transferred?* 4. *Why is knowledge transferred?* 5. *What happens with transferred knowledge?* Furthermore, personal stories and anecdotes led to the collection of interesting contextual information that explain observed phenomena. Additionally, data on the hypothesis about the CoP was collected.

#### 3.1.2.2.1 Lead Farmers

The semi-structured interview with the LFs lasted 30 minutes on average and was structured into two topics whose order was the same in most interviews. The questions within a topic were asked in variable orders.

The first topic concentrates on the transfer of knowledge and occupied the most important place in the semi-structured interviews with LFs. LFs are supposed to forward the six permaculture lessons to the FFs. They were therefore asked about the accomplishment of this task and about the receivers of the lessons (FF and/or OF). The reasons for a (non-)transfer were investigated, as well as the exact teaching process. By teaching process, I refer to *how*, *when* and *where* the teaching took or takes place. Furthermore, explanations for the (non) application of the permaculture techniques were investigated and thus, information on improved livelihoods and living conditions were gathered.

In a second step, I was interested in the relationship between the LF and the FFs in his/her SG. This information can be a motive of a transfer of knowledge, or in other words; a good relationship between the LF and the FFs might explain why the LF taught them and *vice versa*. The reasons for joining the SG and additional information about the SG's functioning and agendas was gathered.

Moreover, the existence of a CoP was investigated by asking the LFs about being in contact with other LFs they took the training with. In case of contact, more details were collected because it shows their interconnectedness and might indicate if knowledge is shared within the LFs group and across different regions and sites. I was further interested in the LFs evaluation on the FFs willingness to learn and apply permaculture techniques.

At the end of the interview the LFs could talk about any other positive and negative effects of the training and I left place for their questions on the research and me.

#### 3.1.2.2.2 Follower Farmer

The semi-structured with the 18 FF was conducted with a mean duration of around 20 minutes. It was structured into three topics, of which the order rarely changed. The questions within a topic however were asked in variable orders.

The FFs are supposed to be taught about permaculture gardening by the LF of their SG. The exact procedure of this knowledge reception was explored, such as the teaching methods, its spatiality and temporality. Furthermore, the FFs' reasons for (not) applying the permaculture lessons were investigated, as well as possible changes in living conditions and improved livelihoods induced by the new practices.

The second topic concerned the relationship between the FF and the LF and if the latter seemed willing to pass on the knowledge on permaculture gardening. I was further interested in an evaluation of the LFs way of teaching.

The third topic of the FFs' semi-structured interview addressed the question if the FFs further transferred the knowledge to an OF. Through this, the project's impact and reach can be estimated. In case the FF forwarded the lessons, the FFs' reasons for doing so, the teaching process, the beneficiaries and their practical application of the lessons were explored.

In a final point, the FFs could add unmentioned aspects and ask their questions to the research.

#### 3.1.2.2.3 Ordinary Farmers

The procedure of the semi-structured interviews with the 5 OFs was somewhat different to the ones with the LFs and the FFs. In fact, interviews with OFs were initially planned to only be undertaken in case time was sufficient after having reached the objective of interviewing 20 LFs and 20 FFs. However, because of a misunderstanding, the EO recruited five OFs on the third interview day. Unfortunately, no clear written interview guide has been elaborated for them at this time of the fieldwork. Not having wanted to reject anybody who was willing to participate at this research, I improvised. Nonetheless, I consider this interview method semi-structured since I knew what

information to collect from the OFs. Because of the preceding two interview days, I was furthermore able to spontaneously base the interview guide on the LFs' and FFs' ones and structure it accordingly.

The OF's semi-structured interview took a mean time of round 30 minutes and were oriented towards collecting data about their knowledge on permaculture gardening to determine the reach of the project. In case they knew about this method of gardening, I was interested in the ways they obtained it. Meaning through *whom* and *how* it exactly happened and their motives for a (non) application. In case of practical application, benefits and difficulties related to this practice were investigated.

### **3.1.2.3 Alternative F2F approaches**

To complement my case study of the functioning of the F2F approach, I further conducted interviews with the directors of two Swazi NGOs that implement the F2F approach: Guba Swaziland and NGO2<sup>13</sup>. Their F2F approach is slightly different from ACAT's and therefore, these interviews enrich this thesis' theoretical frame (see subsection 2.1.1.1.1) and discussion (see chapter 5).

These semi-structured interviews were held in English, were audio-recorded and had a duration of approximately 45 minutes. They were undertaken halfway through the fieldwork at Guba Swaziland's head office and, as for NGO2, at a farmer's market in Mbabane. I was interested in the NGOs' respective implementation of the F2F approach and in its exact functioning. Additionally, I asked for an evaluation of their F2F concerning the knowledge transfer, meaning the strengths and weaknesses of their model.

### **3.1.3 Qualitative: Participant Observation**

In addition to the structured and semi-structured interviews, I undertook more spontaneous and informal methods of data collection.

This qualitative method includes observation of, and participation in the study population. This method's roots are in the traditional ethnographic research and is useful in different ways. Most of all, when participating in the studied community, the researcher gains an understanding of their physical, social, cultural, and economic context. This, in addition to the grasping of the participants values, norms, beliefs, behaviours and activities can be most helpful in asking them the right questions, interpreting their answers and finding an access to them (Mack et al., 2005).

For three months I lived on ACAT's demonstration farm, rural and quite isolated. Living in a setting similar to the one of the interviewed farmers taught me a lot about their living conditions, their routines and daily challenges.

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<sup>13</sup> This organisation is anonymised in this thesis.

A lot of informal knowledge about the local context was gathered through informal, spontaneously held discussions with Swazis. These discussions with ACAT employees, friends and strangers mostly took place in private and public transport, at work, in public places or at private events I attended.

Preceding the two months of data collection, I undertook a one-month internship at Participatory Ecological Land-Use Management (PELUM) association Swaziland<sup>14</sup>. These four weeks previous to the official start of the fieldwork were preparatory. A lot of information about the project and its functioning was gathered through formal and informal discussions with the director and employees of ACAT. Furthermore, during this first month, I acquired some basic knowledge of the local language Siswati, which further improved with the ongoing stay. This was largely appreciated by the interviewees, who generally are not fluent in English. My private contacts regularly explained me various cultural aspects and answered my questions. Through the professional setting of the internship with PELUM for instance, I was able to get in touch with several NGOs such as Guba Swaziland and NGO2 who participated in this research (see subsection 3.1.2.3).

During the fieldwork, I could observe the interactions between SGs members after their weekly meeting. Furthermore, I visited the homestead of four interviewees, one of whom showed me his vegetable garden.

Each interesting encounter, discussion or observation was documented in the field notebook..

## **3.2 Sampling strategies**

At the time of the fieldwork, 83 LFs had already attended the training on permaculture backyard gardening. Each LF is part of a SG with about 15 members on average; the FFs. However, in qualitative research not all persons involved in a project can be interviewed. Only a sample, or a subset, of the studied population is selected.

The initial objective was to interview 20 LFs, 20 FFs and – if time resources allow it – 20 OF. Due to various reasons that are explained later in this section, this objective was not reached for every group of farmers.

ACAT provided me with a handwritten list of the 83 participants of the backyard garden training. It contained information about the LFs' name, age, gender, chiefdom of residence, SGs and mobile phone number. Because of a lack of resources and available interview partners quota sampling was not possible. Instead, a more flexible purposive sampling was undertaken, with the mere criteria of interviewing LFs or FF who are involved in the EcoSolidar permaculture backyard garden training. The

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<sup>14</sup> PELUM Swaziland has not yet changed its name to PELUM Eswatini

sampling of the interviewees consequently, occurred continually during the ongoing fieldwork. The Programmes Manager contacted different EOs who, in their turn, recruited the LFs and FFs who were available and willing to be interviewed on the predetermined date.

The sampling and recruiting of the interviewees was mostly done by the EOs, who acted as *gatekeepers* in this study. *Gatekeepers* are “defined as those individuals in an organisation that have the power to withhold access to people or situations for the purpose of the research” (Miniechello et al., 1997 in de Laine, 2000, p. 123). Nonetheless, as the fieldwork progressed, I was able to decide on the region and on whether LFs or FFs were to be recruited. Thereupon, a quota of the agricultural group and the region similar to reality (quota sampling) could somewhat be realised (see Table 2). Twenty LFs and 18 FFs were interviewed, of whom 22 live in Lubombo and 16 in Shiselweni. However, one LF did not go to the backyard garden training, but to one of the other 9 organic farming lessons (see section 2.2). Another 7 FFs were not taught by LFs who went to the permaculture training. The consequences of this will be closer discussed in section 3.6. Furthermore, the criteria of age, gender and diversification of SGs were neglected due to discord to the field’s realities. Moreover, in respect for the participants and the EOs I did not want to reject anyone who wanted to be interviewed, whether or not they corresponded to my sampling criteria.

The recruitment of the LFs and the FFs was prioritised over to the recruitment of OFs. But because of a misunderstanding, the five OFs were already recruited on the third interview day.

Table 2: Sample Characteristics of LFs and FFs

	Agricultural Group		Administrative Region		EcoSolidar Farmers		Gender		Age (years)	
	LF	FF	Lubombo	Shiselweni	Yes	No	Female	Male	< 50	> 50
Number of interviewees	20	18	22	16	28	8 2 n/a	33	5	19	19
Details			11 LF 11 FF	9 LF 7 FF	19 LF 9 FF	1 LF 7 FF	16 LF 17 FF	4 LF 1 FF	10 LF 9 FF	10 LF 9 FF

### 3.2.1 The interviewees

Table 3 presents all the interviewed small-holder farmers, their profiles and some other relevant information.

Table 3: The Small-holder Farmers<sup>15</sup>

Code name (Interviewee nr)	Agricultural Group	Gender	Age	Region	EcoSolidar Farmer Or trained by EcoSolidar LF	Permaculture Backyard Garden (established)	Explanation	Main Income Generating Activity ( $\geq$ 50% of salary of interviewee)	Additional income generating activity of household	Ecological zone
1	LF	M	49	L	Yes	Yes		F/G	Chicken rearing	LV
2	LF	F	60	L	Yes	Yes		Unknown		LV
3	LF	F	57	L	Yes	Yes		F/G		LV
4	LF	F	38	L	Yes	Yes		F/G	Grass mats	LV
5	FF	F	47	L	Yes	Yes		F/G	Volunteering	LV
6	LF	M	61	S	Yes	Yes		F/G		MV
7	LF	F	39	S	Yes	Yes		F/G	Husband employed	MV
8	LF	F	39	S	Yes	No	In preparation	F/G	Vaseline	MV
9	LF	F	45	S	Yes	Yes		-	Husband employed	MV
10	LF	F	58	S	Yes	No	Not anymore (fencing issues)	-		MV
11	FF	F	53	S	No	No	LF training was one week before interview	F/G	Sewing	MV
12	LF	F	54	S	Yes	Yes		F/G	Vaseline, grass mats	MV
13	FF	F	73	S	Yes	No	Drought	Retirement	F/G	MV
14	FF	F	53	S	No	Yes	Not all methods	F/G		MV
15	OF	F	60+	L	n/a	No	No knowledge	Wicker	Elderly grants	LV
16	FF	F	35	L	Yes	Yes		Wholesaler		LV
17	OF	F	48	L	n/a	No	No knowledge	F/G, Wholesaler	Elderly grants	LV
18	OF	F	27	L	n/a	No	No money to buy seeds	Unemployed		LV

<sup>15</sup> Acronyms: LF = Lead Farmer, FF = Follower Farmer, OF = Ordinary Farmer; F = Female, M = Male; L = Lubombo, S = Shiselweni; n/a = not applicable; F/G = Farming/Gardening; HV = Highveld, LV = Lowveld, MV = Middleveld, LP = Lubombo Plateau (see subsection 2.5.2 for details on ecological zone)

19	OF	F	44	L	n/a	No	Fencing issues, sick	Wholesaler		LV
20	OF	F	35	L	n/a	Yes		Hairdresser	Husband employed	LV
21	FF	F	59	L	Yes	No	No time because of fulltime employment	Domestic help, weeder, cotton picker		LV
22	LF	M	46	L	Yes	Yes		F/G		LV
23	FF	F	50	L	Yes	Yes	Not all methods	Baking	F/G, Husband employed	LV
24	LF	F	46	L	Yes	No	Seed scarcity	Baking, sewing, grass mats	Elderly grants	LV
25	FF	F	60	L	Yes	Yes	Not all methods	Retirement		LV
26	LF	F	36	L	Yes	Yes	Not all methods due to problematic soil	F/G	Wholesaler	LV
27	FF	F	34	L	Yes	No	Absent at teaching session because of employment	Grocery shop owner	Husband employed	LV
28	FF	F	30	L	Yes	Yes		-	Husband employed	LV
29	LF	F	34	L	Yes	Yes		F/G, baking		LP
30	FF	F	46	L	No	Not anymore	Fencing issues	Banana seller, Vaseline		LP
31	LF	F	50	L	Yes	Yes		F/G	Husband employed	LP
32	FF	F	44	L	No	Yes		F/G		LP
33	FF	F	54	L	No	Yes		Banana seller	F/G	LP
34	FF	F	49	L	No	Yes		F/G	Husband employed	LP
35	LF	F	55	L	No	No	Applies alternative organic methods	F/G		LP
36	LF	F	65	L	Yes	Yes		F/G	Begging	LP
37	LF	F	52	S	Yes	Yes		F/G, sewing		HV
38	LF	F	48	S	Yes	Yes		F/G	Piggery	HV
39	LF	M	61	S	Yes	No	Fencing issues	F/G		HV
40	FF	F	41	S	n/a	Yes		F/G		HV
41	FF	F	60	S	n/a	Yes		Grassmats	F/G	HV
42	FF	M	70	S	Yes	Yes	Not all methods	F/G		HV
43	FF	F	45	S	No	Yes		F/G		HV

### 3.3 Fieldwork Description

This section describes how I got in touch with ACAT and the interviewees and explains the usual procedure of an interview.

From the beginning of the master thesis I knew that I wanted to collaborate with an actor in the development sector, preferably an NGO. Consequently, I asked the Swiss NGO EcoSolidar, with whom I have had previous contacts, if they supported a project in Africa that focuses on food security, agriculture and women which are my major fields of interest. They kindly put me in contact with the NGO ACAT Swaziland which they support through a project aiming for improved livelihoods through organic agriculture. Through regular interactions with both NGOs I had a rough idea about the project and its operation through SGs. Nonetheless, I did not understand the exact content of the trainings nor the structures and functioning of the organisation. Therefore, preparing an exact methodology for the two-month fieldwork proved to be difficult. The months before the journey to Eswatini in February 2019 were consequently filled with travel preparations and, more particularly, the establishment of the theoretical framework. The latter, based on a literature review, builds the foundation of this entire research and serves as a guide line through the case study.

EcoSolidar put me in contact with a second Swazi NGO named Participatory Ecological Land Use Management (PELUM) Association Swaziland. It is where I was able to undertake a one-month internship before starting the actual fieldwork. PELUM is located on ACAT's demonstration farm where I was accommodated free of charge for the three-month stay. During this preparatory period, I established contact with several ACAT employees with whom I pre-organised meetings and got an idea of my fieldwork's possibilities, such as transportation and communication issues. It became clear that an interpreter was necessary to translate between English and Siswati, the national language: the more rural the region, the less are people educated and consequently, do not speak English.

At the beginning of March 2019, the eight-week fieldwork started with a meeting with ACAT's director. My thesis plans and the concerned project were discussed. He offered me ACAT's full support in my undertaking, which proved to be very useful and allowed me a smooth fieldwork. ACAT's Programmes Manager was my primary contact person, as well as the *gatekeeper* to the interviewed small-holder farmers. This means that, through his contacts, he selected all the LFs and FFs that I interviewed for this study. I conducted the first interview with the Programmes Manager who provided me with information and explanations about the project in question, the functioning of the SGs and the EOs' tasks. This contextualising interview, combined with the interview with a Training Facilitator, gave me a clear understanding of the project's operations relevant for my research. Consequently, I prepared the initial interview guides for the structured and semi-structured



interviews with LFs and FFs. Additionally, I designed informed consent forms, both in English and Siswati, that every interviewed small-holder farmer signed (see appendix 8.1). I then proceeded with the sampling tentative (see section 3.2).

This preparation phase was followed by six interview days with a total of 43 small-holder farmers. This interview period with farmers was spread over the course of one month (see Table 4). The Programmes Manager kindly drove me and the independent translator to the interview sites. Partly poor road conditions and distant interview sites – in Lubombo and Shiselweni – led to a transportation time of 2 to 4 hours, one way. During the transports, I briefed the translators on the research, the interview guide and an ideal interpretation. Usually, all the interviewees of the day, which means up to nine small-holder farmers, awaited us. After a small introduction, and sometimes an opening prayer, the Programmes Manager left me and the translator alone with the interviewees and pursued his own agenda. We installed ourselves under trees, in the shadow of houses or in the garden of the interviewees to conduct the interviews.

*Table 4: Interview days*

<b>Interview day</b>	<b>Region</b>	<b>Interviewed LFs</b>	<b>Interviewed FFs</b>	<b>Interviewed OFs</b>	<b>Total</b>	<b>Interpreter</b>
26.03.2019	Lubombo	4	1		5	Translator1
27.03.2019	Shiselweni	6	3		9	Translator1
04.04.2019	Lubombo	0	2	5	7	Translator2
09.04.2019	Lubombo	3	4		7	Translator2
10.04.2019	Lubombo	4	4		8	Translator2
24.04.2019	Shiselweni	3	4		7	Translator2

The interviews were conducted with every LF, FF and OF individually. In a few cases, due to particular circumstances, other people were present at the time of the interview. The translator and I presented ourselves by emphasising our independence from the NGO and wishing for honest and open answers. Furthermore, the interviewee was provided with refreshments, was informed on this research, the informed consent form was signed, and the audio-recorder switched on. This was followed by firstly, the structured questions regarding the farmer's profile. And secondly, by the semi-structured interview which was interwoven with the structured questions about the processing of the permaculture lessons. The interviews were usually undertaken in Siswati, with the help of the translators. Even though a majority of the interviewees understood English, they speak it insufficiently to be able to clearly express themselves. The interpreters were hired by me on a day-based wage and were independent from ACAT, such as to not bias the interviewee's answers. After the second interview day, I had to change translators due to some inaccuracies (see section 3.6). I directed the question in English to the interviewee, the interpreter translated it word by word to the

farmer who answered in Siswati, which was, in turn, translated back to English for me. Some interlocutors spoke well enough English, so that no interpretation was needed. In all the interactions with the locals I ensured to respect research ethics (see section 3.4) and tried to create a trustful, relaxed and natural interview atmosphere. All the interviews were conducted outside, all kinds of small interruptions occurred: animals passing by and making noises, cell-phones ringing, neighbours chatting, children playing, rain, wind blowing material away etc. After having finished an interview, the interlocutor informed the next interviewee to come. The interviewees who waited to be interviewed usually sat under trees, chatted and consumed the refreshments I provided them with. After finishing the interviews, the Programmes Manager picked us up and drove us back home.

The following days, I transcribed the audio-recorded interviews, clarified all ambiguities concerning the context and double-checked the interpretations with Swazi acquaintances. This means that I played small portions of Siswati from the recording asking them for a second translation to make sure the interpreter gave precise translations. Between two interview days, especially at the beginning, I adapted the interview guides. I eliminated questions that did not fit the local context, that led to confusion or that were implausibly answered. I added questions that, with growing knowledge of the topic, proved to be research relevant. I also revised or modified questions in order to be more specific, clear and pertinent. After each interview day I counted the interviewed farmers of each group and communicated the remaining number to the Programmes Manager. He, consequently, organised the interviewees of the next interview day accordingly.

NGO2 were supposed to speak on PELUM's radio show about their F2F approach. Unfortunately, this radio show was postponed. Nonetheless, the director of NGO2 kindly agreed to still provide me with the information by means of a semi-structured interview. It took place on the 30<sup>th</sup> March 2019 at a farmers' market in the capital, Mbabane and lasted 54 minutes during which she provided me with interesting information on how the NGO applies the F2F approach. The interview was audio-recorded and transcribed afterwards.

The interviews with the EOs were both conducted individually on the 3<sup>rd</sup> April 2019. It was during a further training for ACAT led by one of the organisation's major donors. The Programmes Manager spontaneously organised two EOs assisting this training, who were willing to be interviewed. After explaining my research and signing the informed consent form, the semi-structured interview was undertaken in the Programmes Manager's office. Both were audio-recorded and transcribed afterwards. The interviews lasted 49, respectively 28 minutes because the latter was halted due to an upcoming meeting.

As well as NGO2, Guba Swaziland wanted to talk about their F2F approach on PELUM's radio show that was dismissed. On the 11<sup>th</sup> April 2019 the director of the organisation specialised in permaculture welcomed me in Malkerns, where the NGO is located. I was, during 43 minutes, entirely informed about Guba Swaziland's F2F approach. The semi-structured interview was recorded and transcribed in the following days.

During the whole fieldwork I was in regular contact with the directors of ACAT and EcoSolidar who gave me precious support. From May to August 2019 I analysed the transcribed interviews using a qualitative content analysis (see subsection 3.5.2).

### 3.4 Research Ethics

An essential aspect of qualitative research is research ethics, meaning to respect the needs and concerns of the studied population. According to Mack et al. (2005) the researcher has to ensure the well-being of the research participants and prioritise it over the research question. Qualitative research ethics are founded on four fundamental principles which are firstly, the respect of persons. The dignity of the participants and has to be respected and their vulnerability must not be exploited. Secondly, the risks associated with participating in the research must be minimised, whereas the benefits need to be maximised. Thirdly, the research participants should be the ones benefitting most from the research, and lastly, the researcher must respect the communities, their values and interests and protect them from harm (Mack et al., 2005; The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). I undertook several measures to respect these four core principles of research ethics and with them, the research participants.

Foremost, the informed consent process contributed to the respecting of persons, their dignity, safety and privacy (see appendix nr 8.1). This process was facilitated by two documents: the *Information Sheet* informed the participating small-holder farmers about the research, its processes, objectives, what the results are used for and whom they are shared with. The *Certificate of Consent* listed the interviewees' rights and conditions of participation. They were, for instance, instructed that their participation is of their own volition, that they may always withdraw from the study and that, upon their wish, they are anonymised. Additionally, the potential interviewees were informed on being audio-recorded during the interview and that their personal information will not be passed on to other research participants or research externals. If the interviewee agreed with all the points, the document was signed by both parties, upon which the interview ensued.

The interviewees could choose to read and sign the English or Siswati version of the documents. The signed Certificates of Consent will be held in my custody for the duration of two years. In the case of seven interviewees (interviewees nr 13, 14, 15, 23, director of Guba, director of NGO2 and the Programmes Manager) the formal, written consent process was overlooked, yet they all clearly gave the impression of voluntary participation. In occurrence of the interviewee being illiterate the document was read aloud, and, in case of consent, the translator signed it.

I emphasised the fact that the present translator and myself are not a part of ACAT, but independent and are conducting this research for academic purposes. I further underlined that regardless the study's results, ACAT's services and support will continue. I thus ensured that their participation is voluntary and not based on a feeling that ACAT expects them participate. Through this, I aimed to create a basis of trust between the interviewee, me and the translator and therefore, honest and unconstrained answers. The trust and respect towards the interviewee were further encouraged through me speaking some Siswati, dressing appropriately, offering refreshments and snacks etc.

Even though the interviewed small-holder farmer had the choice between staying anonymous or not, I decided retrospectively to anonymise them because it may harm them. Anyways, mentioning their names or residential communities does not contribute to this research<sup>16</sup>. These anonymity norms are somewhat different for the interviewed organisation representatives. They are not stated by name, but by naming their function and organisation they may be identified. This was, however, agreed upon by them at the interview.

By not rejecting any interviewee from participating – even if he or she did not correspond to my sampling criteria (e.g. male, OF) – I prioritised the ethics over the research, as it is expected in qualitative research. (Mack et al., 2005). Numerous interviewees covered long distances to come to the interview location and stood in line for many hours to be interviewed.

Despite my efforts to be clear and ethically correct, I quickly got the impression that some interviewees directly associated me with ACAT and bid me to help them with supplementary workshops or for example the digging of boreholes. This revealed that the interviewed small-holder farmers have had big expectations and hopes participating in this research, which I possibly, and unfortunately, cannot directly fulfil. This matter was communicated to them.

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<sup>16</sup> The interviewees are called "Interviewee nr n" with "n" being the number attributed by order of precedence

### 3.5 Methods of Analysis

A total of 49 interviews, innumerable informal discussions, observations and records in the field notebook provided me with a large bundle of data. These data need to be sorted, managed and analysed in order to find concrete responses to the research questions. This section describes the methods that enabled me to analyse the collected data. The analysis was divided into two sections: a quantitative analysis and a qualitative analysis. Even though qualitative and quantitative methods were firstly analysed separately, they were in a second step contrasted. Using quantitative and qualitative methods and analysis in a complementary manner led to a comprehensive exploration of the F2F of this case study.

#### 3.5.1 Quantitative analysis

A quantitative analysis was applied for the data that were collected through the structured interviews: the farmers' profiles and the processing of permaculture lessons. For the quantitative analysis only the LFs and FFs are considered.

##### 3.5.1.1 Profile

The categorical, numerical and nominal variables about the social, economic and agricultural situation of the farmers were put into a spreadsheet where categorical and nominal variables were coded. I then applied basic univariate descriptive statistics to the data set. Means, ranges and frequencies were calculated to understand the characteristics of my interviewees. They provided me with insights on the studied population and contributed to a comprehensive understanding of the interviewees' answers. The descriptive statistics further helped me to explore unexpected phenomena, such as clusters, patterns or extreme values. The statistical data I chose to include in this research is used to enrich the contextual results (see chapter 4.1).

##### 3.5.1.2 Processing of Permaculture Lessons

The processing of permaculture lessons is divided into four different categories (see subsection 3.1.1.2): learning (stage 1), application (stages 1 and 3), transfer (stage 2) and reception (stage 3) of the permaculture lessons (see subsection 2.4 for details on stages). During the interview, for each of these four categories I listed the six permaculture lessons (for details see section 4.2). The interviewee had to affirm or negate if it applied to her or him.

The answers were coded: *Yes* = 1, *No* = 0. In this analysis, each lesson is regarded as a *unit*. And thus, the LFs were able to achieve 18 units; three categories (learning, application, transfer) of six units each. The FFs were able to achieve 12 units; two categories (application, reception) of six units each. The interviewees' individual scores were calculated, as well as the score of each lesson. Basic

descriptive statistics were applied on these scores. In case of an interviewee's failure to reach the maximum score of 18, respectively 12, explanations were sought in the answers to the qualitative semi-structured interviews.

The LF underwent an additional examination concerning the category of learning. Before listing the six lessons in the form of a structured interview, an open question on what they learned at the training on permaculture was asked. In case the LF mentioned a lesson unprompted, this was noted. A score was calculated for the number of times each LF made an unprompted mention of particular lessons. Next, the learning scores were compared with the application and transfer scores in order to find parallels. This analysis is based on the hypothesis that the better the LF remembers the lessons, the more likely it is that he/she applies and transfers them.

The data of processing of permaculture lessons is presented in section 4.3.

### **3.5.2 Qualitative analysis**

Qualitative analysis was undertaken on the content of the semi-structured interviews with the 43 small-holder farmers. I coded the transcripts using the categories I developed in section 2.4 (the temporal stages of knowledge transfer), as well as thematic categories. This coding system differs between the agricultural groups (see Table 5). The main categories describe key aspects of the interviews' analysis and interpretation (Vogt & Werner, 2014). They were built deductively: the theory led to research questions that in turn informed the choice of categories. The main categories were split into sub-categories which focus on more precise aspects. I established definitions and rules according to which the interview text was coded. The interview texts were consequently coded according to the rules by using colour-codes. In a next step the marked sequences were paraphrased into an excel sheet. Passages irrelevant to the research were either left out or classified under Additional Contextual Information. For each category or sub-category the answers of the interviewees were compiled and studied. The interpretative classification of the results in a larger context and discussions led, in a last step, in the answering of the research questions. By analysing the different qualitative categories, the quantitative results (profile and processing of permaculture lessons) were regularly considered and interwoven. By combining qualitative and quantitative data observed situations and results are illuminated from different angles. Thus, biases and misinterpretations could additionally be avoided.

Table 5: Categories Using in Coding the Interview Transcripts: Small-holder Farmers

<b>Lead Farmer</b>		
<b>Main Category</b>	<b>Sub-category</b>	<b>Definition/Explanation</b>
0) Stage 0		0) Information on how LF produced food before ACAT's training
1) Stage 1 (Pre-transfer)	1a) Application 1b) Non-application	1a) Benefits and motives for applying permaculture techniques 1b) Difficulties and reasons for not applying permaculture techniques
2) Stage 2 (Transfer)	2a) To whom? 2b) How? 2c) Where? 2d) When? 2e) Why transfer? 2f) Why no transfer?	2a) Persons (FFs, OFs, family etc.) and number who were taught on permaculture techniques by LF 2b) Teaching methods (orally, practically), teaching procedure, teaching material etc. 2c) Location of teaching 2d) Time and period of teaching, (punctual, regular, refreshes etc.) 2e) Motives for transferring knowledge to anybody 2f) Motives for not transferring knowledge to anybody
3) Stage 3 (Acquisition)		3a) Information on practical application of permaculture techniques by taught individuals (FFs and OFs)
4) Relationship	4a) Intra-SG 4b) Inter-SG (COP)	4a) Relationship between LF and FFs, SG-related information 4b) Information on contact between LF and other LFs (digital, physical, regularity, occasions etc.)
5) Training Content		5) Information on permaculture backyard garden training
6) Additional Contextual Information		6) Interesting contextual information not associable to a category
<b>Follower Farmer</b>		
<b>Main Category</b>	<b>Sub-category</b>	<b>Definition/Explanation</b>
0) Stage 0		0) Information on how FF produced food before having been taught by LF on permaculture
2) Stage 2 (Transfer)	2a) Who? 2b) How? 2c) Where? 2d) When? 2e) Teaching evaluation 2f) Relationship	2a) Person (LF, EO, other) who taught FF on permaculture 2b) Teaching methods (orally, practically), teaching procedure, teaching material etc. 2c) Location of teaching 2d) Time and period of teaching, (punctual, regular, refreshers etc.) 2e) Evaluation and opinion on LF's teaching, suggestions for improvement 2f) Relationship between FF and LF, SG-

		related information
3) Stage 3 (Acquisition)	3a) Application 3b) Non-application	1a) Benefits and motives for applying permaculture techniques 1b) Difficulties and reasons for not applying permaculture techniques
4) Stage 4 (Retransmission)		4) Information on teaching of OFs: number, motive, methods, material location, time etc.
5) Stage 5 (Final Scope)		5) Information on practical application of permaculture techniques by taught OFs
6) Training Content		6) Information on permaculture backyard garden training
7) Additional Contextual Information		7) Interesting contextual information not associable to a category
<b>Ordinary Farmer</b>		
<b>Main Category</b>	<b>Sub-category</b>	<b>Definition/Explanation</b>
5) Stage 5	5a) Reception 5b) Application	5a) Information on knowledge of permaculture lessons and description of the knowledge acquisition 5b) Rough information on practical application

No coding system was used for the analysis of the semi-structured interviews conducted with the ACAT employees and NGO directory since each of them had another main focus. Consequently, the interview content was directly used for establishing and enriching the respective contextual, discussion or conclusion chapter of this thesis.

### 3.6 Limits and Biases of Methods

In this complex research, there are limits and biases that might have led to falsified results.

Even though the collaboration with an NGO has innumerable benefits, it may also bear some research related difficulties, such as *gatekeeping*. Since it was the EOs, hence ACAT employees, who organised and recruited the small-holder farmers, it might have occurred that the selection fell upon the most project-involved and most active ones regarding permaculture. Having positive interview answers would reflect well on the EOs. It is possible that weaker, less enthusiastic LFs and FFs have not been selected by the EOs and consequently, the results of this study might only reflect one part of the reality. However, due to time restrictions a different sampling strategy was not realisable.

This sampling method further led to the recruitment of research-unsuitable interviewees: interviewee nr 35 attended a different training of ACAT's than the other LFs; a training that was not financed by EcoSolidar. Additional seven FFs were taught by a LF who went to a different non-



EcoSolidar training. It is possible that the training was similar, but hypothetically not identical. Consequently, learning, application and transfer of permaculture techniques are not directly comparable with the other interviewees. Five apparent LFs or FFs proved to be OFs. Due to this misunderstanding, I had to improvise on the interview guide. Having had the time to prepare it in advance, I could have asked more deliberate and precise questions. Moreover, I intended to exclusively include women farmers in this research in order to add a gender dimension to this study. Because of a miscommunication between me, the Programmes Manager and the EOs, additional five men were recruited for the interviews. Consequently, the gender dimension was neglected.

Further, it might be possible that the farmers associated me with ACAT which could have influenced their answers. Despite me having informed the interviewees on my independence, asking for honest answers and emphasising that their actions will not have consequences, they might have feared for project exclusion by telling negative aspects. Again, a different approach – for example rendering myself in an individual transportation means – could have limited this bias. Because of an inexistence of local maps, a local contact would have been needed to guide me. This was not possible in this research due to a limited number of contacts and a restricted budget.

In qualitative research, answers and statements cannot be true or false because they are subjective and may vary according to the interviewee's realities. Nonetheless, some factual questions were answered discordantly by, for instance, two interviewees of the same SG.

Significant biases might have been induced by the interpretation between Siswati and English. Collaborating this close with someone can lead to conflicts, especially in the case of research where the researcher is fully dependent on the interpreter: after the first 14 interviews I changed translators. Translator 1 started to take the lead on the interviews by asking her own questions, translating incompletely and by holding private, research irrelevant conversations with the interlocutor. Translator 2 equally struggled with translating the interviewees' answers word by word back to English. It could have led to the missing out on important information. By changing translators, it might have occurred that interview questions were asked in distinctive manners and, consequently, the interviewees answered them differently. Furthermore, both interpreters were non-professionals and therefore, translation errors might have occurred. Unfortunately, a restricted budget prevented me from hiring a professional interpreter.

An additional way where interesting information and data got lost is through the mere recording of interviews. Even though all the interviews were audio-recorded and later transcribed, no visual evidence of the interviewees' narratives was registered. The way in which some interviewees described with mimics and gestures, for example their teaching or planting methods, was as

informative as the oral telling of them. Furthermore, great differences between interviewees existed regarding their passion for permaculture gardening.

The fieldwork provided me with a large amount of data, some of which was sorted out according to relevance and correctness. As the interviews proceeded, for instance, I realised that several profile categories as well as interview questions were answered bizarrely. This can be explained through the fact that when designing the interview guides, I was not yet familiar with the local context. Distances and sizes for example are difficult to assess by the interviewees. Likewise, because of seasonality, lack of record keeping, the household salary was difficult to estimate. Even though the intended categories and questions might have led to interesting results, I acknowledged that these results would not correspond to reality and were, consequently, eliminated. A lot of collected data that could not be integrated in this thesis may be analysed in future research.

Another bias is linked to the empirical part of this research. Whilst interviewing one farmer it sometimes transpired that another farmer, waiting to be interviewed, sat close to the interviewee. This might have had an influence on their answers.

The first round of interviews was done over two successive days, which left no time to adapt the interview guide. This could only be done after 14 interviews and consequently, the first 14 might be slightly different.

The intended number of 20 interviewees per agricultural group was not reached (18 FFs and 5 OFs) because of long distances and insufficient time resources. This has some consequences the quantitative part of this research: The studied population was, with 43 interviewed small-holder farmers, quite small and all the statistical results are therefore not representative.

Various biases and limits were discussed in this section that are related to data collection, fieldwork, analysis and external factors. Hence, all the results presented in the following chapter are only valid for these 43 interviewees in Lubombo and Shiselweni who are involved in ACAT's training on permaculture backyard gardening.

## 4 Results

The results of this study are presented in the following two sections. Firstly, the presentation of the research's context, meaning socio-economic information of focus regions, the backyard garden workshop and other research relevant information I gathered during the fieldwork. And secondly, the results of the investigation concerning the transfer of knowledge, or in other words; the answers to the research questions.

### 4.1 Contextual Results

The Kingdom of Eswatini is divided into four agroecological zones, each of which is inhabited by interviewed small-holder farmers. The cooler and relatively rain-laden Highveld hosts 7 of the interviewees (interviewees nr 37 – 43). Nine interviewees live in the fertile Middleveld (interviewees 6 – 14) and 19 in the drought prone lowveld (interviewees nr 1 – 5; 15 – 28), which is the most infertile zone. The neighbouring subtropical Lubombo Plateau is inhabited by 8 interviewees (29 – 36) (see Figure 4). As diverse as the ecological zones are the livelihood activities and livelihood strategies of the interviewees. The following sections will present the ones mentioned by the interviewees, the most recurrent one being small-scale farming. In a next step, the permaculture backyard garden training is presented, and how this specific technique aims to mitigate the effects of climate change.

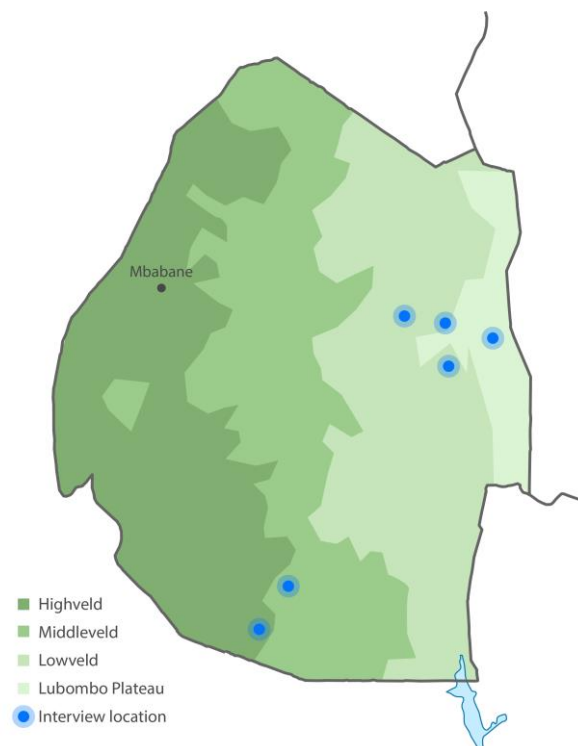


Figure 4: Interview Locations (Source: Alisa Autenried)

#### **4.1.1 Livelihoods in Rural Shiselweni and Lubombo**

The term of livelihood in its simplest sense refers to the means of gaining a living. *“A livelihood comprises people, their capabilities and their means of living, including food, income and assets”* (Chambers & Conway, 1991, p.1). During the interviews four main livelihood activities were identified: formal employment in commercial agriculture, migrations, self-employment and small-scale farming.

##### **4.1.1.1 Formal Employment (in Commercial Agriculture)**

Formal employment is mostly concentrated in the urban regions of Eswatini. Out of 43 interviewed persons of rural Lubombo and Shiselweni, merely one interviewee (nr 21) is formally employed. She even has three formal employments at the same time as “weeder”, cotton-picker and domestic help. Eight interviewees however, stated that their husbands are formally employed (interviewees nr 7, 9, 20, 23, 27, 28, 31, 34).

Nonetheless, the agricultural sector also provides formal employment in rural areas. In fact, agriculture contributes to 27% of the national formal employment, to 17% of the Gross Domestic Product (GDP) and to 33% of the foreign exchange earnings (Moyo, 2013).

Notably, the sugar cane industry has high financial returns and employs nationally round 16'000 people and another 20'000 benefit indirectly from it. In fact, this sector counts for 35% of the agricultural output, for 35% of agricultural wage employment and of 18% of the national output (Mabundza et al., 2014). According to the Swaziland Sugar Association (SSA) their industry is a good opportunity for small-scale farmers to get employment and thus, an income and a way out of poverty (SSA, 2012). Interviewee nr 21 for instance, who is a formal employee of the sugar cane industry, earns SZL 25 per day<sup>17</sup>. As a “weeder” her task is to remove weeds in sugar cane plantations. The Swazi Government encourages small-holders' participation in this business (Manyatsi et al., 2013). However, the use of chemical herbicides increasingly deprives weeders of their jobs (informal discussions, 2019).

Additionally, the cotton industry, which is slowly replacing maize, provides a source of income for around 3'000 small-holder farmers.

##### **4.1.1.2 Migration**

Migration is another popular livelihood strategy adopted by many Swazi households to find employment elsewhere and consequently, support the family through remittances. Men, for instance, have migrated to South African mines since the colonial period (McFadden, 1982). This, for

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<sup>17</sup> 25 Swazi Lilangeni (SZL) or South African Rand (ZAR) equal approximatively 1.8 United States Dollar (USD) (currency conversion on 04.07.2019)

instance, is the case of the husbands of interviewees nr 9 and nr 27. In the last twenty years, emigration has increased heavily and was progressively undertaken by women as well (Prince Hlangusemphi, 2013). The salary in their working sectors abroad is often low, the migrants can seldom visit their families in the Kingdom (personal observations and informal discussions, 2019). In addition to international migration, the precarious employment situation pushes Swazis all the more to look for work in urban regions within Eswatini. This is the case of all the interviewees' husbands with formal employment in Eswatini (Interviewees nr 7, 20, 23, 28, 31, 34).

#### **4.1.1.3 Self-Employment**

Various forms of self-employment are a common livelihood strategy I encountered during the interviews in the rural areas of Lubombo and Shiselweni. Twenty interviewees created their own income generating activity, such as the manufacturing and selling of grass mats – or similar wickerwork – (interviewees nr 4, 12, 15, 24, 41) or of care products such as Vaseline (interviewees nr 8, 12, 30). Further, activities like baking bread buns (interviewees nr 23, 24, 29), sewing (interviewees nr 11, 24, 37) and begging (interviewee nr 36) contribute to the household's budget. Others (interviewees nr 16, 17, 19, 26, 30, 33) call themselves wholesalers because they purchase products, such as bananas or clothes, in Eswatini, South Africa or Mozambique and resell them with a surcharge in both urban and rural markets in Eswatini. Interviewee nr 27 even owns a small grocery shop, interviewee nr 20 is a hairdresser and interviewee nr 5 volunteers at a child care centre, from which she gets a small financial contribution.

#### **4.1.1.4 Small-scale Farming**

Subsistence agriculture is the most important livelihood strategy of Swazis. 1.2 million, hence the large majority of the population practices it. Subsistence agriculture refers to the cultivation of crops and the keeping of livestock for the personal consumption (IFAD, 2007; FAO, 2018; interviews, 2019). Except for interviewee nr 18, all the interviewees practice at least one farming activity to support the household with food: either cultivating fields, practicing animal husbandry, or gardening. However, many of the interviewed small-holder farmers occasionally sell harvest surpluses for a financial contribution to the household budget (Interviews, 2019). Since cash income made out of produce is not included in the definition of subsistence agriculture, I will, from here onward, speak of small-scale farming.

Swazis clearly distinguish between what they call "farming" and what they call "gardening": the former means the cultivation of crops like maize, beans, sorghum etc. on open fields; the latter refers to the cultivation of only vegetables on smaller plots next to the house.

All interviewees except of 4 (interviewees nr 7, 13, 20 and 21) have medium-sized<sup>18</sup> fields around their homesteads where they cultivate mostly maize, sweet potatoes, peanuts, sorghum and different bean varieties. Normally, the fields are cultivated in the warmer months, between October and April. If the households' budgets allow it, tractors are hired to plough the fields before planting. Interviewee nr 14 still harnesses cows to do so and some plough their fields manually: for example, interviewee nr 22 does not want to damage the soil through the machinery. The fields are exclusively rainfed since water is scarce and fields are too large to water by hand. The seeds to plant the fields are either saved from one year's harvest and planted the following year (seed saving practice) or purchased<sup>19</sup>. Interviewee nr 31 indicates that she lacks money to invest in the equipment for a seedling nursery and thus, she cannot diversify her livelihoods further. Most of the interviewees apply chemical pesticides and fertilisers on their field in order to get a rich and undamaged harvest. The chemical fertiliser comes in sacks with granular and chemical fertiliser is used in sprays (interviewee nr 43). The application of the chemical inputs on fields is considered, by most interviewees, the "traditional" way to cultivate. Merely two interviewees state that chemicals are not traditional but linked to civilisation, a technique that emerged in the 1970s (interviewees 9 and 31).

It is not as common for Swazi people to have vegetable gardens as it is for them to have fields: vegetables consume a lot of water, which is a rare resource in several parts of Shiselweni and Lubombo. However, about half of the interviewees (interviewees nr 2, 3, 6, 14, 20, 22, 25, 26, 29, 30, 32, 33, 34, 35, 37, 38, 40, 42, 43) had gardens before ACAT's workshop on backyard gardening. Because of the vegetables' water needs, gardens are irrigated. This is done by using mainly basic irrigation such as watering cans, buckets and other water containers. Two interviewees indicated using more sophisticated irrigation systems, such as drainage of river water through furrows to the garden (interviewee nr 8). The interviewees that garden get their irrigation water from different sources: four (interviewees nr 5, 25, 36 and 37) need to fetch the water from distanced boreholes or wells. Nine persons (interviewees nr 8, 22, 29, 32, 33, 34, 35, 40, 41) fill water baskets in a river and carry it back to their gardens. Interviewees nr 7, 14, 26 and 42 are connected to the main water supply and get their water through pipes. The exact origin of this water is however unknown. Nineteen of the interviewees who garden indicated possessing water tanks or self-made ponds where rain water is harvested and *inter alia* used for irrigation (interviewees nr 2, 3, 4, 9, 11, 12, 16, 22, 23, 25, 26, 27, 28, 31, 32, 33, 34, 42, 43).

People who do not grow their own vegetables either do not consume any or buy them from neighbours or shops. Crops typically grown in the garden include lettuce, spinach, tomatoes, onions,

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<sup>18</sup> According to my observations and the interviewees' tellings, the size of fields are maximum 2 hectares.

<sup>19</sup> Seeds are purchased from shops, markets, other farmers, ACAT or Khuba Traders (agricultural supply traders) (Interviews, 2019).

garlic, green pepper, beetroot, different chili varieties and cabbage. Like on the fields, chemical fertiliser and pesticides are commonly applied on the vegetables. The vegetables are grown in the cooler months of the year, from May to October. The sizes of gardens are much smaller than those of the fields. The interviewees' indications of those sizes however, were not given in square metres, but in spatial references<sup>20</sup>. Through my personal observations, I estimate the average size of a vegetable garden between 30 to 40 square metres. Not all gardens are in or around the homesteads of the interviewees, two interviewees also participate at a community garden. Interviewee nr 43 started the community garden with people living with HIV. Everybody of the group has a small plot in this garden and may dispose freely of its products (Interviews; personal observations and informal discussions, 2019).

Besides farming and gardening, the interviewees perform a third agricultural activity, animal husbandry. Thirty-six out of 38 interviewees possess at least one animal and the average number of livestock per household is 34. Over 90% of the interviewees keep chicken, around 40% keep goats, 32% cattle and 13% possess pigs. One interviewee (interviewee nr 31) also owns three turkeys. Animals are mainly kept for meat consumption and in a few cases for milking. Livestock is free ranged and scarcely ever guarded (Interviews and personal observations, 2019). This often leads to them destroying unfenced vegetable gardens, which is one of the main motives to not cultivate vegetables (see subsection 4.3.2.2).

Small-scale farming is considered a major livelihood strategy of the Swazi population (FAO, 2018; IFAD, 2007). This is confirmed by the interviewees of whom 66% consider farming and gardening their principal income generating activity. Interestingly, FF are less involved in agriculture and have more diverse livelihoods than LFs. In fact, LFs pass more than 90% of their active time in their field or their garden, whereas the FF merely dedicate little more than 50% of their active time to it. The agricultural activities of the OFs is very limited and no active time is dedicated to them. Agriculture is a fulltime employment for three quarters of the LFs, but not even for a third of the FFs. The produced vegetables and crops are channelled to two destinations: personal consumption and selling. On average about 65%<sup>21</sup> of the self-produced products are consumed by the interviewee's household. By doing so, small-holder farmers contribute to guaranteeing their food security and at the same time no money is spent on the purchase of foodstuff. This money can be used for other purposes. Eleven interviewees indicated consuming their whole harvest and not selling any of it. Less than half (16 interviewees) of the interviewed small-holder farmers sell 50% or more of their harvest and merely 6

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<sup>20</sup> Garden sizes were estimated through spatial references such as «from this tree to the road, to the bush, to the cow» (Interviews and observations, 2019).

<sup>21</sup> Normally, the interviewees responded for the produce of their garden and fields combined. It is possible that some interviewees related their answer to either of the two. Therefore, the number might be approximative.

interviewees sell more than 80%. In conclusion, agricultural activities are generally undertaken for the nutritional sustenance of the household. Some interviewees stated that they only sell some specific crops that, for example, spoil easily. The typical customer is private contacts like neighbours and SG members. Five interviewees, four of whom are LFs, also sell their produce at public spaces: interviewees nr 4, 22 and 26 at market stands in urban settings. Interviewee nr 39 sells to a local factory and interviewee nr 40 took the opportunity to sell her produce at a place where older people stand in queue to get their elderly grants. Selling the produce generates an income. However, according to interviewee nr 11 she would like to sell her produce, but she has no access to a market. Access to markets are generally impeded by long distances, no available transport and poor-quality roads (Interviews and personal observations, 2019).

This subsection on livelihoods underlined that agriculture is the backbone of many Swazis' lives. However, Eswatini has experienced strong climatic changes that render agriculture exceedingly challenging.

#### **4.1.2 Climate Change**

Climate extremes frequently challenge food security in Swaziland through decreased harvests, death of livestock caused by thirst and increased prices on food imports from South. These climatic events include periods of drought (2002, 2007, 2014, 2016), periods of heavy rains resulting in floods (2009), and the effects of a strong el Niño characterised by particular storms, wind, and hailstorms (2014). (IRIN, 2009; NDMA, 2015; UN Country Team in Swaziland, 2016).

Not only climate extremes, but also climate change poses challenges: according to an informal discussion with an ACAT employee, the climatic conditions of the last fifteen years have greatly disturbed the farming in Eswatini. Spring (October to December) used to be the planting season of various crops because rains were expected in this season. The harvesting season followed in Summer (January to April, depending on the crop) when the climate was dryer and hotter. Fifteen years ago, however, the seasons started to shift; the rainfalls were left out in autumn and set in in summer. Consequently, newly planted crops dried out in their early stage or rotted in their advanced stages. Crops have failed in many successive years and many of the agriculturally active people have not known how to deal with the new conditions. Indeed, the planting window has shifted and the well-tried crops, such as maize, are not suitable for dry weather conditions anymore. Interviewee nr 15 explained that she abandoned the cultivation of maize and learnt how to cultivate more drought resistant crops (e.g. sorghum, peanuts, mung beans and sweet potatoes) in order to have food. Manyatsi et al. (2013) underlines the necessity to improve the local communities' understanding regarding climate change. Swazi smallholder farmers need to rethink the local cultivation system and acquire new knowledge and techniques in order to adapt to a changing climate.



Besides using the indigenous knowledge to interpret signs of flora and fauna on weather conditions, the Swazis have started employing various livelihood strategies to cope with droughts and floods. They include the reception of food aid from NGOs and private companies and the selling of livestock to come up for basic needs. Furthermore, the social network plays an important role in the response to natural disasters: different support systems between neighbours, relatives and household members are established (Manyatsi et al., 2013).

The government, many private companies, and NGOs recognise the need to help the rural community to further mitigate the effects of climate change (Manyatsi et al., 2013). ACAT is one of these organisations and their project on organic farming aims to improve the livelihoods of small-holder farmers. The corresponding workshop on the permaculture backyard garden is composed of six topics, all of which seeking to improve small-holder farmers' food security, livelihoods and, at the same time, mitigating the effects of climate change.

## **4.2 Permaculture Backyard Garden Training**

This subsection explains the functioning and the detailed content of the permaculture backyard garden workshop. This is done via the interviewees' explanations, and they further state the benefits and obstacles of the practices in their region.

Permaculture is an alternative agroecology movement and refers to both permanent agriculture and permanent culture. This movement was founded by Bill Mollison and David Holmgren in 1970 and was defined as *"the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of landscape and people providing their food, energy, shelter, and other material and non-material needs in a sustainable way"* (Mollison, 1988 in Ferguson & Lovell, 2014, p.253). The ecologist H.T. Odum heavily influenced permaculture by proposing a design where distinctive species exchange their components and thus create a productive ecosystem. The assemblage of the right species in a given space will lead to a transfer of energy and resources between them and consequently substitute a maximum of human labour and material inputs (Ferguson & Lovell, 2014). The design of the permaculture garden is crucial to guarantee this exchange between species, hence the self-sustainability of the system.

In this research, permaculture is not regarded as a theoretical agroecological movement but rather as a collection of gardening practices which are environmentally and ecologically sound. Using planting methods that are in line with permaculture allow the small-holder farmer to more efficiently produce vegetables both for subsistence and for commercial purposes. A key principle is to renounce

of external inputs such as chemical fertiliser and pesticides and to instead use available, natural material. At the workshop on permaculture gardening the LFs were taught *“how we can produce something on our own. Something that is not expensive, something that is not harmful (no chemicals), something that we can get where we are (available material) [...] the produce from that soil is healthy”* (Interviewee nr 12).

The content of the permaculture training, respectively the six lessons, are presented in the following subsections. This is predominantly done with quotations of the LFs, which also gives an idea on how they explain the lessons to the FFs. In addition, the manual ACAT employs to teach permaculture at their training (LUSIP, n.d.) has contributed to the following subsection. It has to be noted that the six permaculture lessons are interrelated and complementary. In practice they cannot be clearly separated from one another: every practice serves several purposes. I separated them for a simplified analysis (see subsection 3.1.1.2).

#### **4.2.1.1 Compost**

The first element of the permaculture vegetable garden is the compost whose objective is to keep the soil of the garden bed fertile. It is produced in a pit in the ground that is filled with a variety of organic material. The installation area of the compost pit must be protected from heavy wind, straight sunlight and running water, preferably under a tree. The pit is 30 centimetres deep, 1.2 metres wide and 1.5 metres long and consists of a first layer of crop residue, such as maize stalks. The following layers are dry grass and manure of approximately five to ten centimetres in thickness. This is followed by two layers of respectively five centimetres of topsoil and green vegetation. The pit should then be watered and complemented by wood ash. These steps must be repeated until the heap reaches a height of 1.5 metres. On top, the gardener must add topsoil and grass and cover the whole compost with banana leaves. A six-week waiting period follows, in which the compost must be kept humid at all times and turned over after three weeks' time. After six weeks the compost is ready to be applied and then *“we open lines in the garden and put it there”* (Interviewee nr 3). The rotting organic material develops a lot of precious nutrients that keep the soil of the garden bed fertile (LUSIP, n.d.; Interviews, 2019).

#### 4.2.1.2 Liquid Manure

Liquid manure, also called *juicing* (interviewee nr 35), is an organic fertiliser that adds nutrients to the garden that are needed by the planted vegetables and the soil. Interviewee nr 38 explains the elaboration of liquid manure well: “You take (animal) manure and you put it in a sack, it must be half of the sack. Then you get a container, maybe 1.2 metres (of height), those plastic containers, you pour water.



When you pour water, it must half fill the container.

Then you get a wire or something to tie the sack on a

log. You roll the wire on the log and you put it (the sack) inside (the container) for 4 to 7 days [...] You can also shake it, so that what is inside (manure) can come inside the water. [...] And then the liquid manure will be good for you to use (on the garden). [...] Then when you want to apply it on the seedlings, you dilute it because the manure is strong! If you use it like this (undiluted) it will burn the seedlings. [...] If you use five litres of manure, you also use five litres of water. And when you apply the manure, the bed must be wet, you have to water it (first), so that when you apply the manure it will go down easily (facilitated infiltration).” Interviewee nr 31 adds that “for the liquid manure I just use goat manure [...] because it is more powerful. I use cow dung to make the compost, but to make the garden richer I use goat manure” (see Figure 5).

Figure 5: Liquid manure of Interviewee nr 22 (Source: Alisa Autenried)

#### 4.2.1.3 Planting Methods

The planting methods are the central part of the permaculture garden because they refer to the preparation of the garden bed and the planting of the seeds and seedlings.

“You make the bed: it is 1.2 metres (width) and this side (length) is as long as desired [...] At first you till the soil a little, not too much so that the worms [...] who cause manure [...] will remain there (5 to 10 centimetres). The good worms must stay. After tilling the soil, you take ash, you do that to scare the ants. After that you spread manure about 5 to 10 centimetres, then you get newspapers and you spread them on top and you water them, so that they retain the moisture. After that you can add the compost [...] and put it there as a layer, also 5 to 10 centimetres. Then you take grass (mulch) and you cover the bed.” Interviewee nr 43 explains that the mulch does not only suppress weeds from growing but also prevents the quick evaporation of water. The interviewee 38 confirms this and describes further advantages of this garden bed: “it retains the moisture for a long time. And it’s fertile. And it lasts a long time when you have planted those beds, you can’t destroy it [...] It doesn’t waste a lot of energy, it doesn’t waste a lot of time. Once you have made the bed you can work. It’s easy.”

After having prepared the garden bed, the planting can start: *“After covering the bed, you can take a stick and you make holes. When you make the holes in the bed, you make sure that the bed is 1.2 metres or 120 centimetres at the side (width).* The principle of the planting methods is what interviewees referred to as *lining* and *spacing*, meaning to plant seedlings in lines on the wide side, with equal spaces in between. Interviewee nr 31 illustrates with a stick what the distance needs to be between two seedlings. Interviewee nr 38 indicates that the distance between two plants, and therefore the number of plants on one line *“depends on the vegetable we are planting. [...] You make 6 holes for onions, then the others like lettuce only 4 holes, then tomatoes, cabbage, green pepper is 30 to 45 centimetres from each plant because they grow big: so, it’s three holes. [...] The holes must be equal (equally separated from each other) and they must be in a straight line!”* The seedlings and seeds get put in the holes, and generously watered. The equal spacing and lining assures the vegetable to develop to its full size without being limited by the leaves of a neighbouring plant.

#### **4.2.1.4 Pest Control**

Vegetables attract all sorts of insects, worms and other organisms that destroy the plant. They are considered pests and gardeners dispose of a certain variety of methods to repel them. The pest control in this permaculture vegetable garden is not chemical but organic. In total, six pest repelling methods are taught at the training, five of which are linked to special planting techniques. In this research the focus is on determining to what extent the knowledge presented here is transferred between the farmers. Therefore, I separated the planting methods that control pests from the ordinary planting methods like spacing and lining.

The first technique that repels pests is strongly linked to the spacing and the lining of the seedlings in the vegetable garden. Interviewee nr 2 explains that *“we must use the vegetables that have a strong smell like onion and garlic. Those vegetables must surround the other veggies like cabbages and tomatoes to protect them from the insects.”* Interviewee nr 22 adds that *“you plant the strong-smelling crop outside, as a first line of defence.”* As interviewee nr 38 clarified above, the seedlings of the same variety are planted in lines in order for the vegetable to develop to its full size. To repel insects *“you divide them all (the lines) by onions [...] lettuce, onion, spinach, onion, tomato, onion.”* Onions may also be replaced by garlic which has the same pungent smell that is disliked by some pests.

The second pest controlling planting method concerns the cutworm. The larvae of this night-flying moth is a caterpillar that cuts down young plants. Interviewee nr 38 explains the method of how to ensure the cutworm does not cause damage to the newly planted vegetable seedlings: *“You put the seedling in the hole. After that you cut dry sticks as small as the pipe of this pen [shows the ink pipe of a regular pen] and then you put it like this (to the left and the right of the seedling). It is a dry wooden*

*stick. So, when the cutworm comes for the seedling, it just does like this [imitates the cutworm with her finger trying to grab the seedling but gets the wooden stick first]. So, it's a dry stick and the worm can't bite anything, so it leaves. When there is not this protection (of the stick), the worm just cuts the seedling."*

Whilst explaining the layering of the garden bed, interviewee nr 38 mentioned wood ashes. This organic material does not only contain nutrients that render the soil fertile but also fends off plant-eating ants.

A method to avoid the transmission of diseases between the planted vegetables consists in a special way of planting. Interviewee nr 29 explains that *"basically there are rooted plants (e.g. beetroot) and leafy plants (e.g. lettuce, spinach) [...] you don't plant the same type of plants next to each other [...] to avoid diseases, communicable diseases."*

Interviewee nr 27 explains that *"there is a worm<sup>22</sup> that eats all the time. It won't go a metre without eating. So, to defeat it, you create a one metre space (between the vegetable garden and the grass surrounding it). So, it's one metre on all the 4 sides (of the garden bed). So, it (the worm) won't be able to get there (the garden) because there is nothing in between the garden and the grass."*

The sixth method of controlling pests is not linked to a special planting method but is considered an organic pesticide that can be applied on the vegetables: the botanical spray. *"You don't use chemicals for gardens and the vegetables. But you use natural things, plants that are smelling, some are bitter, but [...] they are not toxic. [...] You use a bucket of 5 litres (of water). [...] You take those plants that are smelly or bitter [...] the size of a closed fist and then you add them. After 24 hours in the morning you must use the leaves of a wattle tree and put it inside the bucket and put it (the botanical spray) on the leaves of your vegetables, even underneath [...] So, the pests will never damage your crops"* (interviewee nr 38). The leaf of the wattle tree serves as a brush to apply the liquid solution on the vegetables. The smelly plants that are put into the water are for example onions, garlic, aloe-vera, chili, crushed pepper and various indigenous herbs (LUSIP, n.d.).

#### **4.2.1.5 Crop Rotation**

The fifth lesson taught at the permaculture garden in Mbuluzi concerns the rotation of crops. This signifies that after harvesting, the same spot is planted with a different type of vegetable. Interviewee 29 explains: *"let's say you planted leafy plants (lettuce, spinach) this year, then you don't return leafy plants next year: you would go for something rooted like beetroot"*. Varying between vegetables of different groups assures a more sustainable use of nutrients in the soil. Five families of vegetables are taught at the workshop. These are fruit vegetables (e.g. tomatoes, egg plant, pepper),

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<sup>22</sup> The name of this worm is unknown.

leaf vegetables (e.g. lettuce, spinach, cabbage), root vegetables (e.g. beetroot, carrots), bulb vegetables (e.g. onion, garlic) and legumes (e.g. different beans). Once in a while, the gardener must also allow the soil to lie fallow for a reasonable time in order to recuperate.

#### **4.2.1.6 Grey Water Filtering**

Grey water filtering is a synonym for recycling of used water. By purifying dirty water and reusing it, water can be conserved, which is precious in dry areas like the Lowveld. *“We have a way of cleaning water [...] it is not an expensive thing, you use what is available. You need a container, a big one, then you must have two planks that you put on top, and then a (smaller) bucket (on the planks). You must make 5 holes (in the bottom of the bucket). Then you take 5 stones, the size of a closed fist and you put them inside the bucket (on the holes). You cover the stones with a sack and then you take crushed stones and then you put them on top of the sack [...] You take river sand that you also apply on top of the crushed stones [...] and you end with other crushed stones on top. So, when you wash your dishes or clothes, you take that water and pour it there in the bucket. And then, in the container, it will come clean, so you can use it for watering your vegetables. That is an easy way of getting water even if there is not enough water”* (interviewee nr 38). Interviewee nr 30 specifies that *“you don’t just use any type of water; it’s soap dependent [...] there are chemical soaps. Do not use them, do not filter that water, it’s useless. However, there are other soaps like (names brands), you can filter those [...] with a natural basis.”*

#### **4.2.1.7 Benefits**

This subsection concentrates on the five main advantages and benefits of the permaculture gardening, such as they have been experienced by the interviewees who applied them. Obstacles and difficulties related to the practices will figure at a later stage of this thesis (see subsection 4.3.2.2).

##### **Economic Benefits**

The economic benefits of the new techniques were mentioned most frequently and were very strongly emphasised by the interviewees. For instance, thanks to the learnt permaculture practices the interviewees know now how to start and maintain a garden where they can grow vegetables. Growing the vegetables themselves, allows them to save money because they do not have to buy vegetables anymore. This however, is not the most mentioned reason for money saving, but as interviewee nr 12 underlines *“I am saving a lot of money because before I was putting money aside for fertilisers and now, I can channel that money into something else.”* This quotation reveals that the spending of money on external inputs is no longer done because the farmers were taught about how to use readily available material for, especially, the production of their own natural fertiliser and pesticides (liquid manure and pest control). Besides that, *“We are making money from something on which we spent a lot (before) [...] we don’t buy, so when we sell it’s a profit”* (interviewee nr 9). This is

because the farmers may sell any vegetable surplus they have and thus make an income. In a second step, the saved money can be invested into something else, as interviewee nr 31 emphasises: *“We have gained some independence because now we can focus on our household needs, the electricity units and basic stuff, bread, and my husband’s salary can go towards the kids, their upbringing.”* Likewise, this newly gained independence is well illustrated by interviewee nr 2 *“(Before the garden) my kids would buy all the groceries for me, but now (with the garden) they only buy mielie-meal<sup>23</sup> and rice because now I produce almost everything on my own like spinach, cabbages and all the like. It is really helping me a lot and it is a relief for my kids because they also have their own responsibilities. So, now they know ‘Mum is doing well’”*. The financial benefits of the newly applied techniques help to combat poverty (interviewee nr 29) through diversified livelihood strategies.

### **Sanitary Benefits**

According to interviewee nr 29, producing food organically also prevents diseases. Quite a few LFs mentioned these health benefits as motivation to use permaculture techniques at home. *“One of the main reasons is the health benefits because in permaculture we don’t use chemicals. The reason why people (who do not produce organic) have big stomachs is because of the chemicals they eat”* (interviewee nr 37). Equally, interviewee nr 3 states that *“the chemicals cause sicknesses because they are not washed away. Some particles would remain (on the vegetables) and may cause sicknesses [...] we are healthy now.”* Interviewee nr 37 even uses the health benefits as a sales strategy: *“I always tell the people, the neighbours that when they come to my house, that’s where they would get good food, food that will improve their health because it’s good food and it’s healthy food. There are no chemicals used.”* Interviewee nr 2 does not only reveal the health benefits from renouncing on chemicals, but also underlines that now, thanks the availability of fresh vegetables she has a healthy diet.

### **Increased Productivity**

Improved food productivity is another motivation cited by the interviewees for adopting permaculture techniques. A large majority of the interviewees mentioned that through the new practices their food production improved in quantity and in quality. This is well illustrated by the statement of interviewee nr 10: *“I wanted to apply the knowledge (of permaculture) because [...] the produce it’s just good and it grows faster, and we are healthier. The leaves (of the vegetables) are big.”* According to interviewee nr 3 there is no hunger in her family anymore and they have enough food until the next harvesting season. Interviewee nr 29 underlines another interesting aspect by saying that *“it (the vegetables) matures faster. I have a neighbour who planted using the old*

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<sup>23</sup> Mielie-meal is a maize-based flour. It is a staple in Eswatini and mostly eaten in the form of porridge mixed with sour milk.

*techniques ('traditional') and I used permaculture and my crops matured faster. And there is a better success rate. Less failure [...], the harvest is more."* We can see that through a smaller failure rate, quicker growth and larger sizes food quantity is increasing. Quickly available vegetables are largely appreciated by the interviewees: *"with permaculture, if you want to eat it [snaps her fingers] you can eat it right there, you just wash it and there you go."* Instead of with *"mature plants that are sprayed with chemicals, there is a waiting period before you can eat them."* Interviewee (nr 37) states that permaculture leads to an inexhaustible supply: *"Spinach replenishes itself. I can eat spinach six months straight because it grows, and I harvest the top parts (the outermost leaves), then it will regrow, and I harvest the top parts again and it regrows again. The harvest replenishes itself all the time, lettuce does too."* She had a conventional garden before she started cultivating it the organic way, therefore I deduce that this technique is not applicable with the chemically treated garden because, according to interviewee nr 22, the conventional vegetable spoils faster than the organic one. Furthermore, he is *"impressed by the flavour of the organic produce."* In conclusion, we can say that the quantity, quality, the quick growth and flavour of the permaculture produce convinced many of the LFs to apply what they learnt at the training.

### **Water Saving**

Parts of Lubombo and Shiselweni are drought prone and thus water is a precious resource. Some LFs (interviewees 1, 4, 22, 38) underlined that through the application of permaculture techniques the little water that is available can be invested wisely. Interviewee 38 gives two examples on how water can be saved: *"The grass (mulch) with which we cover the plots (garden), it retains the moisture for a long time whilst we are doing other jobs. You can find that your vegetables are not affected by the drought. [...] There is a problem with water on this side (Shiselweni) but in Mbuluzi they taught us how to purify water [...] we are using water for washing dishes [...] so we have a way of cleaning that water."* The different planting methods and the grey water filtering allow farmers, who even live in very dry areas, to grow their own vegetables.

## **4.3 Results Transfer of Knowledge**

This section concentrates on the actual F2F approach, meaning the transfer of permaculture knowledge between the small-holder farmers in Lubombo and Shiselweni. It is structured according to the temporal stages of knowledge transfer (see subsection 2.4)

### **4.3.1 Stage 0: Initial Situation**

When investigating the transfer of knowledge that aims for change, it is interesting to know the situation before the arrival of the new knowledge. In this case it was important to learn about the interviewee's gardening activity and knowledge on permaculture before the training. Half of the LFs



and FFs (interviewees nr 2, 3, 6, 14, 22, 25, 26, 29, 30, 32, 33, 34, 35, 37, 38, 40, 42, 43) had maintained vegetable gardens before ACAT's workshop, upon which a majority applied chemical fertiliser and pesticides. Three LFs (interviewees nr 35, 36, 37) claimed to have already had knowledge previous to the training on aspects taught in the training, such as crop rotation, composting or the skipping of chemical inputs.

### 4.3.2 Stage 1: Pre-transfer

LFs are supposed to transfer the six lessons on permaculture gardening to the FFs of their SGs. Before investigating this, it is important to make sure that the LFs genuinely learnt the six lessons in which they were trained. The first subsection of stage 1, the pre-transfer, shows and discusses the findings of this learning process. After this, the practical application of the learnt topics by the LFs is investigated. Due to structuring reasons, application of the lessons by the LFs figures in stage 1, even if in reality it might also take place during the transfer.

#### 4.3.2.1 Learning

At first, the 20 LF were openly asked what topics they learned at the permaculture training course, without listing the lessons. Table 6 about the *unprompted lessons* indicates that two lessons (crop rotation and grey water filtering) were only mentioned by three interviewees, whereas, more than half the interviewees remembered composting, liquid manure, pest control and planting methods.

In a second step, I brought up the lessons the interviewee had not evoked on his/her own initiative. Table 6 shows that everybody remembered topics 1 to 4 after I reminded them. One interviewee (interviewee nr 35) indicated not having learnt about grey water filtering and planting methods. This is because she has not attended the same training than the other LFs. No information is available if interviewee nr 8 learnt about grey water filtering.

Table 6: Learning of Permaculture Lessons (Lead Farmers)

Lesson →	Compost	Liquid Manure	Crop Rotation	Pest Control	Grey Water Filtering	Planting Methods	Total learning units
<b>Learning</b>							
<b>Yes</b> (nr of interviewees)	20	20	20	20	18	19	117/120
<b>No</b> (Number of interviewees)	0	0	0	0	1	1	2/120
<b>Unprompted</b>	13	13	3	14	3	12	58/117
n/a	0	0	0	0	1	0	1

The examination of the learning about permaculture is not *per se* part of the process of knowledge transfer, but its inevitable basis. Out of 120 learning units (20 LFs learning about 6 topics each) merely two were not achieved (interviewee nr 35) and one is not clearly confirmed (interviewee nr 8). The achievement of 117 out of 120 learning units seem a pertinent basis to investigate the transfer of said knowledge. Nonetheless, it needs to be mentioned that I could not test how profound the interviewees' knowledge of the lessons were.

Only half (58) of the 117 learning units were named spontaneously (Table 5). Consequently, we can say that learning about something does not necessarily mean remembering it. Especially with regards to crop rotation and grey water filtering. Interviewee nr 24 confirms this matter saying that at the training in 2017 she learnt the six lessons of permaculture, but today, she does not have the knowledge about it anymore. How this affected her transfer of knowledge will be discussed in a following section (see section 4.3).

It is possible, that the unprompted topics are better, or more frequently applied than those the interviewees forgot to tell at first. This assumption will be confirmed or rejected in the next subsection about application (see subsection 4.3.2.2).

#### 4.3.2.2 Application

Table 7: Application of Permaculture Lessons (Lead Farmers)

Lesson →	Compost	Liquid Manure	Crop Rotation	Pest Control	Grey Water Filtering	Planting Methods	All lessons	3 topics	None	1 lesson
Application										
<b>Yes</b> (number of interviewees)	15	14	16	15	14	15	14	1	3	2
<b>No</b> (number of interviewees)	5	6	4	5	6	5	-	-	-	-

The 20 LFs were asked if they practically applied the six topics of permaculture in their homesteads. As Table 7 illustrates, between 14 to 16 farmers applied the relative topics; liquid manure and grey water filtering being, with 14 applications, the least practiced. This is followed by composting, pest control and planting methods, with 15 applications each. With 16 LFs practicing it, crop rotation is the most applied topic of the permaculture training. Fourteen LFs apply all six topics at home and two practice at least four of them. There are also three LFs who do not apply any, and two solely apply one of the methods at home. One might conclude that if the interviewees apply permaculture, they are likely to apply the entirety of the techniques. This may be due to the fact that the lessons are interconnected and complementary.

Having been intrigued by the interviewees' high application rate, I wondered if they had not been sceptical. Most of them had doubts about it and needed proof of success before trying it themselves: *"I was sceptical at first, the EO told me about it and I was like 'will this work?'"* She then saw the permaculture garden from the demonstration farm in Mbuluzi and *"after the training, I was convinced, I loved it"* (interviewee nr 29). She then justifies it with saying that *"permaculture is new, but fertiliser is new too"*. The modernity of the technique did not discourage her. Other interviewees were merely curious and ready to try something new: *"the proof is in the product, when I tried permaculture, everything improved."* (interviewee nr 22) or *"I am the kind of person that when I am ready to learn, I am ready to learn!"* Interviewee nr 36 was not sceptical before applying the permaculture methods in her garden because she already had some knowledge about organic agriculture before going to the training and knew that plants can grow without using chemicals.

Some LFs however, do not apply some of the lessons. The obstacles and motives for a non-application are presented in the following paragraphs.

#### 4.3.2.2.1 Reasons and Obstacles for Non-application

##### **Fencing Issues**

Animals are free ranged and most of the time unguarded. Fencing issues are a major discouragement to cultivate vegetables: *"I don't have a garden because I don't have a fence. My chickens and neighbouring goats would come and destroy the vegetables"* (interviewee nr 39). Interviewees nr 10 and nr 39 were completely daunted by the animals and consequently, stopped gardening and will wait until they can afford to buy fences. Even though they did not pause gardening activities, numerous interviewees underlined the frustration they felt when unguarded goats, cows and chickens walking into their garden and ate the vegetables they laboriously grew. Not everybody can afford metal fences and *"branches, they rot, so I have to start (cutting down logs) again"* (interviewee nr 29). Interesting to note is also that *"now the homesteads are close to one another, so there are no longer trees because they (neighbours) cut them down. So, there are no longer branches [...]. There are not enough trees to protect my crops"* (interviewee nr 2). Interviewee nr 30 states that her mother in law always steals her wooden fence and uses it for the cooking fire. Interviewee nr 35 emphasises time expenditure and effort of fencing: *"it takes up most of my time [...] because I make regular patrols and when there is an opening (a hole in the fence) I have to go to the forest and chop down a few logs and branches and come back and patch."*

##### **Long-established Methods and Personal Distractions**

Even though fencing is an issue for interviewee nr 35, she has other reasons for not applying the learnt permaculture techniques. Firstly, she applies the techniques she learnt from her parents where she spreads wood ash on the garden as fertiliser instead of using compost and liquid manure.

*“Before I plough the garden, I spread ash all over the garden. Then I plough, plant and between the lines and spaces: ash again. Then I weed, and when I am done weeding: ash again. And before harvesting: ash again. Whenever I see bacteria: ash again. And it works for me.”* This method apparently is useful against pests as well because *“pests are not an issue for me.”* However, she does crop rotation because her parents already did it and she wanted to implement the compost, but personal problems rose up *“so, I never completed the compost. My garden is way too big and I am on my own, I got distracted.”* Equally interviewee nr 38 suffered from two deaths in her family *“so, I spent a lot of time making preparations instead of gardening and cultivating the fields. I used to grow a lot, but this year was not good.”* Personal distractions and old and trusted methods explain why some interviewees did not apply the learnt permaculture techniques.

### **Unadapted to Local Context and Alternative Methods**

Interviewee nr 26 does not apply composting and liquid manure because for her it is counterproductive: *“I don’t use compost because the soil is already salty [...] if we add things to it, additives, it burns the crops. And if it’s hot, everything burns out. If the soil is salty, you don’t add anything to it, no manure, nothing.”* However, the correctness of her statement cannot be fully affirmed because she is the only interviewee claiming this problem. And, having discussed this matter with an expert in agroecology, it is possible that interviewee nr 26 did not dilute the liquid manure, which may indeed burn the vegetables. With regards to the grey water filtering, interviewee nr 26 does not apply it because *“now, I have enough water [...] from the rain, which I contain in the (water) tank and sometimes I use the one from the tank for watering (the vegetables).”* Even though the interviewee uses the pest control methods she learnt at the training, she is not convinced by its effect: *“with permaculture, pests are more of an issue. They weren’t back then when I was using blue death (chemical insecticide). But now, with the new techniques they are a problem, they go through my plants a lot.”* Interviewee nr 26 is not entirely pleased by permaculture or has no use for certain methods and hence does solely apply three of six methods.

### **Temporal Delay**

Interviewee nr 8 went to the training in austral autumn 2018 and did not have a garden that winter because she was working on the maize fields. However, she plans on gardening in winter 2019. At the time of the interview, she has already started the compost which takes six weeks before reaching maturity and hence, six weeks before she can commence with applying the other lessons.

### **Seed Scarcity**

Permaculture is a technique that does not need a lot of external inputs. However, in case a person does not save the seeds from last year’s plants, one must buy seeds and seedlings. According to interviewee nr 24, *“because of the seedlings and plants scarcity in this region”* this purchase was not

possible during last year's planting season. A prison, the only sales location in this region, did not sell any, and when ACAT finally provided the small-holder farmers with seedlings, they were destroyed by the heat during transportation. By virtue of never having applied the permaculture techniques, at the time of the interview she could not remember what she has been taught at the training.

#### 4.3.2.3 Discussion pre-transfer

It was shown that at least 18 (1 n/a) of the 20 LFs learnt about all six methods of permaculture and 14 of 20 LFs apply all six methods in their backyard garden. Besides the two individuals not having learnt all six methods, there are solely four more not applying all methods (see Table 8). Furthermore, only three interviewees do not apply anything, all of whom had learnt all methods.

Table 8: Lead Farmers not Applying all Permaculture Lessons

Interviewee →	Nr 8	Nr 10	Nr 24	Nr 26	Nr 36	Nr 39
<b>Learning</b> (of six lessons)	5, 1 n/a	6	6	6	4	6
<b>Application</b> (of six lessons)	1	0	0	3	1	0

Hence, a large majority has learnt the content of the training, applied it at home, and has been convinced by the outcome. Furthermore, the results make me reject the hypothesis that only the remembered (unprompted) lessons are better applied than listed ones (see Table 9). In fact, crop rotation was merely mentioned without prompting three times and despite this it is the most applied permaculture topic.

Table 9: Comparison Unprompted Lessons and Application of Lead Farmers

Lessons →	Compost	Liquid Manure	Crop Rotation	Pest Control	Grey Water Filtering	Planting Methods
<b>Unprompted</b>	13	13	3	14	3	12
<b>Application</b>	15	13	16	15	14	15

### 4.3.3 Stage: 2 Transfer

In this section I investigate the detailed process of how the LFs transfer their knowledge. It is structured according to the sub-questions of this research.

#### 4.3.3.1 1. Who transfers knowledge?

Research question 1 focuses on *who transfers knowledge to whom?* The focus does not lie with identifying the individuals doing so, but firstly, in quantifying them and secondly, in determining the beneficiaries.

Through the structured interviews about the transfer of knowledge, the number of interviewed LFs who transferred the knowledge to their respective FFs was determined. Semi-structured interviews delivered explanations to the findings. All the 20 LFs indicated having transferred the permaculture techniques to their SGs except from interviewee nr 8 who states that all the members of her SG attended the training<sup>24</sup>. With 19 LFs teaching their respective SGs, the basic principles of this F2F are fulfilled.

However, only twelve LFs taught the entirety of SG members. According to the LFs, the reasons for not teaching every member mostly lies with the FFs: interviewee 2 for instance states that *“when I came back from the workshop, I tabled the matter in front of everyone (14 members of the SG) [...] but those who showed intentions or interest were only six. The others were not interested at all.”* Likewise, interviewees 37 and 39, who are of part of the same SG, emphasise that the whole SG only attended the theoretical part of the teaching. However, when it came to the practical lessons, many FFs made excuses for not participating. An often-named motive for this is laziness. Sometime after the teaching, twelve members left interviewee nr 39’s SG because of discordances between the members. Interviewee nr 3 only taught 3 of 16 members, because seemingly the remaining 13 have already been taught by the EO. Consequently, even if the F2F was only partially implemented, every member knows about permaculture gardening.

Interestingly, besides interviewee nr 39, only two other LFs indicated tensions between the members of the SGs that explain why not every member was taught: interviewee nr 38 who is passionate about permaculture has already changed SGs twice because of disagreements between her and the other members regarding business decisions. According to her, she is not listened and respected by the other members because originally, she is not from the area. Hence, merely three FFs were taught in permaculture. The SG of interviewee nr 35 faces challenges of a different nature that impedes them from holding regular meetings and discussing permaculture: the appointed treasurer disappeared with the members’ savings. The other LFs underline good and tight relationships with the FFs, and with whom good interactions take place. Most of the members did not know each other very well before joining the SGs, and now, friendships have arisen and interviewee nr 24 feels *“like home in the SG”*. The good terms between the members might support a good transfer of knowledge between them.

It is further interesting to note that 16 of the 20 LFs stated that they had taught at least one person outside their SG. Four of them named their husbands and/or kids as receiver of permaculture

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<sup>24</sup> Interviewee nr 8 was the only one from her SG who was interviewed for this research and this statement can therefore not be confirmed or refuted. I assume that the SG members attended similar organic farming trainings, but not identical to the one she attended: due to limited logistic and financial capacities, merely two members of one SG can attend one same training (EO1, 2019).

knowledge. However, I assume that the genuine number of LFs who showed their family permaculture techniques is bigger, even if LFs did not deliberately communicate it. The other beneficiaries are neighbours and community members; thus OFs. Interviewee nr 20 for instance, sees himself as ambassador and organised an event to show his SG and more than 15 community members how to practice permaculture. Interviewee nr 31 also teaches permaculture at an equally grand scale. She taught 20 to 40 community members at the weekly grand community meeting orally, and then invited the interested people to her homestead where she showed them practically how to maintain a permaculture vegetable garden. Interviewee nr 36 is even member of three different SGs and, according to her, she taught a total of 160 FFs. Another LF (interviewee nr 4) teaches parents about permaculture, whilst they voluntarily work in the soup kitchen where children can eat free food. The other LFs teach neighbours and community members only sporadically when they pass by their garden and show interest in the techniques, or during casual chats on the streets. Interviewee nr 26 for example chatted to community neighbours and stated her experiences with permaculture. Consequently, eight people joined her SG who, hence, received knowledge.

#### 4.3.3.2 2. What knowledge is transferred?

This section presents the permaculture lessons that were transferred from LFs to.

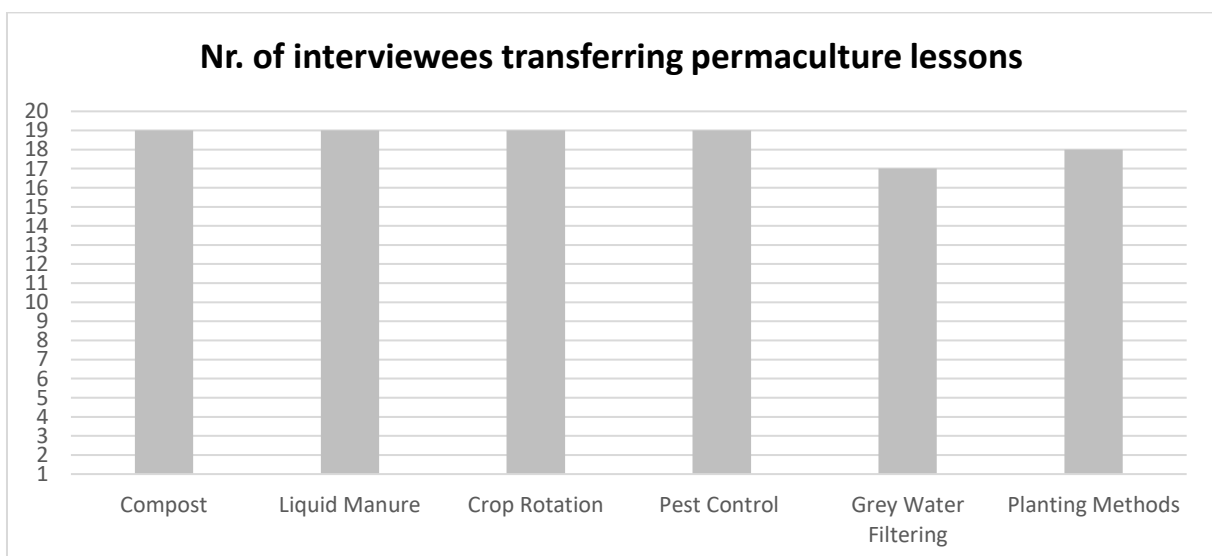


Figure 6: Transferred Permaculture Lessons by Lead Farmers

Figure 6 illustrates that 19 LFs taught their SG about composting, liquid manure, crop rotation and pest control. Grey water filtering is with 17 LFs' teaching the least transferred topic and planting methods is transferred by everybody except of two LFs. Only three individuals did not transfer all the lessons: interviewee nr 8 did not teach anybody from her SG because, according to her, every member went to the training in Mbuluzi. Interviewee nr 10 taught her SG everything, apart from grey water filtering. However, the correctness of this information cannot be known with certainty

because, unlike with the other lessons, I did not specifically ask about grey water filtering. LF nr 35 stated not having transferred grey water filtering and planting methods to her SG because she did not learn about these topics at the training. As discussed above (see subsection 4.3.2) she did not attend the backyard garden training and is therefore cannot be considered representative for the statistical part of this study. Ignoring the uncertainties, the numbers of transferred knowledge (see Figure 6) suggest that the LF do not prefer to teach some topics more than others but teach the whole training course. This might be because the six permaculture lessons are interdependent in their practical application: compost for instance, is created to layer the garden bed, hence lessons one and six are related. Likewise, the lessons on pest control and planting methods are closely linked, since the planting of pest repellent varieties around, and within, the vegetables is part of planting methods as well. In conclusion we can say that in case a LF starts teaching his/her SG, the content of the permaculture backyard garden training is taught in its entirety.

#### **4.3.3.3 3. How is knowledge transferred?**

An essential part of the investigation of this F2F case study is the exploration of the exact teaching process. Which is to say, when and where does the teaching take place and how exactly did the LFs teach the six lessons to the FFs? It must be noted that ACAT does not communicate to the LFs exact methods on how to impart the acquired knowledge with the SG members. Therefore, every LF has slightly varying methods, timings, and locations to do so. Not every teaching method can be presented individually here but the focus lies on displaying their major parallels and differences (consult appendix 8.7 for detailed teaching methods).

In the teaching process, I generally distinguished between the theoretical and the practical transfer of knowledge. A standard model of teaching was identified: after accomplishing the training on permaculture backyard gardening in Mbuluzi, the LF returns to her/his community and gathers with the FFs at the next scheduled SG meeting. These meetings can be weekly, biweekly or monthly and usually take place under trees or in community centres. There, the LF orally tells them about what she/he has learnt at the training. Simultaneously, the literate FFs, or the appointed secretary, take notes. At the next meeting, the SG go to a member's homestead where they practically apply the lessons by establishing together a permaculture backyard garden. Each FF is now in possession of theoretical and practical knowledge on how to establish and maintain a permaculture vegetable garden. The following paragraphs highlight details and variations from this standard model of teaching.

Interviewee nr 31 left out the practical part and put the emphasis of teaching on the theory on which the FFs asked questions that she answered. She underlines that no teaching material was used because of her illiteracy. In fact, no LF indicated having used teaching materials to support the



theoretical transfer of permaculture lessons, except of notebooks. However, interviewee nr 24 and 26 benefitted from the EO who assisted them in teaching the SG the theory on the permaculture lessons.

Interviewee nr 7 however undertook an alternative teaching method by skipping the purely theoretical part: *“since we do the things (gardening) together (practically), there is no need to teach them [...] So, they (FFs) all know what needs to be done.”* Interviewees nr 10, 12 and 29 agree by adding that the theoretical part can be taught throughout the practicals. During these practicals everybody helps each other, such as highlights interviewee nr 39: *“nobody just watches, everybody chips in, everybody works. When they (FFs) pick up the tools and till the soil, we (interviewee nr 37 and 39) show them exactly how it’s done.”*

In some cases, two LFs in the same SG attended the same training (interviewees nr 3 and 4; nr 9 and 10; nr 24 and 26; nr 31 and 36; 37 and 39). In these cases, the LFs did not clearly divide the task of teaching, but it was undertaken together and complementarily.

The location of the practicals varied amongst the LFs. Interviewee nr 1 for instance, undertook them at a plot that was given to his SG by the chief of community. This is because the chiefs hold a big part of the land (Swazi Nation Land) in trust for the King. The task of chiefs is to allocate this land for farms and homesteads and to settle land disputes (Programmes Manager, 2019; Manyatsi et al., 2013). During the practicals of interviewees nr 2, 3, 6, 9 and 31 the LFs *“would visit each and every member and do it practically. Then (one week later) we go to another one and do it practically”* (interviewee nr 9). In the SG of LFs nr 24 and 26 only two homesteads were selected to teach the practicals. The selection of the homesteads where the practicals were conducted was made in function of: firstly, the distance to the SGs meeting point. Secondly, the status of LF and thirdly, the pre-existence of a vegetable garden to minimalise efforts. Interviewee 37 for instance individually went to every FF who already had a garden before and showed there how to apply the six permaculture lessons.

Interviewee nr 22 had an alternative approach to teach people on permaculture. In fact, he divided his, rather big, vegetable garden into two plots: one plot where traditional gardening techniques and chemicals are applied, and one plot that is permaculture. *“The reason why I split it in two is because people want to learn. I want to show people the differences between traditional and permaculture [...] It’s for demonstration purposes.”* In addition to the SG, he invites people from the community with whom he conducts small permaculture workshops. He calls himself an ambassador of permaculture.

Much less formal is interviewee nr 35's teaching method. As stated in subsection 4.3.3.1, her SG does not attend regular meetings due to group internal, money-related tensions. Hence, knowledge on permaculture was transferred during casual chatting in church, under trees or whilst visiting neighbours. Interested members could visit her vegetable garden afterwards.

Interviewee nr 38 recently changed SGs and consequently, the teaching of permaculture lessons is still in progress. Due to a lack of time *"I must not only come for one (FF), so they (FFs) must organise themselves in groups [...] And also on what (tools) will be needed for making those gardens. So, when I come there, we won't waste time. We can do it in many homesteads and not only in one."*

I was further interested in the monitoring of the FFs' progress in gardening. Many LFs (interviewees nr 2, 3, 4, 9, 10, 22, 29, 39) state that now, one to two years after the training, they still refresh, teach and monitor their FFs' gardening techniques. This is done at informal visits of their homesteads or during the SG meetings where information is shared. Interviewee nr 22 says that he monitored all the FFs during the first period, but that today the FFs would master permaculture gardening and hence regular visits are not needed anymore. Interviewee nr 10 equally stated that not all FFs are interested in, or have time for refreshment classes. Interviewee nr 2 on the contrary, says that some FFs still need her assistance because the practical application of permaculture is difficult for them. According to interviewee nr 24, she does not remember anything of the training and consequently cannot monitor or assist the FFs. In the case of interviewee nr 35, she is prevented from monitoring due to limited time resources.

A lot of LFs underlined that the transfer of knowledge on agriculture, not specifically on the permaculture lessons, takes place during everyday situations. During casual talks with community members different or new agricultural techniques are discussed. Interviewees nr 12 and nr 36 stated that even whilst they were waiting to be interviewed for this study, knowledge and tips were shared between small-holder farmers.

#### 4.3.3.3.1 Community of Practice

The interactions outside the SGs illustrate the concept of CoP which states that shared interests and concerns make people interact socially and hence transfer interest-related knowledge. The intentional joining of a SG even underlines the farmer's interest in learning on how to improve his/her livelihood. At the same time the SGs increase the frequency of social interactions and thus the likelihood to learn (Allan, 2000; Wenger et al., 2002). Each LF and FF brings his/her own knowledge and experience into the circle and consequently the domain knowledge grows and possibly new knowledge is produced (McDonald, 2015).

In order to get a deeper understanding of the nature of social interactions between the farmers, their interconnectedness and the reach of the hypothetical CoP-network, I was interested in whom the LFs are in contact with and whether topics of gardening and farming were discussed during their interactions.

I classified the 20 LFs into four categories to qualitatively analyse the nature of their interactions with small-holder farmers outside their own SG (see Table 10).

Table 10: LFs' Interactions With SG-Externals

Interaction	In touch with other LFs	In touch with other SGs (but not LF)	None	No indication	Total
<b>Interviewed LFs</b>	12	3	4	1 (nr 35)	20
<b>Share knowledge about farming</b>	11	3	n/a	n/a	14/15

Table 10 shows that 12, hence more than half of the interviewees continue to be in touch with one or several LFs who attended the same workshop than them. Interviewee nr 6 keeps on being in contact with another LF from his training because they live in the same community. However, they do not meet on purpose, nor do they discuss agricultural matters. Conversely, interviewee nr 37 actively interacts with the LFs she attended the workshop with: *"We communicate via phone and we give each other tips on how to plant. We keep each other updated [...] and ask 'tell me how you do it!' if someone is doing good."* Interviewee nr 29 also uses her phone to interact with the women she met at the permaculture training. They became friends and *"right now we are in touch because it is the beginning of planting season. [...] We share ideas and how to do it, it's assistance. Now, it is more than on previous times (out of planting season)."* She further indicates that in case of questions she would rather ask the other LFs than the EO. This proves a strong bond and trust between the LFs.

Interviewee 22 lives near five other LFs who, after setting up meetings by phone, visit each other to share ideas and information on gardening and farming. Interestingly, two interviewees shared knowledge and tips on farming with other small-holder farmers immediately before being interviewed by me. In both cases, the interviewees were grouped together with other small-holder farmers either waiting to be interviewed by me or having group meetings. These gatherings evidently stimulate discussions about agriculture: *"one thing we discussed today was how to farm goats and how to prepare their sleeping area, how to make their beds"* (interviewee nr 36). Besides this, both LFs are in regular contact with other LFs and SG members because they live in nearby areas and meetings can be arranged easily. Interviewee nr 9 regularly meets with other community members, some LFs from her workshop included, to sell food in bulk as an income generating activity to pay for

school fees. Even though the women do not deliberately meet to discuss agriculture, it still happens that topics of farming and gardening come up.

On the contrary, two interviewees interact intentionally with other LFs through organised meetings, comparable to trading platforms and fairs, to deal with farming and gardening. Firstly, interviewee nr 1 explains that his SG sometimes visits a different SG of a LF he met at the training. There, they for instance exchange plants and show each other how to cultivate these new plants. Secondly, interviewee nr 3 met more than ten LFs from her training at a similar event, which was *“sort of a trade fair to showcase what we ripped from our respective fields or gardens. We would bring everything, and the others would pick and see everything we are able to do. We look at food or stuff that can withstand the sunshine (drought resistant crops) like beans, like sorghum, sweet potatoes, cassava.”*

Three interviewees indicated that even though they are not in touch with LFs who went to their training, they interact with other SGs during what which agricultural information and knowledge are imparted. Interviewee nr 8 for instance, sometimes meets with SGs that are from NGOs other than ACAT and talks about agriculture. Or else, interviewee nr 7 joined a second SG of ACAT. By being member of two different SGs she forms an intersection, a bridge over which knowledge can be transferred back and forth. Interesting as well is interviewee nr 4 who operates through structures different from SGs: *“Here in Swaziland, we have soup kitchens for the under-privileged. So, the kids, when they come back from school, they can go eat free food. So, the parents of those kids will be called. [...] If there is a meeting, all the parents meet, and I take the opportunity and teach them (about gardening). [...] I come up with what I have (knowledge) and another one would come up with what she has too and then important the knowledge to all the women there.”*

Another four LFs indicated neither being in touch with any other LF who went to training nor with other SGs. Interviewees nr 24 and nr 26 are LFs from the same SG and both indicated not being in contact with other LFs because they are the only two LFs under ACAT from this area. Likewise, interviewee nr 2 stated that she was not in touch with other LFs. However, her being present at the interviews of nr 1, 3 and 4 and conversing familiarly with them makes me doubt the correctness of her answer. Another case, where I cannot be entirely sure about the interviewee's connectivity to other LFs is interviewee 38. She recently joined her third SG and abandoned the previous two due to harsh feelings between the members. Although, the interviewee did not clearly state the absence of interactions to other SGs, her detailed account of the wrong goings in the previous groups leads me to the assertion that no contact was maintained.

The previous paragraphs illustrated that LFs interact regularly with other LFs who attended the permaculture gardening workshop. These interactions happen during organised or casual meetings during which agricultural knowledge agricultural activities are shared. Nonetheless, as presented in subsection 4.3.5, not only LFs interact with each other but also FFs and OFs. Regardless the agricultural group or the socio-economic background of a person, information and tips on agriculture are shared in every setting: during informal or formal meetings; between family, community and SG members.

This research did not put the main focus on exploring whether or not small-holder farmers in rural Lubombo and Shiselweni are part of a CoP. Nevertheless, through the investigation of another social learning approach, the F2F approach, characteristics of CoPs were identified. The following paragraph will compare my observations with the the six characteristics identified by (Wenger, 2000) that should be reunited in order to speak of CoP. Firstly, informal or formal events must be organised to create an identity amongst the members, and also to solve problems. The small-holder farmers in this case study meet regularly in SGs, community meetings and diverse other gatherings where LFs and FFs also from more distanced areas are present. Hence, this criterion is fulfilled. Secondly, a sort of leadership must exist to help the CoP develop. I consider LFs and EOs as specialists of agriculture and I assume that they naturally are attributed this role of *leader*. Thirdly, the connectivity between the CoP members must be ensured through interactions or other way of communication: in this case study we can observe a large network of small-holder farmers and people interested in agriculture, NGOs for instance. Manifold social gatherings allow interactions between the members and hence lead to this connectivity. Stories of success and failure concerning specific agricultural practices can travel widely through this network and hence, the practices can be replicated or omitted. The connectivity is supposedly intensified through the use of cell phones that most interviewees possess. Fourthly, the membership of each participant must exist, which is fulfilled with the interviewees' participation in a SG. Fifthly, learning projects must be developed to fill knowledge gaps within the CoP. This criterion is largely fulfilled since the participating at trainings represent such learning projects that provide agricultural knowledge. Through the social network this knowledge travels to many small-holder farmers – CoP members. And lastly, artefact such as documents or tools must exist to make the CoP evolve. I do not know how many SG members take notes at the diverse agricultural trainings from ACAT, respectively the teaching lessons by LFs. Hence, it cannot be determined whether this criterion applies to this case study.

In sum, at least five of Wenger's six criteria for setting up a CoP exist in this case study. In addition to these six criteria, one essential basis must exist in order to speak of CoP: the sharing of the same concerns and interests (Pyrko et al., 2017; Wenger, 1998). This strongly applies to the small-holder

farmers in Lubombo and Shiselweni: increase agricultural productivity in order to become food secure and improve livelihoods. Through this common objective, I assume that agricultural knowledge is more willingly shared and produced. Knowledge transfer is stipulated by their interconnectivity (through SGs) and knowledge production is accelerated by their heterogeneity: this network is formed by specialists (e.g. LFs, EOs, NGOs) and practitioners (e.g. FFs, OFs). Each member brings their own knowledge and experience and perspective into the circle. Through their interactions their domain knowledge increases, and they start to develop trust, a sense of identity and even create documents that prove the shared history of learning.

The investigation on the CoP in this case study was however, not undertaken in depth but can more closely be explored in future research.

#### **4.3.3.4 4. Why is knowledge transferred?**

In a qualitative research about a social process, it is not only important to know the facts about who participated and what happens, but it is also important to understand the reasons behind it. This subsection investigates the LFs motives to impart, or not, their knowledge on permaculture with other people.

As discussed in subsections 4.3.3.1 and 4.3.3.2 motives for not transferring the knowledge on permaculture to the SGs are complicated relationships between the members (interviewees nr 38, 35), FFs who already got the knowledge through EOs (interviewee nr 3) or attended trainings (interviewee nr 8) and disinterested FFs (interviewees nr 37 and 39).

The motives for a knowledge transfer were classified into four main categories: sense of obligation, the will to empower the community, financial motives and a passion for teaching.

With regards to the first category, three LFs stated that they felt obligated to impart their knowledge about permaculture with others. Nonetheless, some heterogeneity with regards to who expects them to impart the knowledge is detectable. Interviewee 6 for instance *“was appointed by the SG to go there (to the training) and represent them. I was obliged or forced to bring back the information to them.”* After asking him whether he went to the training against his will, he added that *“I wanted to go because I was eager to do more. [...] Without food we can’t live, we can’t survive. So, farming is the key. It is very important for us.”* Hence, even though interviewee nr 6 went voluntarily to the training, the transfer of knowledge that followed was motivated by expectations of the SG. By imparting the knowledge with her SG, Interviewee nr 4 did not want to fulfil the expectations of the group, but those of the chief of the area: *“We are subjects of the chief and when we go somewhere we are there to represent the chief, so we are expected to explain and tell them (SG) exactly what we gained at the meeting (training). The chief assigns someone to go because he wants to take care of*

*the community. Without these teachings we would still be starving.*” The last sentence of this quote also points out that there is a need of teaching individual knowledge and skills in order to survive. Interviewee nr 39 feels that it is his duty as Christian to help others by sharing his knowledge on permaculture.

The taking care of the community is a main motive to transfer knowledge that applies to the majority of the interviewees: empower the community through *“teaching them ways of helping themselves to live a better life”* (interviewee nr 1). Through the sharing of knowledge, the LFs are trying to help the people from their community to improve their livelihoods because not everybody had the chance to go to the workshop (interviewees nr 1 and 38): *“My life improved, so I want my fellow community to also improve their lives”* (interviewee nr 31). This reigning solidarity towards the community are part of the social values: *“it is important to impart knowledge [...] then we will all grow. [...] You can’t withhold the knowledge that you have. One cannot be stingy with information because if you are stingy, the community would not be empowered, they would remain poor”* (interviewee nr 12). Interestingly, this interviewee also has financial motives linked to the sharing of knowledge because *“if you are jealous or stingy with the information, people won’t come buy (your produce).”*

Others (interviewees nr 1, 4 and 22) expressed their love and passion for teaching. Having spontaneously been taught and explained permaculture techniques by numerous interviewees, particularly nr 38, I could observe and thus confirm their eagerness to transfer their knowledge and skills. Likewise, interviewee nr 26 explains that her improved living conditions are a product of teaching induced by ACAT’s training. Therefore, teaching others even *“became my tradition”*.

With regards to the future, I consider the last three motives more sustainable than transferring knowledge based on the sense of obligation. The reason for this is that once ACAT will withdraw itself from monitoring the SGs, who are supposed to become self-sustainable, external expectations, or the obligation, are likely to stop and with this, the transfer of knowledge. Whereas, communal solidarity, financial benefits and the calling for teaching are individual values that are rather independent from external factors and may persist once the monitoring ceases.

#### **4.3.4 Stage 3: Reception**

In stage 3, the FFs are put into focus by presenting their perspective of the knowledge transfer. First of all, I will discuss to what extent the FFs genuinely received the knowledge on permaculture and, in a second step, applied it practically. This is followed by a presentation and the FFs’ evaluations of the teaching methods. The FFs’ receptiveness for the new knowledge is further illuminated.

Eighteen FFs were interviewed for this thesis, of which only ten were taught by a LF was interviewed as well. Hence, statistics from the LFs transfer and the FFs reception may not be directly comparable.

Furthermore, seven FFs stated having been taught by LFs that do not figure on the list of the permaculture backyard garden training. I assume that these LFs attended similar trainings, but their content might be somewhat different. Consequently, the following results are slightly biased and serve a mere indicative purpose.

Fourteen FFs said that they have been taught by their respective LFs on all six permaculture lessons. One FF, interviewee nr 13, indicated having knowledge on every of the six lessons, but did not acquire it through her LF but through the EO. Solely three FF have knowledge gaps, two of which only missed out on one lesson: interviewee nr 42 was taught in several sessions on permaculture by her LF and needed to skip the lesson on grey water filtering. Interviewee nr 43 equally missed out on official teaching lessons, but was informed on every permaculture lesson retrospectively, except from liquid manure which he does not remember. Interviewee nr 27 on the contrary, often works at her grocery shop when SG meetings take place. Therefore, she lacks knowledge on five permaculture lessons. Only planting methods were transferred to her during casual chats with her LFs. Despite the fact that four FFs who were not forwarded the entire permaculture training by the LFs, the knowledge transfer seems rather successful.

The practical application of the permaculture lessons is less successful than the reception, respectively the learning, of the lessons (see Figure 7). Only nine FFs indicated applying all six lessons in their home garden. Naturally, the three interviewees who stated not having learnt about the lessons were not able to apply them. However, another seven FFs do not apply the entirety of the lessons. Five of them do not have a garden at all because of water scarcity (interviewee nr 13), a fulltime employment (interviewees 21 and 27) that leaves no time for gardening and because of fencing issues (interviewee nr 6). Interviewee nr 11 stated that her LF only attended the training the previous week and therefore, the teaching has not commenced yet. According to my information, this was a different organic farming training. Interviewees nr 23 and 14 do not rotate the crops because of the small size of their vegetable garden. Additionally, nr 14 does not need to filter her grey water because she is close to the water network and thus, has sufficient water resources. Interviewee nr 12 indicated not practicing any permaculture pest control but instead powdering the chemical *Blue Death* on the vegetables to keep pests away.



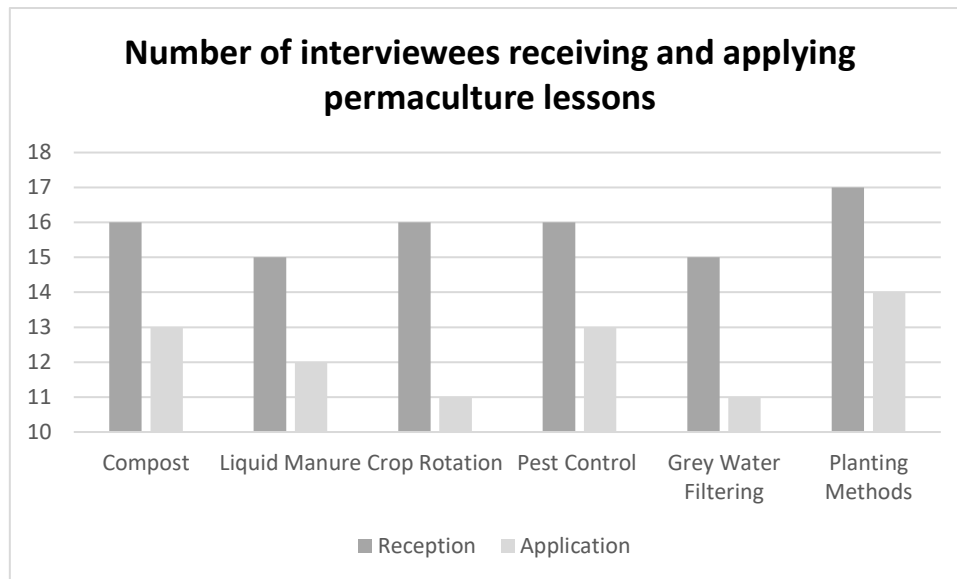


Figure 7: Reception and Application of Permaculture Lessons by Follower Farmers

Interestingly, the interviewed FFs' motives for not practicing the lessons are not disinterest, or laziness (see subsection 4.3.3.1), but conditioned by external factors such as lack of time, fencing material or water. A general persuasion of permaculture techniques was perceptible during the interviews with the exception of interviewee nr 12, who is not convinced by the effects of natural pest control. I assume that permaculture indeed is adapted to the local context and hence, improving the small-holders' livelihoods. However, this quite positive result of knowledge transfer might also be related to the interviewee recruitment undertaken by an ACAT employee. It is possible that only active and motivated FFs were contacted to participate in this study.

In subsection 4.3.3.3 some teaching methods were presented. In order to avoid repetitions, the FFs' narratives on detailed teaching methods will not figure in this study. However, evaluations of the teaching methods will be presented in the following paragraphs. They indicate how FFs like to be taught permaculture knowledge.

A majority of the FFs generally appreciated the way they were taught on permaculture techniques. Interviewee nr 23 for instance, who was taught by interviewees nr 24 and 26 states that she *“was impressed by their (LFs) teaching style. They taught us a lot. Both of them [...] They were passionate.”* These LFs transferred the knowledge to interviewees nr 23, 25, 27 and 28 by teaching the SG the theory a few days after the training, and the practicals three months later in winter. The FFs understood everything that was taught and especially the practical application of the knowledge made *“the teaching courses are very effective”* (interviewee nr 25).

Interviewees nr 40 and 41 are FFs of the same SG and were taught by three LFs who did not participate in this research. Their teaching method was *“a live tutorial [...] In every homestead they*

(LFs) marked out two plots. The one plot, the three of them (LFs) just worked it with my just watching 'watch how we do it on the first plot'. And then I had to reactivate what I learnt on the second plot with them watching [...] I liked the way they taught me because they were right there watching and when I had questions, I could just ask them [...] I loved it" (interviewee nr 40). Both FFs would conduct the teaching the exact same way if they were LFs.

The SG of interviewee nr 34 was read the LF's notebook and in their turn, took notes of the theory lesson. They then visited another member each week where the practicals were conducted with the whole SG present: "she showed us how to do it, and then we do it". This procedure was still being pursued at the time of this study's fieldwork. The LF likes to teach the SG and interviewee nr 34 "wouldn't change anything" on this teaching method.

Interviewee nr 43 was first taught theoretically and then practically over eight weeks. Every week the LFs imparted knowledge on another lesson whilst applying it practically in the neighbourhood care point, where the grown vegetables will be given to children. She liked the LFs' way of teaching and would not alter it "because they are like family to me." This statement indicates that a good relationship to the LF can lead to a better acceptance of the teaching method.

On the contrary, tensions were perceptible when interviewee nr 16 explained how her LF (interviewee nr 2) taught her about permaculture: interviewee nr 2 "was not very vivid in her explanations [...] on some topics she wasn't quite clear [...] I suspect that she didn't quite have a passion for it [...] interviewee nr 2 taught a different curriculum (to the SG) from what she was taught (in Mbuluzi). Only when the EO came back and started surveying the different gardens, did he realise that the way we had planted the garden was totally different [...] she (LF) did not know it (permaculture techniques) herself [...] we removed everything (the garden). Started afresh." The EO consequently taught them the correct techniques. This situation illustrates well a risk of the F2F approach: wrong information can be dispersed, and a project's outcome risks to be missed.

In general, however, the FFs stated that they had friendly to close relationships with their LFs. In general, LFs were perceived to be willing and eager to impart the knowledge on permaculture with their SG. Nonetheless, this passion for permaculture was not shared by all the LFs. Interviewee nr 37 for instance complains that "it goes beyond being lazy: people were just careless. The people (LFs) who went to Mbuluzi to the training, some of them came back and started complaining about the hard work they had to do up there. They did not know that it was a manual labour course. They just thought it was a theory thing, they did not want to get their nails dirty [...] they were not really inspired [...]." This reluctance to undertake manual labour was recurrently mentioned by the interviewees, referring not predominantly to LFs, but to FFs: "in the beginning when we were just

*talking about it (permaculture in theory) they (FFs) were interested. But when it came to manual labour, they started shutting it. The very same people who I taught (FFs) how to do it (gardening), they come to buy my vegetables”* (interviewee nr 37). Interviewee nr 38 shares this frustration about the FFs: *“they (FFs) don’t want development. Especially in this place [...] They have that mentality [...] Most of them are lazy, they need to be motivated, always! Because when we (LFs) teach them, then you leave and you come back another time, they won’t do it. Some say that when they cultivate crops they can’t have a garden (at the same time). Whereas, you eat every day, so you need vegetables!”* This LF changed SGs because of such conflicts within the SG. Interviewee nr 23 justifies the absence of some FFs at the practicals with their old age and internal disposition for learning: *“the two teachers were eager, but not all of the students [...] You know people, some people are good to receive it (new knowledge). Others are less receptive.”*

Laziness is a word or characteristic that many interviewees employed to explain why people are reluctant to apply permaculture. I assume that this is due to the fact that many SG members joined their SG mainly for saving purposes and not for agricultural activities. Interestingly, very few of the people referred to as being lazy participated in this research. This, again, somewhat illustrates that small-holder farmers who agreed to be interviewed are those, who are most motivated and most active in permaculture, which hence, distorts the results.

#### **4.3.5 Stage 4: Retransmission**

This subsection concentrates on the interviewed FFs and if they transferred the acquired permaculture knowledge further to OFs. Or in other words, if the FFs became LFs by teaching people outside ACAT’s SGs about permaculture.

Seven FFs did not teach anybody outside their SGs: interviewee nr 27 does not receive the knowledge herself since she has a fulltime employment. And according to interviewee nr 32, nobody is interested in learning about permaculture gardening. Furthermore, according to interviewee nr 21 *“the reason why I am discouraged from teaching people is because of fencing. A lot of people don’t have fences and these animals that you see over here are all not guarded, and they destroy your crops [...] I would love to (spread the knowledge) but it is kind of pointless if you don’t have a fence.”* Interviewee nr 11 has not had time to impart training’s content with OFs because seemingly her LF only returned from Mbuluzi the previous week. Nevertheless, she intends to do so. Interviewee nr 5 and 14 adapted the strategy of not teaching OFs but convincing them to join the SG. As a consequence, these OFs would assumingly learn about permaculture.

Eleven FFs indicated having taught at least one OF on permaculture (interviewees nr 16, 23, 25, 28, 30, 33, 34, 40, 41, 42, 43). *“I have converted one guy. I was walking around, and I saw him planting.*

*But he was so far ahead, he had done so much (planting), my tips (on permaculture) weren't successful [...] So, that was last year. But now, I continued to teach him and now, he's using the techniques I taught him"* (interviewee nr 25). This describes a typical situation on how the FFs got occasions to teach other community members. Similarly, interviewee nr 33's brother visited her and wanted to lend chemical fertiliser and pesticides. She benefitted from this occasion to teach him on chemical-free permaculture gardening, which he now practices as well. She further intends to teach her sister and her children. Interviewees nr 34, 41 and 43 taught neighbours when they passed by and asked questions on their thriving gardens: *"when they visit my home, they always go see my garden, and then they are tempted to eat it [laughs]"* (interviewee nr 43).

Some FFs (interviewees nr 5, 16 and 42) taught more than 10 OFs about permaculture and thereafter managed to convince them to join their SGs in order to fully benefit from all the undertaken agricultural and saving activities. Through these regular SG meetings knowledge and tips are shared easily between the small-holder farmers. Interviewee nr 14 equally states that she is trying to persuade neighbouring women to join her SG, however she has not been successful yet.

Also, other meetings are used to impart knowledge on agriculture and permaculture, such as the community meeting in the neighbouring chiefdom that interviewee nr 23 attended. At this meeting she taught other women on how to form a SG and the related benefits. The more people participate in ACAT's SGs, the more LFs are trained and may impart the knowledge in their communities.

It is interesting to note that the interviewees who have not yet imparted their knowledge on permaculture show a determination to do so in the near future, so that more community members can improve their livelihoods and living conditions. Additionally, such as it is mentioned in subsection 4.3.3.1, many LFs did not only teach their SGs, but also other OFs. In sum, we can say that many OFs benefit from ACAT's training on permaculture backyard gardening, even if they are not part of an SG. I assume however, that the teaching methods people outside SGs experience are less official and less structured. This is because the teaching happens predominantly through every day social interactions. Informal discussions in churches, soup kitchens etc. lead to a regular exchange of knowledge and tips between small-holder farmers on livelihood activities, such as permaculture gardening.

Concluding, nine FFs know at least one person who applies them in their home garden.

#### **4.3.6 Stage 5: Reach**

Due to time restrictions, this study did not investigate on what permaculture lessons were transferred between FF and OF, respectively LF and OF. Neither are a lot of data available on the OFs' practical implementation of these lessons. However, some information could be collected through

structured and semi-structured interviews with five OFs of Lubombo. This number is not sufficient to make a final claim on the projects' reach but gives a general idea of it. In the following paragraphs each of the interviewed OFs is presented and to what extent permaculture knowledge trickled through to them.

Interviewee nr 15 is a 60-year old small-holder farmer that joined an ACAT SG two years ago. No member of her SG had the chance to go to a training in Mbuluzi yet. However, some group members, her excluded, were taught by the EO on the basics of permaculture and hence: *"we just share knowledge between group members [...] Everybody seems to have a (garden) plot, they have their gardens that are flourishing, and I want to be part of that."* Therefore, by the time she has enough money to buy fences, she intends to convert a part of her field into a permaculture garden and grow vegetables.

A similar situation applies to interviewee nr 17 who is part of an ACAT SG that has not attended a permaculture backyard garden training yet. A member is nonetheless nominated by the SG to become LF. In the mean-time the EO already introduced organic farming to the SG, some planting techniques included. This interviewee does not have a garden because of water scarcity.

Even though interviewee nr 18 is part of the same SG as nr 17, her situation is slightly different. Interviewee nr 17 has learnt about permaculture by observing the garden of her mother in law, who is a FF. *"I have learnt a lot, especially plant and seed techniques. I only watch her (mother in law). Nothing has ever been communicated to me, I just watch my mother in law and then pick it (the knowledge) up."* This young woman has recently been employed and aims to start a garden in the coming winter because it is only now, that she can afford to buy seeds and seedlings.

Interviewee nr 19 is member of nr 17's and 18's SG as well. No member has attended the training on permaculture. However, their SG conducts their weekly meetings at the same time and same place than another SG (of interviewees nr 3 and 4) who has two LFs. And even though the two SGs hold their meetings separately, some knowledge on permaculture is still shared. Through this and the EO's assistance, interviewee nr 19 was informed on the entire training context except from grey water filtering. She insists however that the EO's personal assistance taught her more on permaculture than the other SG, with whose members she is in bad speaking terms. Interviewee nr 19 is very determined to start her own vegetable garden but lacks fencing material.

Interviewee nr 20, equally part of interviewees nr 17, 18 and 19's SG on the contrary, maintains a good relationship with the other SG and emphasises that interviewee nr 3 and 4 are always willing to share knowledge with her. Through this good relationship with especially nr 3, she orally received knowledge on all six permaculture lessons. She is even able to apply the techniques in the vegetable

garden of her mother-in-law. This garden was first maintained by the mother-in-law who applied traditional gardening techniques. Interviewee nr 20 and two sisters-in-law, taught the mother-in-law the six lessons and consequently, converted the garden together in a permaculture vegetable garden. It is interesting to note that an OF became a FF who, in turn, taught another OF. This example illustrates an ideal functioning of the social learning approach, namely F2F.

In conclusion, we observed that through social interactions with FFs and LFs the five interviewed OFs were informed and taught on permaculture.

## 5 Discussion

This research seeks to explore *“How and to what extent is permaculture knowledge passed on from training participating small-holder farmers to other members of the Savings Groups?”* Additionally, the possible reach of the project is studied, as well as the existence of a CoP. Data were gathered by interviewing 20 LFs, 18 FFs, five OFs, four ACAT employees and two directors of Swazi NGOs. I can generally conclude, that the knowledge on permaculture is transferred quite efficiently through the F2F approach. This finding is discussed in detail in this chapter.

In order to investigate the transfer of knowledge, it must be ensured that the knowledge is possessed by the people who are supposed to pass it on. Knowledge is divided into six permaculture lessons: compost, liquid manure, planting methods, pest control, crop rotation and grey water filtering. In this research, I equate the LFs memorising of a lesson with learning it in its complexity. Because of time restrictions the LFs knowledge on permaculture could not be tested in depth. Only one LF (interviewee 35) indicated not having learnt about two permaculture lessons because she attended a training that was slightly different to the one the other LFs took. Consequently, I consider this a solid basis for an investigation on the F2F.

Furthermore, I was interested in knowing if this knowledge is not only theoretically possessed by the LFs, but also practically applied. Only two LFs indicated not to apply any of the lessons in their home garden and further four LFs practice one to three lessons. The least practiced lessons are liquid manure and grey water filtering. The most applied is crop rotation, even if initially, only three LFs unpromptedly mentioned this technique. The remaining 14, hence 70% of the LFs, stated to apply all six lessons. This shows that if someone decides to have a permaculture vegetable garden, the training is applied in its entirety. I assume that this is attributable to the interconnectedness and complementarity of the six lessons.

Ninety percent of the LFs practice at least one permaculture lesson which can be traced back to four main motives. Firstly, by producing and selling their vegetables, small-holder farmers can diversify their livelihoods. They further benefit economically from this activity by not purchasing vegetables from neighbours or stores. Additional money can be saved with permaculture because external inputs, such as chemical fertilisers and pesticides, are omitted. According to Simpson et al. (2015), financial benefits indeed represent a main reason for small-holder farmers to participate in F2F projects.

Secondly, fresh vegetables combined with the renunciation of chemicals leads to good health. Thirdly, according to the interviewees, permaculture increases agricultural productivity, which

translates into an improved food security. This is an especially important factor, since 13 interviewees indicated having insufficient food during the whole year. A further nine said that they only have enough food to eat during, and shortly after, harvesting season. Permaculture helps improving food security is confirmed with the fact that all the OFs, none of them cultivating vegetables, have insufficient food resources.

Lastly, through permaculture techniques, notably grey water filtering and layered seed beds (planting methods), water consumption is reduced, respectively water is reused. Water saving is a major motive because the Kingdom of Eswatini has experienced extreme drought events in the last 15 years, which has had devastating effects on the agriculture, and thus, on the local population.

Nonetheless, six LFs do not practice all six lessons of permaculture due to several obstacles. The most stated issue is fencing: unguarded animals destroy vegetable gardens. Fences are expensive to purchase and difficult to build because of an increasing wood scarcity. Furthermore, gardens cannot be established due to a lack of seeds and insufficient purchasing power. Further, several interviewees indicated having had time consuming personal distractions which prevented them from maintaining a garden. A few interviewees also prefer applying alternative methods to permaculture, in some cases organic ones, that prove a better success rate. In sum, the non-application of permaculture techniques is mostly attributable to external factors and not to dislike or to demotivation. I assume that generally, LFs are interested in agriculture and motivated to induce change in their lives, because otherwise they would not go to a distant training session. It was shown that permaculture knowledge improved the LFs lives significantly. This assumption is supported by Simpson et al. (2015), who found in their study that gaining of knowledge is one of the major motivators to become a LF.

This euphoria about permaculture is also reflected in the transfer: all of the LFs, except from one, have taught their SG about permaculture. However, only 12 LFs taught the entire SGs, the remaining six indicated that only the interested members were present at the teaching lessons. Indeed, a large majority of the interviewed FFs were more interested in money saving than in agricultural activities. Moreover, the LFs described many FFs as "lazy" because they solely attended the theoretical part of the teaching and skipped the physical practicals. One LF stated that she could not teach all the members because they already knew about permaculture from the EO. Unlike in the case study of Kiptot and Franzel (2015), the LFs of my research never mentioned the lack of training materials (sample seeds, notebooks etc.) as a motive for not sharing knowledge.

Even though not all of the LFs taught the entire SG, 80% of them indicated having additionally taught somebody outside their SG, hence OFs. It was mostly family members and neighbours who were



taught during informal and casual conversations in different settings. As a result, the project's reach goes beyond the SGs' – and ACAT's – boundaries.

The interviewed FFs described the LFs as being very eager and passionate about teaching permaculture. In fact, the LFs stated four main motivations to impart what they learnt: a genuine passion and love for teaching; a sense of obligation or external expectations from the SG, the chief, or the religion. Like in the case study of Simpson et al. (2015) the LFs stated income earning opportunities as one of the main reasons to participate at the F2F. The fourth motivation, which Simpson et al. (2015) detected as well, is altruism: many interviewees want to help and empower the community by imparting their resource – knowledge – with community members. This solidarity with the community can assumingly be explained through the generally good relationships between LFs and FFs. In fact, the few interviewees who said they had complicated relations with their SGs, are those who did not successfully participate in the F2F. Meaning that either they taught very few FFs (interviewee nr 38) or only over a very short period of time and, presumably, not quite thoroughly (interviewee nr 35).

With regards to the content of teaching: interestingly, 17 LFs imparted the totality of six lessons with their SG. Three LFs were prevented by various external factors to impart all six lessons. In sum, the LFs who teach their SG, scrupulously teach the entirety of the training and do not select the most preferred lessons. This can once more be explained with the complementarity and interrelatedness of the six permaculture lessons.

This fact is confirmed by the FFs who indicated that their LFs, ten of whom were interviewed for this research, taught them the totality of six lessons. Nonetheless, only 14 of 18 FFs genuinely received the six lessons. This mismatch is attributable to e.g. work that prevented three FFs from attending the teaching. Interestingly, many LFs perceived the FFs as being lazy for skipping the teachings. The interviewed FFs however, did not skip them because of disinterest or demotivation, but because of personal obligations. In fact, most of the FFs who missed out on a teaching lesson were taught retrospectively by the LFs. The disaccord between how the LFs perceive the FFs and the interviewed FFs actual reception of knowledge leads me to the following assumption: the EOs only recruited motivated small-holder farmers for this research, to make it reflect well on them and their work. Less motivated small-holder farmers, such as they were perceived by the LFs, presumptively did not even present themselves at the interviews. Consequently, this research possibly has excessively optimistic results concerning the F2F functioning.

With regards to the FFs' practical application of the permaculture lessons: in total, four FFs do not apply any lesson, the remaining 14 apply at least two lessons. In other words, only half of the FFs

apply all six permaculture lessons: naturally, the three FFs who were not taught all of them, do not apply them. Astonishingly, only one FF does not apply a lesson because she is not convinced by its effects. The remaining five FFs who do not apply the totality are all constraint by external factors, such as seed or water scarcity or a time-consuming full-time employment. Demotivation or laziness are never mentioned and following my observations, all the LFs and FFs are interested in these new techniques. This is explainable through the application resulting in edibles and consequently, in improved livelihoods and food security.

In sum, 90% of the interviewed LFs and 78% of the interviewed FFs apply at least two lessons that were taught on permaculture in Mbuluzi. Moreover, 90% of the interviewed LFs and 50% of the FFs apply the totality of six lessons in their home garden. It is observable that LFs are more active in applying the new knowledge than the FFs. I conclude that the practical application of permaculture is rather successful, even if these statistics are mere indications and not representative. Assumingly, the EOs contribute to this success by doing regular home visits where the SG members are motivated to maintain the permaculture garden. In case of difficulties or questions the EO assists them. The results mentioned above show that the training on backyard gardening has an effect in the field. And, according to the interviewees, is contributing significantly to improved lives.

What might have biased the interviewees' answers concerning the application of the lessons is the timing of the fieldwork (March and April 2019): gardening in Eswatini is mostly undertaken during the winter months, from May to October. Some interviewees attended the training merely in April 2018 and thus only had one winter to apply permaculture techniques. Drawing definite conclusions on whether or not the farmers apply the techniques seems therefore somewhat hasty. Conducting this research at a later stage of the project, after termination for instance, might give different results.

This research however, does not only want to assert whether the training is genuinely applied by the studied population, but also focuses on the exact methods of transferring the training's content. Even though ACAT expects the LFs to impart the knowledge with their SGs, the organisation does not school them in pedagogics, nor predetermine a certain way of teaching. Hence, the narratives of LFs and FFs demonstrated a quite large variety of teaching methods. Nevertheless, all the teachings were of social nature. Meaning that it was done without teaching material but exclusively oral and, in most cases, practical. A few interviewees conducted a theoretical teaching lesson previous to the practical application. During these lessons on permaculture theory some literate FFs took notes. Others explained the theory on permaculture during the practical demonstration of establishing the vegetable garden. The practicals were, with very few exceptions, undertaken in groups where the members assisted each other mutually. The LFs either demonstrated the work or did it

simultaneously with his/her “students”. It is at this point where it becomes clear that the F2F is an approach derived from social learning theory: learning through social interactions (Bandura, 1977; Keen et al., 2005; Parson & Clark, 1995).

Although the LFs were not selected by pedagogical abilities or schooled in didactics, the interviewed FFs generally appreciated the teaching methods. The LFs were described as passionate and eager to impart the knowledge on permaculture. Indeed, LFs were selected by their SG and their motivation for agriculture. Unsurprisingly, the FFs are willing to learn from them and convinced by their teaching methods. The prevailing good relationships between SG members is presumably helping this matter. However, one FF stated that her LF taught her wrong permaculture techniques because the LF possibly did not pay attention at the training. Consequently, the vegetable garden had to be destroyed and later rebuilt.

Therefore, this specific F2F approach where the LF teaches the FF, is criticised by NGO2 and avoided by Guba Swaziland. The knowledge transfer Guba Swaziland’s F2F happens voluntarily, meaning, the trained small-holder farmers are not urged to pass on knowledge by Guba. Through this, the imparting of erroneous information and a bad quality teaching is mostly avoided. The director of NGO2 emphasises that the training merely provides knowledge but does not equip the LFs with skills on how to best pass knowledge on to other persons (here FFs). Consequently, the training does not render the participants teachers or trainers. In ACAT’s F2F programme without pedagogical components, the risk of bad quality teaching is high. Instead, NGO2 opts for a F2F approach where educated teachers train the participants and a small-holder farmer is present to enrich the training with first-hand experiences. However, the quality of teaching from LF to FF could not be investigated in this research. Nevertheless, the assistance and monitoring of EOs in the lessons’ application certainly contributes to a correct establishment and maintenance of the vegetable gardens.

This research goes further and explored if the knowledge is also transferred across the boundaries of the SGs. It was presented above that 16, hence 80%, of the interviewed LFs indeed shared permaculture knowledge with people outside their SGs. With regards to the FFs, knowledge transfer to OFs is slightly less, namely 61%, which corresponds to 11 FFs. It must be noted that some of the FFs who have not taught any OF either intend to do so or are discouraged by the OFs disinterest or by fencing issues. Two FFs opted for a different strategy: instead of doing a teaching *per se*, two FFs tried to convince OFs to join their SG. By doing so, OFs become FFs and permaculture knowledge would be shared with them. Indeed, the transfer of knowledge from FFs and LFs to OFs does not take place the same way as the teaching of FFs by LFs. In fact, OFs are taught much more informally and in everyday situations: interest in permaculture is for instance aroused by visiting community or family

members who see a thriving garden. Consequently, information and skills are shared. The present study corroborates what Nakano et al. (2018) and Krishnan and Patnam (2013) found, namely that spatial proximity between the small-holder farmers increases the adoption rate. Likewise, Taylor and Bhasme (2018) point out that demonstration plots, here permaculture vegetable gardens, lead to an easy transfer of agricultural techniques and knowledge. This might be because visual proofs of the success are more convincing than merely oral ones.

Other occasions to impart knowledge, used by many interviewees, are social gatherings such as community meetings, churchgoings or soup kitchens. Indeed, interviewees stated agriculture as a regularly discussed topic between community members. For instance, two interviewees stated that they shared tips on diverse agricultural activities whilst they were waiting to be interviewed by me. Consequently, social interactions stipulate the transfer of knowledge.

LFs show higher numbers than FFs in both application and teaching OFs. I established three hypothetical reasons trying to explain this phenomenon: firstly, LFs voluntarily chose to go to the training because it is something, they are interested in. Secondly, by going to a training the LFs become some sort of specialists in a topic, which could evoke a feeling of importance and hence may lead to a motivation. This feeling of importance is confirmed by Simpson et al. (2015) who found in their case study that LFs participate, amongst other things, because they want to ameliorate their social status in the community. By teaching well and practicing the lessons, one can get social recognition. And thirdly, because LFs presumably develop a sense of responsibility towards the community by attending such a training. Moreover, FFs might be more interested in the SG activities regarding savings than agriculture, and hence are less involved in permaculture gardening.

In order to illuminate the knowledge transfer from project-involved farmers to OFs from another perspective, five OFs were interviewed. All of them indeed have some knowledge on permaculture. Three of them acquired permaculture through OFs and FFs. The other two were familiarised with this gardening technique with the help of EOs. Hence, all five have partial knowledge on permaculture, with one practically applying it and the other four intending to do so. This fact illustrates that ACAT's project has a big reach. Notwithstanding, it must be noted that these OFs are also part of ACATs' SGs, who do not have a LF yet.

Simpson et al. (2015), as well as Kiptot and Franzel (2015) underline that through the F2F a large number of farmers can be reached in quite a short period of time. This is one of the major advantages of this approach and, according to my findings, it can be confirmed. According to Kiptot and Franzel (2015) cell phones represent a powerful tool of knowledge transfer by allowing a fast communication between SG members. Interestingly, very few interviewees of my case study use the

cell phone to communicate. They stated that the cell phone is merely used in emergencies, such as the postponing of SG meetings. Possibly this is linked to the high costs of calls.

By investigating on the relations between LFs of different SGs, a far-reaching network of small-holder farmers in Lubombo and Shiselweni was observed: 12 LFs stated that they were in contact with LFs they met at the training, 11 of which regularly share knowledge on agriculture. An additional three LFs share knowledge with FF from other SGs. Merely four LFs indicated not being in touch with any other SG members. The connectivity of members through regular interactions of people sharing the same concerns and interests is one of the characteristics of a CoP. A CoP is defined as a structure stipulating the production and sharing of knowledge. Only because of the SGs, ACAT's operating structure, a total of at least five of the six CoP characteristics were identified in this case study: SGs lead to regular meetings of its members where interactions take place and, by sending their members to trainings (learning projects) leaders are created and documents are likely to be created. I assume that SGs are CoPs through which knowledge transfer is accelerated and knowledge production hypothetically stipulated.

Concerning the concept of F2F: the results of the investigated knowledge transfer between small-holder farmers in rural Shiselweni and Lubombo prove that the F2F approach, as it is applied by ACAT, is rather successful. Small-holder farmers who do not apply or transfer the knowledge are often constraint by external factors and do not act upon demotivation. Supposedly, the F2F works so well because of several factors that might be specific to this case study: firstly, permaculture gardening has proven to influence the small-holder farmers' livelihoods and food security significantly. I assume that trainings which are less adapted to the local needs and contexts are less imparted with community members. Secondly, most LFs transferred the training's content in its entirety, meaning all of the six permaculture lessons. I assume that this is because the six lessons are interrelated and complementary. Only in combination of all lessons does a permaculture garden thrive. It is possible that knowledge of a training with completely independent topics is transferred less thoroughly. Thirdly, the SG members' relationships are good. Knowledge and tips are possibly less shared in settings with unknown people or complicated relationships. And lastly, the EOs might have acted as *gatekeepers* and consequently, recruited the most involved and active ones. This last factor might have biased the results of this research.

With regards to the teaching methods, we discover a large variety in various setting which are mostly appreciated by the "students". All the teaching methods have one thing in common: teaching and learning happens through social interactions between the farmers. In conclusion, the social learning theory and its derived approach – the F2F – have proven to be a pertinent theoretical frame for this

case study. Especially, because the interviewees underlined regularly that knowledge on agriculture is shared in every situation where social interactions take place.

## 6 Conclusion

Many people in Lubombo and Shiselweni depend on small-scale farming of which the outcome has become increasingly jeopardised in the last 15 years due to recurrent droughts and the effects of climate change. ACAT's development project aims to mitigate the effects of climate change and improve the farmers' livelihoods through organic farming. It is based on a social learning approach where agricultural knowledge is shared through social interactions. Savings Groups (SGs) are ACAT's main tool to ensure the organised and regular social interactions between vulnerable small-holder farmers. Training participating farmers (LFs) are expected to transfer the training's content onto the SGs members (FFs). This approach has been identified as Farmer to Farmer (F2F) and it is the functionality, reach and success of this approach I was interested in in this case study. Forty-nine structured and semi-structured interviews with small-holder farmers, NGOs and ACAT delivered answers to determine *"How and to what extent is permaculture knowledge passed on from training participating small-holder farmers to other members of the Savings Groups?"*

The analysed data proved that knowledge is quite successfully transferred in ACAT's F2F programme. More precisely, knowledge on permaculture is learnt, applied and transferred by the large majority of interviewed Lead Farmers (LFs). The transfer happens by means of diverse teaching methods, in different settings and in various temporal circumstances. Motives for sharing knowledge resume in a passion for teaching, external expectations, altruism and a related economical profit. Generally, LFs teach the entire training's content and not a restrained selection of it. FFs largely appreciate how the knowledge was transferred to them. Non-acquisition of the permaculture lessons are determined by external factors (work, time restrictions etc.) and not by personal motivations or attitudes such as laziness. FFs apply the lessons of the training less than the LFs, which might be due to a lower sense of project-involvement and responsibility.

Concordant with Kiptot and Franzel (2015) and Simpson et al. (2015), this case study shows that F2F programmes allow a quick transfer of knowledge to a large number of farmers: only two years after the first permaculture training, 84% of the interviewed farmers theoretically know and 60% of the farmers practically apply the entire content of the training. The project reaches even further than SGs' boundaries: two third of the interviewees have shared knowledge with at least one Ordinary Farmer (OF). The inclusion of OFs, SGs meetings and regular communication between different SGs has resulted in a large network of small-holder farmers specialised in organic farming.

Franzel et al. (2014) emphasised the need to conduct more research on the F2F. This case study in the Kingdom of Eswatini can add valuable information to the research area of social learning and its concept F2F. Even if only the hypothetically most interested and motivated SG members participated

in this research, the results suggest that F2F programmes can largely contribute to the improvement of food security and livelihoods. Many development actors invest money in F2F programmes without specifically knowing their outcomes. This research consequently, may also provide valuable insight for organisations on the advantages and obstacles of F2F programmes operating through SG-like structures.

Although the F2F programme in this case study is successful, it has to be considered that through the exploration of the entire F2F functioning, many aspects were merely superficially studied. Future research may hence focus on specific aspects or stages of the knowledge transfer. This study was conducted during the ongoing project. Conducting research on the project's impact after ACAT's withdrawing would contribute to the exploration on the sustainability of F2F programmes. According to Guba Swaziland and NGO2 a F2F approach, as it is undertaken by ACAT, does not guarantee the correctness of transferred knowledge. Through future research the quality of the teaching process may be tested and complement this study. Furthermore, it could be interesting to explore whether the success and reach only apply to the permaculture backyard garden training or to all ten organic farming trainings. Comparisons between different F2F programmes in different regions, applied by different organisations could additionally contribute to the optimisation of its implementation.

Additionally, this case study contributes to the research field of Communities of Practice (CoP): ACAT's SGs were identified as a CoP by reuniting at least five of its six characteristics. I consequently assume, that SGs do not only accelerate the transfer of knowledge but also stipulate the production of knowledge. Future research may investigate if knowledge is indeed produced in ACAT's SGs or if it merely is transferred from ACAT's experts to LFs, FFs and OFs. Moreover, it would be interesting to explore the interrelatedness between the two concepts of social learning: F2F and CoP.



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## 8 Appendix

The appendix is provided in a separate document.

8.0 Appendix

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Alisa AUTENRIED

Under the supervision of Prof. Christian A. KULL



Picture: Alisa Autenried

## 8. Appendix

The appendix is provided in a separate document and contains informed consent forms, interview guides, details on the profile categories and anonymised semi-directive interview transcriptions. Transcriptions of profile questions and interviews with NGO employees are not added due to anonymisation and discretion reasons. It must be noted that they are working documents that might contain spelling, grammar and formatting errors.

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## 8.1 Informed Consent Forms

**Informed Consent Form - English**

**Information Sheet**

I, Alisa Anna Autenried, am a master student of the University of Lausanne, Faculty of Geosciences and Environment. My field of study is geography where I am specialised in development and environment.

I am currently doing my master thesis on *Social Learning in Rural Eswatini*. The goal of this master thesis is to discover how and to what extent farmers pass on their farming knowledge and skills to other farmers (in a savings group). To achieve this objective, I will conduct interviews with different persons involved in such a transfer of knowledge and skills. The focus of this research is on the *Sustainable Agriculture Training* provided by ACAT on the following dates:

- 20<sup>th</sup> – 22<sup>nd</sup> March 2017
- 27<sup>th</sup> – 29<sup>th</sup> March 2017
- 29<sup>th</sup>-31<sup>st</sup> March 2017

and the *Organic Farmer Training* on:

- 09<sup>th</sup>-11<sup>th</sup> April 2018
- 11<sup>th</sup>-13<sup>th</sup> April 2018

The answers obtained during the interviews will help to identify the functioning, the reach and consequently the strengths and challenges of the transfer of knowledge. The purpose of this research is of mainly academic nature and will not directly benefit the interviewed persons. However, a copy of the master thesis will be sent to some interested organisations because the results might of use to them.

This research will involve your participation in an interview of about 30 to 60 minutes. You are being invited to take part in this research because I feel that your knowledge can contribute much to my understanding and my research.

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, all the services you receive from ACAT will continue and nothing will change.

If you accept to participate in my research, I will ask you several questions to which you are invited to respond freely and honestly. Positive as well as negative aspects are of much help. What is more, it is no test or evaluation of your knowledge, so do not feel pressured. The present interpreter will only translate the questions and answers from English to Siswati and reversed. He or she is neutral to the research and will not add or change the information.

Furthermore, the interview will be recorded. The tape will be treated confidentially.

If you wish not to be called by your name in the research, please let me know.

**Certificate of Consent**

I..... voluntarily agree to participate in this research study.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that all the information I provide for this study will be treated confidentially.
- I understand that in case of me wanting to stay anonymous I will inform the interviewing person. This will then be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in the master thesis, the oral presentation of the master thesis and other academical documents.
- I understand that signed consent forms and original audio recordings will be retained in private custody of Alisa Autenried.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Researcher’s information:

Alisa Anna Autenried, Master Student of Geography at the Faculty of Geosciences and Environment, University of Lausanne. [alisa.autenried@unil.ch](mailto:alisa.autenried@unil.ch)

Signature of research participant

Date

\_\_\_\_\_

\_\_\_\_\_

Signature of researcher

Date

\_\_\_\_\_

\_\_\_\_\_

**Informed Consent Form - Siswati****Luhla Lwaloluhlolo**

Ligama lami ngingu Alisa Autenried, Ngenta Sitifiketi se Masters Degree enyuvesi yase Lausanne e Switzerland.

Kuletifundvo tami ngifise kwati kutsi njenge balimi nindluliselana njan lwati nalabanye balimi kanye netindlela tekulima lenitifundzile kubalimisi. Ngako ke ngitocela kubuta balimi labahlukahlukene labangenela lomfundza sikolwa lobowentiwa inhlango yaka Acat yekucechesha balimi ngekulima ngetindlela tekonga letingahlukubeti imvelo leyenteka ngalamalanga lalandzelako.

- 20<sup>th</sup> – 22<sup>nd</sup> March 2017
- 27<sup>th</sup> – 29<sup>th</sup> March 2017
- 29<sup>th</sup>-31<sup>st</sup> March 2017
- 09<sup>th</sup>-11<sup>th</sup> April 2018
- 11<sup>th</sup>-13<sup>th</sup> April 2018

Timphendvulo talemibuto titongisita ngibone kuts lokudlulisela lwati kulabanye balimi kubelusito njani nekutsi ngutiphi tinkinga balimi lababhekene nato ekukwenteni. Loluhlobo angeke lusite umlimi ngamunye ngalokucondzile kepha lobutwe lemibuto, kepha letiphendvulo ngitotindlulisela enhlanganweni yaka ACAT na EcoSolidar.

Ngitocela kubuta imibuto lokutotsatsa sikhatsi lesingange mizuzu lengu 30 kuya ku lengu 60 noma lihora.

Awukaphoceleleki kuphendvula lemibuto. Nangabe ungafuni ungakhatsateki lusito lolutfole ka ACAT lusatochubeka ulutfole.

Nangabe uvuma kungenela loluhlolo ngitokubuta imibuto lembalwancicela uphendvule ngekukhululeka ngeliciniso. Tonkhe timphendvulo ngitoti tsebula ngisrbentisa i recorder, nangabe ungafuni kutisho ligama kute inkinga ungangatisa.

Loluhlolo lutawutsetjulwa, lugcinwe endzaweni lephephile lapho lungeke lubonwe nanome ngubani.

Nawungatsandzi kutsi libito lakho libe kuloluhlolo sicela usho lingetewufakwa.

<b>Sivumelwane Seluhlolo</b>
------------------------------

Mine..... ngekutitsandzela ngiyavuma kungenela loluhlolo:

- Nginyacondza kutsi noma ngivuma kungenela loluhlolo manje ngisengahocisa ngekuhamba kwesikhatsi nangiva ngats imibuto lengibutwa yona angyitsandzi.
- Ngichazelwe kahle ngaloluhlolo, nganikwa nelitfuba lekubuta imibuto mayelana naloluhlolo
- Nginyacondza kutsi angeke ngitfole lutfo ngalokucondzile ngekungenela loluhlolo
- Ngiyavuma kutsi ngitsebulwe uma ngiphendvula lemibuto
- Nginyacondza kutsi tonkhe timphendvulo tami titoba yimfihlo
- Nginyacondza kutsi ngivumelekile uma ngifisile kutsi ligama lami lingashiwo noma lingasebentiswa kuloluhlo kepha kusebentiswe lemininingwane lengitoyisho.
- Nginyacondza kutsi incenye yaloluhlolo itawusetjentiswa emsebentini wami wesikolwa kumfundvo lephakeme, ngiyetsemisa kutsi emagama alaba labangisitile kwenta loluhlolo angeke avetwe kulomsebenti.
- Ngiyetsembisa kutsi imininingwane letsebuliwe yebalini ngitayigcina mine matfupha kute ingaphumeli kulabanye labangagcine sebayisebentisa kabi.
- Ngiyetsemba kutsi kutaba bete inkinga nangichumana nanome ngubani wenu nakkhona lokunye lengikudzingako.
- Nginyacondza kutsi ngivumelekile kushayela labanye balimi lababutiwe nabo lemibuto kuva kabanti kutsi loluhlolo lumayelana nani.

Imininingwane yemcwalingi:

Alisa Anna Autenried, Master Student of Geography at the Faculty of Geosciences and Environment, University of Lausanne. [alisa.autenried@unil.ch](mailto:alisa.autenried@unil.ch)

Kusayina umlimi

Lusuku/Date:

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Kusayina umcwalingi

Lusuku/Date:

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## 8.2 Interview Guide – Lead Farmer

### Profile Questions - Lead Farmer

(Filled in during the Interview)

#### Administration

Date:  Excel Reference:  Number of Interview:   
 Location of Interview:  GPS:   
 Lead Farmer:  Savings Group Member:  Ordinary Farmer:   
 Training: 2017  2018   
 Duration:

#### Personal Information

Name:   
 Savings Group:  Year of Joining:   
 Gender: Female:  Male:  Age:  years  
 Household size:  Adults:  Minors:  from  to  years  
 Head of House: Female:  Male:  Specifics:   
 Residence Community:  District:   
 Level of Education: Primary (1-7):  Secondary (1-3):  High-School (4-5):  Total years:   
 Nutritional Status: sufficient, 12 months:  sufficient, harvesting season:  insufficient:   
 Main Occupation:  Household Salary:   
 % of salary is due to farming  % of active time is dedicated to agricultural activities  
 Other Livelihood Activities:  and %     
 Means of Communication: Phone:  Radio:  Post:  Computer:  other:

#### Agricultural Information

Plot Size:  ha  
 Crops:   
 Animal Husbandry (kind, quantity):   
 Fertilisers: No:  Yes:  → Chemical:  Organic:  Specifics:   
 Origin of seeds:  Chemical:  Organic:   
 Pesticides: No:  Yes:  → Chemical:  Organic:  Specifics:

Technical Support: Yes:  Specifics:  No, manual:

Destination of products:  % own consumption

% is sold to: Market  Private Contacts:  Local Store:  Other:

Irrigation: Rainfed:  Irrigated:  by

Origin of water:  Tank: Yes:  No:

### Interview Situation

Present Persons:

Location:

Interpreter:

Interaction:

Comments, Observations, Atmosphere:

### Semi-structured Interview – Lead Farmer<sup>1</sup>

#### Training: Knowledge Information, Application

1. 1A) How did you produce your food before attending the Sustainable Agriculture/Organic Farmers Training (organic, conventional/chemical inputs)?<sup>2</sup>

1B) How do you produce now?

2. Did you learn anything new at the Sustainable Agriculture/Organic Farmers Training?

If yes:

2A) What did you learn (general topics, maybe specifics)?

Compost(1)  Liquid Manure(2)  Crop Rotation(3)  Pest Control(4)

Grey Water Filtering(5)  Planting Methods(6)  Other(7) \_\_\_\_\_

If no:

2B) Where did you learn the things that were not taught at training?

3. Did you apply anything of the learnt in your own farm/garden?

If yes:

3A) What did you apply?

Compost(1)  Liquid Manure(2)  Crop Rotation(3)

Pest Control(4)  Grey Water Filtering(5)  Planting Methods(6)

3B) Why did you apply it?

<sup>1</sup> Wording and order of questions varied during the interviews

<sup>2</sup> Text in parantheses was not read out loud to interviewee but served as support for the interviewer

3C) Were you not sceptical before applying it?

3D) Did you notice any changes?

3E) Did your food production change since you apply the learnt things?  
(improvements, deterioration, stability)?

If no:

3F): Why did you not apply the learnt in your garden/farm?

3G): Are any other changes in your life related to the new practices (saving money etc.)?

### Knowledge Transfer

4. How many of your SG went to the workshop? → if several: how do you divide teaching?  
Explanations of how it all works.

5. Did you teach any of the things you learnt at the training to someone you know?

If no:

5A) Why not?

If yes:

5B) Who did you teach?

5B1) Is it (a) member(s) of your savings group or not?

5C) Did you teach your savings group?

If no:

5C1) Why not?

If yes:

5C2) What did you teach them?

Compost(1)  Liquid Manure(2)  Crop Rotation(3)

Pest Control(4)  Grey Water Filtering(5)  Planting Methods(6)

5C3) How did you teach them (orally, practically, written, in person, by showing, by doing it with them, telephone, internet etc)?

5C3A) Why do you do it like that? Who decided?

5C3B) Does your SG have a plot where they farm together?

5C4) Do you have meetings?

5C4A) When?

5C4B) Where?

5C4C) How does a typical meeting go?

5C4) Did you teach them individually (1 to 1) or to multiple persons at the same time/ the whole group?

5C5) How many did you teach?

→ Why not all of them?

5C6) How many are in the SG?

5C7) What are the teaching materials? (notebook, blackboard etc.)

5D) When did you teach them? (punctual, over a certain period of time, regularly etc.)

5E) Why have you taught them (personal conviction, obligation etc.)?

5F) Are you still teaching today?

if yes:

5F1) How?

5F2) For what reason?

6. Do you think that the other members of the savings group are willing to learn and to apply the things you learnt at the training course?

6A) Why?

7. What is positive about the teaching?

8. What is negative about the teaching?

---

### Relationship

9. Why did you join the SG?

10. How is your relationship to the other savings group members (friendship, relatives, neighbours, neutral, warm, obligation, strong, neutral, weak etc.)?

11. How many of your group go to the weekly meetings?

12. Have you known the other members of the savings group before you joined the group?

13. Are you in contact with other savings groups?

14. Are you in contact with other lead farmers (women who participated in training)?

If yes:

14A) Do you share knowledge about farming (not only content of training)?

14B) How strong is your link to the members of other savings groups?

15. Being a member of a savings group, do you consider yourself a part of a community (feeling of belonging)?

16. How important is the savings group in comparison to other groups you are a part of (church, family, hobbies)?

---

### General Information

17. Have you noticed any negative effects of the practices?

18. Do you have a question or want to add something?



### 8.3 Interview Guide – Follower Farmer

#### Profile Questions – Follower Farmer

(Filled in during the Interview)

##### Administration

Date:  Excel Reference:  Number of Interview:

Location of Interview:  GPS:

Lead Farmer:  Savings Group Member:  Ordinary Farmer:

Training: 2017  2018

Duration:

##### Personal Information

Name:

Savings Group:  Year of Joining:

Gender: Female:  Male:  Age:  years

Household size:  Adults:  Minors:  from  to  years

Head of House: Female:  Male:  Specifics:

Residence Community:  District:

Level of Education: Primary (1-7):  Secondary (1-3):  High-School (4-5):  Total years:

Nutritional Status: sufficient, 12 months:  sufficient, harvesting season:  insufficient:

Main Occupation:  Household Salary:

% of salary is due to farming  % of active time is dedicated to agricultural activities

Other Livelihood Activities:  and %

Means of Communication: Phone:  Radio:  Post:  Computer:  other:

##### Agricultural Information

Plot Size:  ha

Crops:

Animal Husbandry (kind, quantity):

Fertilisers: No:  Yes:  → Chemical:  Organic:  Specifics:

Origin of seeds:  Chemical:  Organic:

Pesticides: No:  Yes:  → Chemical:  Organic:  Specifics:

Technical Support: Yes:  Specifics:  No, manual:

Destination of products:  % own consumption

% is sold to: Market:  Private Contacts:  Local Store:  Other:

Irrigation: Rainfed:  Irrigated  by

Origin of water:  Tank: Yes:  No:

### Interview Situation

Present Persons:

Location:

Interpreter:

Interaction:

Comments, Observations, Atmosphere:

### Semi-structured Interview – Follower Farmer<sup>3</sup>

#### Reception of knowledge and skills

1. Did Mrs\_\_\_\_\_ and Mrs\_\_\_\_\_ share anything with you that she learnt at the Backyard Garden Training (April 2018)?

If yes:

1A) What did you learn from them (general topics, maybe specifics)<sup>4</sup>?

Compost(1)  Liquid Manure(2)  Crop Rotation(3)  Pest Control(4)

Grey Water Filtering(5)  Planting Methods(6)  Other (7)\_\_\_\_\_

1B) How have you been taught (context, orally, practically, telephone, weekly meeting)?

1B1) How/who decided to teach it like that?

1B2) What are the teaching materials? (notebook, blackboard etc.)

1B3) What would you change if you had to teach someone?

1B4) Does your SG have a plot where they farm together?

1B5) Do you have meetings?

1B5A) When?

1B5B) Where?

1B5C) How does a typical meeting go?

1C) When have you been taught (punctual, regular, ongoing etc.)?

<sup>3</sup> Wording and order of questions varied during the interviews

<sup>4</sup> Text in parantheses was not read out loud to interviewee but served as support for the interviewer

1D) By whom have you been taught (women who assisted or other)?

If no:

1E) Why do you think you have not been taught by Mr(s)\_\_\_\_\_ and Mr(s)\_\_\_\_\_?

1F) Are you willing to learn something new?

2. Have you applied the things you have been taught?

If no:

2A) Why not?

If yes:

2B) What have you applied?

Compost(1)  Liquid Manure(2)  Crop Rotation(3)

Pest Control(4)  Grey Water Filtering(5)  Planting Methods(6)

2C) Why have you applied it?

2C2) Were you sceptical before applying it?

2D) Have you noticed any changes related to the new practices (savings money, producing organic now etc.)?

2E) Has your food production changed (improvement, deterioration, stability)?

2F) Did every member of your SG apply it?

### Relationship

3. How is your relationship with Mr(s)\_\_\_\_\_ and Mr(s)\_\_\_\_\_ who took the training?

4. Have you known Mr(s)\_\_\_\_\_ and Mr(s)\_\_\_\_\_ who took the training before you joined the savings group?

5. Do you think Mr(s)\_\_\_\_\_ and Mr(s)\_\_\_\_\_ are willing to pass on the knowledge and skills?

6. What is positive about the teaching?

7. What is negative about the teaching?

### Transfer of knowledge (to Ordinary Farmers)

8. Have you taught someone else what Mr(s)\_\_\_\_\_ and Mr(s)\_\_\_\_\_ taught you (neighbours, relatives etc.)?

If no:

6A) Why not?

If yes:

6B) Who did you teach? (member of savings group, family etc.)

6C) Why did you teach them?

6D) When did you teach them?

6E) How did you teach them?

6F) Did they apply what you taught them?

### General Information

9. Have you noticed any other changes since you apply what you were taught by Mr(s)\_\_\_\_\_ (savings money, changes in soil quality/health, expenditure of time, livelihood activities etc.)?

10. Do you want to add something?

## 8.4 Profile Categories – Lead Farmer and Follower Farmer<sup>5</sup>

Category	Measurement	Justification	Errors/Biases
Interview nr	Code name of the small-holder farmers. Attributed in order of precedence	Anonymity	
Region	The interviewee's region of origin (Lubombo or Shiselweni)	The respective climatic conditions, and consequently the cultivation may vary.	
Community	The community where the interview took place.	Mostly corresponds to the interviewee's community of residence.	Not used for anonymity reasons
Savings Group	The interviewee's Savings Group.	Triangulation of information. Informative and interpretative purposes	Some interviewees are in the same SG. Consequences: LF teach together; several FFs are taught by the same LF
Year of Training	The year in which the interviewee went to the organic backyard garden training in Mbuluzi.	The date of training may influence the application and transfer of knowledge.	The project has merely started in 2017. It might be too early to evaluate the knowledge transfer. Future research: do 2017 farmers better transfer and apply than 2018 farmers?
Gender	The interviewee's sex	Sex may influence the application and transfer of knowledge.	Men and women are not equally represented
Age	The interviewee's age	The age may influence the application and transfer of knowledge.	
Household size	The number of persons (adults and minors) living in the same household than the interviewee.	The household size may influence the application and transfer of knowledge due to time allocation.	Unprecise answers: some interviewees had difficulties in counting the persons living in the same household. Some people only live there at weekends.
Head of the Household <sup>6</sup>	The person who is responsible for the family.		Not used due to irrelevance
Education	The years the interviewee went to school (1-7 = primary school; 8-	The education of the interviewee may influence the application and	

<sup>5</sup> Categories marked in grey were included in this paper. Categories in white were not used in this paper.

<sup>6</sup> Definition: "The individual *in* one family setting who provides actual support and maintenance *to* one *or* more individuals who are related *to* him *or* her through *Adoption*, blood, *or* marriage » (Source: The Free Dictionary. Available on <https://legal-dictionary.thefreedictionary.com/Head+of+Household>)

	10 = secondary school; 11-12 = high-school)	transfer of knowledge.	
Nutritional Status	The food sufficiency of the interviewee. Three categories were elaborated: 1. Sufficient food to eat during the whole year; 2. Temporarily enough food to eat, e.g. during and shortly after the harvesting season. 3. Insufficient food to eat during the whole year.	The nutritional status of the interviewee may influence the application and transfer of knowledge.	The categories were established before the interviews. Errors in categorisation are possible. The reasons for food insufficiency were not investigated.
Income	Estimations of the yearly salary or income of the interviewee's household.	The income of the interviewee may influence the application and transfer of knowledge.	Most interviewees had difficulties estimating their income because of irregularity of income, the direct spending of money, the lack of record keeping. Some did not know or did not want to tell what the other family members earn, in such cases solely the income of the interviewee is considered. Therefore, this category is merely indicative.
Salary Farming	The percentage (%) of the said salary/income generated by agricultural activities (formal employment excluded). All kinds of agricultural activities are considered, such as the selling of crops, vegetables, animals etc.	Indicates the interviewee's financial dependence from farming and gardening. It may influence the application and transfer of knowledge.	It is based on an estimation and might therefore not be entirely correct.
Agricultural Activity Occupancy Rate	The percentage (%) of the interviewee's daily active time dedicated to agricultural activities (formal employment excluded). The active time corresponds to an ordinary working day of 8 hours.	Indicates role agriculture occupies in interviewee's life. It may influence the application and transfer of knowledge.	Based on estimations which might be erroneous. Agricultural activities are mostly informal employment and are performed at home, the 8-hours working day might not correspond to the interviewee's reality. The category solely serves as a directive guideline or idea. This category does not distinguish between farming and gardening and does not show the invested time in the backyard garden.
Main Occupation	Main income generating activity of the interviewee. Four categories: 1. farming and gardening; 2. formal employment; 3. self-employment (e.g. production of Vaseline, grass mats); 4. elderly	Livelihood diversification and role that agriculture plays interviewee's life. This may influence the application and transfer of knowledge.	

	grants provided by the state		
Other Livelihoods Activities	The household's livelihoods activities, besides the main occupation. Four categories: 1. farming and gardening; 2. formal employment; 3. self-employment; 4. elderly grants	Indication of livelihood diversification	Some interviewees did not cite all the livelihood activities of the household, but merely their own and/or those of the spouse
Plot Size	The size of the backyard garden in m <sup>2</sup> .	Indicates to what extent the learnt knowledge is applied.	Only estimations were included in thesis (no statistical analysis due to obviously incorrect numeric indications). The interviewees struggled with estimations in the metric system. It was not possible to verify the indicated plot sized myself due to a lack of time. Some interviewees indicated the size of the garden combined with the field.
Crops and vegetables	All the crops and vegetables cultivated in the interviewee's garden and field.	Contextual information	
Chickens	The number of chickens the interviewee owns.	Contextual information	
Goats	The number of goats the interviewee owns.	Contextual information	
Cows	The number of cows the interviewee owns.	Contextual information	
Pigs	The number of pigs the interviewee owns.	Contextual information	
Turkeys	The number of turkeys the interviewee owns.	Contextual information	
Fertiliser	The type of fertiliser the interviewee applies in the backyard garden. Four categories: 1. none; 2. organic; 3. chemical; 4. both organic and chemical. Organic fertiliser = natural ingredients (e.g. animal dung, compost) Chemical fertiliser = purchased fertiliser (chemical ingredients)	Indicates to what extent knowledge from the training is applied	
Pesticide	The type of pesticides the interviewee applies in the backyard garden. Four categories: 1. none; 2. organic; 3. chemical; 4. both organic and chemical.	The type of pesticide the interviewee applies in his or her garden shows to what extent knowledge from the training is applied.	

	Organic pesticides = natural ingredients (e.g. garlic, onion, chili, non-chemical techniques applied to prevent pests). Chemical pesticides = purchased pesticides with chemical ingredients (e.g. blue death)		
Origin of Seeds and Seedlings	The provenance of the seeds and seedlings used to cultivate the backyard garden	Indication for money spent on agricultural inputs/dependence on external material to farm and garden.	
Technical Support	The technical support the interviewee makes use of. Two categories: 1. manual only (garden and field); 2. hired tractor to plough the field.	Indication on money spent on agricultural activities	Technical support (hired tractor) is exclusively used in the fields
Personal Consumption	The percentage (%) of the home-grown crops and vegetables that are not sold but consumed by the interviewee's household	Contextual information	The indications are based on interviewee's personal estimation and might contain errors. The interviewee's had difficulties in estimating because of the seasonality of products and lack of record keeping.
Product sale	This category is the counterpart of the "Personal Consumption" category. The percentage (%) of the home-grown crops and vegetables that are not consumed by the household but sold.	Contextual information	Redundant to "Personal Consumption" category.
Destination of Sold Products	The selling place or person of the interviewees home-grown crops or vegetables. Three categories: 1. no selling; 2. private contacts (e.g. neighbours, savings group members); 3. public (e.g. local market, local stores)	Contextual information	The first category (no selling) is correlated with the category "Personal Consumption"
Irrigation	The type of irrigation in the interviewee's backyard garden. Three categories: 1. rainfed; 2. manual irrigation (e.g. watering can, other watering containers); 3. irrigation system (e.g. drip irrigation, river derivations, bottle irrigation system)	Contextual information	

Water Source	The origin of water used for irrigating the backyard garden. Five categories: 1. rain; 2. borehole and well; 3. river; 4. water harvesting system (e.g. watertank, pond); 5. water pipe.	Contextual information	Some interviewees use several water sources. The source of water can differ according to the water availability.
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## 8.5 Interview Guides – ACAT

### 8.5.1 Programmes Officer ACAT<sup>7</sup>

#### Project in general

1. Who facilitated the training?
2. Are the training facilitators ACAT employees or externals?
3. How long does the training last?
4. Who finances the trainings?
5. Who are the Extension Officers and what are their tasks?
6. Are the Extension Officers employed by ACAT or are they externals?
7. Are the Extension Officers also involved in the knowledge transfer?
8. How often do the Extension Officers visit the small-holder farmers?
9. Have already studies been conducted: observations on project/OTC/techniques etc?

#### Training

1. Does the farmers' knowledge contribute to the trainings' content? Or only experts' knowledge?
2. What do you understand by organic/permaculture?
3. What is the detailed programme and content of a training?
4. Were all the trainings on backyard gardening identical?
5. Do participants pay the training?
6. How did you select the most vulnerable people?
7. When did the SGs form?
8. How did the SGs form (friendship, proximity, ACAT etc.)<sup>8</sup>?
9. Who are the members of the SG ? (interconnectedness)
10. Who and How was decided which SG member attends the training?
11. How are the relationships between the members of a SG?
12. Are different SGs in contact?
13. Where are the communities located on the map?

#### Knowledge transfer

1. Is it clearly communicated that knowledge should be transferred to FFs or is it just an indirect expected outcome of the women's interaction?
2. How is the knowledge about organic farming transferred to the population?  
→ Training, Radio, Smartphone (apps)? other activities (ACAT)? Workshops? Savings Groups?
3. Are the interactions between SGs only informal? Not controlled by ACAT?
4. Is it sharing or transfer of knowledge (everybody involved and put their knowledge in or just experts → LF → FF)?
5. How good do the farmers know each other (LF and LF; LF and FF; Extension officers and LF; Extension Officer and FF; ACAT and LF; ACAT and FF)
6. When do LFs transfer knowledge? After or before applying it themselves (FFs can learn from mistakes)?

<sup>7</sup> Wording and order of questions varied during the interviews

<sup>8</sup> Text in parantheses was not read out loud to interviewee but served as support for the interviewer

### 8.5.2 Training Facilitator ACAT

1. What happens in a training?
2. What topics are covered in the backyard garden training?
3. Does the training include the manual's content?
4. Is it an Interactive class/training?
5. Do the participants watch you doing the practicals or do they practice it themselves?

### 8.5.3 Extension Officers ACAT

#### Contextualisation

1. What are your tasks?
  2. Who are the members of your savings groups (list)?
  3. When did the savings groups form (list)?
  4. Can anyone join the savings group?
  5. Who will be interviewed? (20 LFs, 20 FFs)
  6. How did you select the LFs (criteria of **vulnerability**)?
  7. Do you always select the same people to go to the different trainings provided by ACAT?
  8. How do you control the success of the savings clubs in terms of transfer of knowledge/skills?
- 

#### Transfer of knowledge

##### HOW?

9. How are is knowledge transferred?
10. What is the typical procedure of a weekly savings group meeting?
11. Do you have reports of the weekly meetings and the discussed topics?
12. Outside the weekly meetings, in what other contexts are the knowledge and skills transferred?

##### WHO?

13. Who speaks during the meetings? Every training participant?
14. Based on your experience, who transfers knowledge and skills/who does not? (Patterns: young/old/rich/poor/other characteristics)
15. What is the relation between the members of the savings groups (friends, neighbours, neutral etc.)?

##### WHEN?

16. The specific training was conducted in 2017 and 2018, are the knowledge and skills still transferred today? Or was it punctual?
17. Is there a sort of monitoring?

**WHAT?**

- 18. What knowledge/skills is transferred?
- 19. Based on your observation: Is the theoretical or the practical knowledge better transferred?
- 20. What knowledge is not transferred?
- 21. What happens with the transferred knowledge/skills? Applied?
- 22. If applied: By whom (training participants or/and other members of savings group)?

**WHY?**

- 23. Why is it transferred?
  - 24. Why is it not transferred?
- 

**Interview Situation**

Present Persons:

Location:

Interpreter:

Interaction:

Comments, Observations, Atmosphere:

## 8.6 Interview Guide – NGOs<sup>9</sup>

1. How does your NGO apply the Farmer to Farmer Approach?
2. Can you give an example (processes, mechanisms, tools)<sup>10</sup>?
3. Based on your experience, what are the strengths of the F2F?
4. Based on your experience, what are the weaknesses (difficulties) of the F2F?
5. Do you have a monitoring system on how the knowledge and skills are passed on to other farmers?
6. What kind of knowledge and skills are better passed on than others (e.g. theoretical, practical, specific ones etc.)? Why?
7. What is not transferred? Why not?
8. Based on your experience, can you identify patterns on who transfers knowledge and skills (e.g. age, gender etc.)? Why?
9. Do the lead farmers apply practically the knowledge and skills that they pass on?
10. Do the recipient farmers apply practically the knowledge and skills that they receive?
11. Why do you work with the F2F?
12. When does the F2F take place (e.g. punctual, permanently etc.)?
13. Do you want to add anything?

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<sup>9</sup> Wording and order of questions varied during the interviews

<sup>10</sup> Text in parantheses was not read out loud to interviewee but served as support for the interviewer

## 8.7 Interview Transcriptions – Farmers

### Interviewee nr 1 (Lead Farmer)

Interviewee Number: 1  
 Interview Day: 1  
 Location: Lubombo, under a tree  
 Duration: 59:52  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 1, T1, Interviewee nr 2 and her husband  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

#### Comments, Observations, Atmosphere:

First interview with farmer.  
 Sitting under a tree, wind is blowing, chickens are present.  
 I was still a little uncertain how to ask questions. T1 also, so it was a long interview.  
 Mentioned what he needed from ACAT in the future → maybe he did not understand that I was no ACAT?  
 Next interviewee listened (possible falsification of her answers?)  
 Muttering in the background, but not disturbing.

Legend: AA (Alisa Autenried); I1 (Interviewee nr 1); SG (Savings Group); T1 (Translator nr 1); T1 (I1) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Opening prayer from Interviewee nr 2]

T1 (I1): They attended a workshop where they were taught methods than can help them save water, that can help them to receive enough harvest from a smaller place (plot) and how they can clean their water. They then impart their knowledge with the others who may not have had the chance to attend that workshop. [Mobile phone rings] So now, for them it's easier to live a better life because of what they have learnt there, they can plant in a very small place and save water and get enough food. And you no longer use manure (chemical) but you prepare your own. They use natural things to make the soil fertile. They don't have to go buy fertiliser, they use their own things.

AA: Can you tell him that I will record him and that if he wants to stay anonymous, he can let me know?

T1 (I1): Not a problem [signals with hands that he does not need to be anonymous].

AA: And can you tell him that he can speak freely and honestly and that the services don't stop, even if he says something negative about ACAT and the project.

[T1 reads him the informed consent form, I1 reads certificate and signs].

[Profile Questions Part → details and explanations are written on profile questions form]

AA: How did you produce your food before the training?

T1 (I1): They would receive funds from the government with what they would go buy the mealie-meal.

AA: Did he ever use chemical inputs before?

T1 (I1): Yes, before ACAT came in to assist they would use fertilisers. But now, they are using what they learnt.

AA: Okay, so they apply what they learnt. And what topics did you learn at the training? You already mentioned grey water filtering and you said different planting methods and how to save water. Do you remember anything else?

T1 (I1): He learned how to prepare the soil, or something to fertilise the soil. They would use leaves to make compost.

AA: And liquid manure?

T1: They use cow dung.

AA: Did he apply everything he learnt?

T1 (I1): They would mix the topsoil with the manure that they have to produce better food. They also use the crop rotation. Okay this is what they do to protect their crops from pests: they would collect certain leaves like Aloe, like pepper, garlic, onion and crush all those things and then spray the crops as a pest control.

AA: Does he apply the grey water filtering too? You know, how to clean the used water.

T1 (I1): So, they use soil and rocks and then they pour the used water on top and underneath the water would come clean (it was evident that he uses it at home, even if he did not say explicitly).

AA: Why did he apply the things he learnt?

T1 (I1): Because what he learnt does help him and the community at large. Because now they eat something that is safe, that is not expensive – whatever they are using is not expensive, yet they are benefitting from whatever they get. He does not have to buy anymore, which means that he is saving the water – he does not have to throw water away, and he saves money because is not buying water from other places or bringing water from a borehole. Now they are using what they have.

AA: Did his food production change since he applied the learnt things?

T1 (I1): Now, they have a balanced diet, they are able to rotate the crops and therefore eat what they want.

AA: Okay, but did the quantity improve, or stayed the same or even decreased?

T1 (I1): Yes, it improved. Great improvements actually.

AA: Are any other changes in his life related to the new practices, something he has not mentioned before?

T1 (I1): Life is good now, because he doesn't spend money on the things he would buy before. Most of the things he needs he can produce now on his own. And he does not spend money to buy inputs. He is using what he has. So, he can save something for himself and the family. So, he can make savings.

AA: Okay, now we come to the teaching part. Did he teach anything of the learnt to someone he knows?

T1 (I1): Yes.

AA: To who?

T1 (I1): There is an organisation where he taught about 6 women.

AA: Is it the SG “...”<sup>11</sup>?

T1 (I1): Yes. He taught 6 women there.

AA: Did he teach every of the 6 topics (content of training) to them?

T1 (I1): Yes, he taught them everything. They were 12 at the beginning but 6 of them decided to drop out, but he teaches those who are remaining.

AA: Why did they drop out?

T1 (I1): Because they got jobs. That is why they had to leave.

AA: Was he the only one from his SG who got to go to the training?

T1 (I1): Yes.

AA: And how did he teach them?

T1 (I1): He would tell them exactly what has been taught. From the meeting he would come back and impart the knowledge he got from the workshop.

AA: So, mostly orally?

T1 (I1): And afterwards he would call them and do practicals, they would do actual planting.

AA: In their home or in his home?

T1 (I1): They have a place for the SG, where they do the farming. They have a land that was given by the community.

AA: Did he teach them all at the same time?

T1 (I1): Yes.

AA: And did he just teach them once when he came back or was it weekly?

T1 (I1): Immediately when he came back, he would call them and then they would go to that place and start applying what he had learnt at that workshop.

AA: How long more or less did it take?

T1 (I1): It would take 2 weeks at the most. Because he would be imparting the knowledge and they will also be doing it practical and therefore it would be difficult to do teach them all at once. This is why it takes two weeks.

AA: But 2 weeks constantly, or once a week?

T1 (I1): They meet three times a week during the morning hours from 7 to 10, so about 3 hours.

AA: Why did he teach them?

T1 (I1): He had the eagerness to teach them ways of helping themselves to live a better life.

AA: So, it's personal conviction and not because ACAT told him to do so?

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<sup>11</sup> Name of SG was anonymised

T1 (I1): No, he saw the need because the majority of them have nothing. So, by giving them the information and teaching them something, their livelihood can be changed. They can live a better live.

AA: Is he still teaching them today or is it finished?

T1 (I1): So now, a majority of them do the chicken rearing and then they would trade them. People are now aware of what they are doing, they come buy, visit their homes and buy the chickens they (SG) is rearing.

AA: But the chicken rearing was not part of the training I think.

T1 (I1): No, it's not. ACAT taught them how to rear indigenous chickens (not in this particular workshop though, maybe through extension officer or another workshop).

AA: Was it his first and only training he attended?

T1 (I1): He went just to that one.

AA: Does he have the impression that the other members of his SG are willing to learn and to apply what he is teaching them?

T1 (I1): Yes, they want to learn. But they don't have enough water to do everything. If only maybe they could get a borehole they would be able to do more. But water is very scarce here.

AA: What cannot be applied because of water scarcity?

T1 (I1): They want to have a piggery and to rear goats. They need milk, if only they can buy cows they would produce milk. They are the only forecast to chickens (?).

AA: Is chickens the only animal husbandry that works here?

T1 (I1): Yes, yes.

AA: Now, we will be talking more about the relationship between the SG members. How is his relationship to the other members? Are they friendly? Are they family? Is it an obligation etc?

T1 (I1): The community leader invited everyone and then a person would go (join a SG) there to meet on her own volition. They are just community members but not friends.

AA: Did he know the other members before joining?

T1 (I1): Yes, he knew them, but they were not close.

AA: Is he willing to pass on the knowledge to certain members or does he not make a difference?

T1 (I1): The community leader summoned all the people from the area, so that they join forces to empower each other and improve the lives of the people living in this area.

AA: So, he gives the knowledge to everybody the same?

T1: Yes. (question not clear I think, therefore no clear answer)

AA: Does he know any other SG? Not his, but another one.

T1 (I1): No (not true, because other SG members are present).

AA: So, he is not in contact with other people who took the training with him?

T1 (I1): He visited one once, the one that attended the meeting (workshop) with him. So that person relies on cassava, sweet potatoes, peanuts, butternut, beans etc. All the indigenous stuff.



AA: So, they talk about farming and learn from each other?

T1 (I1): Yes.

AA: Did she attend the same training?

T1 (I1): Yes, they were together in the training.

AA: Being part of the SG, does he consider himself being part of a community? A feeling of belonging?

T1 (I1): Actually, there is a huge change. Because now they are able to provide for the family. They can go buy presents on Christmas and clothes. Even nice things for the kids just for Christmas (I think he was talking about the saving part of the SG).

AA: So, it is a good feeling. How strong is his link to the other members of the SG in a scale from 0 to 100?

T1 (I1): It's very very strong. Since he is the chairman, each time he would summon the others for a meeting, they would come, and they would do the things collectively.

AA: So about 100? And how strong is the link to the woman who grows cassava (participant of SG)?

T1 (I1): It is very strong. And they would go visit those people and get what they are doing. If it's cassava, they would come back with the cassava plant and they would have cassava on their own (it's like a trading platform). And if they want sugar beans they would get this. And if the other SG wants something I1's SG has they come and get it and they would show them how to cultivate.

AA: How important is the SG in comparison with other groups he is a part of?

T1 (I1): The SG is really helping the society. Because if there is a need of something, like a kid has no shoes, he can go and ask for money to buy the shoe. If they need money for school fees, they can get it and pay them back later, there are terms. It makes life very easy.

AA: The last question: does he want to add anything?

T1 (I1): They have needs for a bore hole, he wants to know if ACAT may help them one day? For them to have a bigger production, so that they can grow big. Since their major setback is water. They need a borehole.

AA: I am not ACAT, but I will forward ACAT this study, so it is possible that when they hear that the need for a borehole is here, that they might do something. But I can't do anything directly.

T1 (I1): Another problem or setback that they have is the market. They don't have a market for the goods that they have. They wonder if ACAT can help them find a market. Because sometimes things rot because they don't know who to sell to. They even lack cars to transport the things.

T1: I believe ACAT can talk to \_\_\_\_ (?) this institution where farmers would take their goods there. Maybe ACAT can lie with those people. Maybe you can pass that on. These people are serious, very serious.

AA: We come to the end. Siyabonga Babe.

**Interviewee nr 2 (Lead Farmer)**

Interviewee Number: 2  
 Interview Day: 1  
 Location: Lubombo, under a tree, later in chicken shed  
 Duration: 58:59  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 2 and her husband, T1, Interviewee nr 1  
 Interpreter: T1  
 Interaction: Questions asked in English, answers in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

She waited for one hour for me to finish the interview with Interviewee nr 1. She most probably heard his answers which could have influenced hers.  
 She started and finished the interviews with a prayer.  
 During the interview it started raining and we had to move into her chicken shed where we sat on grass mats on the floor. It was very windy which led to some interruptions because the papers flew away. Interruption through ringing phone of interviewee. Chicken cackling in the background.

Biases: Size Plot roughly said (1 football pitch, how big is a football pitch in Eswatini?), does not know salary (does not mention livelihood activities), no indication of number of animals

Legend: AA (Alisa Autenried); I2 (Interviewee nr 2); SG (Savings Group); T1 (Translator nr 1); T1 (I2) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

[After profile questions we moved to the chicken shed because it started raining]

AA: How did you produce your food before you went to the training?

T1 (I2): Her kids would buy all the groceries for her. But now (since she started growing), they only buy mealie-meal and rice because now she produces almost everything on her own like spinach, cabbages and all the like. So, it is really helping a lot and it is a relief for their kids because they also their responsibilities. So, now they know mum is doing well.

AA: Did you learn anything new at the workshop?

T1 (I2): She learnt a lot at the workshop she attended in Mbuluzi. Now she can use a small space like that door [points at the door] to plant different types of veggies.

AA: Does she refer to the crop rotation?

T1: No, the crop rotation is only done on bigger areas. And there is something where I lied: they must use the vegetables that have a strong smell like onion and garlic. Those vegetables must surround the other veggies like cabbages and tomatoes to protect them from the insects.

AA: Okay, did you learn about composting as well?

T1 (I2): Yes.

AA: And liquid manure?

T1 (I2): Yes.

AA: And pest control?

T1 (I2): Yes, like onion and garlic. All the smelly leaves.

AA: Was the grey water filtering new too?

T1 (I2): Yes.

AA: What of the learnt topics did she apply at home?

T1 (I2): She can now prepare the manure and the compost themselves.

AA: Does she also do the pest control at home? And the grey water filtering?

T1 (I2): Yes.

AA: Does she do the crop rotation?

T1 (I2): She does.

AA: Why did she apply it?

T1 (I2): She is no longer buying, she can now use what she has and can use the manure and mix it with something that she has.

AA: Did she use the chemical fertiliser before she prepared the liquid manure on her own?

T1 (I2): Before, she only used manure and never used chemicals.

AA: Did she notice any changes in production?

T1 (I2): There is a change, but it's only that cows damaged her garden and ate most of the things she had planted.

AA: Oh, but would it have been a bigger quantity than before applying the new methods?

T1 (I2): Yes.

AA: How much more?

T1 (I2): They ate everything (misunderstood my question).

AA: Are there any other changes in her life related to the new practices?

T1 (I2): Yes, there is a huge change. She managed to build herself a tank from her savings.

AA: Did she teach any of the things she learnt at the training to someone she knows?

T1 (I2): Yes. She taught about 6 people about gardening.

AA: Are they all members of her SG?

T1 (I2): Yes.

AA: How many members are in her SG in total?

T1 (I2): 14.

AA: And why did she only teach 6 of them?

T1 (I2): When she came back from the workshop she tabled the matter in front of everyone. But the 6 are the ones who decided to attend her workshop (I2 showing the SG the new practices). Those who showed intentions or interest were only 6. The others were not interested at all.

AA: Okay, why were they not interested?

T1: Maybe they are lazy...

AA: Can you please ask her what she has to say (trying to avoid speculations from interpreter)?

T1 (I2): It is maybe because of laziness or because they were not sure if it can work or help them.

AA: Oh okay, so they were sceptical. And what exactly did she teach them?

T1 (I2): How to clean water, how to make a compost, how to rotate crops, the pest control and the liquid manure.

AA: How did she teach them these things?

T1 (I2): They usually meet every Tuesday, that's when she met them and would explain to them and impart the new knowledge she has, yes.

AA: Orally or on a blackboard or...?

T1 (I2): She would be talking and those who are interested would be taking notes. Some would just ignore.

AA: How many hours does the meeting take?

T1 (I2): It goes from 12:00 to 14:00 (2 hours).

AA: And did she also teach them practically?

T1 (I2): She would visit them at home and demonstrate them how it is done.

AA: Okay, so this means that she does not have the same than he has [pointing at I1] (referring to the plot given by the community where they can grow their vegetables)?

T1 (I2): Yes, they do have the same. But they also have one at their homes.

AA: Okay, but she still goes to their homes and teaches them. Did she go to everyone individually?

T1 (I2): Yes.

AA: When did she teach them? Was it punctual, during the first 2 weeks, still now?

T1 (I2): She called them and then they gathered together and then she teaches them.

AA: Was it just once or over a certain period of time?

T1 (I2): They met 4 times.

AA: Is she still teaching them today about what she has learned in the workshop?

T1 (I2): She keeps reminding them. But sometimes it is difficult for them do it, for some especially.

AA: Why?

T1 (I2): Maybe they are lazy.

AA: Does she think the other members of the SG are willing to learn and to apply what she teaches them?

T1 (I2): Some of them want to, some chose not to. Not all of them are keen to learn even if it could benefit them.

AA: How is your relation to the other SG members?

T1 (I2): The relationship is good. I believe it is because they are from the same community and use the same name “Village<sup>12</sup> family”.

AA: So, they knew each other already before they joined the SG?

T1: Yes.

AA: Does she teach some of the members more than others?

T1 (I2): She does. Just to those who are in the meeting. And if she meets someone she would tell them about what they do in their community.

AA: So, she is in contact with other SGs?

T1: Not other SG, let’s say we meet and start talking and then she says, “oh look, this is what we do”.

AA: But is she in contact with other SGs?

T1: She said no [translates to make sure].

[Interviewee nr 3, arrives and people start talking to each other]

AA: Does she consider herself being part of a community in this SG?

T1 (I2): Yes.

AA: How strong is her link to the other members of the SG on a scale from 0 to 100?

T1 (I2): 70

AA: How important is the SG in comparison to other groups?

T1 (I2): It helps them a lot. When they use it (the money of the SG) it benefits them for example building a tank. Some pay for school fees and now they are able to buy whatever they need for their families.

AA: Has she noticed any other changes since she came back from the workshop, it could be anything?

T1 (I2): There is a big change as they continue applying what they learnt there.

AA: In what?

T1 (I2): Now they eat well, balanced diet and they have everything that they need to be healthy.

AA: Okay, so now we have come to the end. Does she want to add something or ask something?

T1 (I2): She would love ACAT to help them with water, maybe with a bore hole because water is very scarce. And fencing. They don’t have fences and the cattle come in and destroy everything. And now the homesteads are close to one another, so there are no longer trees because they cut them down. So, there are no longer branches (for fencing) to protect their stuff. So, there are not enough trees to protect their crops. The fencing and water are very important and what they need.

AA: Okay, I will tell them. Ngiyabonga.

T1 (I2, I1): And ACAT is moving the EO from here. But they want to keep him here because he is a hard worker and he is good. He would encourage them and help them a lot. Now he is transferred to help other people. I1 is asking how ACAT can help their kids because now they are done schooling, and, in most cases, they fail to pay for their tertiary education. Can ACAT help them or empower their kids to continue with what they were doing in an advanced way, so they can help themselves. You can find that they have completed high school and then there is no money to pay for their

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<sup>12</sup> Name of village was anonymised

tertiary education. How can ACAT help them in that regard? He asks if you can pass that question to ACAT. The kids even do crime now to support themselves.

[discussion over children education goes on].

**Interviewee nr 3 (Lead Farmer)**

Interviewee Number: 3  
 Interview Day: 1  
 Location: Lubombo, chicken shed at her homestead, floor  
 Duration: 54:17  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 3, T1, Interviewee nr 1, Interviewee nr 2 and her husband  
 Interpreter: T1  
 Interaction: Questions asked in English, answers in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interviewee arrived in the middle of interview of her predecessor (Interviewee nr 2). A lot of people are present who listened. Someone is talking on the phone in the middle of the interview.  
 Chicken cackling in the background.  
 Good interaction, she did not hesitate with her answers.  
 Good interview.

**Biases:** No indication for salary (spends it instantly). Plot size maybe not correct. I did not ask if she was not sceptical. Interpreter sometimes misunderstands my questions and translates it incorrectly.

Legend: AA (Alisa Autenried); I3 (Interviewee nr 3); SG (Savings Group); T1 (Translator nr 1); T1 (I3) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: How did she produce before she went to the workshop?

T1 (I3): It was not enough until she received the training.

AA: And after the training it was enough food?

T1 (I3): Yes.

AA: Just to make sure: did she never use chemicals before she went to the training?

T1 (I3): Before, she would use fertilisers but in the workshop she learnt that it's not good. It's better to use manure.

AA: Okay, did you learn anything new at the workshop?

T1 (I3): They learned how to prepare the compost, they use dry leaves, they use manure, they use maize stamps, then they add water and then they leave it for some time. Once it is ready to plant, they open the lines (in the garden) and put it there. So, they don't spend money on fertiliser and things like this.

AA: Did she also learn about liquid manure?

T1 (I3): Yes, she does that. They use sand stones and put it in a drum inside with water and then this water will be cleaned, and this will be cleaned water.

AA: And crop rotation and pest control?

T1 (I3): Yes.

AA: Did she also apply those things in her garden?

T1 (I3): Yes, everything.

AA: Why did she apply it?

[husband on the phone]

T1 (I3): It helps a lot. She is saving a lot of money that she would have spent on fertilisers. The chemicals cause sicknesses because they are not washed away. Some particles would remain (on the crop) and may cause sicknesses.

AA: What other changes did she notice since she applies it?

T1 (I3): They are healthy now.

T1: They look young and look fresh!

[talk about fat chickens]

AA: Did their food production change since applying the new methods?

T1 (I3): She received more than she had put in. There is growth in everything she does now. There is no more hunger. They eat until the next season.

AA: Did she teach any of the things she learnt to someone she knows?

T1 (I3): Nobody.

AA: Nobody? Why not?

T1 (I3): She only taught the husband.

AA: Why did she not teach anybody from the SG?

T1 (I3): She misunderstood the question: she does teach the SG. Another advantage from the extension officer is that he is always at their meetings to assist.

AA: So, who exactly did she teach?

T1 (I3): Her husband and three members of the SG.

AA: And how many members does the SG have?

T1 (I3): 16.

AA: Why did she not teach the other 13 members?

T1 (I3): Actually, the extension officer would visit each and every homestead to make sure they have gardens and to teach them how to do it. So, for them (participants at the workshop) is to ADD, to empower them from what they received from when they went to Mbuluzi.

AA: Oh okay. So, the members of the SG already knew the things?

T1 (I3): Yes, the extension officer makes sure that everybody has a garden. Because it avoids buying everything.

AA: So, the other ones already knew more or less the content of the workshop?

T1: Yes (not sure though).



AA: And the things that she learnt at the workshop did she teach them all of it?

T1 (I3): Yes.

AA: How did she teach them?

T1 (I3): When they reach home from their meeting (getting home from the SG meeting) they would do it practically.

AA: Do they all go on their own or does she go with them?

T1 (I3): Yes, she goes with them and takes them through.

AA: So, she goes to everybody and shows them practically how to do it?

T1 (I3): They visit each member's homestead. They say, "let's go to your house and let's do it together" and then they move to another one's house and do it together.

AA: Nice. Do they also have weekly meetings?

T1 (I3): They meet every Tuesday.

AA: Did she also tell them orally or in writing what she learned at the training?

T1 (I3): Yes, and they also have a secretary who takes notes.

AA: Does she still teach them today about what she learned at the workshop?

T1 (I3): Yes, she does. They should have started planting a while ago, but it rained too much. But she is always reminding them and sharing the information.

AA: Why did she teach them?

T1 (I3): They do it to empower each other. If say, she must do it to help them and to help them empower themselves.

AA: Does she think that the other members of the SG are willing to learn and to apply the things she had learnt?

T1 (I3): A majority of them does farming or gardening.

AA: And they are willing to learn the new methods?

T1 (I3): Yes.

AA: Okay, and how is her relationship to the other SG members?

T1 (I3): It's good.

AA: Has she known the other members of the SG before she joined it?

T1 (I3): Yes, because they are from the same community.

AA: Is she more willing to pass the knowledge to certain members than to others?

T1 (I3): She doesn't.

AA: Is she in contact with other SGs?

T1 (I3): Yes.

AA: With whom? Like how many and where are they?

T1 (I3): She related all the members of the group.

AA: No, I mean OTHER SGs.

T1 (I3): No, she does not.

AA: Is she still in contact with anybody she took the training with?

T1 (I3): Yes, she does.

AA: How many?

T1 (I3): There were two from the area. No, more than 10. There are many.

AA: Do they meet or how are they in contact with one another?

T1 (I3): They met once which was a free day for sorghum (?).

AA: Did they teach other things or what did they do during that day?

T1 (I3): It was sort of a trade fair. To showcase what they have or what they ripped from their respective fields or gardens. They would bring everything, and the others would pick and see everything they could (are able to) do. They look at food or stuff that can withstand the sunshine like beans, like sorghum, sweet potatoes, cassava.

AA: Drought resistant crops?

T1: When we get droughts, it is those vegetables or crops that are not consumed by the sun, that will remain. Yes, that are resistant. Like sorghum.

AA: And is another of those fairs planned?

T1 (I3): No, they haven't planned.

AA: Does she consider herself being part of a community in the SG?

T1 (I3): She is happy being a member.

AA: How strong is her link to the other members of the SG?

T1 (I3): It's strong.

AA: And to the women of the other SGs?

T1 (I3): They haven't met.

AA: I thought they did at the fair?

T1: They come together and showcase (misunderstood my question).

AA: Okay, and how important is the SG in comparison to other groups?

T1 (I3): It helps them a lot. So, if they have a need a home they can get it from the SG. Going to someone you know is better than going to a stranger where you are expected to pay a high interest. But here (SG) they get it with a lower interest. How many percent [directs herself to Interviewee nr 1]. The interest is low, very low in comparison with those in town or the bank. There you got the impression to throw yourself in a lions' cage. You die trying to pay it back.

[everybody laughs]

AA: Did she notice any other changes since the workshop?

T1 (I3): A huge change. And they appreciate our visit here.

AA: Siyabonga, thank you very much.

**Interviewee nr 4 (Lead Farmer)**

Interviewee Number: 4  
 Interview Day: 1  
 Location: Lubombo, chicken shed at homestead of Interviewee nr 3, floor  
 Duration: 41:15  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 4 and two children, T1, Interviewee nr 1  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Relaxed interview. Very open and laughs a lot. Good interaction.  
 Her children were playing and she was breast feeding during the interview.  
 She sat on grass mat and me and T1 on wooden blocks in the chicken shed.  
 Cackling of chicken in the background. The children were calm.  
 I was a little tired and hungry because it is the 4<sup>th</sup> interview in a row without a break.

Biases: Plot size, I don't know how precise translations are or if T1 answers in the place of I4 sometimes. I think the interpreter confuses the EO: he is not government but ACAT, so the translations might be wrong.

Legend: AA (Alisa Autenried); I4 (Interviewee nr 4); SG (Savings Group); T1 (Translator nr 1); T1 (I4) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

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[Formalities, profile questions → details and explanations are written on profile question form]

AA: How did she produce her food before she went to the workshop?

T1 (I4): Life was difficult because she could not even have 5 Rand to go buy the spinach.

AA: Oh, because she did not have a garden before she went to the workshop?

T1 (I4): No, she did not have one and she would struggle to get 5(!) Emalangeneni to go buy the spinach. Well, now she has everything.

AA: What did she live from before she started gardening?

T1 (I4): Life was difficult.

AA: And did she use more chemicals before she went to the workshop?

T1 (I4): Yes. She used to. And now she learnt that it's not good, besides being expensive, it's not good.

AA: What did she learn at the training?

T1 (I4): She learned that when planting they need to be wise by using vegetables that can protect other vegetables to protect the others from insects. And that they mustn't use fertiliser, but they must use manure. That they must prepare their own things that they can use to fertilise instead of chemicals.

AA: And did she also learn anything about compost?

T1 (I4): Yes, yes [Interviewee nr 4 laughs]

AA: And about crop rotation?

T1 (I4): Yes, she learned that.

AA: Yes, and pest control?

T1: Yes, that what she was talking about with the garlic and onion.

AA: And the grey water filtering?

T1 (I4): Yes, they were taught.

AA: Did she apply all of it at home?

T1 (I4): It's her livelihood, so, yes.

AA: Why did she apply it?

T1 (I4): It's helping because now she is saving a lot of money. She is not spending on fertilisers and the like.

AA: Wasn't she sceptical before she applied it at home?

T1 (I4): She doubted it at first, but then she realised "this thing is working". [Interviewee nr 4 laughs]

AA: You also said that her food production changed a lot didn't it (double check)?

T1: Yes.

AA: Why has the food quantity improved? Is it because she uses more drought resistant varieties or what is the reason for improvement?

T1 (I4): The problem is the drought. But now with what she learned it's easier, it's better because they can use the little that they have. They don't spend much money, yet the rip.

AA: And the water is better invested?

T1: Yes.

AA: Are there any other changes in her life related to the new practices?

T1 (I4): The kids are healthy because they eat a balanced diet.

AA: Did she teach anything she learnt at the training to someone she knows?

T1 (I4): When she came back (from the workshop) she went to the community (SG) and explained everything. She taught them.

AA: How many did she teach? Was is all of them?

T1 (I4): They would invite her for her to show them how to do the gardening. Then she would apply the knowledge that she received from the workshop.

AA: Ah okay, so the other members of the SG invited her to their respective homes where she would show them practically how to do it?

T1: Yes.

AA: Did she also teach them during the weekly meetings?

T1 (I4): Each time they go to the workshop, it is a must that they come back to the community (SG) to explain to them. They don't keep it to themselves. Because the chief in charge of this area expects them to do so. They are the subject of the chief (?) and when they go somewhere they are there to represent the chief, so they are expected to explain and tell them exactly what they gained at the meeting. The chief assigns someone to go because he wants to take care of the community. Without these teaching they would still be starving, you know? Wishing to buy but they can't afford it (I am not sure if Interviewee said all of this, or if T1 adds some things, because some information is not correct, e.g. the chief/extension officer is not from the government).

AA: So, for her is it also her personal conviction that she wants to teach it. Like the first man (Interviewee nr 1) who said that he wants to teach the things. Or is it merely the feeling of obligation?

T1 (I4): No, she loves teaching them. She has love for this.

AA: Is she still teaching today?

T1 (I4): She does, but some would just listen but not practice.

AA: Yes, that is the answer of the next question if they are willing to learn. For those who are not willing to apply the things, what does she think is the reason?

T1 (I4): They are lazy.

AA: Even if they see that she has so much gain from the new practices. Don't they realise that should do it too?

T1: They realise, but they just sleep. All these young people they prefer to sleep, and they sometimes go to town to look for jobs (did answer on her own and did not translate it to Mazuya). Here Alisa this is what I do [shows her hand]: I have a garden.

AA: How is her relationship to the other SG members?

T1 (I4): All is well, they interact well.

AA: Does she spread the knowledge to everybody the same way or does she differentiate?

T1 (I4): She doesn't make a difference.

AA: Is she in contact with other SGs?

T1 (I4): Yes.

AA: Oh, is she? With who? Is it people she got to know at the workshop?

T1 (I4): No, it is people from here from the community.

AA: Okay, and why does she know them?

T1 (I4): Here in Swaziland we have soup kitchens for the under privileged. So, the kids when they come back from school they can go eat free food. So, the parents of those kids will be called. So they usually meet and talk about stuff. So, they would meet, and she will share.

AA: Ah to the other parents of the children? So, she does that willingly? Is it only SG members?

T1: No, it is not SG, but it was initiated by the government. So, most of the soup kitchens are for pre-school and they don't pay. If there is a meeting all the parents meet, and she would take the opportunity and teach them.

AA: Nice. Does she also benefit from their knowledge, or is she the only one who shares?

T1 (I4): Since it's a big community, she will come up with what she has and another one would come up with what she has too and then impart the knowledge to all the women there.

AA: Does she consider herself being part of the community through the SG?

T1 (I4): Yes.

AA: And how strong is her link to the other members of her own SG from ACAT?

T1 (I4): They are like 1. They are united and do things similarly and jointly.

AA: And to the members of the other SG?

T1: They have no link, they just discuss (answers in the place of the woman).

AA: So, neutral. Like 50. How important is the SG to her in comparison to other groups?

T1 (I4): It is very very helpful, and the interest is very low.

AA: We are at the end. If she maybe wants to add something or add something?

T1 (I4): She can only say thank you to ACAT.

[chatting about something else continues]

**Interviewee nr 5 (Follower Farmer)**

Interviewee Number: 5  
 Interview Day: 1  
 Location: Lubombo, next to a road, in the grass  
 Duration: 33:26  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 5, T1, some women sitting close by  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

She is in the savings group of Interviewee nr 1, who was present at the interview. It could have biased some answers (even though I don't think it had).  
 We sat on the floor next to a road that was not busy. Children passed by and looked. 4 women waited to be interviewed. These interviews did not take place because they form a savings groups that is not agricultural, so they had no link with the workshop. A dog was close by.  
 She gave me good and exact answers (explanations).

Legend: AA (Alisa Autenried); I5 (Interviewee nr 5); SG (Savings Group); T1 (Translator nr 1); T1 (I5) (Interpretation from Siswati into English); (:): Added to facilitate understanding; []: Activities

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[Formalities, profile questions → details and explanations are written on profile question form]

AA: So, did you learn from him [pointing at Interviewee nr 1]?

I5: Yes.

AA: What did he share with you?

T1 (I5): He told her about the compost, about the trees or leaves that she is going to use to prepare, that she is going to use for the spray to kill the pests. So, she is following everything that has been given to her.

AA: Did he also show you how to make liquid manure?

T1 (I5): Yes, he did.

AA: Also about crop rotation?

T1 (I5): He did.

AA: And the grey water filtering too?

T1 (I5): Yes. You use ash, then sand and stones.

AA: How did he teach you?

T1 (I5): So, he called them, all those who did not go there (workshop) and then he would explain everything. And then they had to do it practically.

AA: So, they wanted to know what he learned?

T1: Yes, it was the day of the meeting, Tuesday. And then they met, and he told them “This is what we did, we can save manure, we can do our own manure, we can do our own pesticide” He was talking orally and at the same time showing them practically.

AA: Good. Did he show you at the plot that you have for the SG?

T1 (I5): Yes.

AA: So, this was during how many Tuesday-meetings?

T1 (I5): It took some time, because they had to cut logs, till the land. It took them time (to prepare the garden).

AA: Did she also apply it at home at her garden?

T1 (I5): Yes, she does.

AA: All of it?

T1 (I5): Yes, all of it.

AA: And why did she apply it?

T1 (I5): It was a benefit for her. She learnt a lot and the produce was very good and healthy. Especially the spinach. Its leaves were wow.

AA: Are there any other changes that she noticed?

T1 (I5): She is benefitting a lot and she is saving a lot of money. Because she is no longer buying vegetables.

AA: Did she not have a garden of her own before the workshop?

T1 (I5): No, she did not.

AA: How is your relationship with James Tsabedze?

[laughter] (it is clear that the relationship is good)

T1 (I5): He is a hard worker. He pushes them to their limits. For good results.

AA: Why did she join this particular SG and not another one?

T1 (I5): Actually, she benefitted a lot and now she has no funds to build or make herself a tank, but this is what she learned from them.

AA: So, she knows how to do it, but she has no money for it?

T1: Yes, she needs funding.

AA: And why did she join this SG?

T1: Because there are so many benefits.

AA: Yes, but I mean there are different SGs in this area.

T1 (I5): It's because it's closer to her home.

AA: Ah, so they form by distance?

T1: It's like in that cluster they would go here and in that cluster they would go there.

AA: okay, so it's not because the form by friendship.



T1: No.

AA: Does she think that James is willing to pass on the knowledge?

T1: Yes, yes. That's why she said that he pushed them. When it's time for work he will make sure they work.

AA: Now an important question: Did she teach anybody outside the SG what she learned from him?

T1 (I5): Yes, she talked to these ladies [pointing at 4 women sitting close to us] and they were encouraged (by her) to form their own (SG).

AA: So, they were not (a SG) before?

T1: No, they were not until she (Busie Magagula) introduced them to her own and then they decided to form their own, so they would also benefit.

AA: So, she taught them also about the liquid manure, the composting etc.

T1: No, they are not in the agricultural part, they are only saving money (together).

AA: We are at the end, if she wants to add something or has a question...?

T1 (I5): She is very happy and she is glad that she has been introduced into this organisation because it has changed their lives completely.

AA: How has she been introduced to it?

T1 (I5): Her son introduced her.

AA: How was he introduced?

T1: I don't know, it's unfortunate that he is not here right now.

T1 (I5): The community leaders offered land, so they could do whatever they could to improve their standards of living. And then ACAT came in and that's when they started.

AA: So, they benefitted from the plot they were given and ACAT showed them what they could do with it?

T1: Yes.

AA: Siyabonga.

**Interviewee nr 6 (Lead Farmer)**

Interviewee Number: 6  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 49:15  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 6, T1, Interviewee nr 2 and her husband  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Explains all the details about what he learned at the workshop.  
 Chickens strolling around us.  
 A quiet interview and he was very calm and patient. Good interaction, he talked a lot.  
 2 recordings were made because I pushed a wrong button: 1. 15:45 minutes; 2. 33:45 minutes.  
 People walking in the road who talk and sing.

Biases: Sometimes he speaks for a long while and the interpreter does not translate everything → loss of information and explanations.

Legend: AA (Alisa Autenried); I6 (Interviewee nr 6); SG (Savings Group); T1 (Translator nr 1); T1 (I6) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: He attended the training in 2018. How did he produce his food before attending the training?

T1 (I6): Actually, before he was not using this method. He was just opening furrows. But now, he applies what he learnt there.

AA: Did he use morn chemical inputs before than now?

T1 (I6): He learnt a lot and it is helping him a lot.

AA: So, less chemicals?

T1 (I6): Yes, less chemicals. They now do it the natural way.

AA: So, he said that he learnt something. Can he name the topics he learnt?

T1 (I6): He learnt how to prepare manure. They use the manure from the animals. Then they put it in a sack, they tie then they poor water. There is water coming out. If it's 5 litres, they add 5 more litres (of water), then they use it.

AA: Did he also learn about composting?

T1 (I6): He explained how they prepared the compost.

AA: Did he also learn about crop rotation and pest control?

T1 (I6): Yes.

AA: Did he apply all of it?

T1 (I6): Everything.

AA: And why did he apply it?

T1 (I6): He says it's safe and he's now saving a lot of money because buying those pesticides it's very expensive. Now he prepares it at home and he doesn't need to buy anything but he's using what he has.

AA: Was he not sceptical before?

T1 (I6): He was.

AA: But he tried it anyways. He tried it because he wanted to see if it works?

T1: Yes.

AA: What other changes did he notice, expect of the money saving part?

T1 (I6): Now he can afford clothes for the kids, afford things he couldn't buy for the kids. And now he is able to. He does not spend money for food anymore. Now he is using what they taught him and the manure remains (?) and now he takes from them when he wants to buy or pay for school fees (I think she refers to the SG).

AA: And in terms of food production: Did he also see that he produces more food or was it just the fact that he did not have to buy fertiliser anymore?

T1 (I6): It is really helping because he is no longer using money to buy the things from the shops.

AA: But did he produce more food with the new techniques?

T1 (I6): Yes.

AA: A lot?

T1: Yes.

AA: Did he teach any of the things he learnt to someone he knows?

T1 (I6): Yeah. He taught the community and the kids at home.

AA: And with community does he mean the people from his SG?

T1 (I6): Yes.

AA: Only them?

T1: Yes.

AA: And his kids?

T1: Yes, they are now also able to prepare the compost.

AA: Good. How many people of his SG did he teach?

T1 (I6): 22.

AA: Can you ask him how many members the SG has?

T1 (I6): 22.

AA: So, he taught everybody. Did he teach them all of the 6 subjects?

T1 (I6): He taught them everything.

AA: And how did he teach them?

T1 (I6): He would explain to them. Even those who have difficulties in understanding, he would try his best to simplify everything for everyone to impart the message that was given to him.

AA: And did he do that during the meetings? Do they have like weekly meetings or something?

T1 (I6): Yes, he would teach them in the meetings and when they meet again he would ask if they applied it. To make sure they really got the message.

AA: Does he also teach them practically?

T1 (I6): They visit each and every member where they talk about the thing. Everyone must see what they are doing. They talk about it and then they do it practically, then they even advise each other. So, every week they visit another member.

AA: Interesting. And when did he teach them? Immediately after the workshop or over a few weeks. When was it?

T1 (I6): He was not there the first day (straight after the training) but after a week.

AA: Okay and why did he teach them?

T1 (I6): Actually, he was appointed by the community (SG) to go there and represent them. He was obliged or forced to bring back the information to them.

AA: Did he not want to go?

T1 (I6): He wanted to go. Because he is eager to do more.

AA: Does he know why they chose him and not someone else?

T1 (I6): He doesn't know.

AA: Does he have the impression that the other SG members are willing to learn what he teaches them? Are they eager to learn?

T1 (I6): A majority of them are committed and only a few are lazy. But they are still there.

AA: How many of them apply what he teaches?

T1 (I6): A majority of them.

AA: What is his relationship to the other members?

T1 (I6): It's good.

AA: Did he know them before he joined the group?

T1 (I6): They are all members of the community.

AA: Is he in contact with other SGs?

T1 (I6): Yes.

AA: Where does he know them from?

T1 (I6): From the community.

AA: Oh, so there are more SGs in this community.

T1: Yes.

AA: And do they talk about farming when they meet? Or do they even meet?

T1 (I6): The other groups here only deal with the saving parts, not agriculture.

AA: Is he still in contact with someone he met at the workshop?

T1 (I6): Yes. One of them is here.

AA: Is she from the same SG?

T1 (I6): Yes, they are together in this one.

AA: Ah, so they were 2 people of his SG going to the workshop?

T1 (I6): They are from different groups. This one is from another group. But under ACAT.

AA: Can you ask him if they talk about farming sometimes?

T1 (I6): No, it's difficult. They scarcely meet. They don't meet. It is very rare that they meet.

AA: Ah okay, so he is not really in contact. Does he consider himself being part of a community as a member of the SG?

T1 (I6): Yes.

AA: How strong is the link to the other members of the SG?

T1 (I6): The relationship is strong.

AA: Okay. And how important is the SG in comparison with other groups he is part of?

T1 (I6): That's how he lives. Without food we can't live, we can't survive. So, farming is the key. It is very important for them.

AA: Did he also notice anything negative since he applies this practice?

T1 (I6): None.

AA: Okay. So, we are done with the interview. Does he want to add or ask something?

T1 (I6): The major problem is water. There is no water. Sometimes they have to buy water from a tank that comes. So, it's dry. There is a soup kitchen that the government allowed to be in all the communities. But then now if they don't have water, they can't even cook for the kids. They get donors from outside, they give like beans and rice but if there is no water they can't cook it. So, the major problem is water. If only they can get help, if they can get a borehole they would be very much glad.

AA: Okay, I will tell them. Siyabonga.

**Interviewee nr 7 (Lead Farmer)**

Interviewee Number: 7  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 15:59  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 7, T1, girl sleeping close by  
 Interpreter: T1  
 Interaction: Mostly English, sometimes Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

A girl lay next to us who listened and slept in the grass.  
 Chickens strolling around us.  
 Recording only started from “crops” in profile questions. People walking in the road who talk.  
 For the interview #13 we went to her homestead because we interviewed the aunt (Interviewee nr 13).

**Biases:** Recording only from from “crops” in profile questions, so it might be that I lost some explanations. She did not really speak a lot, therefore I had to ask a lot of questions which she answered with yes and no. This could have influenced the answer (leading into one direction).

Legend: AA (Alisa Autenried); I7 (Interviewee nr 7); SG (Savings Group); T1 (Translator nr 1); T1 (I7) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: How did you produce your food before you went to the workshop? Did you use more pesticides and fertilisers? What changed since you went to the workshop?

T1 (I1): It's like the vegetables grow faster, and stupor. They don't use a lot of money because before they bought fertilisers what is expensive. And now, they prepare it themselves.

AA: Did you learn anything new at the workshop?

I7: Yes, like the garden, I was not knowing.

AA: Ah, like the planting methods?

I7: Yes.

AA: And what else did you learn?

I7: To make a compost.

AA: Anything else? Liquid manure?

T1 (I1): Yes.

AA: And pest control?

T1: She was telling me that they were told to pick leaves and to put it in the water. And now I wanted to know for how long they leave it in the water.

AA: Did you also learn about the grey water filtering? How to purify the used water?

T1 (I1): Yes.

AA: And did you apply anything of the things you learnt at home?

T1 (I1): She is now applying everything she learnt.

AA: Why did you want to try those new techniques?

T1 (I1): When they came back from the workshop, they went to one member's place and they planted. They did it practically before she would go home.

AA: Were you a little bit sceptical?

T1 (I1): They were sceptical because one guy came from the ministry and he told them about digging holes holes holes and he told them something different (than ACAT).

AA: But you still applied ACAT's?

T1 (I1): Yes.

AA: So what changes did you notice?

T1 (I1): There is no hunger at home.

AA: Because you produce more?

I7: Yes.

T1: And you don't spend money.

AA: Okay. Did you teach anybody you know about what you learnt?

T1 (I1): She taught her kids.

AA: And the members of the SG?

T1 (I1): Since they do the things together, there is no need to teach them. They went there and when they came back they went to one member and did it practical. So, they all know what needs to be done.

AA: But she brought the knowledge?

I7: Yes.

AA: Did you also meet before the practical and did you tell them orally?

I7: Yes, yes.

AA: How many times do you meet with the SG?

I7: Twice per month.

AA: For how long.

I7: 2 to 3 hours.

AA: So, you always taught them in the group not one by one.

I7: Yes (in the group).

AA: Do you still monitor them today or teach them today what you learnt?

I7: No.

AA: And why did you teach them? Why did you show them what you learnt?

I7: So that they can know.

AA: So, you wanted them to improve?

I7: Yes.

AA: But not because someone told you that you have to teach them?

I7: No [laughs].

AA: Do you have the impression that the other members of your SG want to learn what you teach them or are they like “nah”?

T1 (I1): They are eager to learn.

AA: And do they also apply it at home?

I7: Most of them.

AA: And how many are there?

I7: We are 15.

AA: How is your relationship to them?

I7: It's friendship.

AA: Why did you join this SG and not another one?

I7: Because It's in my area.

AA: Ah so it's because of the distance. Are you also in contact with other SGs?

T1 (I1): She has joined another group. She will be going there for a second time. She is not deserting the first one. It's also under ACAT.

AA: What is the difference between the two SGs?

T1 (I1): It's like now ACAT wants them to know what is happening in all the other groups.

AA: So, when you go to the second SG do you talk about farming as well?

I7: Yes, it's like the first SG.

AA: Were you the only one from your SG who went to the workshop?

I7: We are two.

AA: Is the other one here too? [pointing to the area where the other interviewees are waiting to be interviewed]

I7: No.

AA: Do you consider yourself being part of a community?

I7: Yes.

AA: How important is it for you to be in that group?

I7: It is important because I have learnt many things.



AA: Do you also have noticed anything negative since you applied the new techniques.

I7: [shakes her head as a No].

AA: Okay, we are at the end. Do you have any questions or want to add anything?

I7: No.

AA: Okay, thank you very much.

**Interviewee nr 8 (Lead Farmer)**

Interviewee Number: 8  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 30:40  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 8, T1, girl sleeping close by  
 Interpreter: T1  
 Interaction: Mostly Siswati (interpreted into English), rarely English

**Comments, Observations, Atmosphere:**

She was not very motivated. She gave monosyllabic answers.  
 Chickens strolling around us.  
 People walking in the road who talk.  
 Random girl sleeping next to us.  
 Car noise in the back. School bus arriving and waiting for children

Biases: Did not apply the techniques because only attended the training in 2018.  
 Said that everybody from SG went to workshop (possible? Probably a similar one).

Legend: AA (Alisa Autenried); I8 (Interviewee nr 8); SG (Savings Group); T1 (Translator nr 1); T1 (I8) (Interpretation from Siswati into English); (:): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: What changed since she attended the workshop?

T1 (I8): It was good (before going to the workshop) but after going there (workshop) it was much better.

AA: Does she use less chemical inputs than before?

T1 (I8): She is using what she learnt.

AA: Okay, so less chemicals (I assume). What did she learn at the workshop?

T1 (I8): She is trying to explain the compost. What is taught there. They need to dig 1 metre down and 1.2 metres width, then they have to put leaves, ashes, chimes, newspapers and then pour water and then leave it for 6 weeks before you can start working on the land. You keep testing the quality by putting a stick into the compost (to see when it's ready).

AA: What else did she learn?

T1 (I8): How to make liquid manure.

AA: And crop rotation?

[explains how it works]

AA: Does she also apply those things at home?

T1 (I8): She was working on the maize meal field. She has not started on the.... Well, she started to work on the compost, but it is still not ready, because the 6 weeks are not over.

AA: So, she has not applied the techniques yet. Why not?

T1: She can't. The soil is not ready yet. She has to wait 6 weeks before she can start planting.

AA: And the pest control?

T1 (I8): She hasn't started anything.

AA: Ah, you don't have a garden yet.

T1: Yeah, the garden is there. She has just prepared the compost to fertilise the land first (before starting to plant).

AA: Did she teach anybody the things she learnt at the workshop?

T1 (I8): Yes, she taught some, but they did not like it. To them it is tiresome, it's a lot of work.

AA: Who was it that she taught?

T1 (I8): People from the community.

AA: People from the SG?

T1 (I8): No, not those who are in the SG.

AA: Why did she not teach them?

T1 (I8): Because they were together there.

AA: The whole SG went to the training?

T1 (I8): They rotated. Some would go, then they come back and those who were left behind would go.

AA: To the same workshop? So, in the end everybody went to the same...?

T1: Yes.

AA: How is the relationship to the other members of the SG?

T1 (I8): It's good.

AA: Did she know them before she joined the SG?

T1 (I8): Yes.

AA: Does she want to teach anybody about what she learned?

T1 (I8): Yes.

AA: Is she also in contact with any other SGs?

T1 (I8): Yes.

AA: From this community or where do they come from?

T1 (I8): From this community.

AA: And do they talk about agriculture?

T1 (I8): Yes.

AA: How is the interaction? Do they meet regularly?

T1 (I8): Weekly, which means 4 times a month.

AA: Oh yes, but I mean with other SGs?

T1 (I8): No.

AA: So, she has no contact with them?

[I8 shakes the head]

T1 (I8): No.

AA: So, she doesn't know anybody else?

T1 (I8): There are some who are with other organisations other than ACAT. They are community members here but join other organisations.

AA: Does she sometimes meet with them and talk about agriculture?

T1 (I8): She does.

AA: How strong is the link to her SG, to the other members?

T1: May you please repeat the question?

AA: If she feels like a community with the SG or is not very important?

T1 (I8): It's like it's easier here. She doesn't spend the money on unnecessary things like fertilisers because she can prepare manure on her own. Also, the pesticides she can prepare on her own, so she is not losing anything. Instead she is gaining and ACAT gives them seeds, I mean manure. ACAT brings the items they need closer.

AA: And then they can buy them from ACAT? So, the SG, how important is it?

T1 (I8): It's under the chieftom. The chief, I think, is the one who wants to see the community growing, surviving, getting the best, getting enough food. So, they do it as a community and the chief is aware that my people will be going there to learn and will be coming back and MY people will be able to support themselves.

AA: Did she want to go, or did she feel obligated?

T1 (I8): She said she was happy because she was able to see Mbabane and she has never been to Mbabane. [laughter].

AA: So, the agricultural part was not the first motivation?

T1 (I8): No, it was not.

AA: Maybe the last question: did you notice anything negative about the project or something you learnt?

T1 (I8): She says that everything is good, but she wishes that ACAT should come and assist with the planting materials.

AA: Okay, I think we are done. Ngiyabonga.

**Interviewee nr 9 (Lead Farmer)**

Interviewee Number: 9  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 31:25  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 9, T1, girl sleeping close by  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Chickens strolling around us.  
 People walking in the road who talk. Muttering from people in the community centre hearable.  
 A girl is sleeping next to us.  
 I was very hungry and exhausted (4<sup>th</sup> interview in a row without a break), so, I was not very patient and did probably not perform as good as usual.

Biases: Says that the whole SG went to the training → correct or not? On my list she is the only one from her SG.

Legend: AA (Alisa Autenried); I9 (Interviewee nr 9); SG (Savings Group); T1 (Translator nr 1); T1 (I9) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Did she learn anything at the workshop?

T1 (I9): So, she learnt about crop rotation, pest control using the leaves, planting methods using the lines (rows) 3 lines and 3 lines and 3 lines. And she learnt about grey water filtering.

AA: And liquid manure also?

T1 (I9): Yes, yes.

AA: Does she apply the new practices at home?

T1 (I9): Yes.

AA: All of them?

T1 (I9): Yes.

AA: Does she use less chemical inputs since she came back from the workshop?

T1 (I9): She is using what she learnt there at the workshop. So, less money goes out. It is helping her a lot because she is saving a lot of money now. It is working for them. Because if you start planting this week you will be start cultivating (harvesting?) in two weeks.

AA: Was she not sceptical?

T1 (I9): She was happy because what they taught here there (Mbuluzi) is something that she has at home. She does not pay for it. It's a method that has been used for year. But when this civilisation

thing came everybody was “I want to use fertiliser” not knowing that there were so many chemicals, so for her it was a good thing.

AA: Did her food production improve since she uses the new techniques?

T1 (I9): The children are happy because now they say “we have enough”.

AA: Did she notice any other changes since she applied the new practices?

T1 (I9): There is a change because now she can be able to feed her family without spending a cent.

AA: Did she teach anything she learnt at the workshop to anybody else?

T1 (I9): She talked to some friends and 2 have already joined.

AA: The group?

T1 (I9): Yes.

AA: And did she also teach the members of her SG?

T1 (I9): No, they haven't started saving here.

AA: Oh, but she is part of a SG? The “Name of SG”<sup>13</sup>.

T1 (I9): No.

AA: So, they don't have weekly meetings?

T1 (I9): They put money, but they use the premises to buy manure and other agricultural inputs.

AA: So, she did not come home and... Did she not tell? Okay, I need to know if she taught someone of the SG?

T1 (I9): She did.

AA: Everybody from her group?

T1 (I9): Yes.

AA: What did she teach them?

T1 (I9): Yes, all of the 6 topics.

AA: And how did she teach them?

T1 (I9): When they came back they would visit each and every member and do it practically. Then they go to another one and do it practically.

AA: Always as a group?

T1 (I9): Yes.

AA: Did she also, maybe during the weekly meetings, talk to them first?

T1 (I9): Actually, they would sit together as a group, explain to each other and discuss. And then they go to their individual homes.

AA: And how many are there in their SG?

T1 (I9): 20

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<sup>13</sup> Name of SG was anonymised.

AA: Why did she teach them?

T1 (I9): She wanted them to know that it is easy to produce for themselves... by giving them that chance, by imparting the information she was empowering them to do as she is (to do like she does in her house).

AA: And is she still monitoring them how they do it at their home?

T1 (I9): They do. That's when they learn that Okay we see that Sisi (sister) is doing good with the spinach and then they can tell someone we need spinach to go to a place. Or now here is cabbages. They communicate (Through communication they know who needs what seedlings, who is doing good with what vegetable and also that they can go buy them).

AA: So, does she think that the other members of her SG are willing to learn and to apply what she teaches?

T1 (I9): Yeah.

AA: And how is her relationship to them?

T1 (I9): It's good.

AA: How many times to they meet?

T1 (I9): They meet after a fortnight after work. Which means twice a month.

AA: Twice a month, okay. For how many hours?

T1 (I9): 1 to 2 hours.

AA: Is she also in contact with other SGs?

T1 (I9): By cell phone or if they have a meeting they would communicate (the next meeting).

AA: No, I mean if she is in contact with OTHER SGs.

T1 (I9): Yes.

AA: Where does she know them from?

T1 (I9): There are those organisations who sell for school fees and the sale for the end of year (?) and they would sell food in bulk.

AA: Okay. With other SGs from the whole community?

T1: Yes.

AA: And how many are there?

T1 (I9): Possibly 25.

AA: Wow 25 groups! And is she still in contact with someone from the workshop?

T1 (I9): Yes.

AA: And do they talk about farming?

T1 (I9): Yes.

AA: And with the other SG (those 25) do they also talk about farming?

T1 (I9): No, the 25 is the number of her group.

AA: Ah okay. And does she feel like part of a community in her SG?

T1 (I9): Yes.

AA: And how many of her group went to the workshop?

T1: This one or the other one?

AA: What other one?

T1: She talked about two groups. The other one is for saving.

AA: Okay, I did not know, you did not translate me that! So, from this one.

T1: ACAT?

AA: Yes.

T1: Can you repeat the question?

AA: How many members of her ACAT SG went to the training?

T1 (I9): They would choose three. But eventually all of them went.

AA: All of them, okay wow. How important is the SG to her in comparison to other groups she is a part of?

T1 (I9): It's important because they can easily venture into other businesses if they can be able to use the money wisely. Because they are making money from something that they did spend a lot (on pesticides and things) when preparing, like producing the vegetables they use simple manure. Even the water is from them. They don't buy, so when they sell it's a profit. The power that they used it seems like it's free. So, if they can use that or to put it into good use they may end up opening their own shop as an organisation.

AA: So, everybody is giving monthly money in it and the person who needs it can take it and give it back when she has it?

T1 (I9): They haven't started yet.

AA: But that's the principle? Okay, so did she notice anything negative since she applies the new agricultural practices?

T1 (I9): No, she is happy.

AA: Okay, good we are at the end. Siyabonga.



**Interviewee nr 10 (Lead Farmer)**

Interviewee Number: 10  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 21:57  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 10, T1, girl sleeping close by  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Questions 6 to 11 were done in a speed because 2 women wanted to go home because the waiting time was too long. So, I only asked Interviewee nr 10 the most important questions. It is starting to get uncomfortable sitting on the floor.  
 My concentration started to become less because I've been doing interviews non-stop for several hours.  
 Chickens strolling around us. People walking in the road who talk. A girl sleeping next to us.

Biases: Some questions were jumped or discussed in a speed (from 6 to 11).

Legend: AA (Alisa Autenried); I10 (Interviewee nr 10); SG (Savings Group); T1 (Translator nr 1); T1 (I10) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Did she learn anything at the workshop from ACAT?

T1 (I10): She is trying to explain all the stages here, the compost, the manure, the rotation...

AA: Does she also remember the pest control and the grey water filtering?

T1: Yes.

AA: Did she mention them?

T1: Yes. Oh no, not the grey water. [translates]

T1 (I10): Yes, also grey water filtering.

AA: Because I always differentiate between what they say spontaneously and what not. Did she apply the things she learnt at home?

T1 (I10): She tried, but was discouraged by the chickens. She needs a fence.

AA: What did she try?

T1 (I10): Spinach, cabbage, onion, tomatoes...

AA: I mean, what techniques did she try to apply before the chickens came?

T1 (I10): She had to cut logs to build fences, but they flew over the fence.

AA: Okay... Did she try the compost?

T1 (I10): No.

AA: And the manure?

T1 (I10): Yes.

AA: Did she try the crop rotation?

T1 (I10): She did that last year.

AA: And did she try the pest control?

T1 (I10): Yes, she tried that.

AA: And also the grey water filtering?

T1 (I10): No.

AA: Why did she apply the other things?

T1 (I10): She wanted to apply the knowledge because by using the outcome, the produce it's just good and it grows faster and they are healthier. The leaves would be like big.

AA: Was she not sceptical before she tried it?

T1 (I10): No, she was not, because she saw it there (Mbuluzi) and they did the practicals there.

AA: And what other changes did she notice?

T1 (I10): Her only setback is the chickens. There is nothing much you can say because she did not do much (could not continue because of the chickens).

AA: Okay, did she teach anything she learnt at the training to anybody she knows?

T1 (I10): Her neighbour.

AA: Did she also teach someone of her SG?

T1 (I10): Yes.

AA: All of them?

T1 (I10): Yes.

AA: How many are there?

T1 (I10): 20

AA: Is it the same than Interviewee nr 9?

T1 (I10): Yes.

AA: Okay, I remember. And what did she teach them?

T1 (I10): She told them that if they want their produce to be good and healthy they need to follow the steps: the pest control, the compost, liquid manure and the rotation of crops and the planting methods.

AA: Oh okay, so all of the 6?

T1: Yes (but did not mention the grey water filtering).

AA: And how did she teach them?

T1 (I10): They visited one member, Make "Interviewee nr 12", all of them went there and did that there practically.

AA: And did she also tell them orally before they did it practically?

T1 (I10): Yes, they would talk.

AA: And how many times do they meet?

T1 (I10): Twice every other week. So, in a week they meet twice and the next week they don't, the third one they met. So, 4 times a month.

AA: Where do they meet?

T1 (I10): In the soup kitchen (of the community).

AA: And why did she teach them?

T1 (I10): To empower them. To give them what they (she) received there (Mbuluzi).

AA: Is she still monitoring today how the other women apply the things?

T1 (I10): They do, but it depends because some may be committed to somewhere and they couldn't come.

AA: Does she have the impression that the other members are willing to learn and to apply?

T1 (I10): They do.

AA: And most of them apply it?

T1 (I10): All of them.

AA: How is her relationship....

[interruption through 2 women (Interviewee nr 11 and 12) who want to leave the queue and go home].

AA: How is her relationship to the other members?

T1 (I10): Good

AA: Is she in contact with other SGs?

T1 (I10): Yes.

AA: Where does she know them from?

T1 (I10): From the community?

AA: And is she still in contact with anybody that she met at the workshop?

T1 (I10): Yes.

AA: Do they talk about farming?

T1 (I10): Yes.

AA: And how are they in contact?

T1 (I10): They use cell phones?

T1: Yes. I remember you asking that question.

AA: No! I am talking about another workshop participant not a member of her SG.

T1: Yes, yes...

AA: So, she calls them and talks with them about farming?

T1 (I10): Yes.

AA: Because the workshop I am referring to is at Mbuluzi... (to clarify it with the interpreter). Does she feel like being a member of community?

T1 (I10): Yes.

AA: Good, yes, I think we are through. Siyabonga make.

**Interviewee nr 11 (Follower Farmer)**

Interviewee Number: 11  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 51:52  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 11, Interviewee nr 12, T1, sleeping girl  
 Interpreter: T1  
 Interaction: Mostly English (interpreted into English), clarifications in Siswati

**Comments, Observations, Atmosphere:**

The interview was done combined with Interviewee nr 12 because they did not have a lot of time and wanted to combine to speed it up. It was not really quicker in the end, but at least I got 2 more interviews. It was complicated to get independent answers. But at least Interviewee nr 12 was a lead farmer and Interviewee nr 11 did not go to the training, so the bias is limited. They made each other talk which is good! They felt more secure being two. Chickens strolling around us. People walking in the road who talk. A girl is sleeping next to us. Very nice and interested woman.

Biases: At the same time than Interviewee nr 12. No indication for % of active time dedicated to agricultural activities.  
 The person she says went to the workshop is not on EcoSolidar's list and only went there the week before the interview! → not a lot of time to apply and learn from her.

Legend: AA (Alisa Autenried); I11 (Interviewee nr 11); SG (Savings Group); T1 (Translator nr 1); T1 (I11) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form, Interview with Albertina Dlamini proceeds]

AA: So, same questions to you: did you learn anything at the workshop?

I11: Yebo Sisi (Yes, Sister).

AA: So, what is the first topic that comes to your mind when you think about the workshop?

T1 (I11): Okay, so she didn't attend the workshop. But a member from her group attended then she came back and imparted the information. She even touched on how to assist a sick person at home. How to take care of sick people at home. So, she learned everything, even though she did not go.

AA: Oh okay, let me just... then I have to take the other one [takes interview for group 2 since she is not a lead farmer]. Who from your group went to the workshop?

I11: "Name 1" and "Name 2"<sup>14</sup>

AA: Okay, so maybe we will find her name on the list [check list unsuccessfully]. So, what topics did she share with you... or what topics did she teach you?

T1 (I11): What they shared was the importance of saving money. If you borrow money, remember to pay it back. Another thing is that they were advised that if you have someone at home who is sick,

<sup>14</sup> Names were anonymised

they must expect two things: that person may not want to be seen, that person may be moody. So they must know, it's not like purposefully but because of what she is going through. And that they must also share with that person or their relatives. They must teach them, tell them that a person sick or not must eat a balanced diet. Which means that they must have a small garden that can assist. It's not like everything must be bought. We can use what we have to get or to make what is needed. That's the introduction of this gardening.

AA: And now referring to this workshop about permaculture. Was she taught something about that too?

T1: Yes, the lady that went there (Mbuluzi) taught them.

AA: All of it?

T1 (I11): Yes.

AA: And how did she teach them about those agriculture practices?

T1 (I11): She learnt how to make a compost, to prepare a compost: the size and how to see if it can be used (measure the maturity), which is tested with a stick. It must be there for six weeks yes.

AA: And how was she taught?

T1: By the lady who went there (Mbuluzi).

AA: Yeah, but orally or practically...?

T1 (I11): Actually, they did that yesterday, the practicals.

AA: So, the lady came back from the workshop?

T1 (I11): The lady only came back from the workshop last week. The workshop was last week.

AA: And did they tell her what she learned orally?

T1 (I11): Yesterday.

AA: Oh, yes, maybe I saw that lady at the workshop in Mbuluzi last week. Do you think that you will apply what she teaches you in your garden?

T1 (I11): They say that it grows faster then when using fertilisers. So, they would save a lot of money because they are no longer buying.

AA: So, how is your relationship to "Name 2" who went to the training?

I11: Yes, alright.

AA: So, do you have the impression that she wants to teach you?

I11: [nods].

AA: Have you known her before you joined the SG?

T1 (I11): They knew each other but not very well. But now they are close.

AA: And do you think you will teach someone else outside the SG?

I11: [nods].

AA: Okay, that's it. Siyabonga.

**Interviewee nr 12 (Lead Farmer)**

Interviewee Number: 12  
 Interview Day: 2  
 Location: Shiselweni, in front of community centre, in the grass  
 Duration: 51:52  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 12, Interviewee nr 11, T1, sleeping girl  
 Interpreter: T1  
 Interaction: Questions asked in English, answers in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

The interview was done combined with Interviewee nr 11 because they did not have a lot of time and wanted to combine to speed it up. It was not really quicker in the end, but at least I got 2 more interviews. It was complicated to get independent answers. But at least Interviewee nr 12 was a lead farmer and Interviewee nr 11 did not go to the training, so the bias is limited.  
 She is very eager and passionate. Chickens strolling around us. People walking in the road who talk. A girl is sleeping next to us.

**Biases:** At the same time than Interviewee nr 11. Nr 12 is not on the participants list → Did she go to EcoSolidar's workshop? Probably attended a workshop in 2017.

Legend: AA (Alisa Autenried); I12 (Interviewee nr 12); SG (Savings Group); T1 (Translator nr 1); T1 (I12) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Did you learn anything at the workshop from ACAT?

T1 (I12): She learnt about pesticides, that they can be dangerous. 1. they are expensive and 2. they must be kept in a safe place away from kids. It's dangerous. But there (Mbuluzi) they were taught that they can produce something for themselves. Something that is not expensive, something that is not harmful, something that they can get where they are. And they also learnt how to prepare a compost that lasts for a long time. And the produce from that soil is healthy. Everything that comes from that (soil) it grows faster than when using fertilisers from the shops. And they are saving a lot of money now they know how to use what they have. They don't have to pay money to go to the shop, but they are saving the money they were going to use to buy those things from the shops.

AA: Did she also mention one of the other topics?

T1 (I12): Yes, that they can prepare manure now. And clean water that they can also use to irrigate.

AA: So, she mentioned them all.

T1 (I12): Yes, even the plant rotation.

AA: Yeah, I got that (by gesture and Siswati words I understand).

T1 (I12): Yes, she touched on all.

AA: Did you apply everything at home?

T1 (I12): Yes. She would go back and refer and see if she is doing the right thing [jokes].

AA: Why did you apply it?

T1 (I12): She is saving a lot of money. Because before she was putting money aside for fertilisers and now she can channel that money to something else. Everything is working well for her since she is using that method that she learnt there.

AA: Was she not sceptical before she tried it on her own?

T1 (I12): She was like “now I want to see, let me go for it, I want to see”. [laughter]

AA: So, does she produce more food now?

T1: That’s what she said.

AA: Did she teach anybody she knows?

T1 (I12): Yes, they impart the knowledge to the kids.

AA: And also to the SG?

T1 (I12): Actually, they imparted the knowledge to the group and to their families.

AA: To everybody of the group?

T1: Everybody. When they come from there they meet as a group.

AA: And did she teach them about everything?

T1 (I12): Yes.

AA: And how did she teach them?

T1 (I12): In their meetings. The one who was from the workshop she would be there telling them what exactly she learnt there. And I heard that they’d go to someone of them and do it practically.

AA: Just to one? And the others learn?

T1 (I12): Yes.

AA: So, they don’t go to everybody. And how many are in your SG? How many people?

T1 (I12): 13.

AA: And where do you meet?

T1 (I12): Under a tree somewhere.

AA: So, you came back from the workshop and you all gathered, and you were telling them once and then you went to the garden applying it practically? (double checking)

T1 (I12): Actually, since she is the one who went first there, the compost was prepared in her place. Then they would go to other places.

AA: Okay, so they did it in every garden? All together?

T1: No, the members went to her place.

AA: Just her place?

T1 (I12): Actually, afterwards the others would go dig, prepare the compost and then the extension officer from the ministry of agriculture (no! he is from ACAT) would see if it is done correctly... [Interviewee nr 12 interrupts]. Seemingly, now what she says is that they are doing it themselves. Now, they don’t need anybody to teach them (anymore) how to do it.



AA: Did all of them apply it at home?

T1 (I12): Yes. We are happy, that's what she is saying.

AA: And why did you teach them?

T1 (I12): It's important to impart knowledge. One cannot be stingy with information. Because if you are stingy, the community would not be empowered, they would remain poor. So, if we impart the knowledge to everyone, then we will all grow. You can't withhold the knowledge that you have. Because if you are stingy, you won't help you. People must know outside so that they can help you. If you have a talent somewhere, who are you going to sell to if you don't show the other people? So, if you are jealous or stingy with the information, people won't go, they won't come buy (your produce).

AA: Yes, that is true. How is your relationship to the other members of the SG? Is it friendship or...?

T1 (I12): ACAT has brought them together now. They share almost everything.

AA: But did you know them before you joined the group?

T1 (I12): They knew each other, but they were not working together. This has brought them together.

AA: Ah, so they knew each other from outside "hello, how are you..."

T1: Yes, she was saying that before (the interview) they were gathered in the house (community centre) and they learnt something as they were there.

AA: Right now?

T1: Yes.

AA: Do you feel as a part of a community in the SG? Do you feel like you belong there?

T1 (I12): They have a good relationship with the officer who was helping them. He would assist them if they need anything. If they needed counselling or information on other issues he is always there.

AA: So, I think we are at the end. Is there anything you want to ask or add?

T1 (I12): She is saying they have a water problem and there is a river down there. If only they can get pipes and bring the water up. So maybe if ACAT may help them with a borehole or pipes. Because their setback here is drought. That is their major setback.

AA: Okay, I will tell them.

**Interviewee nr 13 (Follower Farmer)**

Interviewee Number: 13  
 Interview Day: 2  
 Location: Shiselweni, Homestead Interviewee nr 7 (niece), garden  
 Duration: 34:10  
 Informed Consent Form: Forgotten  
 Anonymisation: Unknown  
 Present Persons: Alisa Autenried, Interviewee nr 13, T1, family is close by (garden)  
 Interpreter: T1  
 Interaction: Mostly English, in the beginning in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Very nice lady. At the beginning only talked Siswati until I discovered that she speaks very well English. I think she did not want to speak English, or she did not dare. Very well educated and open.

Garden of Interviewee nr 7 where whole family was around 20 metres away from interview, all were occupied doing the laundry. Interviewee nr 13 is the aunt of Interviewee nr 7. A lot of interruptions (people they talked to, interpreter talking to other people etc.). Constant small-talk in Siswati between interpreter and interviewee. In the middle of the interview the interpreter starts chatting with Interviewee nr 7 and does not translate anymore, Nr 13 then switches to English and talks directly to me. Confusion about whether she participated on workshop or not. The interview was not really taken seriously by the interpreter not the interviewee.

**Biases:** Already knew most of workshop content from Extension Officer. Interpreter asked questions incorrectly. A lot of interruptions, everybody speaking at the same time, so transcription is hardly hearable which may have caused some transcription errors.

Legend: AA (Alisa Autenried); I13 (Interviewee nr 13); SG (Savings Group); T1 (Translator nr 1); T1 (I13) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: So, did Interviewee nr 7 share anything from the workshop she went to with you?

T1 (I13): She did not go. She did not attend.

AA: Oh, who did then from your SG?

T1: So, no one shared?

AA: No one went to the workshop?

[discussion in Siswati about the misunderstanding]

T1 (I13): No, they did not attend this workshop (taking place in March 2019, one week before this interview) but they went to a workshop a long time ago by the same guy "Extension Officer"<sup>15</sup>. Yes, they were workshopped.

AA: Ah, and when was it?

<sup>15</sup> Name was anonymised.

I13: Ay, it's a long time. [asks Interviewee nr 7]

T1 (I13): Yeah (confirming), they attended the workshop a long time ago.

AA: Ah, they attended! In 2017?

[T1 asks Interviewee nr 7]

AA: Ah okay, but then I filled out the wrong form (profile questions for group 2 instead of 1) [discussion with T1 on organisation of papers]. I just need to find an interview of group 1. [small talk between T1 and I13 about Switzerland]. Okay, so, did you learn anything at the workshop in Mbuluzi?

I13: I never went to Mbuluzi.

T1 (I13): You would visit them and then they would do it.

I13: Not everyone stayed. Maybe once a month. On Wednesdays.

AA: Ah, so you never went to Mbuluzi?

I13: No, I never went.

AA: But do you know someone from your SG who went to Mbuluzi? Who went to the permaculture workshop?

T1: She went [pointing at interviewee nr 7]

[T1 is chatting with Interviewee nr 7 and does not participate at the interview anymore, I13 talks directly in English to me].

AA: Okay, then it was the right form. She went. Did she teach you anything that she learned at that workshop?

I13: Mostly things that they learnt there are the things this guy (refers to "Extension Officer") already taught us. Like how to plant the seeds, veggie seeds, maize and beans. All these things, food stuff.

AA: Ah, so you already knew most of it (before interviewee nr 7 went to the training)?

I13: Yes, we already knew because he teaches us. All these times when he comes to visit us, there he teaches us how to do the gardening and things like that.

AA: Okay, so she (interviewee nr 7) did she still enrich something? Did she still teach any details or did she...?

T1 (I13): Did is what "Extension Officer" would do. They would go for the workshop. He would workshop them and then they would go for practicals, they would prepare the compost, he will teach them how and then they would start the planting and prepare the lines, the spacing and the crop rotation. You cannot the same soil where you were planting cabbage, it has to be spinach or something. She said they then went to another lady Make "Name"<sup>16</sup> who is in their group and this is where they did practicals.

AA: Ah okay, but she said they already knew a lot of it, from the content because the extension officer taught them.

T1: Yes, and they would do practicals and visit the other members.

AA: Okay, good.

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<sup>16</sup> Name was anonymised.

[interruptions from family, shouting, a neighbour comes talking].

AA: Have you applied anything in your garden from what you learned?

I13: I have got just bananas. No vegetables at the moment.

AA: So, since 2017 you did not do compost or crop rotation or any of the other things?

I13: No.

AA: Because of the drought?

I13: Yes, because of the drought and the water here they don't... if they catch you using this water here [points at pipe in garden of interviewee nr 7] you are in big trouble.

AA: You are in big trouble?

I13: Yes, if you use this water for watering.

[answers her ringing phone, interpreter shouting and talking in background with family].

AA: So, she is your niece?

I13: Yes, she says aunt to me (which does not necessarily signify that they are blood related).

AA: Good. Have you taught anybody else about composting, crop rotation, liquid manure, pest control...?

I13: I don't want to lie. I haven't. I don't want to lie.

AA: No, it is a very good result too. Okay, I think that we are done already. Thank you very much.

[Siswati chatting continues].

**Interviewee nr 14 (Follower Farmer)**

Interviewee Number: 14  
 Interview Day: 2  
 Location: Shiselweni, in the homestead of interviewee nr 14, on chairs outside  
 Duration: 34:15  
 Informed Consent Form: Forgotten  
 Anonymisation: Unknown  
 Present Persons: Alisa Autenried, Interviewee nr 14, T1, approx. 10 family members close by  
 Interpreter: T1  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Family in garden drinking beer and listening to music. They passed by in the middle of the interview and acted drunk and stupid around me (wedding proposals, love confessions etc.). Last interview of the day and we wanted to hurry up.  
 Very beautiful region.  
 Animals (turkeys etc.) strolling around. Muttering and music in the background.

**Biases:** Interpreter suggested topics from workshop. The interviewee was not given the chance to name them spontaneously.  
 Indicated LF is not part of EcoSolidar's training. Does not know the name of her SG.

Legend: AA (Alisa Autenried); I14 (Interviewee nr 14); SG (Savings Group); T1 (Translator nr 1); T1 (I14) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

**[Formalities]**

AA: Did you participate at the workshop?

T1 (I14): She did not attend, but those who were chosen to go they came back and imparted the knowledge. They explained and... They came together as a group. When they came back they came together, they dug up there [pointed at interviewee nr 14's garden], prepared the compost, then they planted. Yes, they taught them everything. They were taught about spacing. They were taught about pest control for different kind of veggies yes like you cannot use it on all of them. I mean the mixture for all the veggies, yes, that's what she said.

AA: And did you also learn about crop rotation?

T1: Pardon?

AA: Did she also learn about crop rotation?

T1: Yes, yes, yes this is what she was saying.

AA: And liquid manure?

T1 (I14): Yes.

AA: How many women of your SG went to the workshop?

T1 (I14): 5.

AA: And how many are there in total (members of the SG)?

T1 (I14): 10. When they all come together to the meeting, some are also away. They don't come together. It may be 10 this week and on the next meeting it is 15 you know.

AA: Okay, so not everybody comes to every meeting. And how often do you go to the meetings?

T1 (I14): Before they would meet twice a month. But "Extension Officer"<sup>17</sup> could not afford to meet them that often so now he would meet them once a month.

AA: Ah so "Extension Officer" is always at every meeting?

T1: Yes.

AA: And have you applied anything else than compost (in your home garden)?

[talking in Siswati for a long time]

AA: And? What did she say?

T1 (I14): She was talking about the compost and the planting of maize. Like when it's summer she will have maize and now in winter she will have the vegetables. I think the land is not big enough, yeah I believe the land is not big enough (to plant both at the same time, so she needs to alter).

AA: And did she apply liquid manure?

T1: Yes.

AA: And did she try the grey water filtering?

T1 (I14): She hasn't done it because she has water here, running water. So, there is not reason for her to do it.

AA: Okay, makes sense. And the crop rotation she did not do it because the land is too small?

T1: According to her. Now, she has just harvested maize, now she is preparing for vegetables where there was the maize. Yeah, the same place. So yeah, there is the rotation. Now she is moving maize and now she will plant something else.

AA: And the pest control? Did she do that?

T1: Yes, yes, yes. That's what she was trying to explain...

AA: Ah, that you cannot use the mixture for every plant?

T1: Yes.

AA: Why did she apply it, the things she did?

T1 (I14): So, this time she has bumper harvest as you can see over there. Bumper harvest (I think she means abundant). Before she was not spacing, she would the seed, or the seedling?

AA: The grain?

T1 (I14): Yes, it would be clustered. But now she is aware that it must be proper spacing to allow it to grow. When you want to introduce a good fruit or a good crop.

AA: So, she wanted to try? Or why did she want to try it?

T1 (I14): Actually, she discovered that she was not doing well until the guy from the agriculture department ("Extension Officer" is from ACAT and not agriculture department) came.

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<sup>17</sup> Name was anonymised

AA: And he said that she would get a better harvest if she did it like that?

T1: Yes.

AA: And now she has more is it?

T1: Yes.

AA: Are there any other changes in your life related to the new practices?

T1 (I14): Now she doesn't suffer, she has enough food, vegetables and maize.

AA: Okay, good, good. And who of her SG took the workshop?

I13: "LF"<sup>18</sup>.

[searching the name in the list]

AA: Maybe they went to another training... And what is her relationship to "LF"?

T1 (I14): Neighbour, neighbour.

AA: Okay, but a good relation?

T1 (I14): They work together.

AA: Okay, so when "LF" took the workshop with the others, they came all to her (interviewee nr 14) garden and installed the compost? Or did they go to everyone's garden?

T1 (I14): They went to three homesteads.

AA: And they did the things in three homesteads?

T1: Yes.

AA: And how many times did they come here?

T1 (I14): Twice.

AA: And did they also meet somewhere, like at the soup kitchen, where they were taught orally?

T1 (I14): Where we were (community centre in "Community"<sup>19</sup>). That's where they meet.

AA: Ah, in this room?

T1: Yes, that's where they all meet.

AA: And then they teach each other orally?

T1: Mhmmm (yes).

AA: Good good. And now, does she think that "LF" was willing to share the knowledge?

T1 (I14): She did it willingly.

AA: Has she taught anybody else about it?

[Siswati chatting for a while between interviewee nr 14 and interpreter]

T1: Where is her form (referring to the profile questions)

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<sup>18</sup> Name was anonymised

<sup>19</sup> Name was anonymised

AA: Yeah, we missed that at the beginning, but we are going to do it at the end.

T1: Ah.

AA: So, what did she say? Did she teach anybody?

T1: Yes.

AA: Who?

T1 (I14): They would share the information among themselves in the group. No outsiders.

AA: Okay, so not to any other neighbours?

T1: No.

AA: Why not to outsiders?

T1: I don't know.

AA: Can you ask her?

T1 (I14): She has been inviting them to join the group.

AA: Did anybody agree?

T1 (I14): No, not yet.

AA: So, now we are going to ask those profile questions. (min 17:45)

[The Programmes Officer takes pictures of us, profile questions → details and explanations are written on profile question form]

AA: I was just wondering why did the other women not want to join her SG?

T1 (I14): She is saying that they need to do more, talk to them, strategize and convince them.

AA: Good okay, I think we are done. Siyabonga.



## Interviewee nr 15 (Ordinary Farmer)

Interviewee Number: 15  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 58:27  
 Informed Consent Form: Forgotten  
 Anonymisation: Unknown  
 Present Persons: Alisa Autenried, Interviewee nr 15, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

### Comments, Observations, Atmosphere:

No informed consent form.  
 She was the first interviewee of the day.  
 She is part of a SG (ACAT) where no member went to the permaculture training of ACAT.  
 Interesting because she is group 3 (OF) → still knowledge about permaculture and why?  
 I had no interview planned for group 3, so I had to improvise.  
 Under tree with cows and goats strolling around making noise. Sometimes an airplane and a car pass by. Very windy, so recording is hard to hear.  
 It was the first interview with the new interpreter, so we had a little argument towards the end about him not translating enough details.

Biases: No interview planned with group 3 → no questions prepared (improvisation)

Legend: AA (Alisa Autenried); I15 (Interviewee nr 15); SG (Savings Group); T2 (Translator nr 2); T2 (I15) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

### [Formalities]

AA: What is the name of your SG?

I15: "SG"<sup>20</sup>.

[Checking in list → her SG is not on list because no one from her SG went to permaculture workshop]

T2 (I15): She joined other SGs, she is part of other SGs. And even in those groups no one went to Mbuluzi.

AA: Is it ACAT's SGs?

T2: No, no, no she is part of other SGs besides from this one. Yet still, no one ever went to Mbuluzi.

AA: Oh, but I thought... Can you ask if those SGs are all from ACAT? Because there are other NGOs working with SGs and they told me that in every SG permaculture is a topic of every SG.

T2 (I15): "Extension Officer"<sup>21</sup> teaches her. She doesn't have a plot yet, you know. But the members do and sometimes they sell her vegetables and sometimes they would give her vegetables. She is new, so she is not as advanced yet.

AA: So, she is new? Nobody ever joined the workshop?

<sup>20</sup> Name was anonymised.

<sup>21</sup> Name was anonymised.

T2 (I15): The group has never been to Mbuluzi. However, some of her co-members have been taught by him (Extension Officer). But he hasn't taught her personally. She just shares knowledge between group members. She doesn't have a plot yet, but the members sometimes sell their vegetables, products to her and give her products. And everybody seems to have a plot, they have their gardens that are flourishing, and she wants to be part of that.

AA: Okay, I am just going to improvise on the questions because she does not fit in any of the categories. But since she's here we are still going to ask some questions. So maybe we have to speak a little louder (because of the recorder). Why did she join the group?

T2: She has seen their plots and she wanted to be part of that.

AA: Okay, she did not basically join just for the savings part?

T2 (I15): She doesn't have a plot, but she does have a plot at her home that's where she lives. But she has not converted it into a garden yet. She did not have any money to start it. She is not sure about capital she really does not know where to start. How to get money to grow and... she is new. She just does not know.

AA: And what is the plot right now? Just grass?

T2 (I15): In her field she has maize, okay? Yams which are sweet potatoes, and sorghum. But she wants to convert it...

[clears something]

T2 (I15): She has land, she has a field, right? Currently on the land is maize, yams and sorghum. But she would love to convert it into a garden. Or divide a piece of it and convert it into a garden, but she doesn't have the money yet. She would love to grow these things: Beetroot, spinach, tomatoes, pelle-pelle (chili). Cabbages no because they have water issues, apparently cabbage needs a lot of water. She doesn't want to plant that then. But her main issue is that she doesn't have enough money for fencing. That's what she needs to keep the chickens and cows out.

AA: And can she not just cut wood and build her own fence?

T2 (I15): It's a bad idea because cutting down trees and branches needs labour and she can't do it because she has bad knees. That's a problem. She used to work as a farmer until her knees started to give her problems. And I asked if she had any kids who could help her and she said that the people she has currently around her are lazy.

AA: So, they won't help her. Maybe ask her who exactly told her... I want to understand who gave her the idea to join the SG and start with permaculture.

T2: The community invited her in.

AA: So, the whole community had a meeting?

T2 (I15): She said a lot of things. The current SG meet twice a month. This lady is (?) and she was in church and the people from church said "hey, join this thingy (SG), we are going to start businesses..." However, you have to make contributions and the minimum is 2 Rand, 2 Emalangeni.

AA: 2 Rand per meeting?

T2 (I15): They meet two times a month.

AA: So, two times a month 2 Rand? So, it's 4 Rand

T2 (I15): Minimum. However, if you have 100 Rand you can contribute that. And, so that's how they work. It was a female who invited her. And "Extension Officer" echoed the same things "Hey, come on, join our organisation". And currently they have this programme that is running: They started in

January and ends in June contributing money to buy food. So, January to June and in June. And then from June onwards they are contributing money to farm with it. So, they have different agendas.

AA: So, they can't say like someone wants it for school fees and someone else for a T-shirt?

T2: No, they have programmes. January to June it's just food and from June onwards its farming.

AA: Can you ask her when she joined (the SG)?

T2 (I15): She joined two years ago. And I think for the past two years they did not do well in her SG and "Extension Officer" came and said, "come on guys, chip in some more". And then last year, this finally see results. Then the first measure beat through was June (did not understand clearly from recording).

AA: I now want to go more into the agriculture direction.

T2: But remember: she is not a farmer yet.

AA: I know, but maybe someone... Ask her if someone of her SG has, besides the savings part, has already told her about the permaculture, which is also part of the SG.

T2: "Extension Officer".

AA: Yeah, but she said in the beginning that he did not teach her.

T2: Nobody has been.

AA: Yeah, I didn't tell you but the Extension Officer he also assists them with the garden and if someone has questions he answers them. So, sometimes he even gives knowledge about permaculture before the workshop.

T2 (I15): She said a lot of things.

AA: Could you sometimes break it up a little? Like every time you ask precisions first translate what she said so I know where we are at. Because otherwise the interview might go in another direction. So that I still...

T2: Yeah, but I don't want to interrupt them.

AA: I know, but it's my research and I need to control it.

T2: Okay. So, she mentioned a lot of things. What was the question again?

AA: If someone taught her about permaculture.

T2: Yes, "Extension Officer", right? "Extension Officer" told her that this area is only suitable for 4 crops Tinhlumaya (a legume) which I don't know what it is in English [spells], sweet potatoes leaves, sorghum and...

AA: Maize?

T2: No, no, no drought issues. The reason why these (the said crop) work here is because they are hardy, drought resistant. However, as far as she is concerned, no one from the group has ever implemented was "Extension Officer" teaches. No one has planted this yet.

AA: Even though they are the only ones that are drought resistant? Why?

T2 (I15): As for her, she doesn't like sorghum. She had too much of it as a kid, she doesn't like it. And the patata (sweet potato) is tricky to plant. She only plants small portions because of age and her knees that give her problems.

AA: But I don't get it, since those are the things to plant here because they are drought resistant, why does nobody plant them? Or what else do they plant?

T2 (I15): Old age traditions, that's the reason why. The reason why they are not adapting as "Extension Officer" was saying is because of age old traditions. They are used to what they normally plant after year and after year.

AA: Ah, so they are not used to this (tinhlumaya, sweet potato leaves, sorghum and peanuts)? And he says that they should because it's the only thing that works here (Lubombo that is really dry)?

T2 (I15): And they are like "Oh, this is new, we don't know this". They have done different for ages and there is a resistance (against the new practices). It's not like they are ignorant, or they don't know what's happening, it's just that they are sceptical. Why relying on a stranger? It's strange, but slowly and surely, they are doing it. It's an individual thing and not a mass movement yet.

AA: And is she completely resistant to it? Does she not want to try it?

T2 (I15): She tried sorghum which was really successful, even though she doesn't like it. I don't know what this potato thing is, I am not a farmer, but apparently, it's tricky. She is against this because it's tricky. You have to do research about it. And she does peanuts too, the tradition stuff you know.

AA: And peanuts? Is it something he (Extension Officer) teaches?

T2: Yes, apparently, it is drought resistant. And the water source is quite far from her house. And the knee problems and she can't afford piping. And the water source is a borehole, a community borehole.

AA: Can you ask her if she had to rank why she joined the SG, is it more because of the savings parts or is it more because of the agriculture part or same same?

T2 (I15): The money aspect is more important. Money is tempting you know, you spend it everyday if you have it on you. So, it's better if you invest it. And then you get it later on as a dividend, it will be bigger because it would have generated an interest. It was the main thing for her. But now, it's also an employment thing.

AA: How come?

T2 (I15): Many are jobless. And if you are jobless and you can't find a job, you start a garden and sell your products. So, it's a job opportunity now. He's got these programmes that they run, it really helps them. You are not buying things on a daily basis like bread today, salt tomorrow, tomatoes on the next week. No, you throw it (money) in on an investment thingy (SG) and then three months later you get your dividend.

AA: Okay, good good. Now let's do the profile, the categories we can.

[Profile questions → details and explanations are written on profile question form]

**Interviewee nr 16 (Follower Farmer)**

Interviewee Number: 16  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 01:01:16  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 16 and two of her kids, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Cows and goats in the background making noises.  
 Passing by cars and plains making noise.  
 Very windy, recording is not well hearable. Little boy interrupted me a lot because he was playing with my things. Very nice lady. Breastfeeding her children during the interview.

Biases: The recording is sometimes not hearable because of the wind.

Legend: AA (Alisa Autenried); I16 (Interviewee nr 16); SG (Savings Group); T2 (Translator nr 2); T2 (I16) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: So, you said that “LF”<sup>22</sup> and interviewee nr 2 went to the workshop of permaculture in Mbuluzi. When they came back did they share anything they learnt with you?

T2 (I16): They did. Both of them taught them. She used a notebook and then she took them on the side that had an active that was practicing permaculture (not understandable from recording).

AA: So, they came back...

T2 (I16): They came, shared the knowledge and took everybody on side...

AA: What side?

T2: When I say outside I am talking about a garden that is actually practicing permaculture.

AA: Okay, where was that garden?

T2 (I16): It was a homestead of someone (of the SG).

AA: So, let me just go back to... What did they teach you? What topics?

T2: You mean what crops?

AA: No, what topics of the six that I have here [pointing at the list of interview].

T2: I can't translate them.

AA: Don't suggest them, I want to know what topic comes to her mind spontaneously. Do you remember what they taught you roughly? No details, just the topics.

<sup>22</sup> Name was anonymised

T2 (I16): Ash, soil, grass...

AA: Ah, the compost?

I16: Yes, compost!

T2: Now you are suggesting.

AA: No, I am not. I only recognised the topic she was talking about. That was the compost she was talking about.

[tractor passing by, making a lot of noise]

[I16 explaining planting methods with planting lines]

T2: You got that right?

AA: Yes, the planting methods.

T2 (I16): Every crop is in a different line. Starting with onions as a first line of defence against insects and pests. And then...

AA: Yeah, I got that. Did you also learn about liquid manure?

T2: What is liquid manure?

[I16 explains]

T2 (I16): Manure in a sack, put manure in it and drain it (add water) and the water will trickle through that sack into a container and then when you want to water (your plants) you take that water.

AA: Did you also learn about pest control?

T2: Onions as a first line of defence.

AA: Yeah, but there is also a spray they learnt about with onion, garlic, pellepelle (chili).

T2: Okay, let me ask her.

T2 (I16): The ambassador was not very vivid in her explanations.

AA: Who is the ambassador?

T2: The one that went to the workshop. She wasn't clear. At least that's how she feels.

AA: Oh, that's very interesting.

T2: On some topics she wasn't quite clear.

AA: Okay. Let me keep that in mind (for later questions).

T2 (I16): "LF" gave a better presentation. Interviewee nr 2's presentation was poor. That's how she feels.

AA: What would you have done differently?

T2 (I16): She suspects that interviewee nr 2 doesn't really... that's what she picked up... she didn't quite have a passion for it. She was flipping some parts.

AA: So, she's referring to the oral presentation or also the practical demonstration?

T2: Both. But the other ambassador, "LF", did better. Well, she (interviewee nr 16) wasn't present when "LF" was presenting.

AA: Oh, is it either the one or the other? Or what did you say?

T2: no, two people gave the presentations right. She was present when interviewee nr 2 presented. She did a shitty job and then when it was “LF”’s turn, she (interviewee nr 16) wasn’t present. But from what she gathered she (“LF”) did a splendid job.

AA: And if it had been her, what would she have done differently about the presentation (of interviewee nr 2). You know, if she had to present it?

T2 (I16): Okay, interviewee nr 2 told a different different different curriculum from what she was taught. Only when “EO”<sup>23</sup> came back and started surveying the different gardens did he realise that the way the guys had planted the garden was totally different from what they were taught at Mbuluzi. Totally different. interviewee nr 2 messed up.

AA: Because she did not pay attention at the workshop?

T2: Probably.

AA: Could you ask her what her suspicion is of why she taught it differently.

T2: She said that it is probably because she did not know it herself. She had the wrong information herself.

AA: And then? Did they talk to her about it, or what did they do about it?

T2 (I16): They removed everything. Started afresh.

AA: Oh no. Okay.

T2 (I16): She said that she (interviewee nr 2) had the wrong information. But she apologised for having dispersed the wrong information. And they redressed the issue and fortunately for them everything turned out well. It’s okay.

AA: And where did they get the right information from after this?

T2: “EO”.

AA: And what topics did she teach them wrongly?

T2: The planting, yeah, she mentioned that. That’s actually the one thing that was wrong. All the other five are cool.

AA: Did she learn about the grey water filtering too?

T2: They did. They taught her about that. But only kitchen water. Rinsing water. Not the water we wash the dishes with. You know you wash and rinse? Only the rinsing water.

AA: And which of those six topics did she apply at home? Or did you do the compost at home?

T2: She did, also crop rotation, pest control...

AA: Everything at her home?

T2: Let me ask her.

T2 (I16): Yes, everything.

AA: So, you said they came home from the workshop and then, did you meet just the week after the workshop? Or when did she teach you?

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<sup>23</sup> Name was anonymised

T2 (I16): Three days later.

AA: And did she teach them everything at once?

T2 (I16): On two occasions. The presentations were split into two occasions.

AA: And the practicals? How was that organised?

T2 (I16): Tuesday. The following day. Tuesday is day 1, that's when they were teaching them theory and on Wednesday they were teaching them the practicals at one homestead.

AA: At "LF"'s or interviewee nr 2 's?

T2 (I16): Another member's house.

AA: And then everybody went home and did it the same way?

T2 (I16): Yes.

AA: And then "EO" came and said "no, that's wrong".

I16: Yes.

AA: Okay. And for the theory, did she just explain it? Or did she draw it or did she...?

T2 (I16): She had a notebook.

AA: And everybody wrote it down?

T2: Most of these guys are illiterate. So, I doubt that they were writing it down.

T2 (I16): They have an appointed member that took notes.

AA: Okay, good to know. And where is the meeting?

T2 (I16): Under that tree [pointing at a tree where the other interviewees are waiting].

AA: Under that tree? I need to take a picture. Are you basically willing to learn about permaculture? Is it something you are interested in?

T2 (I16): She loves it.

[Car passes by and I can't hear the recording]

T2 (I16): Improved quantity, improved quality. They love it. And low chances of failure. It's a stable way to farm.

AA: And before you applied it at you home, you did not know that it was good. Why did you still do it?

T2 (I16): She was an only adapter. She changed to drought resistant crops early on. For her it's because of past experiences if she stopped doing the way she was doing things, she would fail. Like everybody else in the community. That's for her specifically. Everybody else, there is a majority, a large number of people that is sticking to old habits and they plant maize and everything. And the reason why they do this it's the hope that it's going to rain and that the conditions are going to be different, year after year after year, they hope, they hope, they hope. It's a gamble. They plant maize and hope that it rains. If I plant maize later on maybe the conditions would be different. It's a hope thing. Like maybe, just maybe this year it's going to be different.

AA: And she?



T2 (I16): She converted to drought resistant crops early on. She doesn't even really plant maize anymore. But that's her, the majority of the community doesn't.

AA: So, she was not sceptical before she applied it?

T2 (I16): She was ready for change.

AA: Okay, she just wanted to try it's really working. Okay, did every member of your group apply it?

T2 (I16): Everybody.

AA: How many are you in your SG?

T2 (I16): 14.

AA: In general, how is your relationship to interviewee nr 2 and "LF"? Is it friendly or not really friendly?

T2 (I16): Friendly.

AA: Did you know them before they went to the training?

T2 (I16): Yes.

AA: Also before they joined the SG?

T2 (I16): Yes, she knew them before. Just community people.

AA: Do you think that they were willing to pass on the knowledge? Oh yeah, I forgot that she said that "LF" yes, but not interviewee nr 2. Was there also something positive about the way they taught it?

T2 (I16): Yeah, it helped a lot. Because before the workshop they planted, but the idea of converting a field into a garden was a foreign concept to them. Because water is an issue around this area and then ACAT came through and said "hey, even if you don't have enough water you can still make a garden". It was an eye-opener, they learned a lot from them.

AA: So, the garden is not something common here?

T2 (I16): It is not. Before the workshop it wasn't. Now, it's pretty common.

AA: Okay, that's interesting. And did you teach anybody else outside your SG about permaculture and gardening?

T2 (I16): Many. Lots, lots, lots, lots...

AA: How many? Or who is it?

T2 (I16): 6 are part of the SG now.

AA: So, you told them that it was something good and that they should join?

T2 (I16): Yes.

AA: Okay, I think we are pretty good now. Did you notice anything else, that has not been mentioned, that changed your life which is related to the new practices? Anything else that could be related to the new practices?

T2 (I16): It's the savings thing. It was an eye opener for her. So that when you get your dividend your money is... (too windy, recording is not hearable).

AA: Okay, so we are done. Siyabonga.

**Interviewee nr 17 (Ordinary Farmer)**

Interviewee Number: 17  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 27:43  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 17, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), sometimes English

**Comments, Observations, Atmosphere:**

Has not been taught in permaculture. Her SG only deals with savings.  
 A very good ambiance with a lot of laughter.  
 Interruption of Programmes Manager looking for food and discussing the logistics.  
 We are all having lunch at the same time than doing the interview (no time for a proper break because 4 women are still waiting to be interviewed). A rather short interview because there was not a lot to investigate and I was not prepared to meet someone who is not part of group 1 or 2.

**Biases:** No interview for OFs was prepared, I had to improvise on the questions.

Legend: AA (Alisa Autenried); I17 (Interviewee nr 17); SG (Savings Group); T2 (Translator nr 2); T2 (I17) (Interpretation from Siswati into English); (:): Added to facilitate understanding; [:]: Activities

**[Formalities]**

T2 (I17): She is very happy to be here.

AA: Me too.

**[laughter]**

AA: Did you go to the workshop in Mbuluzi?

T2 (I17): No, "LF"<sup>24</sup> went.

**[searching name in list]**

AA: When did she go to Mbuluzi?

T2 (I17): She doesn't know.

AA: What is the name of the SG?

T2 (I17): "SG"<sup>25</sup>.

**[profile questions → details and explanations are written on profile question form]**

AA: Did "LF" share anything with you that she learned at the workshop?

<sup>24</sup> Name was anonymised

<sup>25</sup> Name was anonymised

T2 (I17): Yes.

AA: What did she share with you?

T2 (I17): She only attended accounting classes. Nothing else.

AA: Oh, so no permaculture?

T2 (I17): No.

AA: Oh, okay so you didn't learn permaculture?

I17: No.

AA: Okay, that changes everything. Did "EO"<sup>26</sup> teach you anything about permaculture?

T2 (I17): He did.

AA: And nobody from your SG went to the permaculture workshop?

T2 (I17): No. Not yet. But they nominated somebody, but they haven't made the trip yet.

AA: Okay, alright. Well then, we don't really have to ask those questions. So, what did "EO" teach you about permaculture?

T2 (I17): About mango trees, topsoil, ash, grass... Okay he taught them about planting and he taught them about water harvesting with the tanks, the pond. But the pond hasn't been made yet, but the spot has been earmarked. And he taught them about chickens. Free range chickens. Those chickens are drought resistant.

AA: The indigenous chickens.

T2: Yes, the indigenous chickens. But they are expensive. Some would go for like 700 a pop (700 Emalangeneni = 50CHF).

I17: Yes, 700 each. Money that we don't have.

AA: That's a lot!

I17: Yeah, we don't have.

AA: Siyabonga, we are at the end. Thank you so much.

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<sup>26</sup> Name was anonymised

**Interviewee nr 18 (Follower Farmer)**

Interviewee Number: 18  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 17:39  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 18 and her baby, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Short interview  
 Cows and goats in the background making noises. Passing by cars and plains making noise.  
 Very windy, recording is not well hearable.  
 Interview not prepared (OF).

Biases: Recording sometimes hardly hearable.  
 Interview has not been prepared (group 3)

Legend: AA (Alisa Autenried); I18 (Interviewee nr 18); SG (Savings Group); T2 (Translator nr 2); T2 (I18) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

**[Formalities]**

AA: Do you know anything about permaculture?

T2 (I18): Her mother in law taught her. Her mother is a “SG”<sup>27</sup> member (SG).

AA: Is she in the same SG than interviewee nr 3?

T2 (I18): Yes.

AA: I know her. So, did she teach you about permaculture?

T2 (I18): Nothing formal. she just observes.

AA: Okay, and what do you observe?

T2 (I18): She has learned a lot. Especially plant and seed techniques. She only watches her. Nothing has ever been communicated to her, she just watches her mother and then picks it up. She is only going to start this year with farming.

AA: Oh, she hasn’t started yet.

T2 (I18): So far, it’s only observation.

AA: Were you inspired by interviewee nr 3? Or why do you want to start farming now?

<sup>27</sup> Name was anonymised

T2 (I18): Her husband was unemployed, so she couldn't afford to buy seeds. That's the reason why. He has a job now, so she can go buy seeds. They were both unemployed. So, they want to start farming for commercial purposes.

AA: Ah, she wants to farm for commercial purposes?

T2: Let me just double check.

T2 (I18): Both, commercial and personal consumption.

AA: Do you want to do it like you observed at your mother in law?

T2 (I18): Yes, absolutely.

AA: Good. Let's just ask those (profile questions). She is like a third person in line. She is not part of the SG that is working with permaculture, but she has been inspired by someone who is. So, it still is interesting. Could be relevant.

[Profile questions → details and explanations are written on profile question form]

AA: Why did you join the SG?

T2 (I18): Two reasons: skills as an alternate (?), how to make Vaseline, how to plant, how to make soap. And secondly, investment how to double and triple your money. That's the reason why she joined. And she was unemployed, so any type of activity will do. It's better than sitting at home doing nothing.

AA: Okay, that's all. Siyabonga, thank you.

## Interviewee nr 19 (Ordinary Farmer)

Interviewee Number: 19  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 27:43  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 19, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

### Comments, Observations, Atmosphere:

Has not been taught in permaculture. Her SG only deals with savings. And she knows about record keeping (another workshop of ACAT)  
 She is a sickly woman who was very tired and therefore not very motivated.  
 Recording very noisy, so hard to hear the words.

Biases: No interview for group 3 was prepared, I had to improvise on the questions.  
 Bad quality recording

Legend: AA (Alisa Autenried); I19 (Interviewee nr 19); SG (Savings Group); T2 (Translator nr 2); T2 (I19) (Interpretation from Siswati into English); (:): Added to facilitate understanding; [:]: Activities

### [Formalities]

AA: Do you know anything about permaculture?

T2 (I19): No, nothing.

AA: Okay

T2 (I19): Okay, same situation than the woman who just left (interviewee nr 18). The SG meet under a tree [points at tree in proximity]. The same tree than another SG (SG of interviewee nr 3), they are separate, but they meet under the same tree. And they meet at the same time. Same time, same place and they share knowledge even though from her group no one went to Mbuluzi. Interviewee nr 3 is nominated to go to Mbuluzi. But the thing is that they already know because one of the "SG1"<sup>28</sup> members has been to Mbuluzi and she is teaching them too because they meet at the same place at the same time.

AA : So, "SG1" and "SG2"<sup>29</sup> ?

T2 (I19): Yes, they meet at the same time but still separate. And they benefit from "SG1"'s knowledge, so why send someone?

AA: So interviewee nr 3 from "SG1" went to workshop. So, they meet at the same time and at the same place. And now, interviewee nr 17 from "SG2" is nominated to go to Mbuluzi to the permaculture workshop?

T2 (I19): Yes.

<sup>28</sup> Name was anonymised. SG of interviewees nr 3 and 4

<sup>29</sup> Name was anonymised. SG of interviewees nr 17, 18, 19 and 20

AA: It could be interested to know what exactly they learnt from interviewee nr 3.

T2: She mentioned the mango trees.

AA: But that was not part of the workshop. Just those six topics that are on my sheet. It is possible that they still learned something about mango trees, but I need to double check that with ACAT. I will try to ask some questions (even though I did not prepare any for group 3). Did interviewee nr 3 teach you about permaculture?

T2 (I19): She is a sickly person and doesn't attend every meeting. Spinach, compost, the pond thing. She wasn't in attendance, but she heard that they taught them about the ponds, so water harvesting. Pellepelle (chilli) to fight off pests, planting in lines, crop rotation.

AA: And the grey water filtering?

T2 (I19): She didn't go to that class, but she heard about it. The same thing as with the pond.

AA: So, let's treat her like a SG member.

T2 (I19): Okay, "SG1" is a long standing SG, so "Extension Officer"<sup>30</sup> approached them... So, "SG1" has its own members, older member. They have been around for a minute. And "Extension Officer" approached a bunch of women and said "Yo, group yourselves and let's come up with a SG". And because they are newcomers they decided to make their own group instead of joining the already existent one.

AA: The new one is the "SG2"? Because they preferred not to be too big of a group?

T2 (I19): She said that is because maybe they just don't get along, that's what she said.

AA: But as a member of them she should know (the reason why), no?

T2: I think it's a snob thing. (not hearable word for word but basically the content is that "SG1" has existed for a longer time and they have already saved a lot of money and did not want the new ones to benefit from their efforts).

AA: Can you ask her if she has a garden.

T2 (I19): No, she doesn't have. Fencing issues again. The money she has in the SG is just not enough to buy fences. Once it's a decent amount she will and then she will start gardening.

AA: Okay, and what has biased (?) her to start gardening?

T2 (I19): She must eat vegetables, she must own have her own food. She much rather grow it than buy it.

AA: Because of money issues or because of health?

T2 (I19): She is tired of buying buying buying. She wants to it herself. For commercial purposes and for her personal consumption. She is tired of going to the stores and buying veggies.

AA: Because of the way she has to talk or because of the money she has to spend on it?

T2 (I19): The money. That's one aspect, the is tired of buying, going to town and buying. Secondly, she loves (veggies), she wants to grow what she loves. Her spinach and things like that. And for personal consumption, so that the kids can eat. Those are the main reasons.

AA: Does she want to do it the permaculture way as interviewee nr 3 taught her or the traditional way?

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<sup>30</sup> Name was anonymised

T2: She credits ACAT.

AA: Credits? What does that mean?

T2: Credits. ACAT has been bigger help. ACAT has been more beneficial to her.

AA: Yeah, so she wants to do it the permaculture way?

T2: I think so.

AA: Can you ask her?

T2 (I19): “Extension Officer” has been a bigger help. A way way way bigger help than (unhearable).

AA: He was a bigger help than what?

T2: “Extension Officer” has been a bigger help for her than the “SG1” member that went to Mbuluzi. The credit goes to him and ACAT. Rather than...

AA: Rather than the information the “comebackers” gave them.

T2: He is a bigger help.

AA: What did he do in particular that helped her so much.

T2 (I19): Two things stood out for her especially. Planting, gardening that’s one thing. But “Extension Officer” also told them about starting businesses, being enterprising, selling things. He taught them about starting businesses, small businesses. Making small cash, but they would make a living. That for her was a bigger revelation than gardening. Because she already did that.

AA: How come she already did that?

T2: Not gardening per se, but fields, maize.

AA: Oh, she has fields? I did not know.

T2 (I19): Only maize. Not sorghum because she doesn’t have the adequate space and as for peanuts and tinhlumaya she is about to start. She hasn’t done it yet, but she is going to.

AA: And did “Extension Officer” teach her the things about planting? I mean, did he demonstrate or did he just tell the theory?

T2 (I19): “Extension Officer” took some of the group members to different gardens around (name of place not understandable) where permaculture is practiced. And he showed them, “this is how you do it, these are the results if you do it that way”. But she wasn’t present, because she is sick.

AA: So, she just heard that the other ones saw it?

T2 (I19): And they later related the information.

AA: And she said that she did not benefit that much from the SG, from the members who came back from the training, but more from “Extension Officer”. I want to know why she did not benefit from their knowledge. If they did not teach correctly, what happened that she did not learn that much from them. So, maybe ask what was not good about the teaching of interviewee nr 3.

T2 (I19): The seating arrangement it quite funny. They don’t sit together, they are just under the same area. But one group is seated over here [point] and the other one would be there [points]. And they don’t exactly hear what is going on there (at the other group). So that’s why “Extension Officer” is a bigger help. When he comes through he assists them personally and directly.

AA: Why does she not go towards them and ask them?



T2: They are advanced. They are ahead and they are not teaching the basics anymore, they are teaching next level stuff. And this group here are the “new bees”.

AA: When did her SG form?

T2 (I19): 2017.

AA: And when did she join?

T2 (I19): December 2017.

AA: Ah, so she is one of the founders. And does she not want to... or why does she not ask them to impart the knowledge with them too? They could go there and say “Sorry, I am interested in your topic, could you not tell me more about it?” Why does she not want to... Let me formulate that differently. What is the reason why she did not ask them to impart the knowledge with her too?

T2 (I19): She is not on good speaking terms with the “SG1” members. So she has “Extension Officer”.

AA: That’s enough for her?

T2: Yes, but that’s just for her.

AA: Does she think that when interviewee nr 17 goes to the workshop she will benefit from it?

T2: her own...?

AA: Yeah, because she said that Beatrice is going soon to Mbuluzi to a permaculture training. Does she think that it is going to be beneficial?

T2 (I19): Yes.

AA: Is she excited that she is going to learn more does she not really want to learn about permaculture?

T2 (I19): ACAT has been a great help and therefore she is looking forward to it.

AA: Good let’s just go through the profile questions.

[Profile questions → details and explanations are written on profile question form]

**Interviewee nr 20 (Ordinary Farmer)**

Interviewee Number: 20  
 Interview Day: 3  
 Location: Lubombo, under a tree in the grass  
 Duration: 01:13:00  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 20, T2  
 Interpreter: T2  
 Interaction: Understanding of English, answers mostly in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Very nice and very talkative. Good atmosphere. Very long interview.  
 Cows, goats, cars making noise sometimes. Interruption of a phone.  
 Interpreter did not translate everything (I briefed him afterwards again). We also had an argument about it during the interview.

Biases: Some sentences not hearable because interpreter speaks very softly.  
 Bad quality recording (windy, noisy, low voices).  
 No interview prepared for group 3 → improvisation.

Legend: AA (Alisa Autenried); I20 (Interviewee nr 20); SG (Savings Group); T2 (Translator nr 2); T2 (I20) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

**[Formalities]**

AA: Did you go to a permaculture workshop in Mbuluzi?

I20: No, but one of our members did. Actually, I wasn't here, when I came I heard that someone went there, but when she came back she informed us.

AA: Was is about permaculture?

I20: I am not sure.

AA: Or was it record keeping? Because I am especially interested in the gardening part, the permaculture part. Do you have any knowledge of permaculture?

T2 (I20): Everything was (?) But farming member from "SG1"<sup>31</sup> (?)

AA: Who?

T2 (I20): Interviewee nr 2. She was employed so she didn't attend every meeting, but she attended some. And it covered everything here [list]. She has just talked about everything: the compost, the ash, crop rotation, grey water filtering, planting methods, she has a mango tree now. And when she misses a session she will meet with one of the attendees and they bring her up to date, about what happened in the last meetings that she didn't attend because she is employed.

<sup>31</sup> Name was anonymised

AA: So basically, they meet at the same time every Tuesday, two different SGs. “SG1” and “SG2”<sup>32</sup> and you are a member of the second one. So, I don’t really know how you get the exact knowledge from them. Did you meet with her (interviewee nr 2)?

T2 (I20): Interviewee nr 2, two weeks after she came back from the workshop she started teaching her own group and from time to time she would approach them (“SG2”) because they meet at the same time and they exchange.

AA: So interviewee nr 2 is very willing to share the knowledge?

I20: Yes, always always.

AA: So, your relationship with her is good?

I20: Yes.

AA: Okay, go on (because I interrupted her in her telling).

T2 (I20): The tree ditch (?). Cow dung is better than goat dung. One of the main things she has picked up so far is how to plant a mango tree. The whole compost thing, the ash, how to retain water.

AA: How? Just tell me roughly how it’s done. Or better: everything she said.

T2 (I20): Now she knows how to plant a mango tree: you dig a ditch, that soil that she dug out she put it back in, the topsoil mixed with the compost and then insert your tree. The mango tree comes wrapped in plastic. Remove the plastic, add the topsoil and then water it and you are good to go. That is that main thing. “EO”<sup>33</sup> also taught them about chickens. Indigenous chickens. The mango trees come from ACAT.

AA: Do you have a garden where you apply those things?

T2 (I20): The mother-in-law has a garden and she has Tinhlumaya (Mung beans).

AA: Is your mother-in-law a member of a SG?

T2 (I20): Late 2017 there was a programme that ran in the community: If you are a widow there was an organisation that came through and provided tools, seeds and knowledge. She is not sure what organisation it was. Let’s just assume that it’s government. But you need to be a widow to qualify in this programme. The organisation came through, fenced her garden...

AA: Her mother’s garden?

T2 (I20): Her mother-in-law is a widow so she qualified. They marked the plot, fenced it, ploughed it, gave her seeds, taught her how to plant everything. But it’s not ACAT. She doesn’t think that it’s ACAT. Everything for free. And yeah that’s the garden that she is working on with her mother-in-law. She doesn’t have one of her own just yet.

[Interviewee nr 20 shows what Mung Bean (Tinhlumaya) looks like]

AA: So, you work with your mother-in-law together in that plot. And do you apply the permaculture techniques?

T2 (I20): Yes. Her mother-in-law used her own methods, the old ones (traditional ones). However, she has three daughters in law around the house. And they taught her (mother-in-law), like crop rotation that’s one thing they applied. Before, she (mother-in-law) used pesticides, now she doesn’t because the three of them taught her that it’s not the right way to do things.

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<sup>32</sup> Name was anonymised

<sup>33</sup> Name was anonymised

AA: Are the three of them in SGs?

T2 (I20): Yes yes yes. And the thing is that she (mother-in-law) had her garden way before the three came and so she didn't know about permaculture. The garden was already established before them knowing of permaculture.

AA: So, you just do the crop rotation. Or do you also have the compost?

T2 (I20): Everybody seems to be doing the nursery (plant nursery). You know when you have a plot you subdivide a small plot, plant the seeds there, shade it with the grass, the entire plot and then when it's grown enough they transfer it to the big plot. It's like a mini nursery in the shade before transferring it to the bigger garden.

AA: But the compost thing. You dig a hole in the ground, like 1m20 depth, fill it with leaves, ashes etc. Do you do that?

MV: Yes.

AA: Do you also prepare liquid manure, maniolo?

T2 (I20): Yes, she does.

AA: And do you do the pest control? Either onions or garlic around, like strong smelling things. That's the one pest control I know. And the other one they teach is a mix of pellepelle, onion and garlic in a bucket and then you can use it as a spray.

T2 (I20): Yes, crush pellepelle, mix it with onion and garlic and spray it.

AA: You do that in your garden?

I20: Yes, the spicy pellepelle.

AA: And do you do grey water filtering? Like reuse the already used water?

I20: Yes.

AA: Okay, let me just go back to the thing. So, interviewee nr 2 came and taught you. Did she just teach you under that tree? And then she just spoke to you or did she also show you practically how it is done?

T2 (I20): Maybe she did, but she wasn't there. She was working. She is not sure because that other organisation is more advanced than hers. And her organisation covers the basics, so she is not sure whether the organisation. Maybe they did.

AA: But to you, she only told you orally?

I20: Yes.

AA: Okay, I am just going to focalise on you. Did you like the way she taught you?

I20: Yes.

AA: If you had to teach someone about it, would you do something different?

T2 (I20): She likes it this way. She likes it the way it is, she wouldn't change anything.

AA: Why? Did she explain anything?

T2 (I20): It's cost effective. And it works for her.

AA: You said that you applied it at home (permaculture). Why do you apply the compost, the crop rotation, the pest control, the planting methods...?

T2 (I20): It works. Pests are an issue. And if you use permaculture you defeat them. And your yields are going to be better, especially tomatoes, she had a lot of them. She had a big yield. It's a sound way of defeating them. And cheap too.

AA: Were you not sceptical before you tried it?

T2 (I20): At first, she was sceptical. She was based in Mbabane and you don't do gardening there. And when she came here she observed, she talked to people and she heard the success stories, and then she wanted to be part of this.

AA: And what changes did you notice since, let's say, your mother-in-law did the old traditional practices and then you came with your new practices. What changed?

I20: The change that I've seen is that we harvest a lot. And I don't go to the market anymore to buy.

AA: So, the quantity improved?

I20: Yes.

AA: And do you know from your SG did everybody try to apply it?

I20: Yeah almost everyone of them.

T2 (I20): She says almost all of them converted to the new practices. The reason why she is not 100% sure is because she can't go to every garden, these homesteads are scattered. But as far as she knows her personal, close network everybody does it.

AA: When did you join your SG?

T2 (I20): Joined in December 2017. But at first, she wasn't fully active because she had to work.

AA: Before you joined, did you know all the members of the SG?

I20: No.

T2 (I20): She is not from here. She is actually from Mbabane. But she got married and the guy she got married to is from here. And that was in 2015 but they lived in Matsapha. The husband is from here, but he works in Ezulwini and she is from Mbabane and they moved to Matsapha. She came here in 2015 because he (husband) is from here.

[confusion about residential situation]

AA: I don't really understand: So, you both work in Hhohho region but you live here? Your house is here?

T2 (I20): Her husband is from here but works in Ezulwini right? So, he couldn't commute every day. He lived in Matsapha, right? So, she went to live with him in Matsapha. But now they are back here because he is working full time on the highway. So, he is closer and can travel every day.

AA: So, you did not know them (SG members) all before joining. So, you said that you taught your mother-in-law about your practices. Did you teach anybody else?

T2 (I20): She is an introvert and doesn't know a lot of people just yet. So, she hasn't taught anybody else. She feels that a lot of people would be interested in learning.

AA: And you are interested in teaching them?

T2 (I20): She is, but she has to get to know them first.

AA: So, let's do the profile questions.

[Profile questions → details and explanations are written on profile question form]

**Interviewee nr 21 (Follower Farmer)**

Interviewee Number: 21  
 Interview Day: 3  
 Location: Shiselweni, Homestead Interviewee nr 7 (niece), garden  
 Duration: 47:38  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 21, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

A very calm interview. A very happy and open woman.  
 Good atmosphere. Cows, goats, cars and wind making noise sometimes.  
 She is a hardworker. Has torn clothes. She is the aunt of a LF who went to the training.  
 The last of the day.

Biases: Some sentences not hearable because interpreter speaks very softly.  
 Bad quality recording (windy, noisy, low voices).

Legend: AA (Alisa Autenried); I21 (Interviewee nr 21); SG (Savings Group); T2 (Translator nr 2); T2 (I21) (Interpretation from Siswati into English); (:): Added to facilitate understanding; [:]: Activities

**[Formalities]**

T2 (I21): The member of her SG is interviewee nr 2.

AA: Interviewee nr 2?

MD: Yes.

AA: Oh, I know her.

[Profile questions → details and explanations are written on profile question form]

AA: Do you have a garden?

T2 (I21): She does have a garden, but she doesn't have the time to cultivate it. But she promised to do it.

AA: Okay, that's interesting.

[continue Profile Questions]

AA: So interviewee nr 2 and "LF"<sup>34</sup> went to the training in Mbuluzi.

T2 (I21): It was "LF" first and interviewee nr 2 followed.

AA: And they are from the same SG?

T2 (I21): Yes, the same.

<sup>34</sup> Name was anonymised

AA: Did interviewee nr 2 and “LF” teach you anything or shared anything with you that they learnt at the workshop?

T2 (I21): The compost with ash, grass, times (newspaper). She also learned about pest control, but she doesn’t remember everything. She was discouraged.

AA: Discouraged? Why?

T2 (I21): Fertiliser. She was discouraged from using commercial fertiliser.

AA: Ah, is she talking about liquid manure?

T2 (I21): No, just no fertiliser. (Confuses fertiliser and pesticide). It has been a while, she doesn’t remember everything. She does remember something, but vaguely (refers to liquid manure).

AA: Does she remember anything about crop rotation?

T2 (I21): Yes, definitely. They taught them about that.

AA: And did they share also anything about grey water filtering with her?

T2 (I21): Absolutely. You have to add sand to the filter and add water.

AA: How did they teach you?

T2 (I21): It was just an oral thing. They never did practicals. Especially those who were far from water sources, it was just an oral thing. No practicals.

AA: Under that tree [points at tree where SG meetings take place].

T2 (I21): Yep. Under the tree.

AA: And did they have any support like books or notebooks?

T2 (I21): Only the literate wrote and took notes.

AA: Ask her why she thinks that she hasn’t been shown practically.

T2 (I21): The thing is, her work is her responsibility and she can’t always be here. She can’t always attend the meetings because she works fulltime. Even today she had to ask her supervisor, her employer to come here.

AA: Here? With us?

T2 (I21): Yeah.

AA: Oh, wow. Does she think that they have been taught practically but she has just not attended it?

T2: Yeah, that’s what she’s saying.

AA: Okay. And did she like the way they taught her?

T2 (I21): Yes, she loved it. Especially the self-sustainability aspects of it. Rather than going to the shops you now have your garden. She loves the way they taught.

AA: What would she change? Is there anything she would change?

T2: What do you mean?

AA: About the way they were teaching.

T2 (I21): They taught her how to do gardening, and the result was impressive. Her daughter in law has been successful with her gardening, the yield. The progressivity (?) is good. And if there is an

abundance, they sell most of it and they make a little bit of money. So, she wants to imitate her daughter in law.

AA: “LF”?

T2 (I21): “LF”.

AA: So, she hasn’t applied anything of it because she didn’t do the garden. Is that correct?

T2 (I21): Yes.

AA: How is your relationship to interviewee nr 2?

T2 (I21): Friendly terms, good terms.

AA: Did you know her before you joined the “SG”<sup>35</sup>.

T2 (I21): No, she didn’t know her before terms.

AA: Can you ask if they live far away from each other?

T2 (I21): She is not from here. When she got married she came here. Unfortunately, her husband died, and the kids were very very very young. She arrived in 1976 when she came. So, she went back home to raise the kids, so she came back when they were older which was in 2014.

AA: Why did she come back?

T2 (I21): Because the kids were older. She left because the kids were younger, she raised them at her home because it was easier. And now, many years later she came back because they are older. Because this is the place of birth of her husband.

AA: Is it tradition to go back to the place of birth of the husband?

T2 (I21): Yes, it is tradition. She is from a different area originally, which is closer to ACAT.

T2 (I21): When she came back, she came to a different area of “region”<sup>36</sup> and then she moved across the road and she moved closer to here. She moved like 3 times. She came back in 2014 and that’s why she doesn’t really know the people.

AA: Okay. Why did she join “SG” and not another SG? Was it because of the distance?

T2 (I21): Nobody invited her per se. But she observed the women in the community going to meetings, coming from meetings and she desired it when she saw it and then she asked if she could join them. And they agreed. And before that, she was a member of a previous group (SG) but not an ACAT SG. And that SG specialised in food and Tupperware. She said “dishes” so I think she refers to Tupperware. Then she met women who told her about “SG” and the business aspect of it all and agriculture.

AA: And why did she want to join? Because of the business part of the agriculture part?

T2 (I21): Both.

AA: Okay, interesting. Does she know how many members in “SG” are? And how many of them applied it (permaculture)?

T2 (I21): 14 in total. Only 5 people in total applied it. And the reason why she is not sure about the rest is because they are scattered. So, she doesn’t visit their gardens because she has no time.

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<sup>35</sup> Name was anonymised

<sup>36</sup> Region was anonymised



AA: Has she taught anybody else outside the SG about the permaculture that she got from interviewee nr 2?

T2 (I21): Fencing and the reason why she is discouraged from teaching people is because of fencing. A lot of people don't have fences and these animals that you see over here are all not guarded, and they are not manned so they destroy your crops.

AA: If there was fencing...?

T2 (I21): If there was fencing and people guarding those animals and locking them up at night, she would.

AA: So, she would like to spread the knowledge?

T2 (I21): She would love to, but it's kind of pointless if you don't have a fence.

AA: One last question that I don't ask everybody, but since she is the last one and nobody is waiting. If she could just quickly tell me the usual procedure of one of those meetings (weekly SG meeting). What do they do in such a meeting? I just want to know more or less what a meeting looks like.

T2 (I21): Prayer first and then financial aspects first. Tips on how to grow the money. Visiting manufacturer: they buy big bags of sugar and put it in smaller bags and then they sell it.

AA: To whom?

T2 (I21): To the community. Everybody gets a package and goes to sell it.

AA: Ah, so that is one of the activities? And the money from that goes to the savings?

T2 (I21): The money is banked.

AA: And then?

T2 (I21): Then they are talking agriculture stuff. They are wholesalers: they buy sugar and maize in bulk and sell it to the community.

AA: Do they also, the people who have gardens, bring and sell their produce to the people of the SG?

T2 (I21): Yes, they do.

AA: Okay, I think this is it. Siyabonga Make.

**Interviewee nr 22 (Lead Farmer)**

Interviewee Number: 22  
 Interview Day: 4  
 Location: Lubombo, Community Administration Centre, inside  
 Duration: 01:12:34  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 22, T2  
 Interpreter: T2  
 Interaction: Mostly in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

The only and first interview in a office: very quiet, no interruptions.  
 Everybody sitting on chairs. He seemed sceptical and not very motivated in the beginning.  
 He sees himself as an ACAT ambassador (spreading the word of permaculture).  
 I felt some tension between me and him: he only talked to translator and did not really look at me (because I am a woman?).  
 With time he talked more. A very long interview  
 The first of the day. The SG had a meeting with ACAT and everybody was supposed to come talk to me during the meeting, but he talked too long, so he was the only one from this SG.

Biases: Masculine.  
 Empty office = echoes in recording but mostly of good quality.

Legend: AA (Alisa Autenried); I22 (Interviewee nr 22); SG (Savings Group); T2 (Translator nr 2); T2 (I22) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: How big is your plot?

T2 (I22): 12 by 6 metres. That plot is divided into two. He uses one using permaculture tactics and the other section is traditional. Then he compares them. Which one is more productive, you know quality/quantity. And he went to FFS. ACAT sends him to extra classes about agriculture.

AA: Okay. And does he have other things he grows besides the mentioned (profile)?

T2 (I22): He tried beans. It went well for the first year and in the second year it was a catastrophe because of the drought. And his mother got sick and he was preoccupied, so he didn't try it again.

AA: Does he grow the same things on both plots (traditional and permaculture)?

T2 (I22): On the traditional one he uses fertiliser and plants tomatoes.

AA: So, it's the same plants, on the one he uses fertilisers and on the permaculture one he doesn't?

T2 (I22): Yes.

AA: How much of your harvest do you sell and how much do you consume on your own?

T2 (I22): He is an ambassador. An ACAT ambassador. He teaches a lot of SG in this area and does it for free too.

AA: So, he goes to other SGs and teaches them what he has learnt?

T2 (I22): Yes.

AA: Because of your own conviction or why do you do that?

T2 (I22): He has always been passionate about agriculture. But as far as teaching for free and being charitable, he has got this from “EO”<sup>37</sup>. He met EO” in 2013 and he schooled him in permaculture. And he liked it, he fell in love with it. He’s always had a love for agriculture, but it was only through “EO” and he developed a desire. ACAT and “EO”, he is inspired by them. And then he went to Big Bend (FFS) to classes and one of the things that they taught him there was the community sharing and spreading the knowledge. And he is doing this now. It’s passion, personal conviction.

AA: And what did you do before you had this whole knowledge from “EO”?

T2 (I22): Employment wise?

AA: Yes.

T2 (I22): It was traditional farming, maize... nothing else.

AA: Okay. Let’s just finish the profile questions before we talk more.

[continue profile questions]

T2 (I22): He is impressed by the flavour of the organic produce. The quantity, the spirit, especially the flavour.

AA: Do you sell the organic and the traditional on the market?

T2 (I22): He sells both.

[continue profile questions]

T2 (I22): This garden is split in two, but not two equal parts. The permaculture sector is smaller, the traditional is bigger. The permaculture part is for personal consumption and the traditional stuff is the one that gets sold. So that section is bigger, and he uses the tank to irrigate. In the permaculture part he uses a wheelbarrow to water. He has plans to extend the permaculture section.

AA: And to convert the whole thing into permaculture?

T2 (I22): No is not going to convert the whole thing into permaculture because the traditional side he uses it to teach people. That’s where he experiments a lot of methods, new chemicals, new everything. Permaculture is permanent. He is going to make it just a little bit bigger but not the whole thing.

AA: So, you basically use the traditional one to show people that permaculture is better, or...? I don’t really get the purpose of having both.

T2 (I22): The reason why he splits the two is because people want to learn. He wants to show people the differences between traditional and permaculture. So, it’s easier if it’s such side (?). You can show them “these are the results from permaculture, this is how it happens if it’s traditional”. It’s for demonstrative purposes.

AA: And what are the differences between the two?

T2: He like permaculture because with the traditional stuff, the fertiliser it expires or gets rotten somehow. So, he likes permaculture because you can create a compost, readily available resources. You don’t have to go shopping for it. There is a difference.

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<sup>37</sup> Name was anonymised

T2 (I22): Oh, so it's not the fertiliser that expires, but it's the veggies. If you compare two tomatoes: one cultivated fertiliser and one using permaculture, the previous will rotten quicker.

AA: And in terms of quantity, which one is better?

T2 (I22): Permaculture. He loves permaculture.

AA: Where do you get the water from with which you irrigate your garden?

T2 (I22): From a manmade pond. And from the borehole in winter.

AA: So, you went to the training in Mbuluzi in 2017, can you name the big topics you learned at the training?

T2 (I22): Number one permaculture, and then number two is how to manufacture seeds....

AA: In the direction of permaculture. The topics of permaculture, which ones did you cover? You already said compost.

T2 (I22): Readily available resources, manure, grass, cow dung, healthier produce...

AA: Did you learn about the crop rotation?

T2 (I22): Absolutely.

AA: And the pest control?

T2 (I22): Yes. You plant the strong-smelling crops outside, as a first line of defence.

AA: And did you learn about the grey water filtering?

T2 (I22): Yes.

AA: And the planting methods like lining, spacing...?

T2 (I22): Yes.

AA: Did you apply the compost in your garden?

I22: Yes.

AA: And do you use the liquid manure?

T2 (I22): Drum sack, cow dung... (implied a yes, but I did not need the explanation in English of its functioning, because I am familiar with it).

AA: Do you practice the crop rotation in your garden?

T2 (I22): Yes.

AA: And do you do the pest control with the onions around?

T2 (I22): Yes.

AA: And do you do the grey water filtering?

T2 (I22): Yes, he does that too.

AA: And why do you do permaculture?

T2 (I22): Easily available resources, quality products, healthier products, less water usage, natural pest control so you don't have to go to the shops and buy the stuff.

AA: Where you not sceptical before you applied it in your own garden?

T2 (I22): The proof was in the product. When he tried the permaculture, everything improved. The crops improved, he was impressed from day one. Sibusiso schooled him, otherwise he knew nothing about permaculture.

AA: So, you went to the workshop and then you came back. How many of your SG went to the training?

T2 (I22): Just him.

AA: How many members does your SG have?

I22: 15.

AA: And did you teach those 15 members when you came back from the workshop?

T2 (I22): He is teaching in two parts: the theory part and the practicals. In the theory part there was every group member from that particular group. But for practicals there were other group members from other areas.

AA: Oh, so there was your group plus others?

T2 (I22): Yes, for the practicals.

AA: And how many were there in total?

T2 (I22): 30+

AA: And are they all in a SG?

T2: the others? No no they are in different SG.

AA: But they are all members of a SG?

T2: No, no, no, his group has 15 members...

AA: Yeah, but the others that came additionally to the practicals, are they all in a SG of ACAT or is it just neighbours or...?

T2 (I22): Just neighbours, they were curious.

AA: And what did you teach them of those 6 topics? Did you teach them about composting?

I22: Yes.

AA: And did you teach them about the liquid manure in the sack?

I22: Everything, everything.

AA: And you said that you did the theoretical part first. How did you do that? Did you just stand in front like teacher with a blackboard, did you tell them, did you make them take notes...? How did you teach them?

T2: Remember, the teaching part was in two parts. Are you interested in the theory part of in the practical?

AA: First theory, then practical.

T2 (I22): The theory part was just oral. But the practical, they asked a group member who was experienced in permaculture to demonstrate, so everybody could watch it step by step by step.

AA: So, the group members and you did the demonstrations and you monitored them?

T2 (I22): Yes.

AA: And for the theory, did you all teach in one session?

T2 (I22): In one session.

AA: And how much time after the theory did you do the practicals?

T2 (I22): 5 days later.

AA: And where did you do the practicals?

T2 (I22): In two homesteads, the “FF1”<sup>38</sup> homestead and the “FF2”<sup>39</sup> homestead. They are both members of the SG. It was done on two occasions.

AA: And where do you hold your meetings? Like under a tree?

T2 (I22): It varies. Sometimes they meet under a tree and sometimes they would go to a place called “Sibembe” (?). It’s a location for occasional skills training. It’s a fenced location.

AA: Oh, okay. Outside or inside?

T2 (I22): Inside. And under the tree.

AA: And are you going to the gardens of your 15 group members and monitoring them “I would do it like that” or do you let them... like are you still teaching them today or is the permaculture thing a done...?

T2 (I22): Early on he did sight inspections when people were still learning. But now, he is confident that people are doing the right thing. And these people are neighbours, even by walking by their home he would see what they are doing.

AA: And how many of the 15 apply it in their homes?

T2 (I22): There is a national garden. It’s like a community garden. It’s like a garden where every community member contributes. And some of his co-members are focused on that garden. But it’s a community garden, so it has rules and what they farm and how they farm. So not everybody practices permaculture in their home.

AA: But that community garden is it permaculture or is it traditional?

T2 (I22): They don’t like permaculture. They think it is too much work.

AA: And is it more work than the traditional?

T2 (I22): They think so.

AA: And in your opinion?

T2 (I22): Not too much work. The older generation think that it’s too much work preparing compost, doing liquid manure... They are sceptical.

AA: Did you have the impression that your SG members were willing to learn the new techniques?

T2 (I22): He had a showcase. He invited merchants, wholesalers and the community at large to show them what permaculture can do, and everybody was impressed.

AA: And how is your relationship to the other members of the SG?

I22: It’s good. It’s good.

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<sup>38</sup> Name was anonymised

<sup>39</sup> Name was anonymised

AA: Why did you join the SG? Was it especially because of the savings part or was it the permaculture part? Or something else?

T2 (I22): “EO” approach him and told him about the SG. At first, he was a little sceptical. It was all new information to him, so went to an older member who joined earlier and asked her “what’s up with this SG?” and the lady said it worked for her, she had just completed her roof through the scheme, having savings through the scheme. So, he was impressed. And then he joined. But he was also naturally curious.

AA: Alright. Good. So, you’ve known the members before you joined the group. And when you went to the workshop in Mbuluzi, are you still in contact with people you met there at the training?

T2 (I22): They call each other. There were 5 other ladies from this region who went to the training. And they are still in touch and when he has time he goes paying them a visit and they start sharing ideas and info. They are still in touch.

AA: And what does this SG mean to you? Is it important to you or not really? What is your link?

T2 (I22): Very important, very helpful. He gets loans from his SG. It generates interest.

AA: I think we are through. Siyabonga interviewee nr 22.

**Interviewee nr 23 (Follower Farmer)**

Interviewee Number: 23  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 46:29  
 Informed Consent Form: No  
 Anonymisation: Unknown  
 Present Persons: Alisa Autenried, Interviewee nr 23, T2  
 Interpreter: T2  
 Interaction: Mostly English in the beginning, at the end Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree. There is a SG meeting in the building next to us (NCP). Singing and voices are hearable, but it is not distracting. 2 children came asking for sweets. Chickens stroll around. Very hot and windy weather. A very nice woman. As the interview goes on, the interviewee became tired and not very motivated.

Biases: No biases detected

Legend: AA (Alisa Autenried); I23 (Interviewee nr 23); SG (Savings Group); T2 (Translator nr 2); T2 (I23) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

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[Formalities, profile questions → details and explanations are written on profile question form]

I23: This year it (SG) has new members.

AA: How many?

I23: All along we have 19, but now we have 27. The “SG”<sup>40</sup>, they saw the things that I do, like ploughing, go and take the tractor, and plough early.

T2: All the women?

I23: Only the ones here [points at NCP where SG meeting takes place]. Except of the old ones, they can’t plough anymore.

T2: But it’s only women, no men?

I23: Yes, only women.

AA: So, the new members saw what you did in your garden and they wanted to join?

I23: Yes, they saw that we have spinach in our garden and in winter we have spinach, tomatoes and everything that is green. And then they were « Oh, “SG” has become okay ».

AA: How do you communicate your next meeting?

I23: We meet every week on Tuesday at 1. Every week.

AA: And how long does a meeting take?

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<sup>40</sup> Name was anonymised



I23: 1 until 3. It depends on how much we have to discuss. Sometimes until 4.

AA: And what do you discuss usually in such a meeting?

I23: We discuss about our things. Our gardens, our money that we have here, and punish those who did not come here.

AA: How do you punish them?

I23: They have to bring money. If they come late, they have to bring money. 5 Rand if you come late. If you don't come at all it is 10 Rand. We started to do this this year because so many people are lazy and they try to pick up.

[Profile questions continuation]

AA: What is the name of the woman who went to the workshop in Mbuluzi?

I23: Interviewee nr 24 and Interviewee nr 26.

[children asking for cookies]

AA: Did interviewees nr 24 and 26 share anything with you when they came back from the training?

I23: Yes, they shared about the garden.

AA: What topics exactly?

I23: Fertiliser.

AA: The liquid manure?

I23: Yes. Fertiliser and pest control.

AA: Did she also teach you about composting?

I23: Yes, they teach us.

AA: And the crop rotation?

I23: Yes, they teach us.

AA: And the grey water filtering? [explains]

I23: Yes.

AA: And about lining and spacing?

I23: Yes.

AA: How did they teach you? Orally or practically?

I23: We went to interviewee nr 26's home and show how to do these things.

T2: Practicals?

I23: Yes. And with "EO"<sup>41</sup>.

AA: So, you did they practicals all together?

I23: Yes. At interviewee nr 26's home. They showed how much space was needed (between the plants when planting them). Practical.

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<sup>41</sup> Name was anonymised

AA: And when she came back at the training, did you first meet here, and she taught you orally?

I23: Yes, they came here and told me what they learned in Mbuluzi. And in winter we went there (interviewee nr 26's homestead) to do the practicals.

T2 (I23): They crops thrive better in winter. That's why the practicals were done in winter. Maybe it's because of the drought issues.

AA: So, she came back. How many days later did she tell the whole group about what she learned? Like 1 week later, 1 month later or one year later?

T2 (I23): They came back on a weekend and had their next meeting on Tuesday. So, three months.

AA: And how many months later were the practicals?

I23: I think it was one day later. Because we plough.

T2 (I23): The following day.

AA: And who decided that they were going to teach you at interviewee nr 26's house and that you did it that way and not differently?

T2 (I23): It was the chair person.

I23: interviewee nr 26 is the chair person.

AA: And how many people were here when they taught you about the permaculture things?

I23: The old people did not come. I think about 8 or 9.

T2 (I23): Those who were absent came later individually to their homes to check on what they learned. Like the comembers that were absent went to her house to learn. I mean to each other's houses because they missed out on the lesson.

AA: Did you like the way they taught? The teaching?

T2 (I23): The lessons were very enlightening. Health benefits, savings...

AA: And if you had to teach anybody, what would you change?

T2 (I23): She was impressed by their teaching style. They taught them a lot. Both of them. Especially how they were anti-chemicals. And how beneficial this is to them. That's what stood especially out for them.

AA: Alright. Have you applied any of the things they taught you at your home? Like did you apply the compost?

T2 (I23): Yes, the garden and the trees. I have trees now that I eat. Like guava. I eat grapes, I have grapes. \*EO" came and sold the trees and I gave him the money and he brought the trees. Now they are at our homes.

AA: And do you also have a compost?

T2 (I23): She does practice composting. But not currently because they have seeds problems. There were seeds insufficiency. Lack of seeds. So, they won't be ready in winter. But she does. Whenever she gardens she has a compost. She just doesn't have one right now.

AA: So, usually you have one. And usually do you also do the liquid manure? Ah yes, you said so. Do you also do the crop rotation at home?

T2 (I23): She knows about crop rotation, but the thing is that her garden is very small, and she is limited by that. She doesn't have manoeuvre room. Sometimes she would repeat things (plant the same crop twice).

AA: And the pest control?

T2: Yes, she mentioned that.

AA: And do you do the grey water filtering? The purification of the used water.

T2: She said yes.

AA: Why did you want to try the new techniques?

T2 (I23): Health benefits, health, health, health benefits. The organic stuff is healthier, they have seen a difference. A visible difference. Compared to traditional. That's the main thing: the health benefits.

AA: Before you did it in your own garden were you not sceptical like "this is never going to work". Or what convinced you to change to the new techniques?

T2 (I23): She didn't have a garden beforehand. It was a whole new experience for her. So, she had no reason to doubt. She had never gardened before.

AA: Okay. And did everybody of the SG apply it?

I23: The new ones (new members) they don't do it.

T2 (I23): Only because they don't have gardens.

AA: How is your relationship to the two ladies who took the training?

T2 (I23): They are cool, they get along. They are cordial.

AA: Have you known them before you joined the SG?

T2 (I23): Yes, because they are neighbours.

AA: And did you find them willing to impart the knowledge with you? Were they motivated to teach you about what they learned?

T2 (I23): They tried. They were passionate. But you know people, some people are good to receive it. Others are less receptive. But the two teachers were eager, but not all of the students.

AA: Have you taught anybody else outside the SG about permaculture?

I23: Because I am selling buns at the school...

T2 (I23): Yes absolutely. Because of what she does: selling buns, she gets around and she has taught a bunch of people. They are interested in trees etc.

AA: And you just talked to them about it?

I23: Yes.

T2 (I23): She was once summoned to an .... Just to brief them. Teach them.

AA: She went to?

T2 (I23): Mb.... (name not understandable) that's the next neighbourhood to go teach them.

AA: Oh, so you organised a meeting?

I23: Yes. And teach them what ACAT does.

T2 (I23): They (the neighbour village) were interested in establishing their own SGs. So, they called them (“SG”) to go teach them about how to be members of ACAT and what ACAT does, the benefits of it.

AA: Alright. And do you know if someone you spoke to about permaculture, if someone of them applied it in their garden?

T2 (I23): Some of them asked about banana trees, banana plants. She tells people about having trees, planting trees, planting vegetables instead of going to the shops and buy it you can just have it in the yard.

AA: Great. Okay, I think we are through. Siyabonga.

**Interviewee nr 24 (Lead Farmer)**

Interviewee Number: 24  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 42:18  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 24, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree.  
 There is a SG meeting in the building next to us (NCP).  
 voices are hearable, but it is not distracting. Children crying. Chickens stroll around.  
 Very hot and windy weather. A very nice woman, looks very old.

Biases: Interviewee 23 said that not everybody from SG was present at theoretical and practical session → not everybody tells the whole truth in the interviews.

Legend: AA (Alisa Autenried); I24 (Interviewee nr 24); SG (Savings Group); T2 (Translator nr 2); T2 (I24) (Interpretation from Siswati into English); (); : Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Could you ask her why she has not started the gardening? Why she is only preparing it now?

T2 (I24): The delay is because of seedlings and plants scarcity in this region. Do you remember the previous interviewee, she said that they get the seedlings from the prison? And they didn't have and "EO"<sup>42</sup> was supposed to bring her, but he didn't have either. And when he did have them, and he brought them, they were already destroyed.

AA: How come they were already destroyed? Or what was destroyed?

T2: The seeds and the plants. Because that is what they requested him to get. Because that one local shop doesn't have them. And when he had them, they were already destroyed.

T2 (I24): That day in question "EO" was supposed to bring the seeds was a very very hot day. So she suspects that they got destroyed along the way.

AA: Did she learn anything at the workshop?

T2 (I24): She was to loan money to build a house. Her house is incomplete, but she's got the loan from the SG to complete it.

AA: I think she got the question wrong. I want to know if she learnt anything in Mbuluzi?

T2 (I24): Self-made manure, compost.

AA: Can you ask if she learned about crop rotation?

<sup>42</sup> Name was anonymised

T2 (I24): Yes, they did.

AA: And about pest control?

T2 (I24): She struggles with the pests. She sprays the pests.

AA: She learned about it, but she struggles?

T2 (I24): She uses blue death (chemical pesticide). But she doesn't really garden.

AA: And did she learn about the grey water filtering?

T2 (I24): Put the water in a container and then put sand. Yes, she filters.

AA: And did she learn about spacing and lines (planting methods)?

T2 (I24): She does know about it. But she doesn't have the exact number.

AA: But she didn't apply any of those yet (6 topics)?

T2: No.

AA: Can you ask her how she taught the others?

T2 (I24): Because she is illiterate, she doesn't know how to write, so it was mostly oral. She is illiterate.

T2: Do you want to know about the practicals?

AA: Yes, let us hear her story, if it is the same the other ones. Ask if she also showed them (SG) practically?

T2 (I24): They went to two homesteads. One, was a member that actually went to Mbuluzi, interviewees' nr 26 and 23 household.

AA: Ah, the one who was just here right before (interviewee 23).

T2 (I24): And that's where they did their practicals.

AA: And did they like tell them what to do or did she do it with them or was she the only one who demonstrated it and the other ones watched? How did the practicals go?

T2 (I24): "EO" was also there (if I understood correctly). Everybody participated.

AA: Okay, right. Did she teach anybody else outside the SG?

T2 (I24): Of course, but it's chit-chat. Its casual talking. "This is what I'm doing".

AA: How many went to the theoretical and to the practical sessions?

T2 (I24): Strictly members. No one from the outside.

AA: Okay, but how many?

T2 (I24): No one was absent. Everybody pitched.

AA: And did they all apply it at home?

T2 (I24): She is not absolutely sure. Not everybody has a garden, but a few do, a bunch.

AA: And is she still teaching them, reminding them today? Or what is happening today?

T2 (I24): She doesn't remember herself (about the topics), so no. She forgot.

AA: And did she have the impression that the others (SG members) were willing to learn what she had to say?

T2 (I24): They were passionate from the beginning. And it was also because “EO” kept prodding them to participate and do.

AA: So, he is like the motivator?

T2: Yes.

AA: Why did you join the SG? Because of the savings part or because of the agricultural part?

T2 (I24): Since she is the sole bread winner (in the family). The reason why she joined the SG is because the whole family depends on her. She is the only one who brings the money in. So, it's good money wise. It helps to make money.

AA: So mainly for money reasons. How is your relationship to the other members of the SG?

T2 (I24): They get along very well. Nothing shady just yet.

AA: Is everybody always present at every meeting? Or how many people come usually to a meeting?

T2 (I24): Whenever she is absent, she reports. If not, she is not going to be absent. That's how she avoids the fines: the 5 or 10 rand. And I asked her how she notifies the chair person of her absence. And she said that she doesn't use a phone, but she would tell neighbours to report that she is not going to be able to make it.

AA: Ah and then she doesn't have to pay the fine?

T2: If you report beforehand, you don't pay.

AA: So, usually most of them are here?

T2: Yes. Because of the fines, nobody wants to pay.

AA: Can you ask her if she has known the other members before joining the SG?

T2 (I24): Yes, beforehand from the community.

AA: And when she went to the training there were a lot of other women. Does she still have contact with some of them?

T2 (I24): Nope. Outside of this area not. No contact.

AA: But she knows other groups of this area?

T2 (I24): There is a SG Programmes Manager (ACAT employee who drove us here went to a meeting with another SG) went to further ahead (continue the street). And there is communication between that group and this group. However, there are other SGs in the area, but they are not under ACAT. And there is no communication with them.

AA: Do they teach each other things about permaculture?

T2: You mean if they swap information?

AA: Yes.

T2 (I24): Chair persons go there. They share knowledge and then they come back and dispense (disperse?) it between the members.

AA: Who is the chairperson again?

T2 (I24): Interviewee nr 26.

AA: Do you feel that you are part of a community in the SG? Do you have a feeling of belonging? I mean, how important is the SG to her?

T2 (I24): She feels at home, it feels like home.



**Interviewee nr 25 (Follower Farmer)**

Interviewee Number: 25  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 43:26  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 25, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree. There is a SG meeting in the building next to us (NCP). voices are hearable, but it is not distracting. Chickens stroll around. A dog barking sometimes. Very hot and windy weather. A very nice woman, looks very old. Her garden was destroyed by drought. A phone was ringing in the middle of the interview. I could not connect to that woman because she merely talked in Siswati.

Biases: Interviewee 23 said that not everybody from SG was present at theoretical and practical session → not everybody tells the whole truth in the interviews. Voice of interpreter difficult to hear on recording.

Legend: AA (Alisa Autenried); I25 (Interviewee nr 25); SG (Savings Group); T2 (Translator nr 2); T2 (I25) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

T2 (I25): She has had a garden since 2 years now. But she has only known about permaculture since last year. But she is stubborn and continues to use blue death. She knows but she still uses blue death.

AA: Did interviewees nr 24 and 26 share anything with her?

T2 (I25): Yes.

AA: What did they teach her?

T2 (I25): How to take care of chickens, indigenous chickens. Gardening things. Seasonal crops: like this is the perfect time to plant this type of crop versus this crop.

AA: And did they teach her about compost?

[AA explains]

T2 (I25): Yes, absolutely they taught her.

AA: Did they also teach her about the liquid manure?

T2 (I25): She wants us to teach her things too. To help her.

AA: Oh, I don't know more about those things. But I think interviewee nr 24 knows everything and "EO"<sup>43</sup> as well. Did she teach her about crop rotation?

T2 (I25): Yes.

AA: And did they tell her about the pest control.

T2: Yes, but she is stubborn.

AA: Oh yes, true. And the grey water filtering?

[I25 explains]

T2 (I25): Add ash to soapy water... (Her explanation proves that she knows about it).

AA: When she still had a garden what of those things (list) did she apply? Or let's just ask: did she have a compost?

T2 (I25): They did compost.

AA: We know that she didn't apply the liquid manure. Did she apply the crop rotation?

T2 (I25): Absolutely, she did.

AA: Did she apply the pest control? Oh no, she already said that no. Did she apply the grey water filtering?

T2: She did.

AA: And the spacing and the lining (planting methods)?

T2 (I25): They did, using a stick to measure.

AA: Did she like the way they taught her, interviewees nr 24 and 26?

T2 (I25): Yes. Their teaching courses were very effective because they practiced it.

AA: When she applied the things in her garden she learnt from the other 2, why did she apply them? Why did she do the compost, the crop rotation, the spacing and the grey water filtering?

T2 (I25): The people that taught them encouraged them to adapt, and that's the reason why they came here anyway: to get an education. So, they went along with everything the teacher said.

AA: So, she wasn't sceptical?

T2 (I25): No, she wasn't, definitely not. That's the reason why she came here: to get an education. She knew what she was doing.

AA: She just put her trust into this working well?

T2: Absolutely. I'm going to class now, I'm going to learn something, I'm implementing.

AA: So, this SG is a sort of education for her. Did she have a garden before she joined the SG?

T2 (I25): She did have a garden. A community garden though, she was part of a previous SG that had a community garden.

AA: What is the functioning of that community garden and what purpose does it have?

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<sup>43</sup> Name was anonymised

T2 (I25): In that community garden everybody had a section on the plot. But it was a small small small plot, so they didn't make much and it was strictly for commercial purposes.

AA: And what is the motivation to do it at the community garden and not at home? Like, do they provide fencing?

T2 (I25): Some NGO<sup>44</sup> came there and fenced there and provided everything, but then they ran out of water and the garden stopped. People stole the fence, and the whole thing collapsed. Hence, she is here. That community garden is no more.

AA: Oh, it doesn't exist anymore. And when that garden still existed, did she notice any changes from the production back then to the production he had doing the permaculture? Were there like changes?

T2 (I25): Stock differences (?). There is a difference, for example how to irrigate a tree: Instead of using a watering can you can put a container nearer the tree and put some wholes in it so that it drops constantly, instead of gushing away. The ground stays wet for longer, that's what they learned from "EO". And that they weren't doing at the community garden.

AA: The first sentence you said was "stock differences". What do you mean by that?

T2: It's a technique. Gardening technique.

AA: Did she also notice differences in the productivity, quantity and quality? She didn't mention any, did she?

T2 (I25): She is on the fence because no one, according to her, no one within the savings group has had a major success with the permaculture. Runaway success no yet. It's still in its infancy. She doesn't know, she doesn't really know whether the traditional community garden or the permaculture (is better).

AA: Does she have a suspicion why it isn't successful.

T2: It's because it is still new.

AA: Let's say the drought is over and she wants to do the garden again. Would she do it the old way (traditional) or would she do it the new way (permaculture).

T2 (I25): Permaculture.

AA: What else did she say (because she was talking for a long time)?

T2 (I25): She was saying that as life goes on you have to adapt to new stuff. Old ways stay in the past. Even though she never went to school she wants to adapt. She is open to new.

AA: How is your relationship to interviewees nr 24 and 26?

T2 (I25): They love her. They respect her. She speaks the truth. They are tight.

AA: Was there also anything negative about the way they taught?

T2 (I25): She finds no fault with the two. Just her old age that is catching up to her. So, she is slower, and she can't to everything anymore. She is struggling with that. Also, with catching up new things.

AA: Did she teach anybody else outside the SG about the permaculture?

T2 (I25): She has converted one guy. She was just walking around, and she saw the guy planting. But he was so far ahead, he had done so much, her tips weren't successful because he had done so

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<sup>44</sup> Organisation was anonymised

much. So, that was last year. But now, she continued to teach him and now, he's using the techniques she taught him. Just one person.

AA: And is he a neighbour?

T2: Maybe.

AA: If she doesn't have any questions, I think we are through. Siyabonga.

**Interviewee nr 26 (Lead Farmer)**

Interviewee Number: 26  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 32:32  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 26, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English), monosyllabic English

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree. There is a SG meeting in the building next to us (NCP). Chickens stroll around. She did not seem very motivated (I requested her especially for the interview), so I felt bad to ask too many questions. She is the chairman of the SG. I skipped some of the questions because I already knew the answers from interviews 23 – 25  
 SG meeting ends in the middle of the interview and everybody is strolling around and talking.

**Biases:** I forgot to ask % of personal consumption and selling of products. Interviewee 23 said that not everybody from SG was present at theoretical and practical session → not everybody tells the whole truth in the interviews. Voice of interpreter difficult to hear on recording. Probably this lady did not entirely understand the training because after double checking with someone, some facts are not correct (salty soil, compost burns soil (only if too much ash), lack of applying a natural growth booster)

Legend: AA (Alisa Autenried); I26 (Interviewee nr 26); SG (Savings Group); T2 (Translator nr 2); T2 (I26) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: You went to that training in Mbuluzi about permaculture. Did you learn anything new there?

I26: Yes, ma'am.

AA: Could you tell me roughly the topics of it?

T2 (I26): Compost, pest control, plant spacing, intercropping, water conservation...

AA: Did you learn about liquid manure?

I26: Yes.

AA: And crop rotation?

I26: Yes.

AA: And the grey water filtering?

T2 (I26): Absolutely.

AA: Did you apply any of those things in your garden?

T2 (I26): She doesn't use compost because the soil is already salty. There is a lot of salt content in it, if we add things to it, additives, it burns the crops. And if it's hot, everything burns out. If the soil is salty you don't add anything to it, no manure, nothing. So, she doesn't use compost.

AA: Did you use liquid manure?

T2: No.

AA: And the crop rotation?

NS: I did use the crop rotation.

AA: And the pest control?

NS: I surround my beds with chili pepper and sometimes I use the chili to spray.

AA: And the grey water filtering, do you use it?

NS: Now I have enough water I only use the one from rain which I contain in the tank and sometimes I use the one from the tank for watering. I harvest from rain to the tank and then I use it for watering.

AA: And why did you apply those things?

NS: I learned that it is healthy to use the natural things that we use, better than using fertiliser.

AA: Were you not sceptical before you tried it? Like "why should I try something new?"

T2 (I26): It was cost effective, so she was really happy about it.

AA: Before you went to the workshop, did you have a garden already?

T2 (I26): Yes.

AA: Did you notice any changes from the old garden to the new?

T2 (I26): With permaculture pests are more of an issue. They weren't back then when using blue death. But now, with the new techniques they are a problem. They go through her plants a lot. Pests are an issue, but not a total issue, but a significant issue. The difference before permaculture pests were not an issue because you could just apply chemicals to the plants.

AA: Are there still any benefits? Or why do you still use the new techniques?

T2 (I26): Cost effective. She is proud of her garden instead of going to the shops.

AA: Alright. Speaking of quantity. Did you notice any... If you had to compare both techniques, did you notice a decrease, or an improvement or was it the same?

T2 (I26): There is a marked difference between permaculture and the traditional way, just in terms of the maturity speed. You know If you use chemicals and fertilisers it grows faster and without them it grows more slowly. But it doesn't bother her because she expects it, she is not surprised by that because it is healthier. The health benefits outweigh the speed. That one thing that stands out with permaculture.

AA: And that's why you stick with it?

I26: Yes.

AA: We know that you taught the SG about what you learned at the training. Did you teach anybody else that you know?

T2 (I26): Sometimes she would get visitors and they see her garden and then asked questions and be intrigued.

AA: Okay, and then you just tell them orally what you do?

T2 (I26): They will see the garden and then they ask questions.

AA: Why did you teach the SG? Or why did you teach all those people?

T2 (I26): She is a product of teaching herself, so it became her tradition.

AA: And do you like teaching? Or do you have a feeling of obligation because ACAT or “EO”<sup>45</sup> told you that you have to impart it? Or is it something you like to do?

T2 (I26): She arrived here in 2016, right? She was part of a previous SG even though she didn’t have any knowledge of permaculture. But she had knowledge of piggery, animal husbandry... And when she got here she hooked up with another lady from the community to form this group here. So she is behind it. She formed it.

AA: And why did you leave the other one?

T2 (I26): She moved places.

AA: Was it you who motivated the whole permaculture movement or was it “EO”?

T2 (I26): “EO” was the one.

AA: Did you have the impression that the other members of the SG were willing to learn from you?

T2 (I26): Yes, very eager. They normally buy plants and seeds as a collective, but this year it didn’t go according to plan. Some people were left behind, some are ahead, things like that. But the general sense of it is that people are interested.

AA: The whole SG buys seeds together from the savings? When you went to the training in Mbuluzi, are you still in contact with some of the other women who took part at the training? Besides interviewee nr 24.

T2 (I26): They are the only two from this region that participated.

AA: So, you are not meeting with them once a year or something like that?

T2 (I26): No, it’s just the two of them.

AA: Okay, I think we are through. Siyabonga.

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<sup>45</sup> Name was anonymised

**Interviewee nr 27 (Follower Farmer)**

Interviewee Number: 27  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 18:32  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 27, T2  
 Interpreter: T2  
 Interaction: Mostly English, sometimes Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree.  
 Very nice woman. Chickens stroll around. She waited during 30minutes to be interviewed.  
 We had to hurry up a little because it was getting late. Phone ringing during the interview.  
 Not very talkative.

**Biases:** Interviewee did not talk a lot so I had to ask a lot of closed questions

Legend: AA (Alisa Autenried); I27 (Interviewee nr 27); SG (Savings Group); T2 (Translator nr 2); T2 (I27) (Interpretation from Siswati into English); (:): Added to facilitate understanding; [:]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Let us now talk about agriculture. Interviewees nr 24 and 26 went to the permaculture training in Mbuluzi. When they came back did they share anything with you?

I27: I was not here at the time. I was at the shop (her work place).

AA: Did you still get the knowledge somehow from somewhere?

I27: Yes, they tell us about conservation.

T2 (I27): Land conservation. How to plant effectively, how to not use machinery, intercropping.

AA: So, you were not at the meeting, how did you get the knowledge about those things?

I27: After coming here, they came to me and told me things.

AA: So, you went to the practical demonstrations?

T2 (I27): No, no, no, they went to her shop, I guess to buy something, and then they told her.

AA: Okay. So, you did not go to the practical demonstration?

I27: No.

AA: And did you learn about the compost?

T2 (I27): She has heard of it but seen it and she hasn't done it yet. She has just heard of it.

AA: And have you learned about the liquid manure?

I27: In school.

AA: And about the crop rotation?



I27: In school still.

AA: And about the pest control?

I27: It is a worm that eats too much (cut worm).

T2 (I27): There is a worm that eats all the time. It won't go a metre without eating. So, to defeat it you create a one metre space and then you only start your garden. So, it's one metre on all the 4 sides. So, it won't be able to get there because there is nothing in between the garden and the grass.

AA: Did you learn about the grey water filtering?

T2 (I27): She heard it on the radio.

AA: Oh, PELUM's radio show?

I27: Voice of Churches.

AA: Did you apply the one metre spacing in your garden to defeat the worm?

I27: No.

AA: Did you do the spacing in your garden?

I27: Yes.

AA: Okay, and did you put onions and garlic around?

I27: Not around but in lines.

AA: Would you have liked to learn more about the permaculture techniques?

I27: Yes.

AA: And what would you think they would tell you if you asked them to brief you on it? Would they be willing to impart the knowledge with you?

I27: Yes.

AA: Did you also get some knowledge from Sibusiso Dlamini?

I27: Yes.

AA: Alright, I think we are done. Siyabonga.

**Interviewee nr 28 (Follower Farmer)**

Interviewee Number: 28  
 Interview Day: 4  
 Location: Lubombo, outside of the neighbourhood care point, on chairs  
 Duration: 21:13  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 28, T2  
 Interpreter: T2  
 Interaction: Mostly English, sometimes Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview takes place in front of Neighbourhood Care Point on plastic chairs under a tree. Chickens stroll around. Last interview of the day. She waited during 60minutes to be interviewed. We had to hurry up a little because it was getting late. Monosyllabic answers.

**Biases:** Interviewee did not talk a lot so I had to ask a lot of closed questions  
 She tried to answer in English but she was not very confident or fluent, so the answers are rather short and without explanations.

Legend: AA (Alisa Autenried); I28 (Interviewee nr 28); SG (Savings Group); T2 (Translator nr 2); T2 (I28) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Why did you join “SG”?

I28: I need to improve my homestead and many more.

AA: So, for the money saving part?

I28: Yes.

[Continuation profile questions]

AA: They (LFs interviewees nr 24 and 26) came back from the permaculture training in Mbuluzi, did they share anything with you that they learned at the training?

I28: Yes.

AA: Do you remember what? Roughly the topics.

T2 (I28): Plot conservation, effective planning, space management (all three refer to intercropping), compost and natural manure.

AA: Did you also learn about the crop rotation?

I28: Yes.

AA: And the pest control? Onion, garlic, pellepelle (chili)...

I28: Yes.

T2 (I28): Ash most of the time to control pests.

AA: Did you learn about the grey water filtering?

I28: Yes.

AA: And the spacing and the lining?

I28: Yes, yes.

AA: Did you apply any of those topics at home in your garden?

I28: Yes.

AA: All of it?

I28: Yes.

AA: Did you have the impression that the two ladies (lead farmers) liked to teach it?

I28: Yes, they have.

AA: And did you like how they did it?

I28: I liked it. I understood everything.

AA: Did you go to the theoretical and the practical part?

I28: Yes, to one of the homesteads, the one of interviewee nr 26, I went there for practicals.

AA: Did you also like it how they did it there?

I28: Yes, I liked it.

AA: So, they were like “do it like this and this” and you did it?

I28: Yes, she is the leader.

AA: Why did you apply at your home as well?

T2 (I28): Because of the space management.

AA: Because you have a small plot and you want to cultivate more there?

I28: Yes.

AA: Were you not sceptical before you applied it?

I28: No. She loved it from day 1.

AA: Did you have the garden already before they taught you how to do it (permaculture)?

I28: No.

AA: So, you started with them?

I28: Yes.

AA: So, you were just motivated to try something new? Where did you get your food from before gardening?

I28: I bought it.

AA: How is your relationship to these ladies?

I28: It's so close.

AA: And another question: since it's 2 who went to the training, did they teach at the same time or was it just one of them that was speaking?

I28: They were speaking... We are here [point at Neighbourhood Care Point]. They were both speaking and if the other one has forgotten, the other one reminds.

AA: That's good. Did you already know them before you joined the SG?

I28: Yes.

AA: The two?

I28: Yes, from the community.

AA: And were you friends before?

I28: No. I come from Shiselweni and she comes from another place.

AA: Ah and you moved here with your husband. If you went to the training, would you teach it the exact same way as they did?

I28: Yes.

AA: So it was perfect for you?

I28: Yes, I understood everything.

AA: How long did it take to implement the whole practicals at interviewee nr 26's homestead?

I28: I think we went Tuesday, three times.

T2: No, the practicals!

I28: Oh, 2 days.

AA: And how many were you doing it?

I28: We were 15.

AA: And all 15 did it together?

I28: If we are tired we give it (tool) to another one.

AA: Have you taught anybody else outside the SG about the permaculture?

I28: I tried.

AA: Who did you want to convince?

I28: My husband.

AA: Okay. Are you happy about the results?

I28: Yes.

AA: Is there any particular related to those permaculture techniques that is positive or negative?

T2 (I28): That she doesn't have to go to the shops anymore.

[interviewee nr 27 taking a picture of interview situation]

AA: I think we are at the end. Siyabonga.

**Interviewee nr 29 (Lead Farmer)**

Interviewee Number: 29  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 45:48  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 29, T2  
 Interpreter: T2  
 Interaction: Mostly English, sometimes Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

First interview of the day. Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distractive. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. Very nice women. When talking in English the answers are rather short. Has some information about permaculture that is not 100% correct (to my knowledge)

Biases: Sometimes the techniques (6 topics) are not explained the same way by the interviewees, I think some lessons were not understood at the training or faultily imparted with other farmers → here: grey water filtering. English answers are shorter than Siswati ones.

Legend: AA (Alisa Autenried); I29 (Interviewee nr 29); SG (Savings Group); T2 (Translator nr 2); T2 (I29) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: You went to that workshop im Mbuluzi in 2017, did you learn anything?

I29: Yes, I have learned.

AA: Do you remember roughly the topics they taught?

I29: Yes, I remember permaculture.

AA: And what of permaculture?

I29: Permaculture means permanent cultivation. You grow crops using natural things that are around you.

AA: And do you remember some specific things they did with you pratically or in theory?

T2 (I29): You don't plant the same type of plants together next to each other. The leafy plants on one side and then the rooted ones on the other. Aloe to control pest and pellepelle and garlic. You put plants with strong odor in to water, leave it over night and on the next day you can spray.

AA: I did not understand everything (I29 was talking for a long time in Siswati). Can you translate?

T2: Like what?

AA: She was talking for like 3 minutes, I did not understand every word.

T2 (I29): I told you about the leafy ones versus the rooted ones to avoid diseases, communicable diseases. And then she mentioned lining and spacing and she mentioned pest control using plants to surround the other plants within the garden.

AA: Okay. Did you also learn about the liquid manure?

I29: Yes. We use the liquid manure [Siswati] Then you take something to put over the tank, a branch [Siswati]

T2 (I29): The sack actually must not be immersed in water, but only touch it so the water can trickle down. You don't just use the liquid manure, you have to mix it with water. Like 5kg of liquid manure and get 5kg of water and mix it. Otherwise the liquid manure pure would burn the crops.

AA: And did you learn about the crop rotation?

T2 (I29): Basically, there are rooted plants and leafy plants. Let's say you planted leafy plants this year, then you don't return leafy plants next year: if you plant lettuce this year you don't plant cabbage next. You don't do that, you would go for something rooted like beetroot.

AA: And the grey water filtering, did they teach you anything about that?

T2 (I29): Poor they grey water into a container and then add ash, leave it over night and then you can use it the next day.

AA: Did you apply all of those things in your home garden? [read the list aloud]

I29: Yes.

AA: Why did you apply this?

T2 (I29): Because it is cheaper, cost effective, prevents diseases. For mature plants that are sprayed with chemicals, there is a waiting period before you can eat them.

AA: Like when you harvest them they need to rest for some time if they have been treated chemically?

I29: Yes.

T2 (I29): Instead with permaculture: if you want to eat it [snaps his fingers] you can eat it right there, you just wash it and there you go.

AA: Were you not sceptical before you tried those new permaculture techniques?

T2 (I29): No, she was sold overnight.

AA: Is it? But before you went to the training, did you already know anything about permaculture or was it completely new?

T2 (I29): Everything she learned was from Mbuluzi, before she was totally blank.

AA: So "EO"<sup>46</sup> never talked about it before?

T2 (I29): She was sceptical at first. "EO" did tell them, and she was like "I don't know, will this work?" But after the training she was convinced, she was sold, she loved it.

AA: So, one day he came to you to the "SG"<sup>47</sup> and told you about the workshop? Or how did you know of the workshop?

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<sup>46</sup> Name was anonymised

<sup>47</sup> Name was anonymised

T2 (I29): “EO” told her.

AA: And then the group decided that you could go?

I29: Yes.

AA: Do you know why they chose you?

[I29 laughs]

T2 (I29): They trusted her with actually learning something and grasping something up there (Mbuluzi) and then she would come back and share it with them.

AA: Good, alright. And did you have a garden before you went to the workshop?

T2 (I29): She did.

AA: Did you notice any changes from the old techniques to the new ones?

I29: Yes.

AA: What kind of changes?

T2 (I29): It worked for her, it worked for her. It matures faster. She has a neighbour who planted using the old techniques and she (I29) used permaculture and her (I29) crops matured faster. And there is a better success rate. Less failure.

AA: In talking of quantity, did you notice any changes?

T2 (I29): A higher success rate. The harvest is more.

AA: How many of your group (SG) went to that training in Mbuluzi?

T2 (I29): 2

AA: And how many are you in total?

I29: 12

AA: And when you came back, did you teach anybody about it?

I29: Yes.

AA: Your SG or someone else?

T2 (I29): Absolutely, outsiders who came to buy buns or something and they see her garden and she would school them.

AA: So you just tell them orally what you do?

I29: Yes.

AA: So just people from the community?

I29: Yes.

AA: And also “SG”? What did you teach them of the topics we discussed?

T2 (I29): How to prepare a compost and how to use it.

AA: So the practicals?

I29: Yes.

AA: Did you also teach them about the liquid manure?

I29: Yes, the spray.

AA: And also the filtering of the water using the ash?

I29: Yes.

AA: Did you also teach them about the crop rotation?

I29: Yes.

AA: And spacing and lining (planting methods)?

I29: Yes.

AA: How did you teach them this? Like, did you talk to them? And you mentioned the practicals. When you think back when you came back from the training: how did you teach them?

I29: I talked to them and then I would do the practicals with them.

AA: At the same time?

I29: No.

T2 (I29): Practical: as soon as she came back. The thing is that she had a garden going when she went up there. She had planted a few things and when she came back she called all the members for practicals. That's how they started off with. "This is how you plant, this is how you do stuff". And then she went to their plots and showed them how to do it. So it was practicals first. Straight up practicals.

AA: Everybody came to your garden and you showed the new things directly to them in your garden? And then you went to every member? With everybody else?

I29: Yes.

AA: Did everybody of the 12 members come to the session, to the practicals?

I29: Yes.

AA: And did they all apply it?

I29: Yes.

AA: And they still have it today?

I29: They have it. The problem is that they do not have the fence.

T2 (I29): They use branches, but branches they rot. So they have to start again. Fencing is an issue.

AA: Do you still have no fence?

I29: Yes (meaning no, I don't have a fence).

AA: And does it (crops) get eaten by cows and other animals?

T2 (I29): Absolutely.

AA: Okay. And you said that there was another woman who went to Mbuluzi. Did she also teach the others or was it mainly you?

T2 (I29): They did it together.



AA: And you said that you always meet on Tuesday. Do you meet always under that tree [pointing at the tree where her SG has a meeting]? Or where do you meet?

T2 (I29): Either that tree or that preschool over there.

AA: Okay. Are you still going sometimes to their gardens and monitoring them and giving them advises on how they should do it?

T2 (I29): She does, but the problem is the rains that destroyed everything. It rained a lot and they had just planted.

AA: And it got washed away?

I29: The vegetables they die all. They rot.

T2 (I29): But she still does go visit their gardens.

AA: Oh, shame. And did you feel that the others of “SG” were willing to learn from you? Were they motivated to learn about permaculture?

T2 (I29): Yes, absolutely. Because only a week passed and everybody had a garden going. So everybody was motivated.

AA: Nice. So you could convince them that it’s something good?

I29: Yes.

AA: How did you convince them?

T2 (I29): The sizes of the crops were very impressive, so everybody saw that and then they were like “yes, I am farming this way”. And then the flavour too.

AA: So they first saw the result of your garden and only then they adapted?

T2 (I29): Yes.

AA: Okay, so it really makes a difference. Okay. So now, we are going to talk a bit more about the SG in general. A typical Tuesday meeting: What do you do? What is discussed? Do you sell or?

T2 (I29): Opening prayer, minutes from the previous meeting...

AA: Minutes?

T2: You know how we keep minutes? Records! Like records.

AA: Ah, what you did last time.

T2 (I29): They talk about previous agendas and the current agendas and then money gets counted. Then money contributions.

AA: Is permaculture still a topic?

T2 (I29): Classes resumed after that and then any kind of topic anybody has something to say about, to discuss. Closing prayer.

AA: What is an example of the agendas?

T2 (I29): Today’s meeting: there are two agendas that are going to be discussed. Number one is loans, how to get a loan from the SG, what forms to sign, how it works and then after that they will discuss gardening and how to get plants and seeds and stuff. That’s today’s agendas, just two examples.

AA: Very interesting. Why did you join “SG”?

T2 (I29): She wants to improve herself. Combat poverty because now she grows a garden for her own personal consumption and she can sell stuff. So, she never goes hungry she and her kids.

AA: So, you also get a little bit more of independence: you can decide...

I29: Yes.

AA: How is your relationship to the other members?

T2 (I29): Tight, they get along.

AA: Did you know them before?

I29: No.

AA: So, you just got to know them when you joined the group?

I29: Yes.

AA: Why did you join the group? Did you know one member?

T2 (I29): She was part of a previous SG, called a support group.

AA: ACAT?

T2 (I29): No, it wasn't an ACAT group. And then “FF”<sup>48</sup> came through and taught them. “FF” approached her SG and told them about ACAT and how ACAT operates and functions and then she was convinced. She and another lady joined the “SG”.

AA: And abandoned the first one?

T2 (I29): No, she is still part of that.

AA: Good. When you went to the training in Mbuluzi, there were other women taking the training. Are you still in contact with them?

T2 (I29): Yes.

AA: How?

I29: Using a phone.

AA: Ah, you call them and chat? Did you become friends?

I29: Yes.

AA: Do you also talk about farming and gardening?

I29: Yes.

AA: How often do you contact the others from the training?

T2 (I29): Right now, they are in touch because it is planting season. It's the beginning of the planting season, so they are in touch. They share ideas on how you do it, it's assistance. So now it's more than on previous times (out of planting season).

AA: So when you need help on something you would rather talk to them than to SG?

I29: Yes.

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<sup>48</sup> Name was anonymised

AA: Interesting. How strong... What does the Sibonelo group mean to you?

T2 (I29): It's a spot (?) activity in the community, because beforehand there was nothing going on. The people saw what they were doing and now it inspired them.

AA: Okay, we are through. Siyabonga.

**Interviewee nr 30 (Follower Farmer)**

Interviewee Number: 30  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 52:35  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 30, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. She went to Mbuluzi for a training on how to be a chair person (but not permaculture). She is the chairperson of her SG. Wind is hearable of recording.

Biases: English answers are shorter than Siswati ones. Interpreter speaks not very clear sometimes. Her LF is not on the list, but it might be interviewee nr 31 she talks about. Otherwise it is not an EcoSolidar workshop.

Legend: AA (Alisa Autenried); I30 (Interviewee nr 30); SG (Savings Group); T2 (Translator nr 2); T2 (I30) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Do you have a garden?

T2 (I30): Not for the last two years, but she had a garden before. The problem is fencing, everytime she uses logs to fence, her mother in law takes them and uses them as firewood. She destroys them because she has to make a fire because people have to eat (people cook on fire). So, there is a fencing issue. It's just the fencing, otherwise she is passionate about gardening.

[continuation profile questions]

T2 (I30): The garden is more of the same. In the garden she doesn't use fertiliser and the harvest is impressive. At some point "Programmes Officer"<sup>49</sup> and another lady came to visit and they were very impressed by her garden. So, this was when she still had the garden. And she spends no money on her garden.

AA: Not even on seeds?

T2 (I30): She grows her own and conserves them. It's called bedding. This is why she doesn't spend any money on her garden.

AA: Do you use any pesticides?

T2 (I30): Not on the garden but on the field.

<sup>49</sup> Name was anonymised

AA: You said that your garden was very good with the new methods, why don't you apply the same method to your field with the maize and the patata?

T2 (I30): She will do it because she is impressed by the results from permaculture.

AA: I was just wondering if there is a reason for it.

T2 (I30): She plans on using permaculture on both sides (garden and field) but to a degree, she will mix the new methods with the old (traditional). But in the garden, it's strictly permaculture.

AA: Is there something (permaculture technique) that wouldn't work on maize? Like there were a lot of people saying the same thing that in the field they would do it the traditional way with pesticides and fertilisers, but on the garden part it's strictly organic. I was just wondering if there is a reason that I didn't understand.

T2 (I30): She is thinking about introducing permaculture into the fields. Organic is far healthier than the chemicals they normally use.

AA: So, the permaculture technique would normally also work on the maize.

[continuation profile questions]

AA: Who from your SG went to the permaculture training?

T2 (I30): There is another member from her group that went to Mbuluzi, but she is not sure what she did up there.

AA: Do you remember who it is?

T2 (I30): "LF"<sup>50</sup>.

[searching on list, not there]

AA: When she came back from the training, did she share anything with you that she learned up there?

I30: Yes.

AA: Do you remember what?

T2 (I30): Gardening skills and how to take care of chickens.

AA: The gardening part, do you remember the topics?

T2 (I30): Compost. Do you remember interviewee nr 22's garden that is above soil, she is not sure what to call that (elevated bedding), she taught her that.

AA: Did she also teach you about spacing and lining?

I30: Yes. I know.

AA: Also about the liquid manure?

I30: Yes.

AA: And about the crop rotation?

I30: Yes.

AA: And the pest control?

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<sup>50</sup> Name was anonymised

I30: Yes.

AA: And the grey water filtering? The purification of used water.

T2 (I30): Yes, using ash. You don't just use any type of water; it is soap dependent. It depends on the type of soap, there are soaps like "detol", like chemical soaps. Do not use them, do not filter that water, it's useless. However, there are other soaps like greens bars and sunlight you can filter those. It's soap dependent. Those with a natural basis.

AA: How did "LF" teach you about those things?

T2 (I30): They took notes and practicals.

AA: So first she taught you orally and then?

I30: Then notes and then practicals.

AA: On the same day?

I30: No, not on the same day.

AA: And how long did she teach you about everything orally on one day? Or did she teach you about 3 topics on one Wednesday and next Wednesday about another topics?

T2 (I30): One topic at a time. She would teach about the compost and then go on site and make a compost. Then she would teach about planting, they would go on site and do the planting... So, one topic at a time.

AA: And where did you do the practicals?

T2 (I30): They went to her house, "LF"'s house, that's where all the practicals were held.

AA: And then all the members went to their own houses and did it on their own?

I30: Yes.

AA: And did you apply everything she taught you?

I30: Yes.

AA: Compost, liquid manure?

I30: Yes.

AA: Crop rotation?

I30: Yes.

AA: Pest control?

I30: Yes.

AA: Grey water filtering?

I30: Yes.

AA: Lining and spacing?

I30: Yes.

[laughs].

AA: Did everybody from the SG apply it?

T2 (I30): Everyone. Yes.

AA: How many are you?

I30: 10.

AA: And did just you take notes on what she said or everybody?

I30: I am not sure, but most of us.

AA: I was just asking because you are the chairperson of the SG, if it is only the chair who takes notes. And did you like the way she was teaching you?

I30: Yes.

AA: Would you do it the same way? Or would you change something if you had to teach somebody?

T2 (I30): There is nothing to change. She was impressed.

AA: Is she still coming to you, or to the other members who have a garden, to monitor and say “hey no this is wrong”, or does she leave you alone?

T2 (I30): They visit each other in groups. So, the whole group would come, not just the teacher and then observe as a collective.

AA: Why did you apply the things she taught you?

T2 (I30): It works for her.

AA; Were you not sceptical?

T2 (I30): She was sold on the first day (=convinced on the first day).

AA: And did you have a garden before the permaculture techniques?

I30: No.

T2 (I30): She had a garden, but it started getting better using techniques taught from ACAT.

AA: What got better?

T2: Her garden skills, like she had a garden before.

AA: Yeah, but what got better? Like quantity or whatever.

T2 (I30): I asked her, and she gave me three ways of where permaculture has benefitted her. Number one: the low usage of money, because the things are readily available. Minimum money involved because everything is readily available. Number two: high yield rate, success rate whilst using permaculture and then number three: how she controls pests. Instead of going to the shop and buying chemicals, she can just use things like the green pepper (red pepper?) and natural stuff. That's just three ways. Do you want her to keep counting?

AA: If she has anything to say: yes.

T2 (I30): Flavour, that's another thing.

AA: But you suggested it (I understood it when he asked the question in Siswati). You must not do that, you are influencing the result. There was another lady we interviewed yesterday who said that the pests got worse with the permaculture. Did you have that experience as well?

T2 (I30): With her it's not the case.

AA: How is your relationship with “LF”?

T2 (I30): It's good.

AA: Did you have the impression that she was willing to impart the knowledge with you?

T2 (I30): No, no, she is willing to teach.

AA: Alright, have you known her before you joined the SG?

T2 (I30): Yes, yes, yes from the community.

AA: Was there anything negative about anything that had to do with her teaching, or something with your SG? Something that made you learn less (prevents you from learning)?

T2 (I30): No (not a definite no though).

AA: Have you taught anybody else outside the SG?

T2 (I30): Yes. Neighbours.

AA: Why did you teach them?

I30: Because you don't spend money.

AA: So, you convinced them?

T2 (I30): It's a collective effort. So, there is that sense of community.

AA: Between the whole community or the SG members?

T2 (I30): The importance of a fence. It's not relevant to your question but fences are really important to have a successful garden and to prevent cows from trampling on the plots.

AA: And the first thing you said: the sense of community?

T2: Yeah, it's a collective effort. So, you save more. It's cheaper if you buy seeds as a collective than individually.

AA: Ah okay, so you convinced your neighbour to join the group? Or did you just teach them about the garden?

T2 (I30): Somebody of the group, she is not so sure. They defected to her the SG (?). That's new.

AA: And the neighbours you taught about the permaculture, did they apply the techniques in their garden as well?

T2 (I30): Yes, they do. Two of them, she knows for sure.

AA: Okay, we are through, Siyabonga.



**Interviewee nr 31 (Lead Farmer)**

Interviewee Number: 31  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 43:16  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 31, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. 5 other people waiting for us, which is a little stressful. She got a little tired towards the end.

Biases: The translation sometimes wasn't exact (I had the impression because the interviewee talked for a long time and the translation was quite short).

Legend: AA (Alisa Autenried); I31 (Interviewee nr 31); SG (Savings Group); T2 (Translator nr 2); T2 (I31) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Why does she use goat dung for the garden and cow dung for the fields?

T2 (I31): The goat manure is far stronger, so it improves the harvest. She uses cow dung to make the compost, but to make the garden richer she uses goat manure. Because it is more powerful. So, for the liquid manure, she just uses the goat dung.

AA: So, the liquid manure is made from goat dung for the garden and the compost is made from cow dung for both garden and field?

T2: Yes, for both.

[continuation profile questions]

AA: Why doesn't she breed her own seeds also for the garden?

T2 (I31): Lack of equipment, because she doesn't have money. Otherwise she would create her whole nursery, but she doesn't have money to buy the equipment, to buy the nets and the containers where you store it and plant them and chop them, multiply and how they do it.

[continuation profile questions]

[informs us that 5 other persons are waiting for us to be interviewed]

AA: So, you went to the Mbuluzi workshop, did you learn anything from there?

T2 (I31): Yes.

AA: And what topics of permaculture?

T2 (I31): Natural manure, gardening in general, cost saving techniques.

AA: Did you also learn about compost?

T2: Yes, she already said that.

AA: Oh, okay. And the crop rotation?

T2 (I31): And the pest control, they are using the techniques with the leafy and rooted vegetables.

AA: Okay, and the crop rotation too?

T2 (I31): Yes.

AA: And the grey water filtering?

T2 (I31): Yes. They are using leaves to make manure, you collect them and then you put them in a ditch and let them rot.

AA: And do you have a compost in your garden?

T2 (I31): Yes.

AA: And do you do the liquid manure in your garden?

T2 (I31): Yes, with goat.

AA: And the crop rotation?

T2 (I31): Yes, she does it. All the plants in different crops (hardly hearable).

AA: And does she do the pest control?

T2: Yes, she mentioned that.

AA: And the grey water filtering?

T2: She does that.

AA: And the spacing?

T2: Yes. Using leaves as rulers. Or a stick. [shows on her hand the distance where the next plant is planted]

AA: Why did you apply it in your home garden?

T2 (I31): Even if she is low on cash, as long as she has enough money to buy the plants and seeds, she is good to go. No need to go to shops and buy fertiliser. Everything is readily available.

AA: And was she not sceptical before she applied it?

T2 (I31): She was sceptical at first, but when people who told her, people she trusts and showed her the results. Chemical treating plants, treating plants chemically is new to her generation (started in the +/- 70s). She grew up using natural stuff, like cow dung, goat dung. Permaculture is new, but fertiliser is new too.

AA: Did you have a garden before the permaculture garden?

T2 (I31): No.

AA: What changes in your life are related to that garden?

T2 (I31): They have gained some independence because now they can focus on their household needs, the electricity units and basic stuff, bread and stuff and her husband's salary can go towards

the kids, upbringing. Permaculture has made her independent. ACAT has been very very helpful. She is proud of ACAT.

AA: How many members of “SG”<sup>51</sup> went to the workshop in Mbuluzi?

T2 (I31): 2

AA: And how many in total?

T2 (I31): 6.

AA: When you came back from the workshop did you teach anybody about what you learned?

T2 (I31): Every Friday there is a grand community meet to discuss community issues and they cease the moment to teach permaculture. Because the whole community gathers every Friday.

AA: How many people are there?

T2 (I31): 20 to 30, or 40.

AA: And did you just tell them how to do it? Or did you also invite them to your garden and show them how it’s done practically?

T2 (I31): She teaches and then she invites them over.

AA: The whole community?

T2 (I31): Whoever is willing.

AA: Now, specifically, with the teaching methods of the SG. How did she teach the SG?

T2 (I31): She is saying that, because she is illiterate and even though it has been a long time since she’s been in Mbuluzi, she remembers everything. She didn’t write anything down, but she remembers everything. She can tell you who told her what, when, how. So, it’s an oral thing. It’s a Q and A setup: You ask questions and you get answers.

AA: During the workshop of the SG meeting?

I31: During the meeting. Whoever has a question asks it and she would get an answer. So, it’s oral because she can’t read or write. So, it’s mostly talking.

AA: And the practicals?

T2 (I31): No, because they didn’t have a plot.

AA: Nobody from the SG?

T2 (I31): No, they were mixed: there is both theory and practicals. But they would go to each member’s house and then work the programme. And then they would invite members (community members) that pass by “come check it out.”

AA: And did she teach about the composting?

T2 (I31): Yes.

AA: And the liquid manure?

T2 (I31): Yes.

AA: Also about the crop rotation?

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<sup>51</sup> Name was anonymised

T2 (I31): Crop rotation yes.

AA: Did she also teach about the pest control and the grey water filtering?

T2 (I31): Crop rotation? Yes.

AA: And the planting methods?

T2 (I31): Yes.

AA: And did they apply it at their homes?

T2 (I31): Some did it, some didn't.

AA: Does she know why the others did not apply it?

T2 (I31): She doesn't know.

AA: And why did she teach them all this?

T2 (I31): To improve their lives. Because her life improved so she wants her fellow community to also improve their lives. They have hands, so get busy and make money. Be active, be independent, make money!

AA: In general, how is the relationship in the SG?

T2 (I31): It's good.

AA: Does everybody come to every meeting.

T2 (I31): Two rand if you are absent you didn't report. If you report that is fine.

AA: Do you still have contact with the other women who went to the training?

T2 (I31): Yes, the lady right there [points at next interviewee]. They still keep in touch.

AA: Do you talk about agriculture and gardening together?

T2 (I31): Yes, they visit each other's houses and share tips on how to garden.

AA: If she has a question on permaculture: who does she ask?

T2 (I31): "EO"<sup>52</sup>.

AA: Okay, thank you, we are at the end. Siyabonga.

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<sup>52</sup> Name was anonymised

**Interviewee nr 32 (Follower Farmer)**

Interviewee Number: 32  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 22:06  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 32, T2  
 Interpreter: T2  
 Interaction: Mostly English, long answers in Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. Did not have a lot of time because she had to go harvest her field → it was a quick interview. Very nice lady, pretty educated I had the impression.

Biases: She announced from the beginning that she doesn't have a lot of time, so we rushed through the interview. Neither of the ladies that were at the training are not part of EcoSolidar. Answers in English are monosyllabic.

Legend: AA (Alisa Autenried); I32 (Interviewee nr 32); SG (Savings Group); T2 (Translator nr 2); T2 (I32) (Interpretation from Siswati into English); (:): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Who from your SG went to the Mbuluzi training about permaculture?

I32: The secretary and the treasurer.

AA: What are their names?

I32: "LF1"<sup>53</sup> is treasurer, "LF2"<sup>54</sup> is secretary.

AA: When they came back from the training did they share anything with you that they learned?

I32: Yes.

AA: Do you remember what topics of permaculture they taught you?

I32: They taught us about how to grow our seedlings, how to make compost, and even grow citrus fruit trees.

AA: Did they also teach you about how to make liquid manure?

I32: Yes.

AA: And about crop rotation? That every year you plant something else.

I32: Yes, and...

<sup>53</sup> Name was anonymised

<sup>54</sup> Name was anonymised

T2 (I32): Spacing.

AA: Did they also teach about the pest control?

I32: Yes.

AA: And the grey water filtering? Purifying the used water.

I32: Ah, yeah, water, ash.

AA: How did they teach you about that? Did they do it theoretically, did they draw, did they just speak...?

I32: Talking.

AA: How did this happen?

T2 (I32): One of the members went on site and did practicals, experiments.

AA: On what works best?

T2 (I32): The garden they made about there [points].

AA: Is it a community plot?

T2 (I32): At one of the members houses.

AA: When they came back was it at first just orally?

I32: At first it was just orally and then we went together make one garden.

AA: On the same day?

I32: No.

AA: How long after were the practicals?

I32: After two weeks.

AA: And how long did you spend on the practicals?

I32: A day.

AA: One day? Everybody together?

I32: One day we made a compost, and then the following time after two weeks we made the seedlings (planting).

AA: And how many are you in total?

I32: 14. We were 16 but 2 passed away.

AA: That's sad. And did you apply what they taught at your home?

I32: Yes.

AA: Everything of the topics we just discussed?

I32: Yes, last year (this not yet, because the gardening season hasn't started yet).

AA: And this year? Are you going to do it again?

I32: Yes.

AA: Why?

T2 (I32): It's quick to mature, a big product, it's healthy.

AA: But were you not sceptical before you applied it at your home?

T2 (I32): No. She was not sceptical.

AA: Did you already have a garden before you applied the new?

I32: Yes.

AA: And if you compare the two of them, is there a difference?

T2 (I32): Very much so.

AA: What differences?

T2 (I32): The mature rates (more quickly).

AA: Back to the teaching: did you like how the 2 ladies taught?

I32: Yes.

AA: If you had to teach someone, would you do it the exact same way or would you change something?

I32: Yes, the same way.

AA: So, it is two years back that they came back from the training. Will they still go to visit each member's plot, to monitor?

T2 (I32): No, they don't do that. Everybody just compiles a report and brings that instead (to the SG meeting).

AA: A report? Written?

I32: No, just orally.

AA: Did everybody apply it?

I32: No, not everybody. 6 of us. Some don't have the space.

AA: How is your relationship to the two ladies?

T2 (I32): Good.

AA: Did you know them before you went to the SG?

I32: Yes.

AA: Were they motivated to teach the new members?

I32: Yes.

AA: Was there anything negative about the teaching of them?

T2 (I32): One drawback was that not every member could plant at the same time. Because some don't have space to plant.

AA: And did you teach anybody else outside the SG about the gardening?

I32: No, just the members.

AA: Why not?

I32: They are not interested.

**Interviewee nr 33 (Follower Farmer)**

Interviewee Number: 33  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 37:24  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 33, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. Nice lady. She has a cold.

Biases: Neither of the ladies that were at the training are not part of EcoSolidar.

Legend: AA (Alisa Autenried); I33 (Interviewee nr 33); SG (Savings Group); T2 (Translator nr 2); T2 (I33) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

T2 (I33): Three of the SG members went to the training. “LF”<sup>55</sup> and , interviewee number 30 (not correct because she did not go to the training).

AA: So, they went to the training, when they came back did they teach you anything?

T2 (I33): Yes

AA: What did they teach you?

T2 (I33): How to save money, ACAT’s history, how to govern the savings, record keeping, gardening.

AA: Just considering the gardening, what topics did they teach you?

T2 (I33): Compost, pest control with the garlic and stuff.

AA: Did you also learn about the liquid manure?

T2 (I33): Liquid manure: it takes three weeks. She explained how to do it with the sack and the container and the branch.

AA: And did you learn about the grey water filtering?

T2 (I33): Either ash or sand for filtering.

AA: What ash do you take?

T2 (I33): You know how they traditionally cook? They make fires, so that’s where the ash comes from. They don’t use stoves. And they keep the ash and store it in a bucket.

AA: And did you learn about the spacing?

<sup>55</sup> Name was anonymised



T2 (I33): Yes. 30 centimetres spaces for spinach.

AA: And how did you learn about that?

T2 (I33): Orally.

AA: Only orally?

T2 (I33): They go to each and every member's household and then experiment.

AA: The whole group together?

T2 (I33): Yes.

AA: How many are you?

I33: 10.

AA: And everybody goes on Wednesday to your place and helps you do the planting and then next Wednesday it's somewhere else? Or how do you do it?

T2 (I33): They come up with a date during the weekly meeting and say that "on this date we go that member's house for this particular task" and so on and so on and so on. But it is never the same thing. Like, member 1 is the compost, member 2 is the planting, member number three spacing whatever. And so on.

AA: And did you like the way they taught you?

T2 (I33): Yes, she did. It was a lot of personal improvement.

AA: What do you mean by that?

T2 (I33): I mean that whatever the two taught has affected her greatly, in a positive way.

AA: They came back, the whole period of teaching, how long did it take?

T2 (I33): It wasn't a long time. One week.

AA: One week, okay. And every day at another members. So, did you apply the compost in your home garden?

T2 (I33): She does.

AA: Do you also do the liquid manure?

T2 (I33): Yes, she has shared the permaculture info with her brother.

AA: Okay, did he ask for it?

T2 (I33): He asked her for chemicals and she said that "I don't use chemicals anymore, this is how I do it now" and then he went and did the same thing.

AA: Okay, did he apply it?

T2 (I33): Yes.

AA: Do you also do the crop rotation in your own garden?

T2 (I33): This is going to be the first time she will tempt it. She hasn't done it before.

AA: How many years have you done the permaculture garden?

T2 (I33): It's the forth year, the first time in 2015.

AA: And do you apply the pest control?

T2 (I33): Yes, the whole onion and garlic thing.

AA: They grey water filtering she has done, the spacing as well (from previous answers also in the profile questions). Okay. Why did you all those things in your garden?

T2 (I33): They were taught, they accepted the knowledge and now they implement it. It's as simple as that.

AA: Did you not think that... (sceptical)?

T2 (I33): No.

AA: Did you have a garden before?

T2 (I33): She had a casual garden, nothing too serious.

AA: But she had vegetables?

T2 (I33): Yes.

AA: If you compare the "now gardening" to the "before gardening" do you notice any changes?

T2 (I33): There is a change, there is a difference, definitely.

AA: And what exactly?

T2 (I33): Number one is the fast maturity rate, some crops take as little as three weeks and then they are fine. Number two, when you don't use chemicals the food is healthies, especially for women like her who are older, disease... The older you get, you get frail, you are more prone to diseases. So, you have to eat healthy stuff, organic stuff. Just two examples.

AA: And did you notice any quantity changes? Is it less than before because you don't use fertiliser anymore? Or is it more? Or is there no change in quantity?

T2 (I33): More product.

AA: How is your relationship to "LF" and interviewee nr 30?

T2 (I33): Yes, absolutely. They have a long history too, so they get along very well.

AA: What does that mean, a long history?

T2 (I33): Like we date back. They were friends for a long time.

AA: Why did you join the SG?

T2 (I33): The SG is like a labour to her. With the monthly contributions of 5 rand she has like 600 now. And the tractor that she hired last year, she took a loan from the SG, so it's a money management thing for her.

AA: What I still did not get is if you contribute 5 rand a month, is it just to take it away from you, so you won't spend it, or do you make more out of it? Let's say you put every month 5 rand at the end of the year you should have 60 rand. Or do you get like 70 back because you invested in it?

T2: Whether it is generating interest?

AA: Yes.

T2 (I33): The loans have interest. So if you are a member of a SG and you loan money, you are going to pay it back with interest. But it's for the greater good for the SG.

AA: And then someone else can loan more money?

T2 (I33): Yes.

AA: And do you want to teach anybody else, except of your brother?

T2 (I33): Her kids, her daughter in law, she wants to include her in her SG.

AA: Do you have a secretary in your SG? Someone who keeps record of what is treated?

T2 (I33): "LF".

AA: Okay, we are good. Siyabonga.

**Interviewee nr 34 (Follower Farmer)**

Interviewee Number: 34  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 35:16  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 34, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. Lovely lady with red hat. Very calm and happy.

Biases: Her lead farmer who went to the training is not part of EcoSolidar.

Legend: AA (Alisa Autenried); I34 (Interviewee nr 34); SG (Savings Group); T2 (Translator nr 2); T2 (I34) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Who of your SG went to the permaculture training in Mbuluzi?

I34: Interviewee nr 35.

AA: When she came back did she share anything with you that she learned?

T2 (I34): Interviewee nr 35 is going to be the next person we are going to interview. Money saving techniques, garden, how to manage a SG, how to improve themselves and the SG, especially the finances of the SG.

AA: Only speaking of the garden: do you remember what she taught you specifically? The topics?

T2 (I34): The spacing, the compost, the liquid manure, that's pretty much all she remembers.

AA: Did she also teach you about pest control? Pellepelle, garlic...

I34: Oh, yes, I forgot [starts to explain how it works]

T2 (I34): Pellepelle to spray, it helps control pests.

AA: And in the spray do you only use pellepelle, or do you also crush garlic and onion?

T2 (I34): Pellepelle, aloe vera and garlic.

AA: Aloe vera? Interesting. Did you also learn about crop rotation? Like if you plant one crop this year, you should plant another one next year?

T2 (I34): Yes, she does practice it. Crop rotation to improve the quality of the soil.

AA: Oh, so you apply it at your home?

I34: Yes, in my home.

AA: Did you also learn about the grey water filtering?

I34: Yes, yes, I know.

AA: And do you use the pest control at home, in your own home?

I34: Yes.

AA: And the grey water filtering with the ashes, do you use it at home?

I34: Yes.

AA: And do you practice the spacing?

I34: Yes.

AA: So, when she came back and taught you about those subjects, how did she do it? How did she teach you?

T2 (I34): She had a notebook that she would read to them. She took notes at the training.

AA: And then, did you also take notes, or did you just listen?

I34: We took notes.

AA: And did she also teach you practically?

I34: Sometimes, once a week practicals.

T2 (I34): It varies, every time it is at another group members' place.

I34: Today here, next time there. All of us, we are around it.

AA: All the time?

I34: Not all the time, maybe once a week.

AA: And was it just after she came back from the training, or do you still do it like that?

T2 (I34): They still do it. As a group or individually?

I34: Sometimes as a group and sometimes individually.

AA: And the first time you as a group did the practicals, did she show you how to do it and then you all did it together or did she just advise you to do it like that?

I34: No, she showed us how to do it. And then we do it.

AA: Nice. Did you like that way of teaching?

T2 (I34): Very much.

I34: I wouldn't change anything.

AA: Did you have the feeling that interviewee nr 35 liked to teach you?

T2 (I34): Yes, a lot.

AA: When you applied it at your home, why did you do it?

T2 (I34): It helps to control her destiny. Her destiny is in her own hands, that's what permaculture has taught her. If you want to make some money you don't actually have to go look for a job, you can be self-sustainable and independent.

AA: When interviewee nr 35 came back from the training and taught you about permaculture, were you not sceptical “What is this? Why should we do this?”

T2 (I34): She listened, opened up her brain, understood, implemented it and then liked the results. So straight forward.

AA: So open for changes?

I34: Yes.

AA: Before she went to the training, did you already know about permaculture or was it only when she came back?

T2 (I34): She was totally blind (as in she did not know anything about it before).

AA: Did you already have a garden before?

T2 (I34): Yes, but she did not have the knowledge about permaculture before.

AA: So, she did it traditionally with pesticides and everything?

I34: Yes.

AA: If you compare both techniques, do you notice any differences?

T2 (I34): Yes, the veggies are substandard. Her harvest has greatly improved, the quality. Quality and size.

AA: How do you know the quality has improved?

T2 (I34): The customers give her the feedback. Her customers love her products.

AA: Because of the taste?

I34: Taste and size and beauty.

AA: How many members are in your SG?

I34: 7 members.

AA: Did all of them apply it?

I34: Yes, yes, yes.

AA: Are they convinced too? Does it work for everybody?

T2 (I34): Yes, they have a similar success rate.

AA: And how is your relationship with interviewee nr 35?

I34: Yes, we are friends.

AA: Did you know her before the SG?

I34: Yes.

AA: Why did you join the SG?

T2 (I34): The knowledge that she gets from the SG is the main motivator. The knowledge of how to improve her life as a woman.

AA: And who gave you the idea to join it?

T2 (I34): Two ACAT ambassadors came through and introduced the whole idea of ACAT and what ACAT does. And then they followed up,

AA: “EO1” and “EO2”<sup>56</sup>?

I34: Yes.

AA: Did you teach anybody else about the gardening?

I34: Yes.

AA: Who did you teach?

T2 (I34): Neighbours.

AA: So they came by your homestead and saw your garden?

T2 (I34): They come and buy and then they ask a bunch of questions.

AA: Okay. Perfect, I think this is it. Siyabonga.

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<sup>56</sup> Names were anonymised

**Interviewee nr 35 (Lead Farmer)**

Interviewee Number: 35  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 47:46  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 35, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. SG is breaking apart (treasurer stole the money)

Biases: She is not an EcoSolidar farmer (not on the list). I think that she did not go to a permaculture training (did not learn about all the topics of the list)

Legend: AA (Alisa Autenried); I35 (Interviewee nr 35); SG (Savings Group); T2 (Translator nr 2); T2 (I35) (Interpretation from Siswati into English); (:): Added to facilitate understanding; [:]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

T2 (I35): The last SG meeting they held was last year. They have internal problems, so the last meeting they had was last year. Because of some issues they don't get back on track.

AA: What are the issues?

T2 (I35): They appointed a treasurer in their SG and then contributed some money. Now the treasurer disappeared. Every time they have a meeting, she (treasurer) doesn't show up.

AA: And she has the money? And she's gone?

T2 (I35): Yes. So, all the money is gone. That is the main issue.

AA: Yes, that's a big issue.

[continuation profile questions]

T2 (I35): When she had goats she used the manure.

[continuation profile questions]

AA: So, you went to the training in Mbuluzi, did you learn anything new there?

T2 (I35): She went there for record keeping: how to run and maintain a SG.

AA: Oh okay, did you also learn about permaculture?

T2 (I35): Yes.

AA: What topics did you learn under gardening?



T2 (I35): Compost, pest control without going to the shops, how to make jam, about fruit trees. It's been a long time, she doesn't remember.

AA: Don't worry. Did you learn about liquid manure?

T2 (I35): Yes, she calls it juicing.

AA: Did you learn about the crop rotation?

T2 (I35): Yes.

AA: And the spacing (planting methods)?

T2 (I35): She was supposed to go back to Mbuluzi to learn about spacing, but then the problems arose with the treasurer and she didn't have the chance to go back.

AA: Because the workshop was divided in two?

T2 (I35): Yes.

AA: Did you learn about the grey water filtering?

T2 (I35): No.

AA: Did you apply the compost in your home garden?

T2 (I35): She hasn't yet. But she did dig up a ditch, but then problems arose with the garden and personal stuff, so she never completed the compost. Her garden was way too big, and she is on her own, she got distracted. But she knows, she has the knowledge on how to do it.

AA: And did she apply the liquid manure?

T2 (I35): She hasn't implemented it yet, she has an old way that she learned from her parents.

AA: What is it?

T2 (I35): It's with ash in sacks, she spreads the ash. She uses ash. Before she ploughs the garden she spreads ash all over the garden. Then she ploughs, plants and between the lines and spaces: ash again. Then she weeds, when she is done weeding: ash again. And before harvesting: ash again. Whenever she sees bacteria (?): ash again. And it works for her. That's what her parents did. No chemical treatment.

AA: Have you never applied chemicals on your plot?

T2 (I35): Never.

AA: Do you do the crop rotation in your home?

T2 (I35): She does.

AA: And the pest control?

T2 (I35): She doesn't. Pests are not an issue for her.

AA: Why did you do the crop rotation?

T2 (I35): Crop rotation restores the soil, the quality of the soil. You don't repeat what you plant.

AA: Did she already do it before she went to the training or did she pick it up at the training?

T2 (I35): Even before.

AA: When she came back, did she teach anybody about what she learned?

T2 (I35): Group member and other mothers in the community. She teaches them about the soil quality. Not only group members but also outsiders about the quality and how to rotate the crops. Also about juicing even though she doesn't use the liquid manure, she is dependent on the ash. But she does teach them about the liquid manure and how to dilute it.

AA: What topics did she teach them? Composting?

T2 (I35): Some listen, some don't.

AA: And her SG? How many members are there?

T2 (I35): 13.

AA: Did she teach all of them?

T2 (I35): All of them.

AA: And how many apply it?

T2 (I35): Because of her massive, massive, massive garden time is an issue. So, she can't get around to every member and see what they are doing. So, she doesn't do that very much. She is in her own garden because it's a massive garden that has no fence.

AA: And animals don't come and eat?

T2 (I35): The fencing issue takes a lot of her time because she makes regular patrols and when there is an opening she has to go to the forest and chop down a few logs and branches and come back and patch. So, that takes up most of her time. She can't get around to other members' houses.

AA: And when she taught her SG, how did she do it? During a weekly meeting? Practically? Orally etc.?

T2 (I35): Generally.

AA: So, you didn't like organise it "this Wednesday I am going to teach you about compost"?

T2 (I35): Most of the knowledge was shared casually, be it in church, under these trees, neighbours... And then she would school them: invite them over into her garden and then they observe and see and be impressed. And they would ask a bunch of questions and she would share the information with them. So, it was nothing formal.

AA: And the other group members? Oh no, they don't meet anymore. But the training was in 2017... Why did you join the SG?

T2 (I35): Number one: it's a disciplined way of saving money. Rather than having it on you and spending it recklessly, you give it to the organisation and they keep it for you. Number two: you can get loans from you SG, but you have to pay it back with interest. And then number three: the contributions are adequate for her, it's only 5 Rand per month so it works for her. She is able to contribute that, it's affordable for her and it generates an interest.

AA: I am interested in why the people generally don't take the loans for buying fences?

T2 (I35): Fencing was on the agenda, and other community needs you face as a woman. Fencing was one of them. And then they have been discussing it. It's just that the treasurer then disappeared with the money.

AA: You don't have any idea where she is? She just disappeared?

T2 (I35): They see her, she is around, she lives at a distance from here, but they see her. And they asked her, they even involved the police and she said no. They told “Programmes Officer”<sup>57</sup> (ACAT) and he promised to solve the issue on their behalf. So, it’s in his hands.

AA: Does she think they will get it back?

T2 (I35): She is not sure. They see her around every once in a while. “EO”<sup>58</sup> was handling the case and apparently, they shifted him to something else (another community?) and now “Programmes Officer” is handling it.

AA: Except of the treasurer, is the relationship to the other members of the SG good?

T2 (I35): The relationship is deteriorating because of that incidence.

AA: Would she even be willing to teach them?

T2 (I35): When the whole treasurer thing happened, she was very dispirited, but off late she is better, and she wants to come back with full force. And practice garden with the garden. But the spirit was really low because of what happened.

AA: Were you the only one from your group going to Mbuluzi?

T2 (I35): Yes, she was the only one.

AA: Alright, Siyabonga.

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<sup>57</sup> Name was anonymised

<sup>58</sup> Name was anonymised

**Interviewee nr 36 (Lead Farmer)**

Interviewee Number: 36  
 Interview Day: 5  
 Location: Lubombo, under a tree, next to football field  
 Duration: 36:35  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 36, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Football pitch is next to our tree where the interview is held. A lot of SGs having their meeting in the same areas, but it is not distracting. A very busy day, around 100 women meeting. Sometimes people passing by and greeting. Very poor lady.

Biases: Translator confused pesticides and fertiliser: has he always translated it the wrong way? Because he apparently did not know the difference. Had already knowledge about permaculture before the training (except of compost and spacing)

Legend: AA (Alisa Autenried); I36 (Interviewee nr 36); SG (Savings Group); T2 (Translator nr 2); T2 (I36) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: So, she went to the training in Mbuluzi, did she learn anything?

T2 (I36): Preservation, natural manure, fertiliser... she is saying "a lot".

AA: Okay, and if she only focalises on the gardening, can she mention some topics?

T2 (I36): Spacing.

AA: Did she also learn about composting?

T2 (I36): Absolutely.

AA: And about crop rotation?

T2 (I36): Yes, she did.

AA: And the grey water filtering?

T2 (I36): As well. Grey water, ash...

AA: And does she apply the compost in her home garden?

T2 (I36): Yes.

AA: And the crop rotation?

T2 (I36): Also.

AA: And the pest control?

T2 (I36): The liquid version: you crush your garlic, you crush your chili and then spray it.

AA: And does she do the grey water filtering?

T2: She does.

AA: And the spacing?

T2: She does.

AA: And why did she apply the things that she learned at the training?

T2: Everything or just the permaculture?

AA: Just the permaculture.

T2 (I36): Money saving: it's cheaper, its' cost effective. Preservation (?), she is saying a lot.

AA: Was she not sceptical before she applied it at home?

T2 (I36): Permaculture is not exactly new to her, she's been using preventative measures, traditional etc. all along before Mbuluzi. So, it's not exactly new to her.

AA: Was anything new to her?

T2 (I36): How to do a compost. She didn't know how to do a compost. And spacing was new as well.

AA: Why did she try the composting and the spacing? Like, wasn't she sceptical about the composting and the spacing?

T2 (I36): She just wanted to try it (wind in recording, it can't hear it all).

AA: Did she notice any changes since she does the compost and the spacing?

T2 (I36): Permaculture has a higher success rate and the harvest is pretty to look at. Yet, the traditional stuff has a lower success rate.

AA: Alright. How many members of her SG went to the training in Mbuluzi?

T2 (I36): 2.

AA: How many are they in total?

T2 (I36): 10.

AA: Did she teach anybody when she came back about what she learned?

T2 (I36): She is a member of three SGs and she taught all those 3.

AA: How many people are there in total?

T2 (I36): So, her group: 10, 50 another and 100 in another.

AA: So, there is one SG with 100 members and she taught all of them?

T2 (I36): Yes.

AA: And how did she teach all those people?

T2 (I36): Oral.

AA: Did she also show the practicals to anybody?

T2 (I36): They would go to each other's homesteads and teach each other.

AA: In the SG or in what context?

T2 (I36): And the other two groups. The main one and the other two.

AA: They go to each other's homesteads and they would do it together?

T2 (I36): Yes, they do it together.

AA: Does she have any idea how many of the 160 people applied what she taught them?

I36: Many people.

AA: Are they all from this community?

T2 (I36): Everybody is from "community"<sup>59</sup>. It's a big area.

AA: When she went to Mbuluzi she met other women at the training. Is she still in touch with any of them?

T2 (I36): Yes, they are still in contact. Even today they were together. There were 6 SGs and they chose a few that went to Mbuluzi and they are still in touch. So, there are 6 SGs in the area and each group chose a member or too to go to the training. From her group they were two. And they are still in touch. They were together today.

AA: What did they talk about?

T2 (I36): Okay, one thing they discussed today was how to farm goats and how to prepare their sleeping area. How to make their beds. They use planks and logs, they make pillars and they create a bed for the goats. They sleep on top, and when they piss and they fecate they can easily scoop (underneath).

AA: And where do they get the knowledge from? Is it a specialist who is teaching them?

T2 (I36): They learned it during a training in Mbuluzi.

AA: And if she had to choose what is more important to her: the saving or the agriculture part in the SG?

T2 (I36): They money. At the end of the year she gets her money back.

AA: And one thing probably leads to the other: if you have more money you can buy more things for the garden like fences. And I think we are through. Just in general: how is the relationship to the other members of the SG?

T2 (I36): It's good.

AA: Alright. Siyabonga.

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<sup>59</sup> Name was anonymised

**Interviewee nr 37 (Lead Farmer)**

Interviewee Number: 37  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 55:00  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 37, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English), understands some English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. She went to two trainings, maybe both are not purely about permaculture → not on the list of EcoSolidar farmers. Had already a lot of knowledge about permaculture before going to the training. Interruption by Programmes Officer informing me that 6 more people are organised for today that are waiting right now. Interruption by a phone call that she answered.

Biases: Not an EcoSolidar farmer. Did not learn a lot of new things at the training.

Legend: AA (Alisa Autenried); I37 (Interviewee nr 37); SG (Savings Group); T2 (Translator nr 2); T2 (I37) (Interpretation from Siswati into English); (); Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

T2 (I37): The first training she went to in Mbuluzi was about HIV and a little bit of permaculture. Record keeping the second time around. So, she went to two trainings in Mbuluzi.

AA: So, it was not a pure permaculture workshop?

T2: No.

AA: What did you learn about permaculture in the workshop?

T2 (I37): She mentioned three things that she learned. The first thing was how to conserve nature and economical farming. Because you don't have to go to the shops to buy things, you just use the natural fertilisers. She mentioned a little bit of liquid manure and how they don't use chicken manure. And then she mentioned a little bit of pest control, instead of buying chemicals you use your own stuff using crops that have a strong sent.

AA: Did you also learn about composting?

T2 (I37): Yes.

AA: And about the crop rotation?

T2 (I37): Yes.

AA: And about the grey water filtering? The purification of used water.

I37: Yes.

AA: And did you learn about spacing and lining and how to do all the planting?

I37: Yes.

[continuation profile questions]

AA: You mentioned that you learned about all those things about gardening. Did you also apply anything in your garden? Did you apply the composting?

T2 (I37): She did that.

AA: Do you also do the liquid manure?

I37: Yes.

AA: And the crop rotation?

I37: Yes.

AA: Do you also make your own pest control?

I37: Yes. [explains]

AA: Do you filter your own grey water?

I37: Yes.

AA: Do you also do the spacing and the lining and the other planting methods?

I37: Yes.

AA: Why did you apply all those things at home?

T2 (I37): No chemicals, no fertilisers. One of the main reasons is the health benefits because in permaculture they don't use chemicals. That's the reason why people have big stomachs because of the chemicals that they eat. And she always tells the people, the neighbours that when they come to her house that's where they would get good food, food that will improve their health because it's good food and it's healthy food. There are no chemicals used. Using permaculture she got a very impressive harvest of "Lijoti" (a melon variety), like over 25kg each. And she uses that to make jam. It's not a pumpkin but it looks like a watermelon, it's white.

AA: Do you have the impression that your harvest is better since you apply the permaculture?

T2 (I37): A very impressive harvest.

AA: Did you have a garden before you learned about permaculture?

T2 (I37): Yes. Spinach replenishes itself. She can eat spinach 6 months straight, because it grows, and she harvests the top parts, then it will regrow, and she harvests the top parts again and it regrows again. The harvest replenishes itself all the time. Lettuce does too.

I37: I only use the leaves outside and leave the rest and then I always do it like that.

AA: Before you went to the training, have you already had some knowledge about permaculture or was it the first time you heard about it?

I37: A little bit from my family.

T2 (I37): She did compost, it was not a new idea to her. They had been using it before for generations. But what they did not do is isolate the compost, they did not create a compost heap, but it was a general thing, they scattered the grass everywhere, they scattered the carton everywhere. It was not isolated. When she went to the permaculture course it was not new, but the way they taught, the things that they taught her worked for her. But it was not exactly new. Permaculture applies to all crops, especially with the Lijoti, it did wonders for her. She eats it and instead of throwing it away, she throws it onto the compost and then scatter it in the fields again and



plant again and then the harvest will be richer in the new year. She doesn't throw stuff away, it just goes to the compost. And it improves the harvest.

AA: Was there also anything new that you learned at the training? Something that you did not know before?

T2 (I37): The pest control.

AA: When you came back from the training did you teach anybody?

I37: Yes, the neighbours.

AA: And how did you teach them?

I37: I just helped them, I bring them seedlings and make with them the small portion (backyard garden). But later when they have to irrigate they are so lazy. Yeah. They are so lazy, you know. They used to come to me and buy my vegetables (again after having planted their own garden). Their crops failed.

AA: Did their crops fail because they did not irrigate?

T2 (I37): They are flippant, careless about the whole permaculture thing.

I37: They are just so lazy.

AA: Did you also teach your SG?

T2 (I37): It actually happened in reverse. Usually people go to Mbuluzi, come back and teach people. They (SG) recruited her just from observing her. She farmed, her own style of farming before Mbuluzi. And they (SG) liked the way she farmed and said "come join us". It was the other way around.

AA: So, you were not part of the SG yet, and they saw how you did it and then they wanted you to join them and go to Mbuluzi for them?

I37: Yes, yes.

AA: Alright, interesting. So, when you came back did you share it with them?

I37: Yes, I shared.

AA: Did you teach them about the composting?

I37: [nods] But they are lazy [sighs].

AA: How many are there in your group?

I37: There are 18, but now there are 4. Imagine.

AA: What happened to the others? They just don't come anymore?

I37: [laughs] yes.

AA: Okay, so you taught the 18 people?

I37: Yes.

AA: Did anybody of them do it at home?

I37: Yes.

AA: How many?

I37: 5 or 6. 4 were successful.

T2 (I37): She taught 18 in total, 6 gave a serious attempt, but only 4 are continuingly successful.

AA: How did you teach them?

T2 (I37): Oral and then they demonstrate. Working hand in hand with them.

AA: And where did you do this?

I37: In their families.

AA: In each ones? So, the whole group went to every house?

I37: No, I used to go there one by one. Just the two of us.

AA: I did not get that bit. So, first you taught them orally and they took notes? And then you went, just you, to every member, and then you did it with her together?

I37: Yes.

AA: Just the two of you or were the other 17 members there as well and helped to dig and to plant?

T2 (I37): The whole group would come along. They are lazy, not even lazy but they were just not interested. They could not do every household because not everyone implemented permaculture. But everyone had a garden going. So, they skipped some houses.

AA: Okay, I still don't understand if they all did it together?

T2: Whenever they could, they did it together. The whole group would tag along.

AA: Okay.

T2 (I37): It goes beyond being lazy. People were just careless, the people who went to Mbuluzi to the training, some of them came back and started complaining about the hard work they had to do up there. They did not know that it was a manual labour course. They just thought it was a theory thing, they did not want to get their nails dirty. They did not really care, they were not really inspired.

I37: They did not like it. Once they go out, they take the vegetable, they come and cook and after this they don't irrigate. Until you come back.

T2 (I37): They only know how to harvest.

I37: After this, you have to irrigate...

AA: How many of your group went to the training?

I37: 4.

AA: And you are the only one who applies it.

I37: No, 4.

AA: Oh, the four of you who went to the training were successful? And then you convinced two more to do it? And all the others were too lazy?

I37: [nods].

AA: And did you teach them all of what you learned?

I37: Yes.

AA: Why did you teach them what you learned?

T2 (I37): Her main aim was to spread the knowledge, even if they don't use the knowledge or they are lazy. At least they have the knowledge, they have the tools to get busy.

AA: Did you have the impression that they wanted to learn about this?

T2 (I37): In the beginning when they were just talking about it, they were interested. But when it came to the manual labour, they started shutting it. The very same people who she taught how to do it they come to her buying her vegetables. And she taught them the methods and they could have their own things.

AA: So, they see that you have a lot of success and they still don't do it?

T2 (I37): They tell her "you can do it, you are happy, I can't, you can".

AA: If you had to teach them again, would you change anything? Or would you do it the exact same way?

T2 (I37): Exactly the same way.

AA: And in general, how is the relationship to the other members?

T2 (I37): It's very good.

AA: Are you still in touch with other people who went to Mbuluzi?

I37: Yes.

AA: Only the 4 from your SGs?

I37: No.

AA: How are you in contact with them?

T2 (I37): They communicate via phone and they give each other tips on how to plant. They keep each other updated on who is doing good and who is doing bad. If someone is doing good they ask, "tell me how you do it". They keep in touch.

AA: I think that's all the questions I have. Siyabonga.

**Interviewee nr 38 (Lead Farmer)**

Interviewee Number: 38  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 57:10  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 38, T2  
 Interpreter: T2  
 Interaction: English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. A very passionate woman. A very smart, entrepreneurial mind. An extremely interesting interview. Interruption by a phone. I had to take a picture of interviewee nr 37 during the interview. Children sitting in proximity and listening and observing us. Confident enough to say everything in English. Not very motivated during the profile questions, once she started talking about permaculture she was very passionate.

Biases: no apparent biases

Legend: AA (Alisa Autenried); I38 (Interviewee nr 38); SG (Savings Group); T2 (Translator nr 2); T2 (I38) (Interpretation from Siswati into English); (:): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

I38: I used to grow a lot, but this year was not good. There were some distractions during the farming.

AA: What happened?

I38: Last year in November my sister in law died in South Africa. So, I spent a lot of time making preparations instead of farming and cultivating the fields. And also now, my father in law died and I didn't cultivate all the crops that I used to cultivate.

[continuation profile questions]

I38: There is something I remember. There is a problem here (with SG). I am the founder of this association (SG) and it produces another one (SG) that is there [points in a direction] it is called "SG2"<sup>60</sup>. So, the problem is that I am not from this area. I came here because I am married. So, when I founded this association, some of this place, the people became jealous that I am not from this area. So, "EO"<sup>61</sup> and "FF"<sup>62</sup> asked me to join the other one. Also it was founded by me. So, I now remembered that there ("SG1"<sup>63</sup>) we meet on Tuesday, but from 14:00 to 16:00. But I am no longer there. I am in that one («SG2»). Yes, fulltime I am there and I have left them there ("SG1").

AA: When did you change groups?

<sup>60</sup> Name was anonymised

<sup>61</sup> Name was anonymised

<sup>62</sup> Name was anonymised

<sup>63</sup> Name was anonymised

I38: This year, January.

AA: What is the name of the new one?

I38: “SG2”.

AA: So, the relationship between the members of the first group was not good?

I38: They don’t want development. Especially in this place. They claim they know, you can’t tell them because they are from this place. You are just coming and telling them and they are “Who are you?” They have that mentality. Even if you can start an association, there was an inspiring MP<sup>64</sup> (member of parliament), he bought 100 chicks and a bag of starter. I talked to them so that there will be development. Some of them are not even cultivating in their fields because they say they have no money. So, I asked him and he gave us. He bought those 100 chicks and a bag of starter, then we started an association there. So, they say “Who? It came by who? From the one who is not from this place?” When my sister in law died, they just destroyed everything. They took everything, they took the chickens, they sold once. They gave 4 to each one and also gave me 400 (Rand I think) and it was the end of the association. They said that they will buy, that they will contribute 250 in January. That happened in December last year. I have just started in August, because it takes 6 weeks for them to mature. I went to “town”<sup>65</sup> to look for a market and I got that market there at “Eclipse”. When I came back and told them that they must take all of them at 5 weeks they said “No, we just cannot, we can sell them locally.”

AA: The chicks?

I38: Yes. And then there is no association because it came by me and I am not originally from this place. So, everything I try to do, they destroy it. They destroy it. In that association it is just like that. So, I just left and went to there («SG2”). When you just leave, when you just stay in there and don’t proceed with anything (?). Even in that association they raise the chickens, they divide the money amongst themselves, now they are coming to me and say, “Let’s start again”. But I said “No, count me out. I helped you and you just destroyed everything. So, I can’t start afresh, do it alone.”

AA: How come that you have such a good knowledge about the functioning and how it should work in such a SG?

I38: Maybe it’s just a talent. My mother was uneducated, she only went to standard 3 (3 years of schooling). But all the development in that area was done by her. She used to go from office to office to consult them, filling the dongas, she was in the red cross, everything. Maybe I inherited that from her.

AA: Sounds good. When you went to the training, were you still part of the first group?

I38: Yes, I was still part of the first group.

AA: And did you teach them?

I38: Yes, I taught them. Because they did not want to go to the training. They just stayed in their homes “we can’t leave our homes, you go there, and you come back, and you tell us everything, how it is done.”

AA: And then, did any of them apply it in their homes?

I38: Some are doing it. I used to go to their homes and teach them how it is done. Those who are willing, I just go there and teach them how to do the organic farming in the gardens.

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<sup>64</sup> Name was anonymised

<sup>65</sup> Name was anonymised

AA: How people did you teach?

I38: There are two in the new association and one there (“SG1”), she is my neighbour.

AA: So, two of the new and one of the old and all the others were not very motivated to learn?

I38: No, now I don’t have time. Some need my help, more especially in the new group. So, I told them to make a group, so when I teach them I can do it for several. I must not only come for one person. So they must organise themselves. And also on what will be needed for making those gardens (e.g. tools), so that when I come there we won’t waste time. We can do it in many homesteads and not only in one.

AA: Do you remember how many in total you were teaching and how many of them effectively applied it later on?

I38: Most of them are lazy, they need to be motivated, always. Because when we teach them, then you leave and you come back another time they won’t do it. Some say that when they cultivate crops they can’t have a garden. Whereas, you eat every day, so you need vegetables! It can’t be that you have to rest sometime and not grow a garden because you have a field. It doesn’t work that way. But most of them are accepting it because they say that there is less work than with other gardens because the grass with which we cover the plots (mulch), it retains the moisture for a long time whilst we are doing other jobs. You can find that your vegetables are not affected by the drought.

AA: So, you have the impression that the permaculture techniques are less work?

I38: Yes, less work. Even if you are sick you can afford to make your own plot, you can water it, although there is a problem with water on this side (Shiselweni). But in Mbuluzi they taught us how to purify water. You can use water for washing dishes, you can’t say that there is no water, but you are able to bath, you are able to wash dishes and pots. So, we have a way of cleaning that water. I used to teach them. Some would say “water is far away”, but they must do something they can afford to have water. So, we have that way of purifying that water. It’s not an expensive thing, you use what is available. We use a bucket and a container in which we collect the water. You need a container, a big one, then you must have two planks, or two poles that you put on top here and then a bucket. You must make holes under the bucket, maybe 5 holes. Then you take stones, 5 stones the size of a closed fist and you put them inside the bucket (on the holes). Then you must take a sack and you put it on top of those stones. After that you have to add sand, not it’s not sand. You cover the stones with the sack and then you take crushed stones and then you put them on top of the sack, the crushed stones. Then you get river sand that you also apply on top of the crushed stones. Then, after that, you add sand and then you end with other crushed stones on top. So, when you wash your dishes or clothes, you take that water and pour it there in the bucket. And then in the container it will come clean, so you can use it for watering your vegetables. That is an easy way of getting water even if here there is not enough water. But you can use that water for watering and also for washing dishes.

AA: What else did you learn at the training?

I38: How to make manure, the liquid manure. And also using botanical spray, you don’t use chemicals for gardens and the vegetables. But you use natural things, plants that are smelling, some are bitter, but are not harmful. They are not toxic. For a 5 litre bucket you take about. You take those plants that are smelly or that are bitter. You use a bucket of 5 litre, the size of a closed fist, you take the leaves, then you add them. Also aloe (vera), even pepper, you can use crushed pepper and put it in the 5 litre. Only one fist, it depends when you want 10 litre, it is times 2. The fist full of plants you put in there and over 24 hours. After 24 hours in the morning you must use the leaves of a wattle tree and put it inside the bucket and put it on the leaves of your vegetables, even underneath [shows how to do it] (the big leaf of the wattle tree serves as a brush that you put inside the liquid and brush

the vegetables with it). So, the pests will never damage your crops. But you are not using a chemical, you are using the plants, the natural plants.

AA: What kind of pests do they repel? Worms?

I38: Yes, worms and also...

[thinks]

AA: The cut worm?

[shows everything she tells with her hands and a stick to explain the procedure of planting]

I38: Oh, the cut worm you repel like this: you first make the bed, it is 1.2metres (width) and this side (length) is as long as desired. You make the bed: you first get manure, you spread it 5 to 10cm. Sometimes you don't have a metre in your garden, so you measure it like this [shows 10cm with her hand], then on top of the manure you spread newspapers. Okay, at first you till the soil a little, not too much so that the worms will remain there. So, that when you take the soil you don't dig deep, you just take a little so that the worms who will cause manure will stay. The good worms must stay. After tilling the soil a little, you take ash. You do that to scare the ants.

AA: Ash scares the ants?

I38: Yes. After that you spread the manure about 5 to 10cm, then you get newspapers and you spread them on top and you water them. So that they retain the moisture. After that you can add the compost.... Oh yes, I haven't talked about compost and how you do that. So you take the compost and put it there as a layer, also 5 to 10cm. Then you take grass and you cover the bed. After covering the bed, you can take a stick and you make holes. When you make the holes in the bed you make sure that the bed is 1.2metres or 120cm a side. So, you make 4 holes, but it depends on the vegetable we are planting. Because when we plant... Okay, we start with the onions at the edge because they are smelly, then when you plant the other seedlings, you divide them with onions. Spinach, then onions, you make 6 holes for onions, then the others like lettuce only 4 holes, then tomatoes, cabbage, green peppers is 30 to 45cm from each plant because they grow big. So, it's three holes. Tomatoes, cabbage and green pepper because they become big plants, it's three. And also from this side [shows] to the other side it must be 40cm because they are big plants. You divide them all by onions.

AA: How often do you put onions between the vegetables? Just on the ends of the bed or in between every other vegetable line?

I38: Lettuce, onion, spinach, onion, tomato, onion. But also at the ends of the bed. [gets up and shows where to put onions on our imaginary bed]. When you do spinach, then onion it's six holes for onions. Betroot, lettuce, spinach only 4 holes. But it must be equal. The holes must be equal (equally separated from each other), and they must be in a straight line. And when you are finished... Oh yes [remembers something]. There is, to prevent the cut worm! When you are finished you cover it all with grass. You use the stick and you make the hole here and here [shows]. Then you water first before you put the seedlings. When you make the hole, you must remove the grass, the grass must not go inside the hole with the seedling, so, you remove it like this [shows]. Then you put the seedling in the hole. After that you cut dry sticks as small as the pipe of this pen [shows the ink pipe of a regular pen] and then you put it like this (to the left and the right of the seedling). It is a dry wooden stick. So, when the cut worm comes for the seedling it just does like this (tries to grab the seedling but gets the wooden stick first). So, it is a dry stick and it (worm) can't bite anything, so it leaves. When there is not this protection (of the wooden sticks), it (worm) just cuts the seedling. After that you start watering, you water, you water, you water, you water. You don't step on the bed. You stand at this side and that side. And then you see "okay my seedling is now strong", then you take the water manure (=liquid manure). It goes like this: You take manure and you put it in a

sack, it must be half of the sack. Then you get a container, maybe 1.2m, those plastic containers, you pour water. When you pour water, it must be half full the container. Then you get a wire or something to tie the sack on a log. You roll the wire on the log and you put it inside (the container) for 4 to 7 days. And then the liquid manure will be good for you to use, 4 to 7 days. Then when you have put it there (into the container), you can also shake it so that what is inside can come inside the water. Then when you apply the liquid manure on the seedlings: 1 litre of manure is 1 litre of water. If you use 5 litres of manure, you also use 5 litres of water. You dilute because the manure is strong! If you can use it like this (undiluted) it will burn the seedlings. And when you apply the manure, the seedling, or the bed must be wet. And you have to water it! So that when you apply the manure it will go down easily, when it is wet (facilitate infiltration). Then, when you make the botanical spray where you use those plants that are non-toxic. If you put 5 litres it's only one hand full. You put it inside and it stays 24 hours and then it is ready for the use. You use it. There is no chemicals used and the vegetables, you eat them and you can't complain about stomach ache because they are just healthy. And they are sweet. And they grow big, even beetroot. You will be shocked, in just that small space, but hey, the products are great.

AA: And you said the layers with the newspapers and the whatnot, what exactly is it for? Is just for keeping it humid?

I38: Yes, and also it is a way of planting. How can I say, it is an easy way of preserving the soil, because when you are not using this (method) you have to use certain chemicals and also it retains the moisture for a long time. And it is fertile. And you take a long time when you have planted those beds, you can't destroy it. It stays for a long time. And then you have to renew it, starting from papers and renew it. But it doesn't waste a lot of energy, it doesn't waste a lot of time. You can use it, it's easy. Once you have made the bed you can work. It's easy.

AA: So, at home do you do all of it?

I38: Yes, I do.

AA: And do you also all of it to the others?

I38: Yes, I teach them.

AA: And now you taught us [laughter]. Do you also do the crop rotation?

I38: Yes, when you have planted lettuce and you harvest the lettuce you don't do it again to plant lettuce there. You change those crops, you plant another one.

AA: Do you have some sort of a plan like "this year the first line was lettuce, so you know that next year it is going to be beetroot"?

I38: It's not even next year! This thing gets ready... Let me say for lettuce, after 6 weeks it is ready. Then you have to harvest it. More especially this way of farming, it gets ready fast! Then you have to change. When you have planted lettuce you can't buy seedlings and plant them there. You must plant another, maybe beetroot. The one with the root. You do the rotation with the vegetables.

AA: Before you went to Mbuluzi, did you already know some of it?

I38: I planted another way, not this organic farming. No. I learnt a lot there. I learned a lot.

AA: Why did you want to go to Mbuluzi? Were you not sceptical like "what is this organic farming? This is not going to work"?

I38: No, I am the kind of person that when I am ready to learn I am ready to learn.

AA: I feel you very passionate about it [laughter and nods]. You said that you were the only one who went there from your SG?



I38: Yes, I was the only one.

AA: And did you also teach anybody else outside the SG?

I38: Yes, but now I am having a problem with time.

AA: When you joined the first SG, why did you join it? Do you remember?

I38: Oh, the first one? Okay there was a group, that was making polish for... we made polish. The other one was for farming. Oh, I forgot, there was a group: the first one that I joined was a SG and it was making polish, we were saving polish, but there were some problems that some people did not want others to develop. You see when I have a problem and I say "please borrow me this sum of money", then I can take it and never pay it back. Maybe the whole year you still don't pay (back). Some people did not get the money who also needed to borrow. But because you haven't returned it what money will the others borrow? So, we made polish and everything everthing. So, I don't like where there is noise, I just move back. I want to protect my faith, I am a Christian. So, when things are not done the right way, I just move back. I don't want to get involved. Because even when I said "Let us do things, let us be transparent" some people did not want it, they did... I just moved back. So, I first started with the polish, doing the polish.

AA: Was it also an ACAT group?

I38: Yes, it was ACAT. I started joining ACAT association because of the fact that ACAT is with Christian people. The founder of ACAT was Christian, a long time ago. This is why I joined ACAT. There are other associations, I never joined another. But when I arrived here I said "yes, ACAT, I know ACAT, maybe join because it is a group of reverends". But sometimes when you see those things, you just need to protect your faith because this is just temporal. But if you go there, your faith is destroyed (refers to the polish SG), so it's better to just move back. Even those who fight... I am not after power, I am trying to help people who need it. But if they are coming "you are trying to destroy us" I just move back (sentence not clearly hearable).

AA: And before, you said that the second group was for agriculture?

I38: Yes, it was for agriculture, I saw even that the people who were not cultivating, even not in a field. I asked what was the problem and they say "we don't have money". Okay it's better maybe that you don't have stew, but it's better if you have your own mealie-meal. Instead of saying "I don't have money". So let's start with saving money! A little, but let's do it under ACAT, so that when cultivation times come everyone can order and they come with a truck and bring the seeds here to our place. We don't have to hire (a vehicle) and go to town and buy it. This is a better way. Even if you have 300Rand you can get your bag (of seeds). You can take your wheelbarrow and go and collect it (at the truck). That's how I started this farming SG. These two SGs are for farming, this one and also the other one here [points at area]. People are not cultivating even a single field. They say that they don't have money. Okay, but you can keep a little, a little, a little and then when farming time comes you can farm, you can cultivate like other people! Other than always working for others, and then you come (back home) late and they (employers) give you just one plate of food. That's what I've seen here, they just give one plate of food. But they are working from morning to sunsets in their (employers) fields. But why can't you do your own?! That's why I started the group.

AA: You say in the fields of the big companies?

I38: No, of those who have money. Who cultivate, who have tractors and everything. So they hire these cheap labourers. So that's how I started this association for farmers so that they can keep what they have. But when it's time for farming everyone must farm. Even if you only have one field: farm it, you must cultivate it and plant it so that you can get your own mealie-meal at the end.

AA: Impressive.

[continuation of profile questions]

AA: How many of those beds do you have?

I38: Three and a short one. The others are very long.

AA: Before you went to the training, did you use chemicals?

I38: Yes, I used to use chemicals to frighten the ants.

AA: And the seeds you get them all from ACAT?

I38: The seeds yes, but the seedlings from a shop.

AA: Thank you so much for this interesting lesson and this interview. Siyabonga Make.

**Interviewee nr 39 (Lead Farmer)**

Interviewee Number: 39  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 50:58  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 39, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English), understands English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. Ha has no garden because he has no fence. He did not seem very motivated to participate. Maybe he was tired (age related?)

Biases: Male. No indication on % of products sold/consumed. No exact translations I fear (translator sometimes freestyled).

Legend: AA (Alisa Autenried); I39 (Interviewee nr 39); SG (Savings Group); T2 (Translator nr 2); T2 (I39) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

T2 (I39): He doesn't have a garden because he has no fence. His chickens and neighbouring goats would come and destroy the vegetables.

AA: But does he want to have a garden?

T2 (I39): He does want one, but only when he has a fence.

AA: Do you use fertiliser?

T2 (I39): Manure.

AA: And do you use pesticides on the field?

T2 (I39): He does because the organic farming is only practical for a garden. But it won't really work on fields because fields are just way bigger and that's why he does use pesticides.

[continuation profile questions]

AA: When you went to Mbuluzi, did you learn anything new?

T2 (I39): Organic farming, how to start and to maintain a garden, how to use readily available resources to farm instead of going to the shops. There are two other points: spiritual wellness that's number one.

AA: Spiritual wellness?

T2 (I39): That's how to use your Christianity to become a better person. And then number two: How to use your hands to be productive.

AA: We go into the organic farming topic and the gardening: do you remember any topics they (ACAT) taught?

T2 (I39): How to start and maintain a garden, and how to layer each plot.

[explains something in Siswati]

T2: You got that?

AA: Yes, the pest control.

T2 (I39): And crop spacing. For the pest control you use the crops that have a strong smell or are quite bitter to the taste. You crush them, put them in a bucket, leave them for a day or two and then you spray with that.

AA: Did you also learn about composting?

T2 (I39): Yes.

AA: And liquid manure?

T2 (I39): Yes.

AA: And the crop rotation? That you plant every year something else on the same spot.

T2 (I39): Yes, they did.

AA: And about the grey water filtering? How to purify the used water?

T2 (I39): Yes. [I39 explains shortly].

AA: Were you the only one from your SG who went to the training?

T2 (I39): No, there was one other lady, but she is not around today. So, they were two.

AA: How many are you in total in your group?

T2 (I39): From 16 to 4. They were 16 members before, but only 4 current members today.

AA: Are you in the same group than the lady who was here before you (interviewee nr 38)?

T2 (I39): No, but with the first lady we interviewed today, interviewee nr 37.

T2: She is the one who complained about the laziness of the women.

AA: So, when you came back from the training, did both of you teach the others?

I39: Yes.

AA: How did you organise this? Did you separate the topics or... How did you teach the others?

T2 (I39): It was an oral thing and they (SG members) took notes. After the theory part was done, they would select any member who was nearby, and they would go on site. Any member who was nearby and who had a garden in their homestead, they would go there to do the practicals. Everybody else does it.

AA: How many of the 16 participated at this gardening activities, the practicals and the oral part?

T2 (I39): 3 to 5. It's hard to figure out for him because they go about their business every day, nothing is ever predictable. But the ones he is sure about that they know something about organic farming are the 3 to 5 people. The others just have the notes. The thing is that when he tried to gather them all, so that they can go and do the practicals, they would come up with different reasons for not showing up. So, it's only between the 3 and 5. The rest just have the notes, not the practicals.

AA: So, they were not really interested in learning new things?

T2 (I39): Physical. Some were were interested, some were passionate. But others, you know, normally you lost them when it came to the manual labour. The reports worked fine, but when it came to the physical activity everybody came up with an excuse. Some were, some were not.

AA: Do you think that they are in the SG more because of the savings part than because of the agricultural part?

T2 (I39): It was mostly the financial aspect of it. The gardening [makes a sound that tells there is no interest]. The gardenening part, the agricultural part of it scattered the members, it chased them away.

AA: You said that you were 16 and that now you are 4 members. So, there is only 4 of you coming to the meetings?

T2 (I39): Only three consistently.

AA: So, interviewee nr 37 and?

T2 (I39): One lady that is not around today because she is sickly.

AA: And when do you meet?

T2 (I39): On Tuesdays. It used to be a Wednesday, and now it's a Tuesday. 1 to 2 hours is the typical duration of a meeting.

AA: And do you meet in that house [points to neighbourhood care point].

I39: No.

AA: Where do you meet usually?

T2 (I39): "location"<sup>66</sup>.

AA: When you came back from the training, did you teach the others about composting?

I39: Yes.

AA: And about the liquid manure?

T2 (I39): They taught pretty much everything that they learned up there (Mbuluzi). They came back and spread the knowledge.

AA: Are you still monitoring today? Are you still going to the other homesteads to monitor what the other people do?

T2 (I39): Yes, they do.

AA: How do you do that?

T2: What do you mean?

AA: Do you just observe, or do you give tips...?

T2 (I39): They work together and everybody chips in. Nobody just watches, everybody chips in, everybody works. So, when you pick up the tools and till the soil, they show them exactly how it's done.

AA: Still today?

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<sup>66</sup> Name was anonymised

T2 (I39): Still today, they don't just show up and dictate. They pick up the tools and show them how to do it. Get busy, get dirty, get your hands dirty.

AA: Do you all go together to visit the homesteads?

T2: No, he said that they would make an appointment: This week we do it at this person's homestead, next week we are going to the next person. Remember that we are only talking about 3 to 5 people here.

AA: Yes. Are you still in the construction phase? Are you still digging the compost, or is it already set and you just have to do minor things?

T2 (I39): It varies from person to person. Some are not as advanced that they can sell the harvest, it's just for personal consumption. But with others, yes, it's for commercial and personal consumption. (misunderstood the question)

AA: How is the relationship between the group members?

T2 (I39): Absolutely, they get along. And they were taught in Mbuluzi that you should apply Christian values to this whole thing: get along with your neighbour, help each other.

AA: Are you still in touch with some people who went with you to the training?

I39: Yebo Make.

AA: How do you contact them? By phone or do you meet them?

T2 (I39): They show up in person.

AA: Are they close?

I39: Yes.

AA: How many from this region went to the training?

I39: Three. interviewee nr 37, me and another one. (Only one person out of his SG).

AA: And do you also talk about gardening and farming or is it more other topics that you discuss?

T2 (I39): Absolutely, they share tips. Not only that, they also share seeds and seedlings too. And they keep each other updated on current trends.

AA: And where do you get the trends from? Do you have another source of information about gardening or farming?

T2 (I39): Two other sources of knowledge: School, in school there were practicals. They used to do gardens and stuff. So, he uses some of that knowledge and applies it today. Then the other source is traditional. The stuff you learn from your father and your grandfather, about how to farm, they use that. However, organic farming is just far superior compared to the other stuff. It's more advanced because of Mbuluzi.

AA: Do you also get some information from "EO"<sup>67</sup>?

T2 (I39): He teaches them a few things.

AA: Okay, alright. Is the SG important to you or not that much?

T2 (I39): Three things. Skills: he knows how to make jam now. So, skills is the number one. Number two is that the SG has been an eye opener, more like a world opener on how the world operates,

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<sup>67</sup> Name was anonymised

how you can use things that are readily available, make money out of them and how you can survive. And number three is the financial aspect of it, how to save money, how to triple your money and how to increase your wealth. So, basically, it's those 3 things.

AA: You said that you were 3 to 4 people who always come to the weekly meetings, can the others of the 16 still borrow your money? Or is it just the 3 or 4 of you?

T2 (I39): Just the 4. The others left, they are gone. They are not part of the group anymore.

AA: But did you make them go away or did they decide for their own?

T2 (I39): It was their own decision. They left because they... you know what a stockfeller (?) is? It's like a SG, you contribute money every month from January to December and in December everybody shares the wealth. You go buy whatever. But with ACAT's the money is not "ours", it's the organisation's (SG) money and we spend the money on things that will help us further the course. So, instead of sharing the money in December, we buy a fence, or we rent tractors. So, that upset them because then the money is not "our" money but it's the organisation's money.

AA: So, they created their own group?

I39: I don't know.

AA: Alright, I think we are done. Siyabonga.

**Interviewee nr 40 (Follower Farmer)**

Interviewee Number: 40  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 39:00  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 40, T2  
 Interpreter: T2  
 Interaction: Mostly Siswati (interpreted into English), understands English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. Interesting interview. The other interviewees are still waiting inside the neighbourhood care point. At the beginning. Very talkative. Explains a lot of things. I had to make a phone call in the middle of the interview to organise something with our driver.

**Biases:** It would be very interesting to make videos of them and see them explaining the technologies with gestures and mimic. A lot of the permaculture techniques she explained were purposefully not translated to me (repetitive).

Legend: AA (Alisa Autenried); I40 (Interviewee nr 40); SG (Savings Group); T2 (Translator nr 2); T2 (I40) (Interpretation from Siswati into English); (:): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: So, with your SG, where do you meet and when do you meet?

T2 (I40): Every other week on Wednesday, they start at noon and finish when they are done.

AA: How many members are you?

T2 (I40): 19.

AA: How many of your SG went there?

T2 (I40): Three, not her though.

AA: Who is it?

T2 (I40): She doesn't remember.

AA: Where are your meetings?

T2 (I40): At the "FF"<sup>68</sup> Homestead. They do it indoors.

AA: So, when they went to the training and they came back, did they share anything with you that they learned about permaculture and gardening?

T2 (I40): Yes.

AA: Do you remember the topics they taught you?

<sup>68</sup> Name was anonymised



[explains the planting methods, the pest control, the composting and the crop rotation]

T2: Did you get the parts of the planting methods, the pest control, the composting and the crop rotation?

AA: I did. Did you learn about the liquid manure?

T2 (I40): Yes, “juicing”.

[I40 explains]

AA: Did you learn about the grey water filtering?

[I40 explains]

T2 (I40): Crushed stones, rocks, river sand, ash...

[I40 continues explaining]

AA: How did they teach you all this?

T2 (I40): It was a live tutorial. It was an on-site tutorial by the three who went to Mbuluzi. The three who went up there came to your house and teach you everything. Not the whole group, but only the three came to each one’s house. And they showed.

AA: They went to every house? Without the other group members?

T2: Every house, without the other group members. Just the three. It was theory and practicals.

T2 (I40): In every homestead they marked out two plots. The one plot the three of them just worked it with her just watching “Watch how we do it on the first plot”. And then she had to reactivate what she learned on the second plot with them watching.

AA: Alone?

T2: Alone. But of course, they would help out if she got stuck.

AA: Ah, at the same time? They did not go home, and she got the second plot as a homework?

T2: No, they show up, they mark two plots, then the lead farmers work the first plot and she watches. And when they are done they say “go to plot number 2 and do what we just did”. And they observed her.

AA: And did you apply all of those things?

T2 (I40): Everything.

AA: Did you find this a good way to having been taught like that?

[interruption by a phone call]

T2 (I40): The methods? The teaching methods? She loved it because you have to do it when they are still present, once they leave she is on her own. She can’t consult with nobody then. She liked the way they taught her because they were right there watching and when she had questions, she could just ask. And she mentioned that organic farming is cool, in terms of good harvest, a rich harvest.

AA: If you had to teach anybody, would you do it the same way?

T2 (I40): Yes, she would.

AA: Good. And the relationship to the other group members?

T2 (I40): Generally, the relationship is good. Only when it comes to the manual labour then it gets a little bit sour.

AA: Why? And between who?

T2: The group members.

AA: Why? Ask her.

T2: Because of the physical labour.

AA: Because it is exhausting?

T2 (I40): They complain of old age. They can't do that stuff anymore.

AA: But the relationship to the three who went to the training?

T2 (I40): They are cool. Whenever she has a problem she picks up the phone and calls them. Recently, she had a problem with the bugs on the spinach, and she tried the botanical spray and it was not working. She picked up the phone and called one of the lead farmers. And she said "let's try the aloe (vera)". They crushed the aloe, extracted the juice and did the same thing and it solved the problem. They share tips all the time.

AA: And did all of the 19 members apply it at home? Did they continue after they left, the three of them left?

T2 (I40): Only 14 and the reason why it is not the 19 is because the others are old. They use walking sticks and everything. So, they said that they won't be able to farm.

AA: Why did you apply it? You said that you have already had that huge field and the garden before. Why did you apply it?

T2 (I40): Saving. That's one thing which is a big plus with the organic farming. She doesn't have to go to the shops all the time. She just uses the things that are readily available. It's cheaper to farm this way.

AA: Were you not sceptical about not using....? Or did you even use pesticides before? Chemicals fertilisers and pesticides.

T2 (I40): She did before use chemicals. And then, she came to that SG and they were like "We don't use that, we use natural and organic stuff".

AA: And were you not sceptical that with only natural things it would not work?

T2 (I40): She was sceptical at first. But she still tried it to see if it works. Especially lettuce impressed her. "What's the worst that could happen if I try it out?". And then she did and she was impressed: her lettuce and spinach [click sound and thumbs up].

AA: Have you taught anybody else about these things?

T2 (I40): Not yet.

AA: Why not?

T2: She doesn't want to be rude, she is waiting on them to approach her. I was asking her if her neighbours were not impressed with her harvest and she said yes, they are. But they have never asked her to teach them, which is praiser (?). And until she is not asked to teach, she won't teach. They have to ask her first.

AA: Did you teach you husband and kids?

T2 (I40): Kids yes and her husband. The husband is always in the garden with her. And when “EO”<sup>69</sup> shows up her husband is always nearby. So, yeah.

AA: Did “EO” also teach anything about it or was it mainly from the three people who went to the training?

T2 (I40): He gives tips, he shares tips.

AA: But the main knowledge did it come from him or from the three ladies?

T2 (I40): Everybody shares tips. She learns from everybody. She can call the three, the three can call “EO” to clarify. And when “EO” checks in from time to time he explains. Recently, she had a problem with “Nomuhla” and then “EO” gave her tips about it.

AA: I think that we are through. Siyabonga.

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<sup>69</sup> Name was anonymised

**Interviewee nr 41 (Follower Farmer)**

Interviewee Number: 41  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 19:47  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 41, T2  
 Interpreter: T2  
 Interaction: Siswati (interpreted into English)

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. Same SG than interview 40. Nicely dressed lady. She seems very happy to participate. Nothing new in this interview, so I rushed through it a little (2 more people waiting)

Biases: Same SG than interview 40, so the teaching methods etc. were already known, they were not asked a second time. Nothing new in this interview, so I rushed through it a little.

Legend: AA (Alisa Autenried); I41 (Interviewee nr 41); SG (Savings Group); T2 (Translator nr 2); T2 (I41) (Interpretation from Siswati into English); (): Added to facilitate understanding; []: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Who from you SG went to the training in Mbuluzi?

T2 (I41): Three people from her group.

AA: Do you remember the names?

T2 (I41): No.

AA: And how many are you in SG?

T2 (I41): 19.

AA: Oh yes, that's the same. When they came back from the training, did they teach you anything?

T2 (I41): Yes, gardening skills.

AA: And do you roughly remember the topics?

T2 (I41): How to use nature to make manure. Compost. You know that methods with the two sticks, the seedling in the middle (for cut worms, it is part of "pest control"). Clearing the plot from grass to avoid grasshoppers and other insects from making a habitat. And some other things.

AA: Did they teach you about crop rotation?

T2 (I41): They did.

AA: And grey water filtering?

T2 (I41): River sand... She doesn't remember the rest. They were taught grey water filtering.

AA: And did she learn about spacing and lining?

T2 (I41): Yes.

AA: Did you apply all of it in your home?

T2 (I41): Yes, the lead farmers were present, she applied it all.

AA: Did you like the way they taught you?

T2 (I41): Very much so.

AA: Why did you apply it at home?

T2 (I41): To self sustain. She doesn't go hungry because she gardens.

AA: Was she not sceptical before?

T2 (I41): No, no, no. She was passionate from day 1. In fact, a lot of people praise her "How do you do what you do?"

AA: Did you have a garden before?

T2 (I41): No. Totally blank, no garden, no nothing. Just the fields.

AA: And how is your relationship to those three people who taught you?

T2 (I41): They get along very well.

AA: Did you think that they were willing to pass the knowledge on to you?

T2 (I41): Yes, they were passionate, they were willing.

AA: Why did you join the SG?

T2 (I41): Because she never goes to bed hungry. It's a metaphor. She learns a lot of skills.

AA: So, she joined mainly because of the agricultural part?

T2 (I41): Both, financial and agricultural aspects.

AA: Okay. And did you teach anybody else about gardening and permaculture?

T2 (I41): This one person did. She showed up and she asked her (about the garden) and then she taught her. But she hasn't started the garden just yet. But she promised to do so.

AA: Okay, who is it? A neighbour?

T2 (I41): Yes.

AA: So, she went to her garden and asked questions? Or how did this work?

T2 (I41): This woman just came by and found her busy in the garden. She asked questions and she answered those questions. And she is interested every since.

AA: I think this is all. Siyabonga Make.

**Interviewee nr 42 (Follower Farmer)**

Interviewee Number: 42  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 32:43  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 42, T2  
 Interpreter: T2  
 Interaction: English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. Makes a great effort to speak in English. Shy, but very nice. I think he was quite happy to participate in my study. Was not present at the teaching lesson but got the knowledge later from the women (incomplete I think)

**Biases:** His English is not very good, so sometimes the answers are a little interpreted. He sometimes did not understand my questions. I am not sure if he really applies it at home or if he just said it to please me.

Legend: AA (Alisa Autenried); I42 (Interviewee nr 42); SG (Savings Group); T2 (Translator nr 2); T2 (I42) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Who from your SG went to the Mbuluzi training?

I42: One who is not around anymore. She is sickly, she is not here. But she was supposed to be here.

AA: Was it not also interviewee nr 38 who went to your training?

I42: Yes...

AA: So, when those women went to the training and they came back, did they teach you anything that they learned?

I42: I was not present that time when she was teaching because some relative had passed away and I could not go to the meeting. So, I missed it.

AA: You missed the practical and the oral part?

I42: Yes, that was the problem.

AA: But did you still get the knowledge somehow?

I42: Yes, I got it later. The use of fertiliser, they shared that. I could not afford to buy fertiliser so that gave me something. I should use the natural. I was using it (the chemical fertilisers). They gave me that knowledge.

AA: And who told you that?

I42: Those who came back (from the training). I chatted with them after.

AA: So, you still wanted to know more or less what they learned?

I42: Yes.

AA: Okay. Did she mention something about the composting?

I42: Yes, she mentioned about the composting.

AA: And did you apply that at home?

I42: I liked it.

AA: Did you do it at home?

I42: I practice it because... I have a garden, so I am using much of it.

AA: And did she also mention the liquid manure?

I42: Liquid manure?

AA: It's manure in a sack and then you put it in a bucket with water...

I42: I can't remember, sorry.

AA: And did she mention something about crop rotation? That you don't plant twice the same thing on the same spot.

I42: Yes.

AA: And the pest control, that you use garlic and pellepelle, onions...

I42: Yes, yes.

AA: Also the technique with stick against the cut worm?

I42: Yes, but I have forgotten that.

AA: Do you do the pest control, the natural one with the pellepelle and the garlic, the spray, at home?

I42: Yes, you crush it. I can make that.

AA: Did she share anything with you about grey water filtering? That you can purify the used water?

I42: [thinks]. Yes.

AA: And did she teach you about the planting, the spacing and the lining?

I42: Yes, they did.

AA: Do you do it at home?

I42: Yes, I do it.

AA: Okay, good. Did they also show you practically how it is done or was it just chatting with her?

I42: We did not have the time (to do it practically).

AA: And why do you do the compost at home?

I42: [hesitates]

AA: Why did you want to try that?

I42: I wanted to try it because it makes... because I don't have money to buy fertiliser. It's costly, so it means that... it makes it easy because it is natural.

AA: But were you not sceptical before you tried it like “this is never going to work”?

I42: I was the time they taught. I was sceptical at once but when I tried it I found that it works for the better.

AA: So, you had a garden before?

I42: Yes.

AA: Did you notice any changes from your practices before?

I42: Yes, I noticed because I couldn't use so much water as I needed. And water has grown now. And the harvest is bigger and healthier.

AA: Because of which practice did you save water?

I42: Yes, I couldn't pour as much water as I used to do.

AA: Why?

I42: Because of the teaching.

AA: Okay. And how is your relationship to those 2 women who went to the training?

I42: They are ordinary members of our association.

AA: So, it's good?

I42: Yes.

AA: Did you have the impression that they wanted you to know all this or were they greedy about the knowledge?

I42: I had the impression that they wanted me to know all of this.

AA: That 's good. And did you teach anybody else about it?

I42: Oh, yes. I spread the word to the community members. Even before I started to practice it (if I understood correctly). And even some of my partners in gardening (?) got this knowledge.

AA: But did they ask you to share it? Or did you go to them?

I42: It's me, myself, I wanted to share that knowledge because they are also... fertilisers are also costly to us, so we had to find another... So, we share it. And I also wanted them to come and join the group.

AA: They even joined the SG?

I42: Some they did join.

AA: And out of interest: how much money does a sack of fertiliser cost?

I42: About 300Rand.

AA: And how many of them did you need a year?

I42: I use it for my fields where I cultivate maize, not vegetables.

AA: But before you got the knowledge about...

[confusion]

AA: Oh, you never used it on the garden. Okay. I think I have all I needed to know. Thank you so much.



**Interviewee nr 43 (Follower Farmer)**

Interviewee Number: 43  
 Interview Day: 6  
 Location: Shiselweni, behind the house of EO, on chairs outside  
 Duration: 31:44  
 Informed Consent Form: Yes  
 Anonymisation: Not required  
 Present Persons: Alisa Autenried, Interviewee nr 43, T2  
 Interpreter: T2  
 Interaction: English

**Comments, Observations, Atmosphere:**

Interview in the shadow of a house, close to a Neighbourhood Care Point. On chairs in the grass. Chickens strolling around. Good weather. The very last interview. She went for the secretary and the HIV training in Mbuluzi. She saw the permaculture garden. She has a home garden and a community garden. I think she is affected by HIV. A lovely lady, very funny. Liked to tell everything and seemed truthful.

Biases: No apparent biases

Legend: AA (Alisa Autenried); I43 (Interviewee nr 43); SG (Savings Group); T2 (Translator nr 2); T2 (I43) (Interpretation from Siswati into English); ( ): Added to facilitate understanding; [ ]: Activities

[Formalities, profile questions → details and explanations are written on profile question form]

AA: Who from your group went to the training?

I43: “LF1” and “LF2”<sup>70</sup>.

[continuation profile questions]

AA: Do you also sell some of your products?

I43: Just a little. I have the one from the backyard garden, but I also have another one at the community garden.

AA: And do you sell the products from your garden at home?

I43: I sell a little from my backyard garden just for my family household and I usually sell to the community.

AA: And the community garden is for commercial purpose?

I43: Yes.

AA: And how does that work with the community garden? Is the whole community working on one big plot?

I43: Not all the members of the community. Those from, those that joined the group.

AA: Only of your SG?

<sup>70</sup> Names were anonymised

I43: It started with people living with HIV and those who affected by it. They started the group.

T2: It's a different group from the SG?

I43: Yes.

T2: There are two different groups: the community group and this one over here.

[continuation profile questions]

AA: So, the garden at home is organic and the community garden is conventional with chemical fertilisers?

I43: Yes. But if I see something that something in the community garden is not growing well I just take the organic liquid manure to that plot and put it there.

T2: Everybody has their own plot in the community garden?

I43: Yes.

AA: How do you operate with the pesticides?

I43: In the community garden I use chemicals but a little at home.

[continuation profile questions]

AA: So, when "LF1" and "LF2" came back from the workshop in Mbuluzi, did they share anything with you that they learned?

I43: Yes.

AA: Do you remember what, more or less?

I43: They taught about how to make permaculture, seed banks. We only use the organic material like manure and ash.

AA: And more in the permaculture. Do you remember any topics more precisely that they taught you?

I43: The making of the seed bed. You measure 1.2metres width and on the other side it can be long. And we cut some sticks, like this [shows] so we can put them around the seedling so the cut worm will cut the straw and not the seedling. And also, what was different was the mulching. In the permaculture bed you mulch so that you save water. And in the permaculture garden there is no... the mulch suppresses the weeds. And the vegetables of the permaculture garden are healthy and (not hearable but I think I heard "especially for people with HIV). Now, when we use permaculture it's best for us because in permaculture you can just take lettuce leaves, wash them and eat them. There is no chemicals. But in the commercial practice...

AA: With the commercial one, do you just wash it longer or how do you get rid of the chemicals?

I43: You have to wait. You cannot just go to the garden. If you have sprayed today there are some days you have to wait even if you are hungry, you cannot go for that lettuce because you have to wait for some days so that the chemicals would slow down. You have to make sure that you wash and rinse.

AA: And what is the chemical fertiliser? Is it a spray or a powder?

I43: For the pesticides, it's usually... with water. You spray it.

AA: And the chemical fertiliser?

I43: It's granules.

AA: And did you also learn about the composting?

I43: Yes.

AA: And about the crop rotation?

I43: Yes.

AA: And about the grey water filtering? The purification of the used water, with the bucket and the stones and [explains]

I43: Yes, but I was absent that day.

AA: So, they taught you in different sessions?

I43: Yes.

AA: How many sessions?

I43: We would even do it practically. (Not hearable). That is why I prefer to use it for my own benefits at home. [laughs]

AA: So, they taught you over how many sessions? Was it in two weeks or...

T2 (I43): It was ongoing, week after week.

AA: How exactly did they teach you?

I43: I can say maybe 4 to 8 weeks until the vegetables were ready to eat.

AA: Did they teach you at your home?

I43: No, at one of our nearby NCP (neighbourhood care point).

AA: Do you have a plot at the NCP?

I43: Yes, we practice at the carepoint.

AA: Is this the community garden?

I43: No.

AA: So, you have a garden at home, one at the community garden and one at the NCP with your SG?

I43: No, the one at the NCP is just for the kids.

T2: But that's where you practice?

I43: Yes.

AA: Did they first teach you orally or practically at the same time?

I43: They teach us first and then we would do it practically.

AA: And by topic, like this week this topic, next week the next topic?

I43: Yes.

AA: Okay. And did you also take notes about what they said?

I43: Yes.

AA: Did you like the way they taught?

I43: Yes.

AA: Would you change anything if you had to teach anybody?

I43: I have no difficulty with them because they are like family to me.

AA: Did you apply the things they taught you at your home garden?

I43: Yes.

AA: The compost?

I43: Yes.

AA: The liquid manure?

I43: Yes.

AA: And the crop rotation?

I43: Yes.

AA: The pest control?

I43: Yes. Except in summer [exhales] the diseases from the maize fields attack the vegetables. That's when you get tempted to spray (with chemicals). Because in permaculture they taught us that when certain plants are affected by diseases and the solutions of chilis don't work, you have to remove the plants. So, in summer you remove all, you don't spray. So, that's when you get tempted to spray.

AA: And did you resist or did you spray?

I43: [laughs] (= sprayed) But it's not all the vegetables, it's usually cabbage and tomatoes that are likely to be affected by diseases. But the lettuce and spinach are okay. You can eat spinach even if it has holes, holes, holes...

AA: What kind of disease was it?

I43: There were worms. And even indigenous birds. They come and...

AA: Okay. Why did you apply all this in your garden? The new techniques of permaculture.

I43: It's cheaper and safe.

AA: When they came back from the training and they told you everything about the natural things and whatnot. Were you not like "this is never going to work" were you not sceptical?

I43: [laughs] but it's a lot of time to do. Because if you don't have cows you must go to the neighbour and ask for the manure.

AA: What convinced you to try the new techniques?

I43: When it was introduced we just saw that this thing is natural and healthy.

AA: Did you compare the yield of the community garden with your home garden?

I43: There is difference, even the taste. The taste of the permaculture vegetables is nicer than... Serious! And those from the permaculture they grow fast, they don't waste water.

AA: And in terms of quantity, do you have the impression that one garden gives more harvest?

I43: The permaculture is bigger, has bigger leaves.

AA: How many members are you in your SG.

I43: We are 27 this year.

AA: And did the two ladies teach everybody?

I43: Yes.

AA: And how many of them applied it at home?

I43: More than 15. The challenge is that the other ones can't afford to buy fencing. Because in our area you can see that we don't have those trees who we can use like ... There are bush trees with thorns that you can use for fencing but in our area every tree belongs to someone.

AA: And how did you do it?

I43: I buy the fencing. So, no one can afford to buy the fence.

AA: Did you also teach anybody else about it?

I43: My kids, and my neighbours. Some that are not members of SG. When they visit my home they always go and see my garden. And then they are tempted to it eat [laughs].

AA: Did they also ask you how it works?

I43: Yes.

AA: And you taught them?

I43: Yes.

AA: And do they do it?

I43: Yes, they do it. Especially those who have cows, so, now I benefit. Because when they like the method, now they return the favour and bring manure for me.

AA: Now you get the dung in exchange for the knowledge. That's a very good trade I would say. Did you also show them practically how it works?

I43: Yes.

AA: Nice. I think this is it. Siyabonga.