

**The design and impact of a marketing training to
strengthen customer value creation among Ethiopian
pastoralists**

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To
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CONTENTS

Chapter 1	General introduction	13
Chapter 2	The transformation of African smallholders into customer value creating businesses: A conceptual framework	26
Chapter 3	Barriers for the market integration of Ethiopian pastoralists: The overlooked role of market knowledge	48
Chapter 4	Moving towards new horizons for marketing education: Designing a marketing training for pastoralists	75
Chapter 5	Does a marketing training for Ethiopian pastoralists improve their market knowledge, customer value creation and livelihood performance? A field experiment	104
Chapter 6	General discussion, conclusion and implications	147
	References	157
	Summary	181
	Samenvatting	186
	Completed training and supervision plan	194

1

General Introduction

1.1. The potential and the problems of rural African smallholders

As the world population is expected to expand beyond 9 billion by 2050 (FAO, 2009; Tilman et al., 2011), food production will need to increase by approximately 70% to feed the population (FAO, 2009). Furthermore, a growing part of that expanding population pertains to an upcoming middle class, leading to an increasing demand for high-value products, animal protein and safer food (Delgado, 2003; Reardon et al., 2015). To respond to this growing demand in terms of quantity and quality, multinational, supermarket, processing, food chain and export companies are pushing market-frontiers deeper into the rural areas in developing and emerging (D&E) markets to secure their supplies (London, Anupindi, & Sheth, 2010; Reardon et al., 2009). In doing so, they have expanded their networks to the millions of smallholders in rural Africa (e.g., Minten, Randrianarison, & Swinnen, 2009; Roa & Qaim, 2011).

As a consequence, smallholders in D&E markets are currently responsible for 80% of food production (FAO, 2012), including a significant share of coffee, cacao, tea, vegetables and fruits, and livestock (FAO, 2013; Davies & Hatfield, 2007; Temu & Temu, 2005). Smallholders not only contribute to feeding the growing population and to meeting the demand of the upcoming middle class but also increase their own incomes and contribute to the growth of their national economies (Barret, 2008; Maertens, Colen, & Swinnen 2011). This cash income enables the smallholders to purchase consumer goods and services, such as medical care, and to invest in their children's education (Maertens, Colen, & Swinnen, 2011; Turner & Williams, 2002). Pushing the market frontiers deeper into remote rural areas therefore offers an opportunity to ensure food security and to lift smallholders out of poverty.

However, this opportunity comes with challenges. The majority of smallholders operate in remote rural areas where the roads to bring the products to markets are almost absent or in very poor condition. Smallholders may lack construction materials, electricity and access to information and communication services (e.g., Barrett, 2008; Ouma et al., 2010; Poulton, Kydd, & Dorward, 2006). The more remote the smallholders are, the scarcer these resources are. The scarcity of such resources makes it difficult for smallholders to produce sufficient quantities while complying with the quality and safety standards of the market (Weatherspoon & Reardon, 2003). Despite the opportunities, producing goods and services that are valuable to customers with high spending power is therefore a major challenge for smallholders, especially if they are more remote (e.g., Arnould & Mohr, 2005; Rao & Qaim, 2011).

1.2. The existing approaches to the market integration of rural smallholders

Academic research has searched for solutions to the remoteness problems that impede smallholders' effective integration with and function in markets. The existing studies from the development and agricultural economics literature often approach the remoteness of smallholders from the transaction-cost perspective (e.g., Barrett, 2008; Chamberlin & Jayne, 2013). These studies have emphasized the importance of creating an enabling institutional environment by developing roads, marketplaces, and creating access to microfinance as ways to reduce the traveling and other transaction costs that undermine the exchanges between smallholders and potential buyers (e.g., Barrett, 2008; McPeack, 2001; Turner & Williams, 2002).

However, a growing literature has begun to examine more direct solutions to the remoteness problems of smallholders (e.g., Adekambi, Ingenbleek, & van Trijp, 2015). These studies are motivated by insights that show that smallholders who initially connected to markets lost their market integration, and they fell back into poverty even though there were no changes in transaction costs (Andersson et al., 2015). This implies that creating an enabling institutional environment may not provide sufficient support for smallholders to effectively interact with and produce valuable products for the markets. For this reason, research has sought alternative and complementary solutions that help smallholders to create as much value as possible for customers in a given environment (World Bank, 2002). In particular, training has been brought forward as an intervention that can strengthen smallholders' quality practices, productivity, and response to changing requirements and market conditions (Braun et al., 2006).

Non-governmental organizations (NGOs) and companies have begun to train smallholders on the quality and safety standards that they want the products to meet (know-what) and the practices by which smallholders can meet such standards (know-how) (Adekambi et al., 2015). For example, Lipton, which is a Unilever company, organizes farmer field schools and field visits to commercial farms to acquaint them with the standards for tea and the inputs and practices that will help them to comply with such standards (e.g., Adekambi et al., 2015; Bernard, Taffesse, & Gabre-Madhin, 2008). The farmer field schools and field visits are mostly organized at the association and group level, such as cooperatives that require smallholders to register as members and bind themselves to the decision authority of the cooperatives (Bernard et al., 2008; Okoth et al., 2006). Such training programs are effective for smallholders who are willing and able to offer the decision authority about what and how to produce to others, such as cooperatives and companies that take the lead to

effectively organize their supply chain. They make the decisions for smallholders, either directly through outgrower schemes or through cooperatives, about what to produce and how to produce it (Glover, 1990). If such organizational forms work effectively, training regarding the “know-what” and “know-how” can logically make an important contribution to the value that is created by smallholders.

However, the dissemination of know-what and know-how through cooperatives and other organizations is not always effective. Trainings that are restricted to know-what and know-how assume that the organizations have the authority and power to decide what their members produce. However, this is not always the case. The development research has shown that many African cooperatives struggle with poor business management, bad governance, and a lack of marketing plans (e.g., Chirwa et al., 2005; Ortmann & King, 2007; Poulton, Dorward, & Kydd, 2010). As a consequence, smallholders often still retain some level of decision authority about what and how they produce, even if they are a member of a cooperative or some other form of organization. Especially in regions that are remote, the influence of cooperatives may be limited. In such circumstances, smallholders will make their own decisions and discuss these with community members.

As in the case of other decision-makers, smallholders make their decisions on the basis of their knowledge. Especially in remote areas that are largely disconnected from information flows, they highly rely in that respect on traditional knowledge. Traditional knowledge is the contextually developed knowledge that people in a given environment have sustained and passed on through cultural transmission from generation to generation within a community, which often forms the community’s work culture or traditional identity (Berkes, Folke, & Gadgil, 1995; UNESCO, 2014). Smallholders thus conduct production activities according to the experiences and practices that they have inherited from their forefathers to serve their subsistence consumption needs and for exchanges in small and fragmented volumes within their community at local markets. These local markets often function based on social networks and relationships (Fafchamps, 2001). As such, smallholders who operate in these marketplaces have little opportunity to obtain knowledge on non-local, modern markets (e.g., London et al., 2010). Without the knowledge of why buyers exchange their money for products and services, smallholders cannot envisage the reasons to comply with the know-what and know-how, which ultimately hinders their market integration.

When remote African smallholders integrate with markets without capturing the fundamental logic of why it is important to produce what is valuable for the market, negative consequences may appear. Smallholders become easy targets of trade partners’ opportunistic

behaviour and lack the negotiation power to influence market dealings, thus they often face rejection of their products in the marketplaces for not complying with market requirements, and they drop out of the market (Adekambi et al., 2016; Andersson et al., 2015; Little, Debsu, & Tiki, 2014; McPeak & Little, 2006). They also rarely respond to market opportunities to seize the benefits of favourable market conditions (Little et al., 2014; Verbeke et al., 2009). To reduce such negative events, smallholders should strengthen their “know-why”.

1.3. A marketing approach to the market integration of rural smallholders

To address the know-why, know-what and know-how problems of the smallholders, this thesis approaches smallholders as customer value creating businesses. Smallholders such as farmers, fishers and pastoralists often consist of large numbers of small-scale businesses that make decisions mainly at the individual level on what to produce using their own available resources (e.g., Adekambi et al., 2015; FAO, 2013). Customer value is created through the decisions of such individual businesses on how to organize their operation and allocate their resources to create offerings that their customers value and become willing to pay (Narver & Slater, 1990; Slater, 1999). This thesis therefore adopts customer value creation from the strategic marketing perspective to approach the know-why problem. Since the 1990s, the strategic marketing literature has identified customer value creation as the fundamental logic of why businesses exist (e.g., Kohli & Jaworski, 1990; Slater, 1997).

The marketing literature has documented that successful businesses make decisions based on their understanding of how the market operates, why their customers invest their money in purchasing products and services, and how their competitors respond to what the customers want (e.g., Kohli & Jaworski, 1990; Slater, Olso, & Sorensen, 2012). To be rewarded by their customers, the businesses thus organize their operations in such a way that they satisfy the needs and expectations of customers (Slater, 1997; Woodruff, 1997). As it seems that it is this type of knowledge from which smallholders often refrain, an improved understanding of why buyers reward producers for the value that they create is beneficial for smallholders to understand what and how to produce. It can also help them to successfully enter higher-income markets, such as the export and middle class markets (Adekambi et al., 2015). In short, smallholders who understand why to comply with demanded quality standards and quantities and how they benefit from such compliance can utilize their knowledge to produce something that is valuable for the market.

The marketing literature ascertains that an understanding of the fundamental logic on why creating customer value is important for businesses to effectively and successful function

in the markets can be established through the teaching of fundamental marketing concepts (e.g., Kotler & Keller, 2012). In this regard, marketing training can establish, modify and/or expand the mindset of smallholders to focus on the interests and needs of their customers. To investigate this potential role of marketing training for rural smallholders, this thesis designs and tests a marketing training program among pastoralists.

1.4. Application to pastoralists

Pastoralists are people who raise livestock in the arid and semi-arid drylands for their livelihoods (Fratkin, 1997; Koocheki & Gliessman, 2005). They inhabit a complex context that demands a continuous balance between natural resources, livestock and people (Fratkin, 1997; Kocheiki & Gliessman, 2005). Pastoralists respond to the socioeconomic, political and ecological challenges that include population growth, loss of grazing lands, mobility restricting policies, conflicts over grazing areas and fragile ecosystem through, among other things, a mobile grazing and flexible livestock management (destock and restock) (e.g., Adriansen, 2006; Fratkin, 2001; Kerven, 1992; Khazanov, 1984). Numerous field studies, going back to the 1980s, in pastoral areas point out that pastoralists depend on markets for generations to flexibly adapt their livestock production to climatic condition variability and availability of natural resources (pasture and water) (Dietz 1987; Kerven, 1992; Khazanov, 1984; Sandford & Scoones, 2006; Zaal 1998). Pastoralists depend on markets not only to destock and restock their animals to respond to the ecological system, but also to meet their cash needs to purchase cereals for food for their families (e.g., Kerven, 1992; Nori et al., 2006).

Although pastoralists practice different strategies to sustain their livelihoods in the harsh environments some scholars and practitioners doubt whether pastoralism is in itself sustainable (e.g., Hardin, 1968; Mortimore & Turner, 2005). These scholars and practitioners portray pastoral livelihoods, especially those in Africa, as an unproductive and environmentally destructive, outdated production system (Nori & Davies, 2007). They see the rapidly growing pastoral population as a threat to the long-term preservation of communal natural resources because they overexploit the resources for short-term survival (e.g., Hardin, 1968). These scholars and practitioners contend that severe and frequently occurring environmental hazards, such as droughts, that cause rangelands to decline, worsen water shortage and cause massive herd die-offs, reinforce their opinions of unsustainable pastoral livelihoods (Hesse & MacGrego, 2006; Nori & Davies, 2007). However, research has also provided counter-evidence suggesting that pastoralism is a resilient and effective way of

utilizing marginal lands (e.g., Fratkin, 2001; 1997; Galaty & Johnson, 1990; Khazanov, 1984). A recent extensive literature review by Tessema, Ingenbleek and van Trijp (2014) confirms that most scholars nowadays agree that pastoralism is in principle a sustainable mode of life. The literature, mostly from anthropology, geography and ecology disciplines, indicates that pastoralists are ecologically rational actors who utilize natural resources optimally using a mobile life style (e.g., Adriansen, 2006; Sandford & Scoones, 2006) and increased market integration (e.g., Fratkin, 2001). This same literature suggests that pastoralists will continue as the custodians of the marginal ecosystems, and contributors to the development of (poor) nations and to the supply of animal-protein if supported with enabling interventions and incentives that enhance their market integration (Nori & Davies, 2007; Tessema et al., 2014).

The market integration of pastoralists can potentially be enhanced by strengthening their marketing knowledge. This may help them to optimally integrate resources to create and deliver value to their customers (Kotler & Keller, 2012). Focusing on customer value creating activities (i.e., reproducing livestock from the ‘eyes of the customers’ from inception) helps pastoralists to supply high-quality livestock and to sell at better prices to the livestock buyers like traders, fattening operators, and exporters (e.g., Ingenbleek, Tessema, & van Trijp, 2013; Tessema et al., 2014). As a consequence, the pastoralists may create more sustainable linkages with their buyers. Such linkages help pastoralists to reproduce and supply high-quality animals and restock animals when prices are low and vegetation is abundant. In other words: they will take advantage from both market and climatic conditions and enhance the protection of natural resources while producing consistent high-quality livestock (Tessema, 2012). Their marketing thus becomes an integrated long-term approach to sustain the ecology and the livelihood of the pastoralists. Such a role of marketing can be enhanced by offering a marketing training to the pastoralists. This thesis designs such training and evaluates its impact on the market knowledge and customer value creation of Ethiopian pastoralists.

1.5. Ethiopian pastoralists

Ethiopia has the largest pastoralist population in East Africa, which is the region with the highest pastoralist population in the world (Homewood, Trench, & Brockington, 2012). With nearly 15 million pastoralists who inhabit approximately 60% of the country’s territory (World Bank, 2013), pastoralism is an important pillar of Ethiopia’s economy. It contributes approximately 35% to the agricultural GDP (Davies & Hatfield, 2007; COMESA, 2009). Ethiopian pastoralists graze their livestock on communal grazing areas (Koocheki &

Gliessman, 2005; Davies, 2008). They use a mobile lifestyle to ensure the sustainable use of natural resources (pasture and water) (Davies, 2008). They live in dry, isolated, remote and underdeveloped areas where a crop-based livelihood cannot be sustained (IFAD, 2009). They inhabit a complex ecological system that demands a continuous balance between pasture, livestock and people (Oxfam, 2008). They also have a strong traditional customary system through which they share and transfer knowledge for generations for the collective well-being to survive in the remote drylands, and to interact with the external environment (WISP, 2008), which they usually call “the non-pastoral world”.

Like other pastoralists, Ethiopian pastoralists have been participating in the livestock markets for centuries to adapt to changing environmental conditions (Hogg, 1997; Riché et al., 2009). They have predominantly used the livestock markets to destock and restock their animals, and to satisfy their immediate cash needs which shows an increasing trend due to the decline of milk production (e.g., Desta & Coppock, 2004). Despite their long market participation history, the livestock market off-take rate of Ethiopian pastoralists is low, with small volume transactions and lack of responsiveness to favourable market conditions being the main causes (e.g., Barrett et al., 2004; Coppock, Desta, Gebru, & Tezera, 2005; Little, Debsu, & Tiki, 2014). Livestock is not purposely produced for the market, but produced to satisfy their own needs in terms of milk and meat consumption, wealth accumulation, and cultural expression (Desta & Coppock, 2004; Coppock et al., 2005). As a consequence, natural phenomena (death and birth) regulate the herd sizes of Ethiopian pastoralists more than their market participation (e.g., Barrett, Bellemare, & Osterloh 2006). Desta (1999), for example, found that in 17-year herd history data from Borana pastoralists, mortality always exceeds net sales as a share of beginning period herd size, with sales never exceeding 3 per cent and showing no change at all in response to climatic shocks, rangeland carrying capacity and regular conflicts overgrazing areas, causing regular hiking in mortality rates. Coppock (1994) also found that by the late 1980s, Ethiopian Borana pastoralists were oscillating in a vicious cycle of cattle mortality caused by high stocking rates and frequent drought, with only women often selling dairy products in situations of milk-deficit to feed the household.

According to Coppock et al. (2005), Borana pastoralists have been, for decades, very reluctant to engage in commercializing their livestock; opportunistic use of markets to respond to market opportunities, to stabilize income variability and even to climatic shocks that cause massive herd die-offs and loss of wealth is rare (Barrett et al., 2006; Desta, 1999). Barrett et al. (2006) claim that Borana pastoralists largely participate in the livestock markets to meet household’s immediate cash expenditure needs. Little, Debsu, & Tiki (2014) made a

comparable claim based on their findings from the Borana region in Southern Ethiopia. They state that the majority of the pastoralists in their study point out that the main reason for livestock sales is the need of cash to purchase food when milk production is low. Little, Debsu, & Tiki (2014) note that these pastoralists practice mobility to enhance herd (milk) reproduction, rather than livestock sales, which accounts for less than one-third of the livelihood earned from milk production. In this sense, the market integration of Ethiopian pastoralists is merely triggered by financial needs and other factors that affect livestock quality and their market value (Pavanello, 2010), than by profit-making opportunities that can help to manage herd size and common natural resources to fulfil long-term buyer-seller commitment. Ethiopian pastoralists' failure to proactively respond to market opportunities can be attributed to their remoteness from markets.

Not surprisingly, Ethiopian pastoralists, particularly Borana pastoralists, suffer from all of the remoteness problems (both physical distance and mindset isolation) that are described above. They are therefore exposed to the opportunistic behaviour of buyers, make production decisions based on their traditionally rooted knowledge of reproducing livestock, and they often face product rejections at the marketplaces (e.g., Aklilu & Cately, 2009; Little et al., 2014; Verbeke et al., 2009). Offering marketing training that conveys the logic of why the reproduction of livestock based on the needs of buyers can help them to solve these problems. As a consequence, they earn higher cash incomes to purchase food items, consumer goods, education for their children, and medical services for themselves, their families and herds (Turner & Williams, 2002). They will also contribute more to fulfilling the growing demand for animal-protein (Delgado, 2003).

1.6. Aim and research questions

The overall aim of this thesis is to design a marketing training for pastoralists and to test its effectiveness in improving their market knowledge, value creation and their livelihood performance. This aim will be achieved by answering the following four questions. First, *how and why does marketing training (theoretically) affect value creation and livelihood performance in the context of smallholders?* To answer this question, the thesis integrates separately existing lines of literature on smallholders, business training and customer value creation, with market knowledge as a strategic resource for the integration of resources to create customer value (Slater et al., 2012; Marinova, 2004).

Second, by specifically applying to pastoralists, the thesis answers the question: *what knowledge do pastoralists have and require to create value for their customers?* In other

words, the thesis answers the question *what are the marketing training needs of pastoralists?* Such a grassroots level understanding of what knowledge producers (pastoralists) in developing countries lack will help in the design of a demand-driven training protocol that connects the new knowledge that the training offers to their prior knowledge (e.g., Kibwika, Wals, & Nassuna-Musoke, 2009).

Third, the thesis answers the question *what training concepts and methods does marketing training require to acquaint the pastoralists with the market knowledge that they need?* This thesis determines learning objectives from fundamental marketing concepts including market, market exchanges, customer, value, market dynamics and competition that establish the basic knowledge that is essential to understand a customer-focused approach to conducting business (Kotler & Keller, 2012; Henke, 1985), and it identifies and validates teaching methods that are suitable to teach low-literate learners.

Thus far, the assertion that marketing training is a relevant approach to acquaint learners with marketing knowledge is based on (qualitative) evidence from studies that have been conducted among entrepreneurs in an urban context that are characterized by a diversity of economic activities (e.g., Viswanathan et al., 2009).

The present thesis therefore answers the fourth question: *does marketing training indeed strengthen value creation and improve the livelihood performance of pastoralists?* The thesis answers this question through a field experiment by enrolling a group of pastoralists in the training program and comparing them with a control group of pastoralists on the same measures. Answering this question is relevant to broaden the application of marketing training beyond urban contexts to diverse rural settings to build the capacity of the “next four billion” people in D&E countries who live at or near subsistence levels to seize market opportunities.

1.7. Structure of the thesis

This thesis consists of six chapters (Figure 1.1). Chapter 2 (*The Transformation of African Smallholders into Value Creating Businesses: A Conceptual Framework*) integrates the streams of literature on smallholders, business training and customer value creation to provide a better understanding on how the transformation of smallholders into customer value creating businesses can be shaped in a way that leads to reduced rural poverty. Thus far, these lines of literature stand alone. The literature on smallholders is largely dominated by disciplines such as development economics, sociology and anthropology (e.g., Barrett, 2008; Fafchamps, 2001). The business literature primarily discusses urban business sectors (e.g., de Wet & Gossel, 2016; Guma, 2015) while it neglects smallholders in rural areas. To facilitate the

transformation of smallholders into businesses, we bring customer value creation as the core logic for why businesses exist (Slater, 1997), with market knowledge as the key resource in the creation of customer value (Marinova, 2004). The concept of market knowledge as the key resource for customer value creation has been addressed in marketing studies on advanced business sectors (e.g., Slater et al., 2012; Marinova, 2004; Glazer, 1991); however, it has not yet been discussed in the context of smallholders.

Chapter 3 (*Barriers for the Market Integration of Ethiopian Pastoralists: The Overlooked Role of Market knowledge*) presents a qualitative study that investigates the market knowledge of pastoralists. The qualitative study collected data through field observations of marketplaces and pastoral grazing areas, interviews and discussions with pastoralists, as well as interviews with members of the livestock value chain and experts. Based on field study findings, the chapter summarizes the current livestock production and marketing practices of pastoralists. It provides a comparative perspective on what pastoralists know and what knowledge they need to effectively function in the market environment and to seize advantages when market conditions are favourable. Finally, the chapter draws implications for interventions to build the market knowledge of pastoralists.

Chapter 4 (*Moving Towards New Horizons for Marketing Education: Designing a Marketing Training for the Poor in Developing and Emerging Markets*) addresses the design of a marketing training program to equip pastoralists with the knowledge they need for a better understanding of the market environment. The chapter uses four consecutive empirical studies that apply well-established training design procedures to design a marketing training program (e.g., Kirkpatrick, 1975). It departs from the market knowledge need assessment (chapter 3) and explicates theoretically underpinned learning objectives from fundamental marketing concepts to design a pilot-tested complete training protocol. By conducting consecutive empirical studies, the chapter contextualizes the learning objectives to the interpretation scheme and the economic activity of the pastoralists, identifies and validates suitable teaching methods and pilot tests the complete training protocol.

Chapter 5 (*Does a Marketing Training for Ethiopian Pastoralists Improve their Market Knowledge, Customer Value Creation and Livelihood Performance? A Field Experiment*) implements and evaluates the effectiveness of the marketing training program in equipping the pastoralists with the knowledge that is required to help them to create value for their customers. The chapter evaluates, as compared to non-trained pastoralists, whether the trained pastoralists focus on customer value creation activities, including market-oriented breeding, fattening, quality care and the supply of relatively higher quality livestock to the market.

Finally, in chapter 6 (*General discussions, conclusion and implications*), the results and conclusions from the empirical studies are discussed. The chapter discusses implications for development workers and future research.

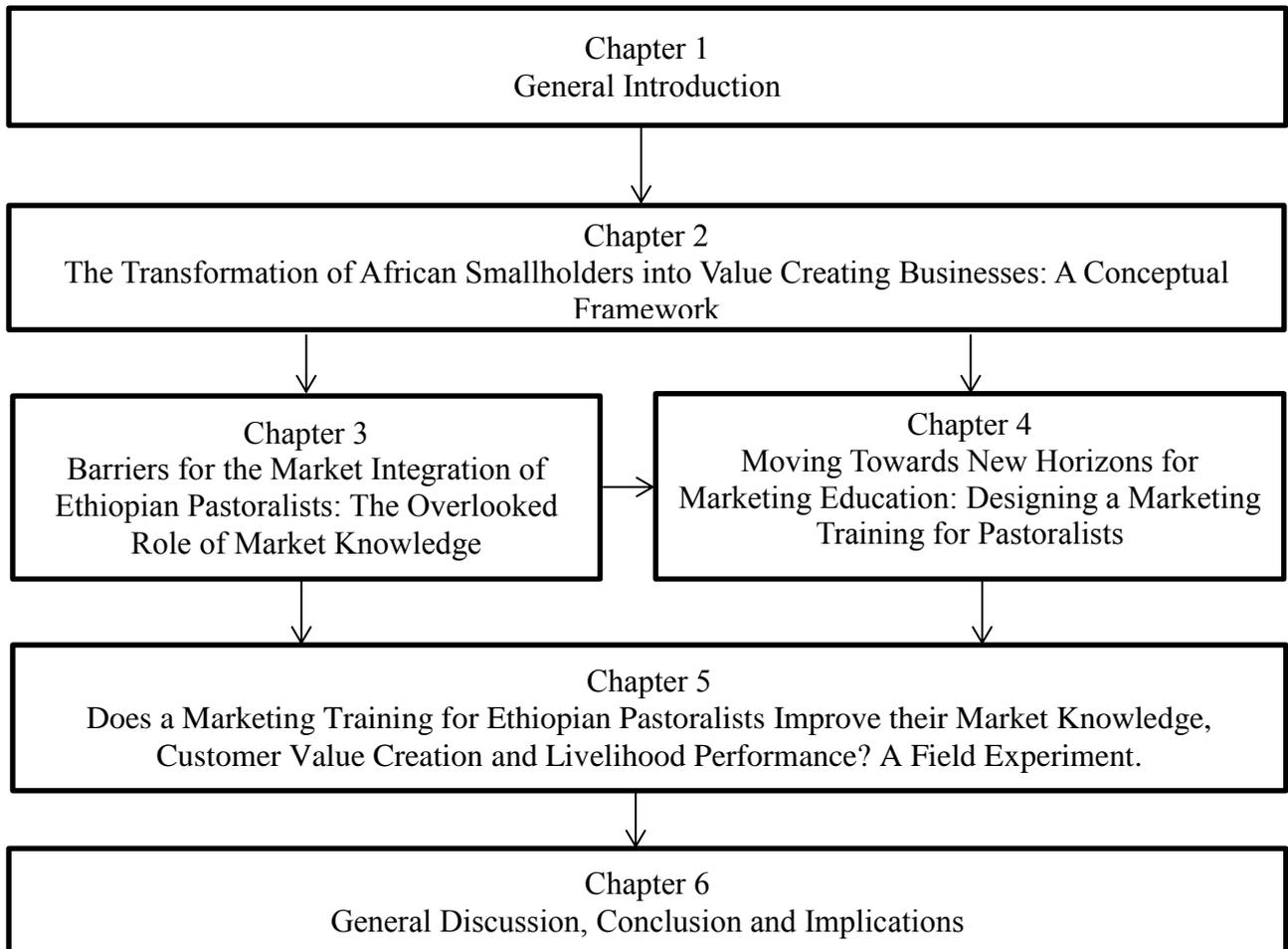


Figure 1.1. Outline of the thesis

2

The Transformation of African Smallholders into Customer Value Creating Businesses: A Conceptual Framework

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Abstract

An increasing number of the 600 million African smallholders are becoming integrated into the supply chains of supermarkets, fast food chains and exporters. This process gradually transforms the smallholders into profit-oriented businesses that can make important contributions to rural development and food security. This study connects distinct lines of literature on smallholders, business training, and customer value creation. More specifically, it argues that to equip smallholders with the understanding of how markets function and what customers value, trainings that address fundamental marketing concepts are required. The arguments are captured in a conceptual framework explaining the livelihood performance of rural African smallholders. Based on these arguments, the study formulates implications for development workers and suggests directions for African business research.

Key words: Smallholders, agriculture, business, customer value creation, training, Africa

2.1. Introduction

In Africa, approximately 600 million people operate as smallholders (The Rockefeller Foundation, 2011). These smallholders provide up to 80 percent of the food supply in Sub-Saharan Africa (FAO, 2012). Still, the majority of African smallholders operate in rural areas that are often relatively isolated from markets due to lack of infrastructure (Collier & Gunning, 1999). They therefore often produce for self-consumption and for small exchanges with their communities. Since the introduction of export crops during the colonial period (Tosh, 1980), rural African smallholders have become an important source of internationally traded commodities such as coffee, tea and cocoa (Temu & Temu, 2005; UNCTAD, 2015). Recent agricultural policy reforms and economic growth have led to increased exports of tropical fruits and other high value products, and an increase of processing of agricultural products in response to new demand from the growing middle classes (Reardon et al., 2015). Supermarkets, fast food chains and processing companies are pushing the market-frontier deeper into rural Africa (Rao & Qaim, 2013). Consequently, smallholders that were selling a share of their production to markets increase their market participation and new groups of smallholders enter markets. In doing so, they collectively make important contributions to food security and rural development (Barrett, 2008).

This study focuses on the smallholders that experience such steep increases in their market participation and are relatively new to the market. Because they lived for generations in relative isolation, smallholders' knowledge of and ability to function as a business is highly constrained. They therefore often lack the knowledge and skills that are common to other small businesses (McKenzie & Woodruff, 2013). In particular, their production and marketing practices are often traditional and uncoordinated (FAO, 2014). According to the FAO (2014), smallholders in Kenya lack an understanding of product quality management, their maize sales often depend on urgent cash needs, they do not target preferred customers and they do not meet the standards required by modern value chains. Comparable disconnections between production and marketing are also widespread among smallholders in Ethiopia, Malawi, Mozambique and Zambia where smallholder production fails to respond to the changing consumption patterns of urban markets (Jayne, Mather, & Mghenyi, 2010). In Benin, small-scale fishermen face difficulties in selling their shrimp to the European Union because their produce fails to meet basic safety requirements (Adekambi et al., 2016).

By bringing the discussion on African smallholders into the business realm, this study aims to contribute to a smooth and successful integration of smallholders with the global market system. By approaching smallholders as businesses, we also break new ground for

African business research. While the literature on African smallholders is dominated by disciplines other than business such as development economics, sociology and anthropology (e.g., Barrett, 2008; Fafchamps, 2001), the African business literature primarily discusses urban business sectors (e.g., de Wet & Gossel, 2016; Guma, 2015), mostly neglecting rural and peri-urban smallholders. The integration of these separately existing lines of literature in this study helps the readership of the *Journal of African Business* to, as MacInnis (2011, p. 138) says in her taxonomy of conceptual contributions, ‘see previously distinct lines of literature as inseparable’. We make the integration tangible by developing a conceptual framework that builds on both streams of literature. The study further complements the literature on smallholders and business training with customer value creation literature. Marketing theory holds that the fundamental logic for the existence of any business is to create value to satisfy the needs of customers (Slater, 1997; Woodruff, 1997). The only exception in which customer value creation is not applicable is in a situation in which there are no market exchanges (cf. Vargo & Lusch, 2004). This suggests that, when they become more integrated with the market, also African smallholders should increasingly create value to satisfy their customers and to make profits.

To address the knowledge deficiency that relatively newly integrated smallholders may have about the functioning of markets and creation of customer value, we draw on the literature on business training. Business management and entrepreneurship training has received growing attention from development workers as a potential approach for improving the business knowledge and skills of entrepreneurs (e.g., de Mel, McKenzie, & Woodruff, 2014; Mano, Iddrisu, Yoshino, & Sonobe, 2012). While business training is probably a necessary part of the transformation of African smallholders into customer value creating businesses, such trainings have been mostly offered in urban areas in Africa (e.g., Berge, Bjorvatn, Juniwaty, & Tungodden, 2012; Glaub, Frese, Fischer, & Hoppe, 2012; Mano et al., 2012; Sonobe, Mano, Akoten, & Otsuka, 2010) while mostly neglecting rural areas.

The study is structured as follows. It first provides a background on smallholders. Next, it presents a review of the literature on business training initiatives. It then describes customer value creation as the core reason for the existence of businesses and presents the conceptual framework. Then, marketing training is explained as a strategic approach to develop the knowledge to understand the market and what the customers need to create value to satisfy their needs. The study concludes by discussing the implications for development workers and African agribusiness research.

2.2. Background on African smallholders

Smallholders include small-scale farmers, forest keepers, fishers or pastoralists that either use commonly owned natural resources or manage private lands of less than 10 hectares (FAO, 2012). Though some take a broader definition of smallholders to include also wickerwork, processing, and artisanship (CFS, 2014; Maltsoğlu & Tanyeri-Abur, 2005), the development literature largely concentrates on agricultural smallholders because of their important contribution to the economies of developing countries and to world food production (e.g., Barret, 2008; FAO, 2012; Poulton, Dorward, & Kydd, 2010). In Nigeria, Kenya and Benin, respectively, 80, 75 and 90 percent of food production comes from smallholders (UNDP, 2012). In Burundi, smallholders produce 71 percent of the tea, Burundi's second largest cash crop (World Bank, 2008). Though smallholders usually make use of family labour (Narayanan & Gulati, 2002), in Ethiopia, Kenya, Tanzania and Uganda, smallholders account for over 75 percent of the employment (Salami, Kamara, & Brixiova, 2010).

The literature sometimes groups smallholders in terms of the markets that they serve. Sub-Saharan African smallholders serve local, regional and export markets (e.g., Shiferaw, Hellin, & Muricho, 2011; Temu & Temu, 2005). Although long-distance trade of agricultural outputs goes back far into African history (e.g. Wolf, 1982), the export market was mostly developed during colonial times. These “colonial products” often still account for an important share of the exports, like over 80% of Ethiopia's and Uganda's coffee production and over 90% of the Ghanaian and Ivory Coast's cocoa production (World Bank, 2011). During the last decades, also more high-value products are being exported like fruits and vegetables (Henson, Masakure, & Cranfield, 2011).

Exporters are however not the only ones raising the demand for smallholders' output. Also traders and retailers that fulfil the demand for food in the growing urban areas call upon smallholder production. As a consequence, smallholders in peri-urban areas have often become specialized producers that hardly produce for their own consumption. African smallholders that produce staple food sell most of their products in local markets (Taffesse, Dorosh, & Asrat, 2011). The growing demand also fosters trade within Africa. Smallholders from, among others, Tanzania, Cameroon, and Madagascar deliver, for example, fruits and vegetables to the expanding supermarkets in Kenya, Ghana, and South Africa (Neven, Odera, Reardon & Wang, 2009; Weatherspoon & Reardon, 2003).

Though market participation, in particular at markets that represent higher purchasing power, generally has a positive effect on the livelihoods of smallholders (Gebre-madhin & Haggblade, 2004; World Bank, 2015), several authors argue that smallholders also frequently

face rejections of their products (e.g., Graffham, Karehu, & McGregor, 2009). Rejections may lead to disappointment with and sometimes even rejection of the market system (Jaffee, Henson, & Rios, 2011). Exporting companies, fast food chains and supermarkets increasingly ask smallholders a timely and consistent supply of products meeting fixed quality standards (Neven et al., 2009). In Kenya, a substantial group of smallholders therefore failed to sustain their linkage with supermarkets (Fischer & Qaim, 2011). The most common barriers hinder smallholders in their market integration include the lack of supportive infrastructure (e.g., roads, information communication systems and storage) (e.g., Barrett, 2008; Fratkin & Mearns, 2003), absence of key production inputs (e.g., land, equipment and finance) (e.g., Jayne et al., 2010), lack of information to make effective selling decisions and lack of technical support and extension services (Henson, Jaffee, Cranfield, Blandon, & Siegel, 2008).

Over the past decade, smallholder cooperatives have been suggested as a suitable approach to overcoming the barriers that smallholders face (Bernard & Spielman, 2009). The underlying assumption is that smallholders will act collectively and benefit from large-scale input purchase/production, cost reduction and experience/information sharing to supply their products in large volume to markets and to bargain for better terms of exchange in the marketplace (Bernard & Spielman, 2009). In practice, however, they often lack marketing plans, business management, and training and technical support (Chriwa et al., 2005; Ortmann & King, 2007; Poulton et al., 2010).

An important part of the problem seems the relative remoteness of smallholders, as a consequence of which they are not exposed to the information, knowledge and skills that they need to be successful in the market. Instead, they therefore rely on traditional production practices that do not meet the standards (Fischer & Qaim, 2011). Due to the fact that many African smallholder cooperatives are restricted to the traditional and local knowledge within the boundaries of their local community, cooperatives are not a solution to that problem (ILO, 2014). Local (traditional) knowledge refers to the knowledge or practices that people in a given environment have developed over time and passed on from generation to generation within a community, and which often form the community's work culture or traditional identity (Berkes, Folke, & Gadgil, 1995; UNESCO, 2014). Anthropologists describe local knowledge as highly contextualized, informal and unstructured knowledge that is acquired or handed-down through cultural transmission and used in daily routines (e.g., Berkes et al., 1995; Blaikie et al., 1997). In this sense, many African smallholders conduct their production activities according to the experiences and practices inherited from forefathers rather than

from the ‘eyes of the buyer’. Though unrelated to any of the infrastructural barriers, this knowledge gap may hinder their market participation most.

2.3. Business and entrepreneurship training initiatives in developing and emerging markets

Business training can potentially fill this knowledge gap. Business training has grown in developing and emerging markets as a means of enhancing the knowledge and skills of entrepreneurs to enable them to improve their livelihoods (ILO, 2014). Such training supports small-scale businesses in developing and emerging markets that are not capable to execute business practices that are common to small-scale businesses in high-income markets (McKenzie & Woodruff, 2013). By engaging in business management and entrepreneurial trainings, smallholders are expected to improve their business competencies (McKenzie & Woodruff, 2013). In this regard, the International Labour Organization (ILO)’s Start and Improve Your Business (SIYB) programme is the most widely implemented business training. Other development organizations like UNCTAD, IFC and GTZ have also implemented training programmes.

Recent studies that have implemented and evaluated the impact of training programmes show that almost all training programmes help their target groups to improve their knowledge and abilities to exercise business practices, which leads to improved business outcomes (higher sales and profits) (see McKenzie & Woodruff, 2013 for a recent review). Several of the studies report that business and entrepreneurship training programmes support entrepreneurs in improving their business knowledge (Gine & Mansuri, 2012), applying business practices (de Mel et al., 2014) and improving their business performance (Mano et al., 2012). Because of the roles that business and entrepreneurial trainings play on African small-scale businesses, studies suggest that more trainings to African entrepreneurs will help them to survive and grow as businesses (e.g., Ladzani & van Vuuren, 2002; Mano et al., 2012).

While business training is generally important for any entrepreneur to acquire or improve knowledge and perform better, its impact is likely to differ depending upon who receives the training and what the training offers (McKenzie & Woodruff, 2013). Table 2.1 presents a systematized review of the current business trainings. Many of these training programmes have focused primarily on African urban areas. Urban areas in Sub-Saharan African countries have social and economic advantages over rural areas, such as exposure to education and educated people, formal businesses and media (World Bank & IMF, 2013).

Compared to the many African smallholders who operate in rural areas, urban entrepreneurs therefore enjoy potentially more interactions with, and gain support from, educated people and formal institutions. Such interactions can help the entrepreneurs to develop their ability to be flexible and responsive to new developments. The business training for smallholders is therefore likely to differ from the trainings for urban entrepreneurs.

An overview of the core topics covered by the business training programmes, with a particular focus on studies conducted in Africa, is presented in column 5 of Table 2.1. The training programmes share a set of common topics that include financial literacy (e.g., record-keeping, financial planning and separating household and business finance). Other topics covered include costing and pricing, inventory management and the steps needed to take a product to market (routine marketing activities) (McKenzie & Woodruff, 2013). While the topics covered are important for businesses, there are challenges that likely influence the training's effectiveness and degree of impact. According to McKenzie & Woodruff (2013), business training courses cover a combination of broader business concepts in 'one menu'; this makes it difficult for impact evaluation studies to determine which component of the training explains the success story of the training programmes.

The training content reflects the focus of the trainings on urban and peri-urban entrepreneurs. These target groups have some experience with the market system and they already have answers to the fundamental questions on how markets function, why customers are important, and why new technologies and quality practices help them to succeed on the market. For smallholders that have little or no experience with the market, these fundamental questions still should be addressed to ensure that their market integration is more smooth and stable. They underlie and connect the technical, production, marketing, and management practices conducted in the smallholder business. Business training for smallholders with little market experience may therefore benefit from treating marketing not only as a set of instruments and practices but also as a business philosophy (Kohli & Jaworski, 1990). As a business philosophy, marketing recognizes the customer as the focal point of all business activities and guides the coordination of business activities towards satisfying the needs of target customers (Deng & Dart, 1994).

Table 2.1: Overview of studies of business and entrepreneurship trainings in developing and emerging countries

Studies	Country	Implemented in	Target: new or existing business?	Main topics covered
Abebe and Sonobe (2012)	Ethiopia	Urban	- Existing	- Introduction to entrepreneurship, marketing, production management and financial management
Berge et al. (2012)	Tanzania	Urban	- Existing	- Accounting and finance (record keeping and separating household and business finances) and marketing techniques needed to take a product to market
de Mel et al. (2014)	Sri Lanka	Urban	- Existing	- Accounting (record keeping), financial planning and marketing steps to take a product to market
Giné and Mansuri (2011)	Pakistan	Rural	- Existing	- Accounting and finance (record keeping and separating household and business finances)
Glaub et al. (2012)	Uganda	Urban	- Existing	Aspirations/Self-esteem
Ladzani and van Vuuren (2012)	South Africa	Urban	- Existing	Motivation, entrepreneurship and business skills
Mano et al. (2012)	Ghana	Urban	- Existing	- Accounting and finance (record keeping and separating household and business finances) and marketing
Sonobe et al. (2010)	Kenya, Ghana	Urban	- Existing	- Business planning - Financial management

2.4. Customer value creation

Figure 2.1 presents a conceptual framework that is produced from the integration of previously distinct lines of literature together. An integrative conceptualization accommodates existing but diversified knowledge into a unified whole to produce an interconnected perspective and to offer a pattern of relationships (MacInnis, 2011). Because customer value creation is the central concept within business philosophy (Kotler & Keller, 2012; Woodruff, 1997), it is the central variable in the framework.

Customer value is one of the most widely discussed concepts in the strategic marketing literature (e.g., Slater, 1997; Woodruff, 1997). Marketing research has conceptualized customer value as a customer-direct concept (e.g., Woodruff, 1997) and as a supplier-direct concept (e.g., Rust, Lemon, & Zeithaml, 2004; Walter, Ritter, & Gemunden, 2001). From the supplier perspective, customer value is viewed as what the supplier derives (gains) from the customer that increases the value of the business (e.g., profitability) when delivering products or services to the customer (e.g., Woodall, 2003).

The ‘customer-direct’ concept considers value from the customer’s side and qualifies as what the customer wants from buying and using a supplier’s product (Woodruff, 1997). In accordance with this perspective, Woodruff (1997, pp.142) defines “customer value as a customer's perceived preference for and evaluation of those product attributes, performances and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes”. Thus, customer value refers to the benefits that customers receive in the transaction relative to what they sacrifice (Zeithaml, 1988; Woodruff, 1997). Businesses that create more customer value are better than their competitors in satisfying their target customers and in retaining them (Flint, Blocker, & Boutin, 2011; Woodruff, 1997). Customers may also spread positive-word-of-mouth which enables the business to attract more customers (de Matos & Rossi, 2008). For these reasons, customer value creation is a key driver of financial performance (Woodruff, 1997).

As customer value is a perception, the different main customer groups of smallholders (exporters, emerging middle class and low-income consumers) have a different idea of what is valuable. Exporters, for example, evaluate the value of the products on among others compliance with quality and safety standards (e.g., Henson et al., 2011), to the emerging middle class it can for example be health and indulgence (e.g., Tschirley et al., 2015), and to low-income consumers it may be a low price and high quantity at acceptable quality levels (Sheth, 2011). The smallholder literature has shown that smallholders that consistently produce and supply products that meet the quality and safety standards of buyers like

supermarkets and exporters enables the smallholders to obtain higher and stable returns (Maertens, Colen, & Swinnen, 2011; Minten, Randrianarison, & Swinnen, 2009). Smallholders With the such higher returns, these smallholders purchase consumer goods, cover medical expenses, invest in education for their children (Maertens et al., 2011), and also can accumulate capital (Lewis, 2002). Even smallholders that produce for customers with very little purchasing power are likely to be better off when such customers are loyal and speak favourable about them (e.g., Baiphethi & Jacobs, 2009). Hence, value creating smallholders experience higher levels of livelihood performance. We thus propose the following:

P₁: Customer value creation positively influences the livelihood performance of smallholders.

The value for customers is created based on how businesses integrate resources to make, communicate and deliver products that satisfy the needs of customers (Woodruff, 1997; Zeithaml, 1988). Flint (2004), Webster (2002), and McDonald (2006) have identified sequential steps that businesses undertake to create value, namely value-defining, value-developing and value-delivering (see Figure 2.2 & Table 2.2). Value-defining activities are performed before the product physically exists. They include assessing the market, selecting the customers to target and defining what they value (e.g., Lanning & Michaels, 2000). Value-developing entails procuring resources and designing and making a product that customers find consistently useful and want to buy repeatedly (Kotler & Keller, 2012; Webster, 2002). The product is developed to contain essential attributes (quality, features or style) that fit the expectation of the customer (Vantrappen, 1992). Finally, the value created is communicated and delivered to predefined customers (Flint, 2004; Lanning & Michaels, 2000).

Importantly, the strategic marketing literature suggests that the capacity of a business to integrate resources in a way that creates superior customer value depends on market knowledge (Li & Calantone, 1998). Market knowledge refers to the systematically developed and organized knowledge or understanding that pertains to the market, market trends (dynamics), and customers' and competitors' behaviour that is required to guide creating and delivering superior value to satisfy customer needs (e.g., Glazer, 1991; Marinova, 2004). Market knowledge helps to create customer value because it gives businesses a better understanding of what the customer wants as businesses combine resources into offerings (Slater, Olson, & Sorensen, 2012). An understanding of concepts such as markets, customers, value, competitors and target markets may create a mental model on the basis of which any

new, contextual market information can be interpreted (Slater & Narver, 1995). As such, the information adds to the knowledge and helps smallholders in their decision-making and the coordination of activities within the business.

At this level of abstraction, value creation is not any different for smallholders. Given the options that are available where they live, they should decide whether they target exporters, upcoming middle class markets, or low-income markets, and perhaps which specific traders, exporters or customer groups within these markets. To effectively integrate their resources like land, water, seeds, and fertilizers, they need information on the expectations and standards of exporters and/or traders. When buyers require a minimum quantity, smallholders may pool their output to create a larger-quantity value proposition, for example, in the context of cooperatives or credit groups. Also comparable to other businesses, smallholders will need a mental framework reflecting basic marketing concepts like target markets, customer value and satisfaction to understand how all their activities may help to maintain customers, acquire new ones and generate profits.

P_2 : The higher the market knowledge of smallholders, the more value they create for their customers.

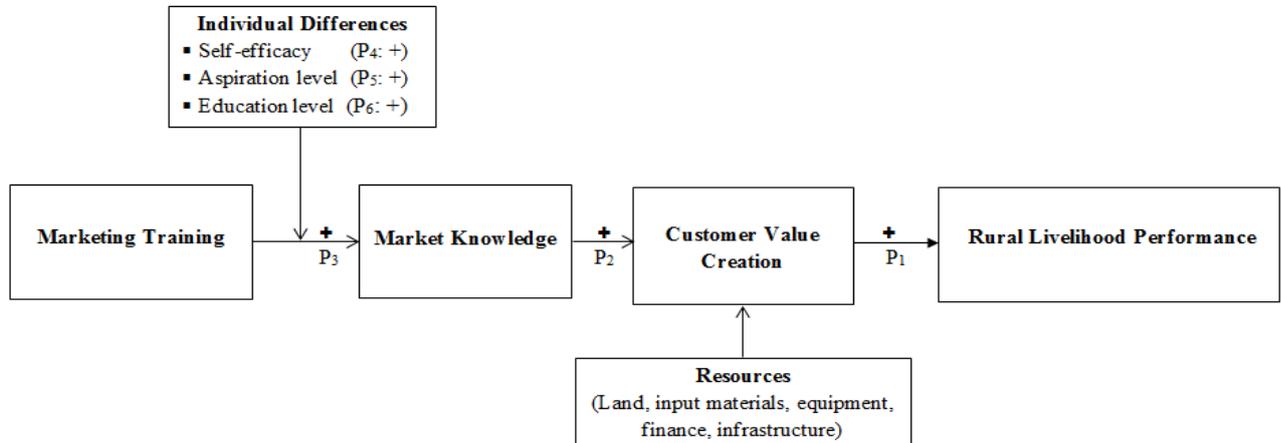


Figure 2.1: Conceptual Framework

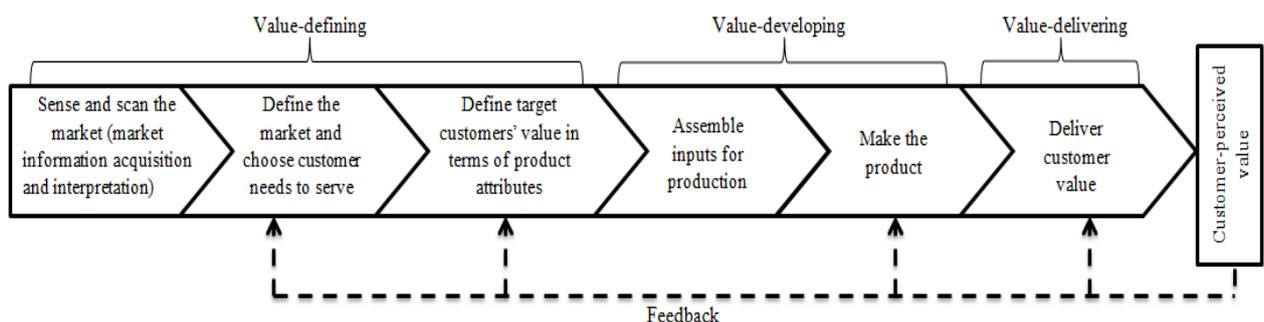


Figure 2.2: Customer value creation process (based on Webster, 2002; Kotler & Keller, 2012)

Table 2.2: Customer value creation activities among smallholders

Value-defining	Market sensing	<p>Information gathering about and interpretation of market conditions (e.g., price trends), preferences of exporters, wholesalers, supermarkets and retailers, as well as supply of similar products by other producers through:</p> <ul style="list-style-type: none"> - personal visits (observation) to marketplaces - face-to-face discussions with exporters, supermarkets, wholesalers, retailers and end-consumers. - discussions about customers and other suppliers of similar products with relatives, NGOs, government offices, etc. - consulting development agents and experts about conditions in the local, regional and export markets, and how such conditions influence price of products. - discussions about exporters, supermarkets, wholesalers, retailers and end-consumers with other producers who supply similar products to the market.
	Define the customers to serve	<ul style="list-style-type: none"> - Specify the group of customers (exporters, the emerging middle-class or low income consumers) whom the smallholders should target and capably meet their needs.
	Define the value of target customers	<ul style="list-style-type: none"> - Specify the value of the targeted customers in terms of specific product attributes (e.g., size, color, weight, volume, taste), and suitable place and time to supply the product.
Value-developing	Assemble inputs for production	<ul style="list-style-type: none"> - Assemble (procure) inputs (e.g., feed in livestock sector, improved variety seed and fertilizer in farming, fishing net in fishing) that are important ingredients or tools needed to make the product.
	Make the product	<p>Design and make the product based on the product quality attributes specified to meet the value of the predefined customers.</p>
Value-delivering	<p>Supply the product through an appropriate distribution channels to reach the targeted customers (e.g., exporters) at the specified place (right place) and in the right time.</p>	

2.5. The role of marketing training

The majority of rural African smallholders produce however on the basis of their traditional knowledge and experience that is available within their community (Unesco 2014). Arnould (2001), for example, reports that many onion producers in Niger produce onion based on culturally-based practices such as hand-lifted irrigation and traditional storage, leading to unnecessary losses of up to 60% of their produce. They sell their produce at farm gates during harvesting time at low prices. Comparable practices also exist among other smallholders. Remote East African pastoralists, for example, raise livestock to own large herd sizes and sell livestock only when they need cash or to avoid losses from drought (McCabe, 2004). Customers' considerations are mostly absent in such mental models, let alone that they provide a frame to coordinate activities in the smallholding.

In such situations, the development of a more marketing-based worldview can be established by creating an understanding of basic marketing concepts. Teaching these basic marketing concepts is a key component of academic thinking in the field of marketing (Kotler & Keller, 2012). As such, insights that are developed within the marketing discipline regarding how to teach marketing concepts can also be used to help African smallholders develop the mindset of market-based interpretation, thus guiding their decision-making and coordination towards the creation of customer value.

Educational literature states that education can shape the minds of people in such a way that they can access and process information, memorize, use logical reasoning, make strategic decisions and find ways to create a better future (Bostrom & Sandberg, 2009; UNESCO, 2006). In that respect, education and training enhance the cognitive resources, such as understanding abstraction, memory, critical thinking and reasoning, that individuals need to accomplish tasks in a better way (Bostrom & Sandberg, 2009). The purpose of training is also to offer training participants with the potential and empowerment to envision different realities and make informed choices (UNESCO, 2006; Viswanathan, Sridharan, Gau, & Ritchie, 2009). This implies that marketing training can provide smallholders with the knowledge that helps them to envision different approaches to managing a profitable business.

Marketing training is a specific element of education planned to convey new, to modify or to expand marketing knowledge, skills and attitudes of learners or maintain levels of competence to respond to new developments and changing circumstances, as well as enhance productivity (e.g., Goldstein, 1993). Marketing literature suggests marketing training as an important approach to equip participants with market knowledge that provides an understanding of the market environment and what the customers want to make informed and

reasoned production and marketing decisions (e.g., Petkus, 2007; Rosa, 2012; Viswanathan et al., 2009). Petkus (2007) argues that the knowledge that helps learners to integrate abstract concepts with concrete phenomena and analyse the phenomena and to make logical reasoning to shape their tasks and make critical decisions is an outcome of marketing education. In this process of building knowledge, learners must obviously understand the basic marketing concepts (Henke, 1985). As such, teaching fundamental marketing concepts in a way that is understandable to smallholders will increase the market knowledge of smallholders.

The importance of marketing training for entrepreneurs has also been assessed empirically. Viswanathan, Gajendiran and Venkatesan (2008), for example, developed a marketing training for micro-entrepreneurs in Chennai, India, with an objective to improve the knowledge of the micro-entrepreneurs from the perspective of running a profitable business by satisfying customer needs. The training program designers have reported positive outcomes that the micro-entrepreneurs have gained knowledge from the training and started to recognize the benefits of putting customer needs first in doing business (Viswanathan et al., 2009). Like rural African smallholders, the micro-entrepreneurs in Chennai face conditions of resource scarcity that impede their efforts to acquire knowledge from the surrounding environment to function in and benefit from the markets. The evidence obtained from Chennai therefore highlights the important of marketing training to resource-constrained small-scale businesses including African smallholders. As such, a marketing training designed based on specific training needs, economic practices (e.g. farming, pastoralism or fishing) and the particular markets (local, regional or export) they serve will help African smallholders to develop knowledge that will enable them to process market information and to make informed decisions to coordinate the activities in their business.

P₃: Smallholders who receive marketing training will develop more market knowledge.

2.6. Accounting for individual differences

Traditionally, training design focuses on three features: 1) assessment of training needs (learning outcomes), 2) use of appropriate training methods to deliver content based on needs, and 3) evaluation of the effectiveness of the training (Tracey & Tews, 1995). While deliberation on these features is inevitable, it excludes the consideration of individual participants' differences that may influence the effectiveness of any training effort (Tracey & Tews, 1995). Existing business training literature emphasizes that individual differences before training will determine the potential effectiveness of training (e.g., Holton, Bates, & Ruona, 2000; Tracey, Hinkin, Tannenbaum, & Mathieu, 2001). Rosa (2012) also suggests that

marketing training that is meant to build the knowledge and ability of marketers in subsistence marketplaces needs to account for individual characteristics. Accordingly, we include *self-efficacy*, *aspiration* and *education level*, which training literature has identified as determinants of training effectiveness (e.g., Chiaburu & Marinova, 2005; Tziner, Fisher, Senior, & Weisberg, 2007).

Self-efficacy: is defined as one's belief in one's ability to succeed in specific situations or accomplish a task (Bandura, 2004). An individual's sense and awareness of self-efficacy plays an important role in how the individual approaches tasks and makes efforts to overcome challenges (Saks, 1995). Pre-training self-efficacy of participants has also been found to determine the effectiveness of the training programme in transferring knowledge to the participants (Sookhai & Budworth, 2010). Participants with higher self-efficacy have the motivation and self-confidence to endeavour to acquire new insights and knowledge from the programme (e.g., Sookhai & Budworth, 2010; Tracey et al., 2001). In this regard, African smallholders with higher belief in their ability to succeed are likely to acquire more knowledge from a marketing training. Narayan, Patel, Schafft, Rademacher and Koch-Schulte (2000) report that resource-constrained African rural communities feel that they do not have the power and capability to lift themselves out of poverty. As such, those African smallholders who feel that they do not have the required capacity to succeed with their businesses will less likely benefit from the training. Hence, smallholders' self-efficacy will moderate the effectiveness of marketing training in enabling African smallholders to capture new insights and knowledge from the training programs (Saks, 1995).

P₄: The higher the self-efficacy of smallholders, the stronger the relationship between marketing training and market knowledge.

Aspiration level: Aspiration refers to the desire, interest or motivation to achieve something higher compared to previous, current or peers' performance (Baum & Dahlin, 2007). Trainees with higher aspirations achieve higher education outcomes than those with lower aspiration levels (Khattab, 2015). Trainees who aspire to achieve higher performance (goal-orientation) in their life make efforts to learn the knowledge and skills that lead them to attain their desired goals (Chiaburu & Marinova, 2005). Even when trainees possess the needed self-efficacy to learn the material emphasized in the training program, their performance in acquiring knowledge will be poor if their desire to learn and achieve some level of success is low or absent (Chiaburu & Marinova, 2005). Based on a large, world-wide sample of people living in

poverty, Narayan, Pritchett and Kapoor (2009) found that individuals with higher aspiration levels set goals and are more likely to lift themselves out of poverty while those with lower levels of aspiration remain in the same poverty situation. Hence, the pre-training aspirations of smallholders are likely to influence the effectiveness of a training in conveying the intended subject matter.

P₅: The higher the aspiration levels of smallholders, the stronger the relationship between marketing training and market knowledge.

Education level: Education is considered to be an influential factor in individuals' trainability and knowledge acquisition (Mathieu & Martineau, 1997). Research suggests that trainees with higher education levels process and relate one training content with another content, and acquire more knowledge from a training programme than less educated trainees (Mathieu, Tannenbaum, & Salas, 1992). Individuals with low education levels lack the ability to obtain, process and relate one concept or piece of information with another concept or piece of information emphasized in a training programme (Viswanathan et al., 2009). Unless learning outcomes are stated in concrete terms for low-literate training participants, these participants are less likely to grasp the concepts and benefits of the training programme (Viswanathan et al., 2009). Because many smallholders in Sub-Saharan Africa have low levels of literacy (UNESCO, 2013), the effectiveness of marketing training may depend not only on their self-efficacy and aspiration but also on their education level.

P₆: The higher the education level of smallholders, the stronger the relationship between marketing training and market knowledge.

Finally, our framework includes a box with control variables that refer to resources such as agricultural land, finance, access to water and pasture and equipment. These variables are likely to influence customer value creation because we previously defined value creation as a process of integrating resources. These particular resources are often addressed in the literature on smallholders (e.g., Jayne et al., 2010; Marenja & Barrett, 2007). Obviously, the degree to which such resources are accessible influences the value creation process of smallholders.

2.7. Conclusion

By integrating distinct lines of literature, this study created a conceptual framework to transform African smallholders into customer value creating businesses. Customer value

creation is central to the framework because smallholders who create value for their customers are likely to improve their livelihood performance. As such, the transformation of smallholders into customer value creating businesses contributes to reductions in rural poverty and the problems associated with it, such as food insecurity, insufficient food production and migration from rural to urban areas. Whereas strategic marketing literature recognizes market knowledge as a strategic resource for customer value creation in advanced business sectors, this study brings market knowledge as a factor that is highly influential in the successful transformation of African smallholders into customer value creating businesses. As smallholders create value out of Africa's most distinctive resources like agricultural land and its diversity of flora and fauna, customer value creation in the context of smallholders deserves all attention it may get from the side of African business researchers and educators. Educators are needed because marketing training develops smallholders' market knowledge. In the implications section for African business research, we will describe potential research directions for African business researchers to study the effectiveness of marketing training to help smallholders develop market knowledge.

2.8. Implications for development workers

To foster the integration of African smallholders into markets, development workers, including policy makers, aid organizations and researchers, have dedicated considerable efforts to creating enabling environments for smallholders. These efforts largely focus on resources such as roads, landholding, capital, and improved seed varieties (Tripp & Rohrbach, 2001). While creating an enabling environment is important to the market participation of smallholders, it may not be enough for smallholders who lack the basic knowledge and the mindset of making a profit by satisfying customer needs. Due to lack of foundational knowledge about the logic of doing business, smallholders benefit less from the enabling environment because they do not make their products from the customers' perspective; customers reject products if they feel that the products are not made to meet their needs (Kotler & Keller, 2012). As such, policy makers should focus not only on creating enabling environment, but also on enabling smallholders to produce what their customers want to buy. Otherwise, smallholders facing frequent product rejections will lose profits and thus fall deeper into poverty. To escape from poverty, smallholders migrate from rural to urban areas seeking jobs and a better life, which has negative consequences such as dwindling rural productivity and rural-urban socioeconomic chaos (Narayan et al., 2000). Dwindling smallholder productivity also impacts food insecurity in Africa.

The framework developed in this study provides implications for policy makers to support smallholders to align their products with customer requirements. Policy making should focus on marketing training as a means to provide smallholders with the basic knowledge that will enable them to grasp the logic of doing business and discover how to be in the profit making business. Because education is a tool to shape the mindset of individuals (UNESCO, 2006), policy that focuses on marketing training can empower smallholders to think beyond the traditional status quo and envision different approaches that enable them to produce and market higher quality products that offer superior value to target customers. With more developed market knowledge, smallholders can flexibly adapt their production system to consistently align products to customer preferences and purchasing patterns. As such, smallholders will make products that not only satisfy local markets but also meet the requirements of export or other high-value markets. This will enable the smallholders to sell their products at higher prices and consequently gain profits, which will result in better rural livelihood performance. We therefore suggest that policy makers focus on marketing training to help smallholders organize their activities towards creating customer value.

Aid organizations and business training designers can support policy making regarding the transformation of African smallholders into customer value creating businesses by dedicating resources and designing marketing training programmes that include and emphasize marketing as a business philosophy. By emphasizing marketing as a business philosophy, such programmes have a high potential to create a mindset among smallholders that puts customers first in the production and marketing process. To create such a mindset, training programmes can build on fundamental marketing concepts to deliver the foundational knowledge that smallholders will use to coordinate and guide their activities towards making the right products for their customers (Kotler & Armstrong, 2012). Structuring the trainings according to learning outcomes formulated from a set of basic concepts will potentially help smallholders gain a more logical and broader comprehension of their roles as key actors in the market environment. The set of basic marketing concepts that smallholders can benefit from include, among others, market, market exchange, market dynamics, customer-centric business, competition, marketing instruments, and value chain (Kotler & Armstrong, 2012; Kotler & Keller; 2012). Which concepts are needed to train the smallholders may depend on the specific training needs and specific economic activities of the smallholders who will participant in training programs. Also, the effectiveness of training programs in enabling smallholders to acquire knowledge can depend on hiring appropriate trainers who are

knowledgeable about the concepts being taught, and have the desire to train, ability to communicate and skills at getting the smallholders to actively participate in the training.

As a final point of warning, we state that smallholders do not just learn from trainings but also from their experiences in the markets. By increasingly developing projects in the market environment of smallholders, NGOs are an important force that create the learning environment. NGOs should therefore try to make that environment function along the rules of the market, such as that creation of value requires investments in the necessary resources. While giving resources for free to smallholders may be an effective way to overcome capital constraints, it can also provide a wrong signal for market knowledge development. Policies of NGOs that provide incentives to smallholders should therefore not interfere with training contents designed to develop the market knowledge of the smallholders.

2.9. Implications for African agribusiness research

Our framework offers several directions for future research. As we still know very little about how African smallholders perceive and understand their markets, more qualitative studies are needed in a wide variety of African smallholder contexts. These studies may help to develop an understanding of the knowledge gaps and marketing training needs of smallholders and therefore generate valuable input into the design of marketing trainings.

This study indicated that the capacity to create value for customers depends on market knowledge, and, in turn, the development of market knowledge depends on marketing training. African business research, however, has empirically studied none of these relationships in the context of transforming African smallholders into profit-oriented businesses. A promising approach that will lay a foundation for conducting empirical studies could be the design of a complete marketing training program. To design training programs, qualitative studies should assess the training needs of specific smallholders that need to be trained. Assessing training needs is important to identify the knowledge gap and to determine the concepts and methods needed to convey the required knowledge (Brown, 2002; Goldstein, 1993). Qualitative studies are important to design training programs that build on existing knowledge and practice of participants (Angelo, 1993; Halpern & Hakel, 2003) and will pave the way for quantitative investigations of the effectiveness of the training programs.

Cross-sectional and, in particular, longitudinal quantitative surveys could evaluate the progressive effects of marketing trainings. Cross-sectional surveys could be used to determine whether training participants achieved the training's learning outcomes and whether the participants have acquired a foundation that is sufficient to apply their new knowledge in their

Chapter 2

production and marketing practices. Longitudinal studies could investigate the progressive impact of marketing training in enabling smallholders to translate into practice what they have acquired from the training. Specifically, a longitudinal experimental study could evaluate the effectiveness of the training by comparing differences in production and marketing activities between those who enrolled in training and those who did not. Findings from such studies will entice development workers to commit resources with the aim of offering and scaling up marketing training that could promote African smallholders from surviving to thriving.

3

Barriers for the Market Integration of Ethiopian Pastoralists: The Overlooked Role of Market Knowledge

This chapter is submitted for publication as Mebrahtu L. Teklehaimanot, Paul T.M. Ingenbleek, & Hans van Trijp. Barriers for the Market Integration of Ethiopian Pastoralists: The Overlooked Role of Market Knowledge.

Abstract

In response to rapid globalization, developing and emerging countries have dedicated considerable efforts to integrating their locally and nationally organized markets with global markets. These efforts integrate rural producers such as pastoralists, who previously functioned at local markets, to a greater extent with international markets. While such integration opens opportunities for these producers to access higher purchasing power, it is difficult for remote pastoralists with limited productive resources and limited institutional support to recognize and seize the opportunities. Pastoralists are mostly isolated from the other livestock value chain members. This makes it difficult for the pastoralists to acquire knowledge regarding how the market functions and what the value chain members want. This study explores how much pastoralists know and what knowledge they need to seize market opportunities. Using qualitative evidence from Ethiopian pastoralists, this study finds that pastoralists understand routine and physically existing facts such as selling livestock in a fixed marketplace during regular market days. However, the pastoralists lack the higher order knowledge that includes a broader understanding of the market phenomena and the abilities to scrutinize and interpolate those phenomena into their livestock raising experiential realm to make informed production decisions. This study concludes with implications for the development of market knowledge among pastoralists.

Keywords: Market integration, market knowledge, remote, pastoralists, Ethiopia

3.1. Introduction

In recent decades, the world has witnessed rapid globalization with the increasing integration of production chains, international trade, investment and capital flows (Neethi, 2012; Nissanke & Thorbecke, 2007). In response to this globalization trend, developing and emerging (D&E) countries continue to liberalize their economies to integrate their locally and nationally organized markets with global markets (Borras, 2010; Carletto et al., 2010). This has facilitated the integration of locally organized producers such as pastoralists in D&E countries to participate in the global rewards (Carletto et al., 2010; Dixon et al., 2004). The perceived benefit for these producers is gaining access to higher purchasing power and higher price paying markets, which contributes to a better livelihood (e.g., Minten, Randrianarison, & Swinnen, 2009). However, rural producers may not benefit from their integration into global markets on par with or as fairly as producers that are closer to towns and cities with better infrastructure and education. While it is difficult for all rural producers to seize market opportunities due to the deprivation of productive resources, such as knowledge, education and infrastructure (Barrett, 2008; Dorward et al., 2005; Narayan et al., 2000), it is particularly difficult for the pastoralists who live in remote areas.

Pastoralists operate in extremely remote rural areas that have scarce required productive resources; this has contributed to their poverty (UNDP, 2013). To lift pastoralists out of poverty, the development literature has focused on creating an enabling institutional environment to connect them with global markets that have higher purchasing power compared to their serving local markets (e.g., Barrett, 2008; Swinnen & Maertens, 2007; Verbeke et al., 2009). This literature has identified the absence of or poor infrastructure and limited access to financial services as barriers that prevent pastoralists from connecting with markets and from taking advantage of market opportunities (e.g., Barrett, 2008; Davies, 2008; Watson & van Binsbergen, 2008). Consistent with recommendations from this literature, policy makers and development workers have dedicated considerable efforts to remove institutional barriers (e.g., FAO and IFAD, 2016; IFAD, 2009; UNDP, 2008). Aid agencies, for example, invested in infrastructure to link East African pastoralists to export markets (Aklilu & Catley, 2009). Research has indicated, however, that such investments have had minimal impact on livestock sales and that market off-take rates from pastoralists in the region remain low (Aklilu & Catley, 2009; Little, Debsu, & Tiki, 2014).

A growing body of literature has begun to focus on the behavioural features of the producers as determining factors to improve the producers' market access and market off-take rates of institutional arrangements (e.g., Ingenbleek, Tessema, & van Trijp, 2013; Jayne,

Mather, & Mghenyi, 2010; Zulu, Jayne, & Beaver, 2007). This literature highlights that the production, consumption and marketing behaviours of producers are centrally important for their market integration and to the improvement of their living standards (FAO, 2014a; Jayne et al., 2010). Underlying these behaviours is knowledge that creates a critical understanding of people's environments. This knowledge facilitates people's adaptation and enables them to transform resources into higher living standards and development (FAO & UNESCO, 2003; World Bank, 1999). In cognitive psychology, knowledge is regarded as a necessary precondition to guide and shape individuals' behaviour to make informed choices for a better future and to accomplish their tasks successfully (e.g., Frick, Kaiser, & Wilson, 2004; Wilcock et al., 2004). Frick et al. (2004) argue that it is important to ascertain how much people know and what type of knowledge is needed to promote their behaviour to achieve desired results. However, to the best of our knowledge, the literature still lacks an in-depth investigation of the knowledge that remote producers obtain from their day-to-day interactions in the marketplace and the knowledge they need to acquire by other means. Such a grassroots level investigation is important because it will help to design focused interventions that respond directly to the knowledge need.

This study investigates the market knowledge of Ethiopian pastoralists. This study explores the knowledge the pastoralists have regarding the livestock market and the knowledge they lack, the latter of which disfavours them from seizing market opportunities by increasing livestock quality and market off-take rates. Ethiopia has the largest pastoralist population in East Africa (CSA, 2013), the region with the largest pastoralist population in the world (Homewood, Trench, & Brockington, 2012). The nearly 15 million Ethiopian pastoralists inhabit approximately 60% of the country's territory (World Bank, 2013) and contribute up to 35% to the country's agricultural gross domestic product (GDP) (Davies & Hatfield, 2007). Ethiopian pastoralists therefore turn the remote, harsh drylands into economically viable production environments (Ingenbleek et al., 2013).

The remainder of this study is structured as follows. First, it provides a background on the market integration of pastoralists. Then, this study describes market knowledge as a strategic resource for sustainable market integration; this is followed by the study method and results. This study finally provides the conclusions and implications for action and further research.

3.2. Market integration of pastoralists

The market integration of pastoralists is posited to provide several benefits to global markets, national economies and to pastoralists themselves. First, integrating pastoralists more with markets can facilitate the supply of livestock and livestock products that helps the global market respond to the globally increasing demand for animal-protein (Davies & Hatfield, 2007; Delgado, 2003). Second, this integration enhances the foreign earnings of national economies from livestock exports thus contributing to the national economic development (Davies & Hatfield, 2007). Third, pastoralists can sell (destock) and buy (restock) livestock to respond to recurrent droughts and climate variability, which are increasingly threatening their livelihoods (Little et al., 2001; 2008; Vrieling et al., 2016). Fourth, the cash obtained from selling livestock enables pastoralists to purchase food items, education for their children, medical services for their families and herds, and other consumer goods (e.g., mobile and radio) (Headey, Taffesse, & You, 2014; Turner & Williams, 2003). Despite these perceived benefits, studies are reporting that the remote and traditional pastoralists are not taking full advantage of the market opportunities that have been created (e.g., Little et al., 2014; Rugadya, Oboikol, & Kamusiime, 2005; Verbeke et al., 2009). In Ethiopia, for example, existing export abattoirs are reported to operate at less than half of their installed capacity due to the supply shortage of export quality animals (Teklewold et al., 2009). Thus, the livestock potential from pastoralists is not exploited to reduce poverty and ensure food security (Verbeke et al., 2009).

The research that investigated the reasons that impede pastoralists from taking advantage of market opportunities predominantly focuses on post-production factors (Little et al., 2014), including the absence of roads, marketplaces, holding grounds, quarantine standards, and the information communication tools that facilitate sales (e.g., Barrett, 2008; IFAD, 2009; Teklewold et al., 2009) and the frequent animal rejection at marketplaces for low quality (e.g., McPeak & Little, 2006; Rugadya et al., 2005). The barrier for pastoralists to successfully integrate with markets can be explained by their remoteness, which hampers their learning and their use of knowledge about the market environment and the value chain members. This barrier renders it more difficult for pastoralists to respond to the demand for the consistent and timely supply of quality livestock to the export market. Because their remoteness deprives the pastoralists from acquiring up-to-date knowledge from the external environment, they may have no option but to build on and consistently exploit the experience and knowledge they have learned from their community within their neighbourhood.

At a more fundamental level, the literature on social cognition indicates that social influences, such as community and family orientation and education, build and modify the cognitive abilities or the knowledge of individuals through modelling, instruction and social persuasion (e.g., Bandura, 1989; Heckman, 2006). In contexts where productive resources that facilitate the flow of and exposure to knowledge and information are limited, communities orient their children to capitalize on local knowledge, passing knowledge from one generation to another, which leads to specialization in a specific economic activity (e.g., Narayan et al., 2000). Communities in productive resource scarce environments teach their children to develop knowledge that enables them to survive in that environment (e.g., Narayan et al., 2000). Consistent with this, a research conducted among Turkana pastoralists in northern Kenya also reported that pastoral families teach their children (sons) to have large herd sizes to accumulate wealth, secure food and marry more wives to have more children (McCabe, 2004). Other studies also report similar findings that pastoralists learn (from their ancestors) to increase their herd size (livestock asset building, which is fully based on a production orientation) as a sign of social status and as insurance against drought, animal disease and raiding (e.g., Bellemare & Barrett, 2006; Hesse & MacGregor, 2006; Johannesen & Skonhoft, 2011). In this respect, community and family orientation (i.e., the social influences) shapes the behaviour of remote pastoralists to remain specialized in an economic activity that the pastoral community has carried out for generations. Pastoralists thus may exploit the knowledge that is developed from what is known in their community to support their behaviour of building herd size; because they have minimal opportunity to develop market knowledge through exploring external sources to obtain a better understanding about market phenomena.

Knowledge shapes the perceptions, goals (aspirations) and expectations of people, with the aspirations and expectations shaping and directing behaviour (e.g., Bandura, 1989; Narayan et al., 2000; Wilcock et al., 2004). People empowered with knowledge of what to do (“know-what”), why doing the task is appropriate (“know-why”) and how the task should be done (“know-how”) in their domain accomplish tasks for a productive life (Hiebert, 1986; Narayan, Pritchett, & Kapoor, 2009). The business literature also states that businesses that possess strategic and higher-order knowledge use their knowledge to scrutinize the market environment and interpret market information to develop and market products that meet the expectation of customers (e.g., Kim & Atuahene-Gima, 2010; Marinova, 2004). The same literature conceives market knowledge as a strategic resource to understand what customers

value and to create offerings that meet the expectation of customers (e.g., Glazer, 1991; Slater, Olson, & Sørensen, 2012).

3.3. Market knowledge: A strategic resource for sustainable market integration

Whereas creating an enabling institutional environment by building roads, marketplaces, and information communication facilities has been identified as important to facilitate the market integration of pastoralists, this study takes a business perspective to understand the knowledge barriers that undermine the efforts of remote pastoralists to raise livestock according to market requirements. We bring market knowledge as a complementary approach that can also lead to an effective use of roads, marketplaces and information communication facilities. Market Knowledge provides an understanding of the market phenomena, what the customer needs and what to do to respond to what the customer needs. From a business perspective, the customer is the judge who evaluates the products and makes decisions regarding whether to buy products that provide equal or higher benefits or to reject products that provide benefits below expectation (Woodruff, 1997). Because it is the logic of market exchange that buyers purchase products if they expect to derive benefits, it also holds true in the buying-selling relationship between the livestock buyers (customers) and the pastoralists. Livestock buyers, such as exporters, purchase animals from pastoralists if they find that the animals possess the attributes (breed, age, weight, and health) that importers seek and are willing to pay for.

The business literature asserts that, to develop the product that buyers are willing to repeatedly purchase and to sustain their linkage with the producers, producers need to have knowledge regarding what the customers desire to obtain from purchasing and using a product (Slater, 1997; Woodruff, 1997). Importantly, the producers that acquire and possess broader knowledge about the market phenomena such as how the market operates and the objectives of market exchanges, the market dynamics, such as changes in customer preferences and adjustments in export-import policies, and the actions of competitors, consistently adjust their products to customer preferences (Glazer, 1991; Kim & Atuahene-Gima, 2010). Market knowledge that refers to a systematically developed and stored understanding of the market phenomena therefore guides producers to make profitable production and marketing decisions (e.g., Glazer, 1991; Kim & Atuahene-Gima, 2010). In this respect, pastoralists that develop knowledge about how the livestock market operates and what livestock buyers want to obtain from purchasing livestock are likely to raise commercially viable livestock.

Market knowledge is based on the knowledge of concepts, facts and procedures (sequential production and marketing activities) referred to as the know-what, know-why and

know-how (Bollinger & Smith, 2001; Grant, 1996). According to the knowledge-based view (Grant, 1996), *know-what* refers to the knowledge about concepts and facts such as what is the market, what determines the price of a product and what do customers want from the purchase of a product (Bollinger & Smith, 2001; Lundvall & Johnson, 1994). Businesses with knowledge of such underlying concepts and facts understand that a market consists of a heterogeneous interacting set of parties involved in the process of facilitating market exchange (Burnett, 2008; Kotler & Keller, 2012). Such broader understanding of the market enables pastoralists to utilize alternative mechanisms to trade their products and to influence the different parties such as individual brokers and traders and institutions that facilitate transactions (Kotler & Keller, 2012). The researchers also recognize that the product attributes, the changes in demand for and the supply of similar products as well as the adjustments in government policies determine the price of a product, enabling them to make informed decisions to take advantages of favourable market conditions or to survive unfavourable ones.

Know-why refers to the knowledge about the logic of why things should be done, such as why businesses should be customer-focused (e.g., Grant, 1996). Know-why is a higher-order knowledge that provides a fundamental understanding of the principle underlying the existence of businesses. Businesses exist to satisfy customers and thus to make a profit (Slater, 1997); this also holds for pastoralists as far as they participate in market exchanges. *Know-how* entails the knowledge of how things are actually done (e.g., how do customer-focused businesses create offerings that respond to changing customer preferences) (Clarke, 2001; Sinkula, 1994). Such knowledge of important sequential activities that customer-focused businesses undertake is relevant for pastoralists to realize which activities are first and which are next to consistently align products to customer needs (Flint, 2004; Webster, 2002). Customer-focused businesses first assess the market, select specific customers to serve and define what these customers value in specific product attributes (Flint, 2004; Lanning & Michaels, 2000). These businesses then procure inputs for production and develop the products according to the predefined attributes (Webster, 2002). Finally, the businesses communicate the product attributes and deliver the products to the pre-specified customers through an appropriate channel in a suitable time (Flint, 2004; Lanning & Michaels, 2000).

The capacity of pastoralists to integrate with and benefit from the livestock market can greatly depend on their knowledge and understanding of the market phenomena and the interpretation and translations of those phenomena to their livestock production and marketing business to consistently align their livestock to the preferences of livestock buyers. However,

there is no evidence about what the pastoralists really know in this regard and what knowledge they need to focus on market-focused livestock production and marketing business. Therefore, we conducted a study that provides qualitative responses to the following research questions: a) What do pastoralists understand about the market and how it functions? b) Do pastoralists understand the logic why to know what the customer wants? And c) What do pastoralists know about how to respond to what the customer wants?

3.4. Research cases and methods

3.4.1. Research cases

To find answers to the research questions, we conducted a qualitative study in three pastoral regions in Ethiopia: Borana, Middle Awash (Afar), and Shinile (Somali) (see Figure 3.1). In these regions, pastoralism supports 86-95% of the population's livelihood (CSA, 2007). The regions are prone to erratic rainfall and recurrent drought, which trigger feed and water shortages, as well as food and social insecurity. The regions differ in how remote they are from central markets, cities, trade routes and Ethiopia's export-import outlet/inlet, as well as in the existence/absence of large private and governmental investments with the high potential to influence the flow of knowledge and information. The regions are thus selected as comparative cases to understand and explain how pastoralists in less remote (Middle Awash and Shinile) and pastoralists in more remote (Borana) areas differ in their market knowledge.

The Borana region is far from the central markets and has very few large-scale agricultural projects. Borana pastoralists pursue a less diversified livelihood, with pastoralism as the main source of livelihood. In this region, pasture (the main input for raising livestock) is more available compared to the two other regions. Borana pastoralists are known for having large herds of a cattle breed that is fertile and suitable for beef production (Haile et al., 2011; Zander & Mburu, 2013). This finding makes Borana an important source of supply for livestock traders, fattening operators, slaughterhouses and exporters who strive to respond to the growing demand for animal protein.

The Afar region is characterized by an arid and semi-arid climate with low and erratic rainfall, with a mean annual rainfall as that has decreased to 150 mm and a higher average temperature of as much as 48°C. The Middle Awash of Afar, the area selected as one case in this study, is close to the central markets and is crossed by a main road and a railway that connects Ethiopia with Djibouti, Ethiopia's export-import outlet/inlet. In this area, large scale state farms and the commercial irrigation of cotton plantations exist; these provide Afar pastoralists an opportunity to frequently interact with investors to obtain broader and up-to-

date information regarding the market and employment opportunity. Middle Awash pastoralists also engage in income generation activities other than livestock selling. These pastoralists largely engage in charcoal production, which is supported by FARM-Africa (a non-governmental organization) to clear a thorny, shrub tree, named *Prosopis juliflora*. Locals call this tree the *devil tree*; it was introduced approximately three decades ago to afforest the arid lands of the region but resulted in negative impacts by invading and destroying the scarce vegetation available for pasture. Charcoal traders from large cities including Addis Ababa and Adama visit this area on nearly a daily basis to collect charcoal.

The Somali region, specifically the Shinile zone, is a lowland, arid area with 95% of the population engaged in pastoralism (SCUK & DPPA, 2008). Shinile zone is close to Dire-Dawa, one of the big Ethiopian cities, Djibouti and Somaliland. Shinile pastoralists sell livestock in and purchase food items and consumer goods from Dire-Dawa and have close interaction with Djibouti (Devereux, 2006). This area is also a route for the oldest and most vibrant informal cross border livestock trading (via Djibouti and Somaliland) (FAO, 2014b). In addition to selling livestock and livestock products, Shinile pastoralists generate income from charcoal production by selling to consumers in Dire-Dawa and Djibouti (8 of 10 of our interviewees produce and sell charcoal).

Our study of the three regions provides us with insights to reflect on the current livestock production and the marketing practice of Ethiopian pastoralists. In addition, importantly, the less remote contexts of Middle Awash and Shinile situated near large cities and Ethiopia's export-import route, on the one hand and the more remote Borana with minimal interaction with the central market, on the other hand, allow us to provide a comparative perspective on the know-what, know-why and know-how.



Figure 3.1: Regions included as cases in this study

3.4.2. Research methods

Field data were collected through triangulated methods of personal observation, individual interviews and focus group discussions. To first understand the current livestock production and the marketing practices of pastoralists, we personally observed the grazing areas and the marketplaces to witness the herd size, the composition and feeding, trekking animals to marketplaces; we also observed to whom pastoralists communicate with in the marketplaces and how they deal with brokers and traders. We also interviewed pastoralists on how they decide and select animals to sell. Experts (#10) were also approached to reflect on the livestock production and the marketing practices of pastoralists; they also reflected on the Ethiopian livestock value chain.

Data on the know-what, know-why and know-how of the pastoralists were collected through in-depth interviews and focus group discussions based on a structured case study protocol (Yin, 2003). With regard to know-what, pastoralists were requested to explain what the livestock market means to them, who operates within the livestock market and in what role, and what are the quality attributes that different livestock buyers (exporters, fattening operators or slaughterhouses) seek. Know-what also includes the pastoralists' knowledge on what determines the prices of animals. The know-what questions assessed the pastoralists'

abstract and factual understanding of the livestock market, the forces that cause livestock prices to change (market dynamics) and the specific attributes of target buyers of livestock.

Questions pertaining to know-why investigated the understanding of pastoralists of the underlying reason regarding why considering the livestock attribute preferences of buyers during the livestock reproduction process is important. Know-why questions also assessed the pastoralists' knowledge regarding why knowing how other livestock suppliers respond to the demands from livestock buyers is important to their livestock production and selling decisions. The questions on know-how focused on how market-oriented livestock producers scrutinize the livestock market phenomena, select specific livestock buyers they can profitably serve, and produce and market animals that specific buyers are willing to buy and pay for. Interviews on the know-what, know-why and know-how were conducted with 25 Borana, 10 Middle Awash and 15 Shinile pastoralists; 50 pastoralists in total. Key informant pastoralist selection was based on the principle of saturation in which an additional interview no longer provides new information (Eisenhardt & Graebner, 2007; Mason, 2010). Interviews with pastoralists were largely conducted around settlements and grazing areas; a few were conducted around marketplaces. Marketplace interviews were conducted early, before peak market hours, or at the end of the market day to avoid infringing on the pastoralists' core business. In addition to the interviews, we conducted three focus group discussions (one in each region) that consisted of an average of six to eight participants in each group. Each group discussion took, on average, one to one and half hours (Morgan, 1997). All interviews and discussions with pastoralists were conducted with the support of development agents (DAs) and employees of a local organization to easily bypass traditional hierarchies (from clan leaders to ordinary pastoralists), easily bridge communications and to minimize the stranger effect. The interviews and discussions on know-what, know-why and know-how were focused on obtaining responses to the research questions.

Finally, we conducted interviews with other actors from the Ethiopian livestock value chain including livestock brokers and traders (#10), fattening operators (#3), and meat and live animal exporters (#5) to obtain their opinions and reflections on the livestock quality and supply from pastoralists and the challenges these actors encounter to obtain the quality and quantity of livestock they want. Each interview lasted approximately 45 minutes to one hour. All interviews and group discussions were recorded and transcribed nearly exactly to capture the true feelings, the knowledge and the challenges of the pastoralists. We utilized a content analysis approach by identifying the quotes from individual informants that contain key words that pertain to the know-what, know-why or know-how (see Table 3.1 for illustrative quotes).

Chapter 3

The quotes were then coded as know-what, know-why or know-how. Subsequently, we combined all quotes based on their respective codes for each region and summarized these into specific findings of the three types of knowledge. Finally, we compared the findings between the less remote areas of Middle Awash and Shinile regions on the one hand and the remote Borana region on the other hand (Table 3.2).

Table 3.1: Illustrative Quotes from Pastoralists, Traders, Fattening Operators, and Experts

Know-what	<p>‘I always trek and sell my animals in Dubuluq. It is about 5 hours trekking from here (the village the pastoralist lives in)’ (A Borana pastoralist).</p> <p>‘I have contact with traders from Djibouti and Somaliland. I usually ask them when they will come to Dire-Dawa and Babile and what type of animals they will buy’ (A Shinile pastoralist).</p> <p>‘What pastoralists usually know is selling their animals when they need cash. Most pastoralists wait for the regular market days to sell their animals’ (A fattening operator).</p> <p>‘Pastoralists understand very obvious facts like the fixed marketplace as means of exchange. In the past when drought hits the pastoralists, the government offices have been sometimes arranging direct contact between traders and pastoralists, and they force the pastoralists to sell animals to the traders to avoid losses. It was a forceful quota system, and this can tell you that pastoralists don’t consider it as a trading mechanism. In response to your question on which pastoralists are more knowledgeable about the market, I would definitely say Shinile (Somali) and then Middle Awash, but they don’t have enough resources to attract the market’ (An expert from SOS Sahel).</p> <p>‘I have been researching the situation of pastoralists for several years now. If you approach Borana pastoralists and ask them about rich people in their clan, they can explain to you the name of every rich pastoralist’s number of animals, the number of lactating cows he has, and even their colours. But they don’t know the value of his animals in terms of the market. Regarding awareness, Somali (Shinile) pastoralists are more aware about the market, but Borana pastoralists have a huge market potential’ (An expert from the Pastoralist Forum Ethiopia-PFE).</p>
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Table 3.1 (Continued)

Know-why	<p>‘Why do you ask me to think about people living in cities (customers)? I am a pastoralist raising livestock. Of course, I sell animals, and I get money. We don’t ask buyers for money for free’ (A Borana pastoralist).</p> <p>‘I have been frequently facing rejections of my animals in the marketplace. I don’t know why traders reject my animals. You have to ask the traders why they reject our animals’ (A Borana pastoralist).</p> <p>‘Why should I know how others produce and supply livestock? I don’t compete with anyone’ (A pastoralist from Middle Awash).</p> <p>‘Our customers, especially exporters, demand the supply of livestock with specific attributes (weight, height, age and sometimes colour). Pastoralists usually don’t know why they should care about the history (age) of their animals and at what age to sell their animals. I travel a lot to visit several marketplaces to obtain the required quality and quantity of livestock’ (A trader).</p> <p>‘Pastoralists continue to practice the traditional way of herding livestock they inherited from their ancestors. They focus on building herd size. To purposely focus on the market is not yet in their mindset’ (An expert from Mercy corps).</p>
Know-how	<p>‘I choose an animal depending on the cash I need. I only sell an ox if I need more cash to buy heifers for reproduction, cereals and cloths. I sell goat if I need to buy small things like kerosene, and pens and pencils for my children’ (A Borana pastoralist).</p> <p>‘I don’t think pastoralists know the detail market-oriented activities to reproduce livestock for market. Pastoralists focus on production activities for themselves, not for the market’ (An expert in SOS Sahel).</p> <p>‘Pastoralists are very traditional and largely focus on increasing herd size. I don’t believe they know what activities to undertake to produce commercially viable livestock’ (An expert from FAO).</p>

3.5. Results

Figure 3.2 presents the current traditional livestock value chain that flows from pastoralists as primary producers to the export markets in Ethiopia and then to international markets. The value chain incorporates several members, including brokers, traders, hotels, fattening operators, and slaughterhouses, as well as meat and live animal exporters, at different stages of market exchanges. Knowing what roles these members play in the market, the interdependence among chain members, what the subsequent chain members require from the preceding member(s), and why and how to respond to their requirements are useful to produce and supply what customers value. Producing and supplying products according to the requirements of the chain members strengthens and sustains relationships with the chain members, and thus enables them to satisfy the needs of end-consumers through collaborative and coordinated efforts (Kothandaraman and Wilson, 2001; Porter, 1985). In the following subsections, we first describe the findings we obtain from our personal observations and from the interviews with pastoralists and experts on the current livestock production and marketing practice of Ethiopian pastoralists. Next, based on the findings from the interviews and the discussions with pastoralists on the know-what, know-why and know-how, we discuss how the remote Borana pastoralists differ in their market knowledge from the less remote pastoralists of Middle Awash and Shinile (Table 3.2). This section will be followed by a description of the reflections we obtained from the livestock chain members including pastoralists on the consequences that emerged from the knowledge gap among pastoralists.

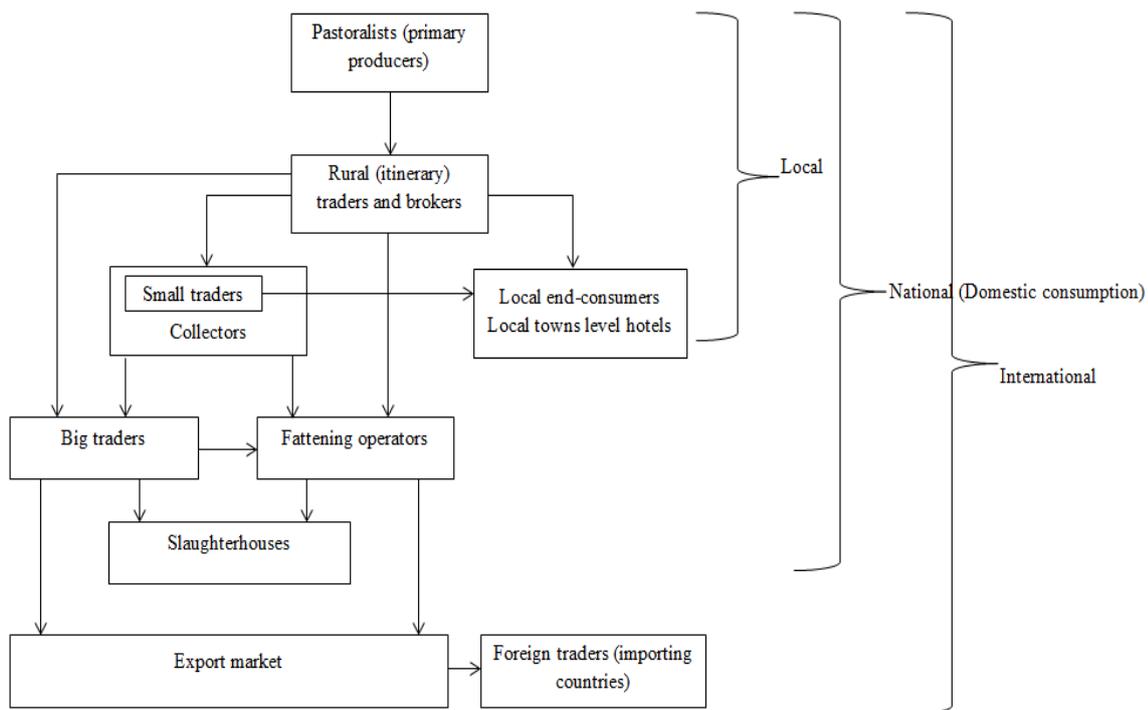


Figure 3.2: Ethiopian traditional livestock market chain

Table 3.2: Summary of findings by region

	Borana	Shinile/Middle Awash
Know-what	They usually devote much of their time to reproducing livestock in the remote grazing field. They recognize the routine of selling livestock in the fixed marketplaces or selling to rural traders on the way to the marketplaces.	Because of their interaction with nearby cities, charcoal traders and buyers from Djibouti and Somaliland, they have a relatively broader understanding of the livestock market compared to Borana pastoralists. Shinile pastoralists are better in recognizing alternative means through which they can gather market information and trade animals.
Know-why	They understand minimal regarding why they should consider the interest of buyers during livestock production. Knowing how other livestock suppliers assess and respond to livestock buyers is not a concern for Borana pastoralists.	They relatively recognize why they should be concerned about the preferences of buyers, but they do not understand why they should focus on the actions of other livestock suppliers. They do not understand the essence of competition.
Know-how	For most Borana pastoralists, knowledge is more on asking for price, choosing the animal that can be sold at or equivalent to the estimated amount of the household expenditure and meeting the broker to negotiate on their behalf.	These pastoralists, especially in Shinile, recognize more market-oriented activities including asking hotel owners about their interest, buying from markets, stall fattening cattle and then selling to the hotels.

3.5.1. *Current livestock production and marketing practices of Ethiopian pastoralists*

The current livestock production and marketing practices reveal that the majority of Ethiopian pastoralists primarily raise livestock (cattle, goats, sheep and camels) to increase herd size as a reflection of social status and for nonmarket values (wealth in physical stock). The livestock raising and managing practices of pastoralists is primarily destined to fulfil their needs, for example, milk production for household consumption. Pastoralists focus more on female animals because milk production is their major source of food. One can easily observe in the places where their livestock are corralled that many pastoral households have high percentage of female animals in their herd composition (for some pastoralists, as much as 80 to 85%). Pastoralists restrict grazing areas to feed lactating cows while the remainder move over long distances to search for pasture and water to ensure sustainable milk production and herd reproduction. A Borana pastoralist noted ‘I have a few cows settled here to produce milk for the family. My other herds are far from here; it can even take me two days to find them’. Herd mobility is increasing periodically due to erratic rainfall and recurrent drought that force rangelands to deteriorate, which, in turn, leads to the reduction of milk production (also see the report, Feed The Future, 2015).

The evidence from our interviews with pastoralists and experts shows that declining milk production forces pastoralists to use the livestock markets more to sell livestock to obtain cash to purchase food items. Most pastoralists decide the type of animals (goat/sheep, cattle or camel) they should sell largely based on the amount of cash they need to cover their expenditures rather than on market conditions that cause the price of animals to increase or decrease. Because the majority of pastoralists sell animals to satisfy their cash needs, the frequency and number of livestock market off-take is low (this is very low during the wet seasons as milk production is sufficiently high to feed a household). The experts we interviewed explained that although traders are not interested in drought stricken, thin and undernourished animals, pastoralists often become desperate to destock more livestock during the dry season to avoid losses. The experts noted that low market off-take rates during the wet season and high death rates during heavy droughts continue to shrink the herd size of Ethiopia pastoralists.

3.5.2. *Market knowledge among pastoralists: Know-what, know-why and know-how*

From the insights on the current livestock production and marketing practices and the findings from the know-what, know-why and know-how interviews with pastoralists, as discussed in this subsection, the capacity of pastoralists to successfully and sustainably participate in the

livestock market is beyond developing physical resources such as roads and marketplaces. Although roads and marketplaces are necessary, they are not sufficient for pastoralists whose mindset is oriented to reproduce livestock for nonmarket values, such as obtaining social status. The explanation of the findings on know-what, know-why and know-how discloses that the majority of the pastoralists, most importantly Borana pastoralists who have a high potential of marketable cattle breeds, lack the mindset that incorporates why they should be so concerned about the needs and interests of customers during livestock reproduction.

Know-what

In the context of pastoralists, a *livestock market* is any mechanism (e.g., a fixed physical place, a direct personal contact, a negotiation with buyers or an arrangement through non-governmental organizations (NGOs), government offices, experts, families, friends or brokers) that allows livestock sellers and buyers to interact and effect exchanges. Thus, market exchanges can be effectuated through multiple interaction mechanisms that allow the pastoralists and livestock buyers to have unrestricted access to each other and that enable buyers to influence the livestock production in response to their current and future demands. For Borana, what most pastoralists know and consider when trading their livestock is the regular market days in fixed marketplaces. For most of the Borana respondents (88%), the term ‘market’ means a fixed physical place where many people gather to buy or sell goods. These pastoralists explained that they usually trek their animals over long distances to sell them in the nearest marketplaces. One Borana pastoralist, for example, defined a market as ‘Dubuluq’ (the name of a marketplace with Friday as a regular market day). The pastoralist further explained, ‘I always sell my animals in Dubuluq. Other marketplaces are very far from our village.’ For Awash and Shinile, pastoralists have a relatively broader understanding of the livestock market. Importantly, Shinile pastoralists recognize a market as trading livestock in fixed marketplaces with cross-border traders and directly selling to hotel owners in Dire-Dawa and Djibouti. In this regard, one Shinile pastoralist noted, ‘I sell cattle in Babile (a nearby marketplace that is frequently visited by cross border traders via Somaliland and Djibouti) and have regular contact with and supply goats to Hotels in Dire-Dawa. I also know collectors who usually contact me one week in advance to prepare and supply sheep and goats to the rail route travelling from Dire-Dawa to Dewelle (Ethio-Djibouti border)’.

Livestock prices in Ethiopia change because of changes in the domestic demand for meat (usually due to consumers’ income changes, fasting, animal disease outbreaks, or government tax impositions), cross-border trade, supply (surplus or shortage) from producers, as well as consumer demands in importing countries and changes in the regulations of the

importing countries. Borana pastoralists are more aware of the obvious facts such as the regularly occurring local Christian and Muslim fasting and holidays. Our respondents in Borana noted that they usually feel the price changes; however, they have minimal understanding of the factors that cause the change. For Shinile, pastoralists are relatively more aware that, in addition to the regular fasting and holidays, demand from buyers from Dire-Dawa, Djibouti and Somaliland, and cross-border government control (tight or loose) cause the price of animals to change (increase or decrease). Despite the evidence from our interviews with traders, fattening operators, exporters and experts shows that the different buyers in the Ethiopian livestock value chain have their own specific preferences on livestock attributes, most pastoralists recognize that buyers are traders of a similar type. Most of the respondents in Borana responded to our question, ‘what different livestock buyers do you know?’ as, ‘I know the buyers are daldalaas (a Borana translation for traders)’. Pastoralists in Middle Awash and Shinile differentiate buyers as traders selling via or to Djibouti and Somaliland (export), retailers (hotels and slaughterhouses) and end-consumers buying goats and sheep.

Know-why

Exploring and acquiring knowledge from the market environment about the livestock value chain members is very difficult for the remote pastoralists who are isolated from accessing productive resources such as education and communication facilities and less informed by the market. Although it is difficult for almost all pastoralists to comprehend the logic of why it is important to consider the interest of livestock buyers during livestock production, it is more difficult for the more remote Borana pastoralists. In contrast to Middle Awash and Shinile pastoralists who frequently meet with charcoal traders, central market traders and those trading to Djibouti and Somaliland, as well as to those who interact with large hotels in large cities such as Dire-Dawa, remote Borana pastoralists have minimal knowledge regarding why they should consider the needs and interests of buyers during livestock production. In response to the question ‘Do you know why you should consider the interest of buyers when you raise your livestock?’, one pastoralist in Shinile explained, ‘Hotels in Dire-Dawa reject my goats if I do not supply the goats with the required weight and height’. Conversely, a pastoralist from Borana replied, ‘We are pastoralists raising livestock for ourselves. Daldalaas give us money by taking our livestock in return.’ For the remote pastoralists who usually spend much of their time reproducing livestock in the grazing fields, the livestock are important to the satisfaction of their own interests (i.e., milk production and social status);

they do not consider buyers' interest that could have guided their livestock production while raising the livestock.

With regard to whether knowing how other livestock suppliers respond to the preferences of livestock buyers, the pastoralists do not recognize it as competition from existing and potential livestock suppliers and as substitutes that livestock buyers may consider. Pastoralists know that there are others who supply livestock to the market, but they do not consider them as their competitors. The majority of the Borana pastoralists (92%) and the Middle Awash and Shinile (80%) do not sense and recognize rivalry although it exists. The pastoralists' responses to our question 'Do you consider highland farmers as your competitors?' was 'No, they are not our competitors. They do their own job and we do ours. We have our own separate fates and chances; they cannot take the chance that is already meant for us'. Competition, in the context of pastoralists, completion regards learning how other livestock suppliers respond to market requirements and strive to use such understanding as the input to produce high quality livestock for the market. The fact that pastoralists do not understand competition, regardless of whether they are less or more remote, can be explained from the customary rules they have developed for generations to support each other and not to compete over the scarce natural resources needed to survive in the harsh environment.

Know-how

On the knowledge of important sequential activities to produce and market livestock that buyers are willing to buy and pay for, pastoralists are more familiar with the production-oriented and selling activities ("make and sell") such as raising the animals and selling when cash is needed. The customer-oriented activities of assessing the livestock market, selecting specific buyers to serve, defining livestock attributes in specific terms and reproducing livestock to respond to the needs of the buyers ("sense and respond") are nearly unknown to the pastoralists. Pastoralists know that they can gather price information by visiting marketplaces, by asking brokers from their clan and by discussing this with clan members who have been to the marketplaces. Pastoralists gather price information not to strategically use the information to leverage by responding to price trends but for immediate consumption to obtain the cash they need to cover immediate expenditures.

Comparatively, Middle Awash and Shinile pastoralists are more aware of the sequentially important production and marketing activities needed to produce and market commercially viable livestock. For example, Shinile pastoralists list more activities they know such as visiting the marketplaces to know what type of animals have high demand, asking traders about the demand for cattle, sheep and goats in Djibouti, Somaliland and the Middle

East, asking hotel owners about their interest, and buying fodder and animals for stall fattening and resale. In contrast, the listings of most Borana pastoralists focus on choosing animals that can be sold at or equivalent to the cash they need, trekking the animals to the marketplaces and contacting brokers to negotiate for favourable prices on their behalf.

Overall, despite the knowledge differences that arise from locational advantage (remoteness), pastoralists understand more obvious and physical facts about the livestock market. Pastoralists' knowledge entails what they have acquired through every day experiences and repeated actions, as well as what they have learned from their ancestors. A higher-order and more abstract understanding regarding the manner in which the livestock market functions, and most importantly, regarding why the livestock buyer (the customer) is the most important stakeholder to consider while reproducing the livestock is not captured in the pastoralists' livestock production mindset. Consequently, it is commonplace to hear pastoralists complaining about the livestock market on the one hand, and traders, fattening operators and exporters complaining about the quantity and the quality of the livestock supply from pastoralists on the other hand.

3.5.3. Reflections from livestock value chain members

Pastoralists complain that they benefit less from their market participation. The pastoralists complain that they encounter frequent rejections of their animals in the marketplaces or dispose of their animals at lower prices. One pastoralist in Borana explained, 'After travelling long distances to the marketplaces, we want to sell our animals and return back to our settlements on time. But buyers often offer lower prices for our animals that we hoped to sell at better prices. We have no option other than selling. We cannot trek them back over the long distance'. Another pastoralist in Middle Awash exclaimed, 'I have no answer why I sold my best ox at a price that cannot even buy enough food for my family for Sugum (an Afar translation of the short (rainy) season of March to April)'. Pastoralists barely recognize that what is the best ox for them may not necessarily be best for the buyers. For example, pastoralists can consider a fattened, castrated ox as good quality, but castrated and old animals are not needed by exporters that pay higher prices. The pastoralists usually put the blame on the brokers and traders and rarely assume that their production-oriented business model is the reason for the lower prices and the low-quality animal-motivated rejections.

Pastoralists' blame of brokers and traders holds true for post-production, specifically for the ability to bargain for prices. Well-informed brokers and traders occasionally use ruses, psychological games and communication signs that pastoralists barely understand to

communicate pricing or to mislead pastoralists. We observed that pastoralists become victims of the communication artifices and psychological games. In Borana, for example, we observed a trader using three brokers offering different prices to a bull of a pastoralist. The first broker offered a higher price, and subsequent brokers undermined the quality of the animal and offered sequentially lower prices. Because the pastoralist did not understand the ruse, he rejected all subsequent prices and waited for other buyers to offer him a better price; however, no one offered him a price above that of the first broker. Late in the afternoon, only the broker who offered the lowest price appeared; he knew the pastoralist was desperate to sell his bull and return to his settlement before sunset. Experts substantiated our observation that such a ruse and other unethical business dealings that exploit pastoralists are very common. Although pastoralists believe that brokers cheat them, the pastoralists' lack of knowledge to envisage alternative selling means, to influence negotiations in the marketplace or to have greater certainty regarding future sales by bypassing brokers force them to utilize these familiar brokers. For example, we found binding sentences such as, 'I usually contact the brokers from my clan and whom I've known for many years. I don't contact other brokers even when I feel I didn't get the right price'.

Traders, fattening operators and exporters also express their dissatisfaction for the current production and marketing practices of pastoralists. Traders complain that their efforts to bridge the members of the livestock value chain are full of challenges due to the shortage of quality and quantity in the supply of livestock from the source. The complaint from traders can be summarized as, 'We serve the demands of livestock from different buyers with different requirements. The supply from producers including pastoralists doesn't account for buyers' requirements and is not in volume. Pastoralists sell animals largely when they need cash. This makes our job challenging because we have to visit several local marketplaces to collect the volume and quality of livestock that our buyers want'. Fattening operators also state that the shortage of quality livestock supply, and other issues, provides an uncertain future for their business. Fattening operators usually buy young and skinny animals with high fattening (increase both in weight and height) potential to feed and fatten for resale for domestic and international consumption.

In the area, we visited and where many fattening operators are concentrated, fattening operators primarily focus on fattening cattle and goats. These fattening operators prefer a cattle breed named '*Boran*' (with Borana pastoralists as the main source of this breed) and similar breeds from other low land areas; this includes cattle from the Bale lowlands and goats from Afar and Somali. Boran cattle breed is ascertained as a fast growing and quality beef

breed compared to other indigenous cattle breeds in Ethiopia (e.g., Haile et al., 2011). Borana pastoralists, however, largely reproduce this breed for milk production and high social value. Fattening operators complain that they are operating under capacity primarily because of the supply shortage of such livestock. A fattening operator in Modjo (a town approximately 70 km far from Addis Ababa and where many of the fattening operators are concentrated) noted, ‘I have the capacity to fatten 1,000 to 1,500 bulls over a period of three months, but I only have 120 bulls in stock as we couldn’t find the right quality and quantity livestock from the market’. Fattening operators explain the shortage of quality livestock as, ‘We often face age, muscularity and genetic problems. Producers don’t bring animals at their right age for fattening’.

Exporters also echoed their dissatisfaction with the current livestock production and marketing practices of pastoralists. The evidence from our interviews with exporters indicates that importing countries that usually purchase Ethiopian livestock prefer uncastrated, young (with an average age of 2.5 to 3 years), fattened, healthy and (most often hornless) male animals. However, obtaining livestock that exactly fulfil these attributes in large volumes at once is challenging. Pastoralists do not maintain history data on their animals, for example, age and health data, as they do not purposely reproduce the livestock for market. An exporter in Adama (the terminal market) explained, ‘My interaction with importers is increasingly becoming less frequent as importing countries are increasingly becoming strict in food quality and safety while there is no change in livestock quality in the source’. The consequence is that small quantity and low quality livestock supplier pastoralists sell their animals to small and rural traders at local markets at lower prices. The pastoralists subsequently lose profits and then pursue the poverty life. Empowering pastoralists with the knowledge that can help them to broaden their thinking horizon to understand the market can enable them to recognize the benefits of raising livestock purposely to satisfy the demands of the market and to earn profits.

3.6. Conclusion and implications

This study set out to find answers to research questions that include understanding pastoralists’ knowledge of the livestock market, whether pastoralists comprehend the logic why to know what the customer wants and whether they know how to respond to what the customer wants. Ethiopian pastoralists largely understand the livestock market as a fixed physical place with regular market days for sellers and buyers to meet and transact. These pastoralists rarely recognize markets as a mechanism with different actors and respective roles

to facilitate transactions between trading partners. These pastoralists also rarely recognize the relevance of considering the needs and interests of buyers during livestock reproduction. Instead, the majority of the pastoralists attempt to sell animals that they produce primarily to satisfy their own needs and interests, which is building herd size to ensure sustainable milk production and gain higher social status. Pastoralists rarely know how to strategically scrutinize the livestock market phenomena with the intention to align livestock reproduction to respond to the changing preferences of livestock buyers. We thus contend that developing physical infrastructure is necessary but not sufficient for the successful and sustainable market integration of pastoralists. Beyond removing physical distance, pastoralists need knowledge that reorients their isolated mindset to incorporate an expanded perspective on how the market operates and the logic regarding why customers decide and are (un)willing to invest their money to purchase products. With such marketing-based livestock production mindset, pastoralists can productively use the infrastructure to frequently sell animals that buyers are willing to purchase.

The comparative analyses reveal that less remote pastoralists have more opportunities to explore and acquire knowledge from the market environment, which enables them to recognize market opportunities and to align their livestock to what buyers are willing to spend their money on. Frequent interactions with buyers enable the less remote pastoralists to build experiences regarding the quality attributes of the animals that buyers seek. Conversely, remote pastoralists who spend much of their time in the remote grazing areas have minimal opportunities to learn from the external environment because of their limited interaction with market actors and institutions. Due to the limited flow of knowledge and the information from the market environment, remote pastoralists exploit the knowledge they have learned from their family and from the community orientation that supports livestock asset building. Pastoralists thus are rarely customer-centric or aware of customers during production.

The capacity of the pastoralists to expand their thinking horizons to envision beyond the status quo to incorporate a market-based mindset can be stimulated through empowering them with market knowledge. We therefore suggest that, in their policies and projects, policy makers and development workers consider building pastoralists' market knowledge. One option to facilitate market knowledge development among pastoralists is to create an opportunity for pastoralists to easily interact with and learn from subsequent members of the livestock value chain. Thus far, the development literature has provided insights on developing infrastructure such as roads and information communication facilities to allow information to flow among market actors (e.g., Barrett, 2008; Verbeke et al., 2009).

Constructing roads and information communication facilities can reduce the barriers that undermine the livestock value chain members', including pastoralists, efforts to frequently interact. Developing infrastructure, however, takes long periods and requires the allocation of capital budgets with long-term effects. Focusing on infrastructure to facilitate market knowledge development over shorter periods will slow the undertaking of other recurrent and important activities that compete for scarce resources in developing countries such as Ethiopia. Policy makers and development workers should therefore seek complementary approaches such as marketing training that they can offer within their recurrent budgets to help remote pastoralists develop market knowledge over a relatively shorter period.

Marketing training is a specific element of education that conveys new market knowledge or that modifies and/or expands the market knowledge and the learner attitudes of learners or helps to maintain level of competence to respond to new developments and changing circumstances, and it enhances productivity (e.g., Goldstein, 1993). Because education shapes the minds of people by teaching fundamental concepts to develop foundational knowledge that will help them to process information to make logical and strategic decisions for a better future (e.g., Bostrom & Sandberg, 2009; Heckman, 2006; UNESCO, 2006), marketing training can equip pastoralists with a fundamental knowledge of how the livestock market functions and the reasons to consider the preferences of livestock buyers. Teaching fundamental marketing concepts such as markets, exchanges, customers, market dynamics, competition and value creation can acquaint the pastoralists with this fundamental marketing knowledge (e.g., Kotler & Keller, 2012).

This study investigated the market knowledge gap among pastoralists. Further research could study how to effectively teach the low-literate pastoralists to acquaint them with market knowledge so that they can focus on market-based livestock production to earn profits and to lift themselves out of poverty. Because pastoralists have their own traditional means of transferring knowledge over generations, such as metaphors and storytelling, further research could identify teaching methods and investigate how the methods from educational literature can be integrated with the pastoralists' traditionally structured methods to convey new knowledge. Studying and documenting the knowledge gap and the methods suitable to teach the low-literate, traditional pastoral community could serve as an input to designing training interventions that empowers pastoralists to adjust their livestock to reap sustainable market-based economic benefits.

4

Moving Towards New Horizons for Marketing Education: Designing a Marketing Training for Pastoralists

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Abstract

In recent years, marketing education has broadened to poor people in developing and emerging countries. In this chapter, the authors use four empirical studies that apply well-established training design procedures to design a marketing training program for Ethiopian pastoralists. Because pastoralists operate in extremely remote, traditional, and sparsely populated regions of developing and emerging markets, the training complements trainings for the poor applied in urban areas of these countries. As such, the chapter provides implications for training program designers on how they can adapt the training program procedures to other contexts, thereby making marketing ideas accessible to a large and important new target group for marketing education.

Keywords

Developing and emerging markets, poverty, pastoralists, customer value, marketing training

4.1. Introduction

In line with a broader movement to teach business and entrepreneurial skills in developing and emerging (D&E) economies (cf. McKenzie & Woodruff, 2013), marketing education has broadened to new target groups in D&E countries (cf. Rosa, 2012). There is a huge potential demand for such training because millions of low-literate individuals are trying to generate an income from marketplaces each day without knowledge that is vital to managing and influencing the ever changing, increasingly complex and confusing marketplace exchanges (Viswanathan, Gajendiran, & Venkatesan, 2008; Adkins & Ozanne, 2005a). For these people, running their own business is not only a way to survive but is also a potential way out of poverty (Karnani, 2007). To that end, Bloom et al. (2013) find that a knowledge gap hinders entrepreneurs in D&E countries from acquiring the management skills needed for business survival and growth. Such a knowledge gap logically has negative consequences for employment, productivity and economic growth.

Because education can remove this barrier, training in different kinds of management practices becomes increasingly important in D&E countries (McKenzie & Woodruff, 2013). The International Labour Organization, for example, runs a program that has already trained 6 million participants during the last 15 years (ILO, 2014). The ILO and others include marketing with other business competences in one training. Although there are some trainings that specifically focus on marketing, in particular the Marketplace literacy program in urban Chennai, India (Viswanathan, Sridharan, Gau, & Ritchie, 2009), studies on designing marketing training programs are still scarce. Designing such training is, however, a complex task because while “the next four billion” people in D&E countries living at or near subsistence levels have some common characteristics (see Rosa, 2012; Ingenbleek, 2014 for reviews) they are also highly heterogeneous (Burgess & Steenkamp, 2006). The ways in which people cope with the scarcity of resources may vary strongly among localities, such as urban, peri-urban, rural and remote areas. The training needs, the learning objectives and concepts logically will vary between contexts that can be extremely different from each other.

In this study, we design a marketing training program for pastoralists in East Africa using step-wise training design procedures (e.g., Kirkpatrick, 1975). As such procedures are not context-dependent, they can be used to design trainings in a wide range of contexts including that of pastoralists. Pastoralists are people with a mobile lifestyle. The nearly 200 million pastoralists worldwide (IFAD, 2009) move with their herds of cattle, camels, goats and/or sheep to make efficient and sustainable use of common grazing lands. The context of pastoralists is particularly suitable for this purpose because they are found in extremely

remote, sparsely populated, traditional and dry rural areas. As such, this context forms a contrast with the marketplace literacy training developed for the urban and densely populated context of Chennai (Viswanathan et al., 2009). The new training therefore shapes a range of potential applications between the two extremes. Once the program has a formally designed basis, others can more easily adapt it to the specific subsistence conditions for which they intend to design a training.

In the remainder of this chapter, we first give a brief overview of marketing trainings for the poor, followed by a discussion of design techniques for marketing trainings. Based on these techniques, we discuss the methods and results of four empirical studies through which the training is step-by-step designed. We finish the chapter with a general discussion and concrete implications for the trainers or course designers who aim to take the training to new horizons.

4.2. Marketing trainings for the poor

Business training receives a growing interest in D&E countries to empower the low-income, low-literate individuals in D&E countries to better understand the market environment, create their own opportunities and gain control over their roles in marketplace exchanges (e.g., de Mel, McKenzie, & Woodruff, 2014; Mano, Iddrisu, Yoshino, & Sonobe, 2012; Viswanathan et al., 2009; Dunford & Watson, 2008). The trainings reflect a growing interest of business researchers in the impoverished parts of D&E countries. From a business strategy perspective, Prahalad (2005) approached low-income people as consumers with untapped purchasing power and suggested that the expansion of multinational companies can achieve profitability while alleviating poverty by providing products and services to these consumers at affordable prices. Viswanathan et al. (2009) took a different approach by defining the poor both as consumers to whom to sell and micro-entrepreneurs from whom to buy and focused on the importance of training aimed at empowering the poor.

Table 2.1 (in chapter 2) presents an overview of existing business and management trainings for entrepreneurs in D&E countries. The training programs share a set of common topics, including financial literacy (e.g., record-keeping, financial planning, as well as separating household and business finance), costing and pricing, inventory management and the steps needed to take a product to market (McKenzie & Woodruff, 2013). Several of the studies report that business and entrepreneurship programs support entrepreneurs in improving their business knowledge (Gine & Mansuri, 2012), applying business practices (de Mel et al., 2014), and improving their business performance (Mano et al., 2012).

While the business training programs and the topics covered are important to acquire or improve business knowledge and performance, they primarily focus on general business topics (McKenzie & Woodruff, 2013). As can be seen from Table 2.1, column 3, the majority of the business training programs is also offered to entrepreneurs in urban areas who more likely have access to education and educated people, formal businesses and media than people in rural areas (World Bank & IMF, 2013). Despite the general business focus of the programs, marketing's fundamental understanding that the customer should come first, seems weakly incorporated. One exception is the marketplace literacy program designed by Viswanathan et al. (2009) for the urban context of Chennai, India. Marketplace literacy refers, in that respect, to the knowledge and ability to accomplish marketing tasks to get one's needs met (Viswanathan et al., 2009; Adkins & Ozanne, 2005b). While the trainers of the program make their methods and materials kindly available to others, a more systematic study on training design may further strengthen the quality of marketing trainings as either stand-alone programs or as part of broader business trainings in D&E countries.

4.3. Designing training programs

A training is any planned activity intended to convey new, to modify, and/or to expand knowledge, skills and attitudes of learners or maintain levels of competence to respond to new developments and changing circumstances, as well as enhance productivity (Arthur, Bennett, Edens, & Bell, 2003; Goldstein, 1993). Schlee and Harich (2010) state that marketing training can be designed to equip learners with knowledge and skills to serve different purposes and levels, including (but not necessarily restricted to) entry-, lower-, middle-, and upper-level jobs.

For a training program to become effective, the training literature suggests to put substantial thought and effort in planning and design (e.g., Kirkpatrick, 1975; Kraiger, McLinden, & Casper, 2004). Training programs become effective in delivering new insights and knowledge if they are designed to account for prior knowledge and practice of learners (Halpern & Hakel, 2003; Angelo, 1993). This is because such trainings guide the learners to acquire new knowledge by connecting to what the learners know and do at the start of the training, as well as help learners to store the new knowledge in long-term memory to easily retrieve it when they need it (Angelo, 1993; Tannenbaum & Yukl, 1992). Furthermore, learners acquire and store knowledge better if training programs are designed to be learner-centred and engaging by incorporating visual, demonstrational and learning-by-doing exercises (Clarke, Flaherty, & Yankey, 2006; Grossman, Salas, Pavlas, Games, & Rosen,

2013; Knowles, Holton, & Swanson, 2014). Following guiding steps provides in that respect a structure to decide on what to incorporate, who should be trained and what methods to employ to training targeted participants (Salas & Cannon-Bowers, 2001).

Kirkpatrick's (1975) ten-step program is still one of the most popular ways to systematically design an effective training program (Tamkin, Yarnall, & Kerrin, 2002). The steps include (1) assessing the training needs, (2) defining the learning objectives, (3) outlining the subject contents, (4) selecting participants, (5) determining the training schedule, (6) selecting appropriate facilities, (7) selecting appropriate trainer(s), (8) selecting and preparing audiovisual aids, (9) coordinating the program, and (10) evaluating the program. As these steps are not dependent on a particular context, they should also help to design training programs for the poor, including our study context.

For our purpose to design a marketing training program for Ethiopian pastoralists, we combine some of these steps in one study (see Figure 4.1). First, we conducted a qualitative study to assess the marketing training needs of pastoralists. Next, we formulate initial learning objectives on the basis of fundamental marketing concepts to convey the knowledge that pastoralists need to align their products to market requirements. Then, we conducted a study to concretize and contextualize the learning objectives, ensuring that they connect with the existing knowledge and interpretation schemes of pastoralists. Subsequently, we conducted a study to identify and validate suitable pedagogical methods to convey the learning objectives. Finally, participants selection, recruiting trainer, training schedule and coordination were accomplished when the complete training protocol was tested. We discuss these steps in the following sections.

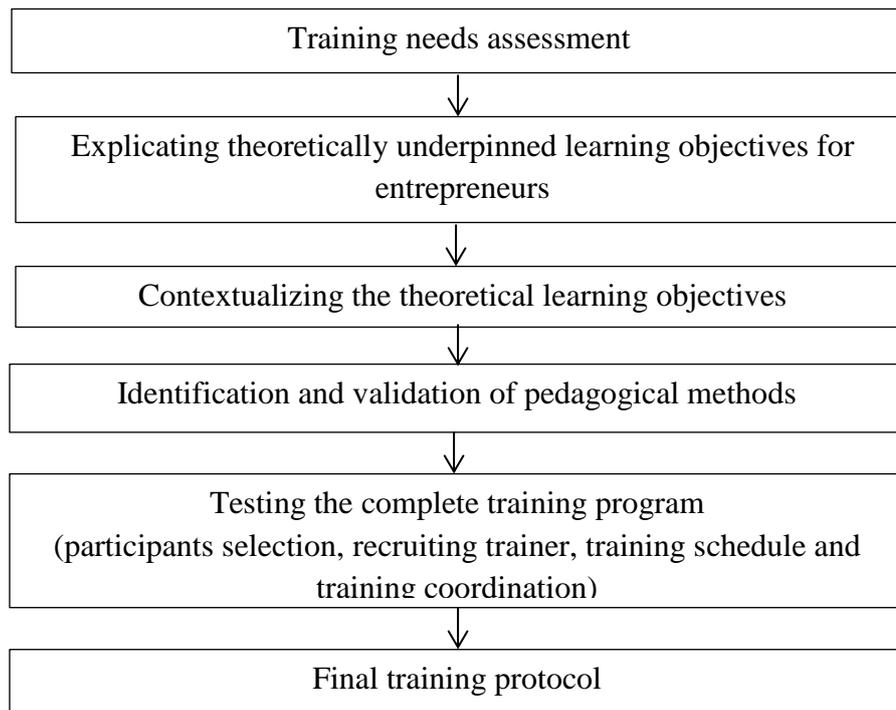


Figure 4.1: Explicating the theoretical foundation and contextualization of training learning objectives (based on Kirkpatrick, 1975).

4.4. Assessing the marketing training needs of pastoralists

Method

To understand the training needs of pastoralists, we conducted a needs assessment study in three pastoral regions in Ethiopia, namely Afar, Borana and Somali. Because pastoralists live to a large extent isolated from the market, they are often unable to articulate their own learning needs. We therefore derive the learning needs from a bottom-up, contextual understanding that we created from the existing literature and by revisiting qualitative data that we collected during previous studies. In 2009 we visited three different pastoral regions in Ethiopia where we conducted interviews with 64 pastoralists, 54 other chain actors (like traders, brokers and slaughter houses), as well 13 experts. We also conducted fourteen focus groups with 5 to 8 pastoralists and we observed marketplaces and companies in the livestock chain. This round of data focussed on the market integration of pastoralists in general. Another round of data collection in 2013 focussed more specifically on the market knowledge of pastoralists and included interviews with 50 pastoralists and three focus group discussions of six to eight participants each. We also did 18 interviews with chain parties and visited ten experts.

Results

The training needs of pastoralists are rooted in the fact that their context is deprived of productive resources such as infrastructure and education relevant to broadening the thinking horizon and to embrace new developments. Pastoralists operate in extremely remote areas that isolate them from the other value chain actors. Unlike the densely populated urban contexts where well-networked people continuously exchange information (Fafchamps, 2001), pastoralists are distant from one another, which makes retrieving information from the network more difficult (Ingenbleek, Tessema, & van Trijp, 2013). Because they occupy marginal agriculture lands, raising livestock using a mobile lifestyle is essentially the only sustainable business opportunity (Nori, Kenyanjui, Yusuf, & Mohammed, 2006). To survive in the harsh environment, pastoralists have developed strong customary rules that shape community members' relationships, information exchange and use of common resources (WISP, 2007). Although the pastoralists have some relationships with local and national governmental bodies, they largely administer themselves by drawing on their cultural values, norms and traditions (WISP, 2007). To ensure the continuity of traditions, clan leaders inspect members' conformity to norms, and they enforce these by social pressure and sanctions.

We observed that pastoralists are usually in the grazing fields with their herds, where they fully devote themselves to reproducing their livestock to increase their herd size. They have limited exposure to and interaction with the external environment, the “non-pastoral world” as pastoralists call it. As such, they have built their own traditional knowledge that helps them to build their herds. Pastoralists increase the size of their herds because it gives them a higher social status and because the animals provide milk, which is a key component of their diets. The pastoralists thus primarily raise livestock to fulfil their own needs and don't consider buyers' preferences in their livestock production; implying that customer consideration is almost absent from their production-oriented model. When pastoralists are in need of cash to purchase food items, and cloths or to pay for education for their children, they trek their animals from the grazing fields over long distances to sell them on regular market days in fixed marketplaces.

While pastoralists know these marketplaces and the practices that they observe there, they rarely consider other mechanisms (e.g., direct contacts and phone calls with traders) to trade their livestock. One pastoralist, for example, replied to our question ‘Where and how do you sell your animals when you do?’ ‘I always sell my animals in Dubuluq (a physical place in Borana region), the marketplace built and arranged for us by the government. Other marketplaces are very far from our village’. The choice of the animals that they offer for sale

is mostly based on the cash that they need to cover their estimated expenditure. It is not based on assessment of buyers' preferences, livestock supply from others or other market conditions that influence livestock prices. Pastoralists are not aware that traders' decisions to buy or reject animals also depends on the livestock production and supply by others (e.g. farmers and commercial producers). 92% of those involved in this study replied to our question 'Do you consider highland farmers as your competitors?' as 'No, they have their own life and fate, and we have our own life and fate'. Their livestock selling choice and decision thus is rarely supported by knowledge from the external sources about the market phenomena that could help them to take advantage of favourable market conditions or avoid the unfavourable ones.

In the marketplaces, the pastoralists are confronted with better-informed and educated buyers who may take advantage of their superior understanding on the functioning of the market, the market phenomena and price. In the marketplaces that we visited, we observed that pastoralists rarely try to directly communicate with livestock buyers. They rather contact brokers from their own clan to find buyers for whatever animal they supply and negotiate for price on their behalf, because they fear that well-informed livestock traders can take advantage of them with their superior knowledge and negotiation abilities. One pastoralist noted 'Traders and brokers are shrewd in bargaining and they try to make things fuzzy for us so that we accept their description of the quality of our animals and the price they offer'. Pastoralists communicate with brokers from their own clan on the basis of trust and honesty. They have inherited these values from many generations before them as strong customary rules and social obligations for their collective well-being. Brokers and traders, however, sometimes exploit the situation to their own advantage and use communication signs, psychological games and tricks to deceive pastoralists. Because pastoralists rarely understand the communication signs and tricks, or are less empowered to challenge the brokers, they have little influence on the marketplace dealings. We showed a sign to a pastoralist that traders frequently use to communicate with brokers on how much price to offer to the pastoralists, he said 'I don't know what it means'.

As pastoralists' interaction with the market occurs through brokers and is limited to the fixed marketplaces, they have less opportunity to meet and know the different livestock buyers who operate at different stages of the livestock value chain. They thus lack the bigger picture of the livestock value chain. Pastoralists therefore need a marketing training that acquaints them with the basic knowledge of what a market is, how it functions and why they should consider the needs of livestock buyers as a basis for breeding and raising livestock. A better understanding of how competition from other livestock suppliers and unethical

behaviours of buyers affect their negotiation position, and ultimately the price, would also help to be more successful on the market. Responsiveness to such knowledge would in turn help the pastoralists to improve their livelihood performance and decrease their poverty.

4.5. Explicating theoretically underpinned learning objectives

While the training needs assessment helps to understand the knowledge gaps of pastoralists, marketing theory may help to select the content for the training. Consistent with recent ideas from the literature on marketing's contribution to development (Ingenbleek, 2014), we formulate learning objectives that are both contextually meaningful and theoretically underpinned by moving from the "bottom up" and from the "top down" (see Table 4.1). The top-down process starts in that respect from generally applicable marketing principles that can later be contextualized. To come to learning objectives at the level of generally applicable principles, we draw on customer value theory (Woodruff, 1997). This perspective suggests that if businesses integrate resources and develop value propositions with the aim to satisfy customers, they will be rewarded with among others higher sales, willingness to pay and customer loyalty (e.g., Woodruff, 1997; Kotler & Armstrong, 2012). As such, it may help to lift pastoralists out of poverty.

Educational psychology literature asserts that teaching basic concepts to students enables them to develop the mental abilities, relevant to understanding the world around them, solving problems, logical reasoning and making informed-choices (e.g., Bostrom & Sandberg, 2009; Rittle-Johnson, Siegler, & Alibali, 2001; UNESCO, 2006). Comparable to educational psychology, the marketing education literature asserts that the aim of marketing education is to build a knowledge base and to equip learners with critical thinking, ability to integrate abstract concepts with concrete phenomena and logical reasoning to make critical decisions and accomplish their tasks (e.g., Petkus, 2007; Schibrowsky, Pltier, & Boyt, 2002). To build the knowledge base, 'students must obviously understand the basic marketing concepts' (Henke, 1985, pp. 59).

These concepts are *market*, *market exchange*, *market dynamics*, *customer-centric business*, *competition*, *marketing instruments*, and *value chain* (Kotler & Keller; 2012; Burnett, 2008). We further add *business ethics*, which is essential for balancing profit making and satisfying customer needs (de George, 2011). Understanding *market* as a heterogeneous interacting set of parties involved in the process of facilitating market exchanges (Kotler & Keller, 2012; Burnett, 2008), for example, can make pastoralists think about their transactions in a more systematic way, covering the exchanges in physical market places and the

exchanges they make along their way to the marketplaces. Understanding *market dynamics* will help entrepreneurs to scrutinize the changes in customer preferences, supply of products and price changes, thus enabling them to survive unfavourable market conditions and seize opportunities. A learning objective on *customer-centric business* will help pastoralists to organize their livestock production with a focus on customers and undertake value-creating and value-delivering activities to outperform the competition. In the embedded context of D&E marketplaces in which the cultural norm is to maintain the status quo that ensures everyone's survival, the notion of *competition* may easily be overlooked though it exists in some form (Ingenbleek et al., 2013). In the livestock market, for example, competition exists, in that highland farmers, fattening operators, commercial cooperatives and pastoralists supply similar products.

Understanding the *marketing instruments* is important for pastoralists and other entrepreneurs to make decisions on what product (attributes) to offer to customers, how to communicate and how to make the product easily accessible as well as affordable to customers (Kotler & Keller, 2012). Understanding *value chain* as a series of actors—from input suppliers to producers and processors to intermediaries and final consumers—can help the pastoralists to see the bigger picture of their transactions and to cooperate and work in coordination with subsequent chain members (Vitale, Giglierano, & Pfoertsch, 2011). A learning objective on *business ethics* will make pastoralists (who depend on ethical values of trust and honesty) aware that transacting parties from the modern market may not be as ethical as the pastoralists are. It acquaints the pastoralists with the understanding of their rights and responsibilities as sellers to influence marketplace exchanges, and to understand and respond to unethical behaviours (psychological games and tricks from brokers and traders). The learning objective can also help pastoralists to identify and create linkage with ethical livestock traders who live up to their promises.

Table 4.1: Explicating theoretically underpinned learning objectives

Training components	Learning objectives
<i>Market</i>	Participants understand the concept of a market as a mechanism through which goods and services are traded.
<i>Market exchange</i>	Participants understand the concept of market exchange and that a mutually agreed exchange of products can be effectuated at any place and time.
<i>Market dynamics</i>	Participants understand the interdependent factors that influence their production and marketing decisions and practices and can take them into account when making production, selling and pricing decisions.
<i>Customer-centred business</i>	Participants understand the customer-focused philosophy of conducting business and the customer-centred sequential business activities.
<i>Competition</i>	Participants can identify the different types of competitors and can compare the value they offer with their own offerings and marketing activities.
<i>Marketing instruments</i>	Participants understand the marketing instruments and how the value offered to customers is effectuated with these instruments.
<i>Value chain</i>	Participants can oversee the value chain activities and exchanges that occur at different stages of the chain from production to consumption.
<i>Business ethics</i>	Participants are aware that mutually beneficial exchanges translate to ethically good business.

4.6. Contextualizing the learning objectives

Learners easily capture new insights if learning objectives are concretely and meaningfully connected to what they already know and do (Halpern & Hakel, 2003; Angelo, 1993). Raising livestock has been the prime activity of pastoralists for thousands of years. They therefore give meaning to their life and interpret any matter that comes to them from the outside world by linking to their livestock. Because this way of thinking is fundamentally different from that of marketing educators, we conducted this study to check whether and how our learning objectives (Table 4.1) can be connected to the existing frames of interpretation of pastoralists.

Method

We discussed the learning objectives with 50 pastoralists (in individual interviews) in Afar, Somali and Borana pastoral regions in 2013. In addition to these interviews, we discussed the learning objectives with three focus groups that consisted of six to seven pastoralists. With the help of development agents in each region, we recruited pastoralists who are willing to participate and capable of reflecting and providing feedback on the learning objectives. We used pictures and posters of, among others, money, livestock buyers and mobile phones for communication and information sharing with brokers, traders and other livestock suppliers, to explain the concepts. Experienced translators who all have a pastoral background and tertiary education levels facilitated the discussions with the pastoralists. Interviews lasted 40 minutes to one hour, while group discussions lasted between one and two hours.

Results

The interviews and discussions helped to further concretize and contextualize the concepts and learning objectives to the livestock economy (Table 4.2, left column). In all three regions, we observed that the participants became submissive and repeatedly waited for further explanations. They tried to avoid discussion on some concepts, signalling that they had nothing to say or reflect on the concepts. Because pastoralists do not recognize livestock production as business, our respondents were reluctant to discuss on *customer-centred livestock raising business*. Initially, they argued that they are not business people and that business has no connection to what they do. One respondent, for example, explained ‘This is not our issue, we are pastoralists raising livestock; you should discuss it with those who run hotels in Yabello (name of a nearby town)’.

In discussing the *market* concept, they related it to their common knowledge of a fixed physical marketplace they usually visit on regular market days, as mentioned in the study for

needs assessment. Livestock traders and exporters, however, understand livestock market as a mechanism (e.g., marketplaces, directly contacting potential livestock sellers or linkages through NGOs and government offices) that facilitates trading livestock. As pastoralists also faced difficulties in quickly capturing other concepts, we simplified the concepts by relating them more to livestock raising and selling and to the benefits of customer-centred livestock production. Concretizing the concepts into specific livestock production and marketing practices also facilitated subsequent interviews and discussions because it minimized confusion, communication gaps and misunderstanding between us and the participants.

Pastoralists strive to achieve collective well-being and sustainable use of physical natural resources. As such, as stated in the section on training needs assessment, they lack a sense of competition. The discussion on competition helped to understand how pastoralists can capture the concept. We explained competition as information sharing about the livestock market and learning from others by discussing and observing what they do to tailor their products to the requirements of livestock buyers. We also found that pastoralists understand the meaning of competition when they become aware that there are other suppliers of livestock, including highland farmers, commercial cooperatives, and fattening operators.

Pastoralists also feared that customer-centred livestock production can lead to overexploitation of pasture and water and thus increase profits at the expense of the ecological sustainability of the commonly-shared grazing lands. An interpretation that would suggest that customer-oriented pastoralists can freely overexploit natural resources if buyers ask them to violate pastoralists' strong customary rule of protecting common resources for their collective well-being. The feedback from the participants helped us to carefully interpret the learning objective as creating a long-term relationship with customers to consistently meet the needs of the customers. We emphasized that a long-term commitment to satisfy the needs of customers cannot be achieved without a long-term commitment to protecting natural resources (because to satisfy customers in the future with high-quality livestock the grazing lands should still be in a good condition).

Table 4.2: Contextualized and pilot-tested learning objectives

Contextualization of training program components	Teaching method	Module
<p><i>Market</i>, in the pastoral context, refers to the <i>livestock market</i>. A livestock market is any mechanism (e.g., fixed physical marketplaces and direct contact through phone calls, NGOs, government offices, families and friends or brokers) that allows livestock buyers and sellers to interact and effect exchanges. Livestock refer to the products of pastoralists, including cattle, camels, goats, sheep, yaks, horses, llamas, alpacas, reindeer and vicunas; varying according to the climate, natural resources and geographical area where the pastoralists operate (IFAD, 2009).</p>	<p>Guided two-way oral and group discussions and presentations.</p>	<p>Day-1</p>
<p><i>Market exchange</i>, in the pastoral context, is buying or selling livestock through any mechanism (marketplace or privately with specific buyers).</p>	<p>Guided two-way oral and group discussions and presentations.</p>	<p>Day-1</p>
<p><i>Livestock market dynamics</i>: the changes (and trends) in livestock prices due to changes in the demand and/or supply of livestock and the availability of livestock traders, changes in livestock traders' preferences for other products or changes in government policies.</p>	<p>Guided two-way oral and group discussions; simulated scenario (in groups, participants gather information about the quantity demanded and supplied, they forecast prices based on available market information, and they make production and selling decisions).</p>	<p>Day-1</p>
<p><i>Customer-centred livestock raising and selling</i>: a livestock business that raises livestock to satisfy the needs of targeted livestock buyers. The job of the livestock producer is raising the right livestock based on a sufficient understanding of what the buyers require of the livestock (in terms of type, breed, colour, height, age and weight), not finding the right customer for whatever is produced.</p>	<p>Pictorial arrangements of business components (including money, customer, livestock, and production factors) to observe which elements the participants prioritize; simulated market scenario using two producers: a customer-oriented producer (a good quality product in picture, sold at a better price) and a traditional producer who selects and supplies from what he has (make and sell).</p>	<p>Day-2. An integrated part of everyday discussion.</p>

Chapter 4

Table 4.2 (continued)

<p><i>Competition:</i> in the pastoral context, competition refers to the existing and potential supply of livestock from pastoralists, highland farmers, fattening operators and (cooperative) commercial producers.</p>	<p>Guided oral and group discussions on competition; pictorial presentation of competitors.</p>	<p>Day-2</p>
<p><i>Sequence of customer-centred livestock raising and marketing activities (know-how):</i> the sequences of activities required to raise and market livestock that meets buyers' requirements. This can include assessing the livestock market, identifying the attributes of livestock specific buyers look for, and raising and supplying livestock accordingly.</p>	<p>Video show; competitive group discussion and presentation; role-model sharing his production (storytelling) and marketing practices.</p>	<p>Day-3</p>
<p><i>Marketing instruments:</i> the livestock, livestock price, communication with buyers and livestock supply mechanisms to the livestock market.</p>	<p>Different products with their respective attributes in posters; group exercises in price setting and communication with potential buyers.</p>	<p>Day-4</p>
<p><i>Value chain:</i> a chain that starts with primary livestock production and proceeds to final consumption (end consumers); used as a summarizing map for the customer-centred livestock business. It shows how a focus on customers at the primary stage of production and collaboration with subsequent chain members affect the consumption of end users.</p>	<p>Value chain in posters (pictorial displays of range of activities from production to consumption), group exercises and discussion.</p>	<p>Day-5</p>
<p><i>Business ethics:</i> can refer to the values and principles that guide the dealings among all actors in the livestock value chain. Business ethics plays a critical role in such contexts due to weak or absent formal institutions that maintain law and order in the remote areas of pastoralists.</p>	<p>Paired dealings (one as informed trader and the other as seller), group exercise listing the ethical and unethical market behaviours of the dealing parties, and presentations.</p>	<p>Day-5. Part of everyday discussions.</p>

4.7. Identification and validation of pedagogical methods

Method

In this study, we aim to identify and validate suitable pedagogical methods that can effectively convey the concretized and contextualized learning objectives. We reviewed education and marketplace literacy literature to design pedagogically suitable training methods that enable to convey abstract concepts to low-literate people (e.g., Knowles et al., 2014; UNESCO, 2006; Viswanathan et al., 2008). Methods that seem suitable for teaching low-literate people were discussed with five pedagogy experts working in universities and community teaching centres in Ethiopia. The discussion with the experts focused on whether low-literate pastoralists can learn abstract concepts, and the experts were questioned on whether the identified teaching methods are pedagogically effective to enable the low-literate pastoralists to capture and integrate new knowledge with their existing practice. After incorporating comments from the pedagogy experts, we pretested the methods with the pastoralists from September to October 2014.

Pretesting the teaching methods was conducted in the Borana region. Compared to other pastoral regions in Ethiopia, the Borana region is relatively remote and is characterized by relatively low diversification (i.e., livestock raising is the predominant business). To recruit and interview the pastoralists, we worked with the Borana Zone Trade and Market Development (BTMD) office, which facilitates pastoral livelihood improvement and market integration packages. Two experienced employees of BTMD, who completed tertiary education and have a pastoral background, were employed to help us recruit the pastoralists and pretest the teaching methods. Twelve pastoralists were first invited in a training session to observe their comfort with and feelings towards the training methods. In this session, the trainer followed more of a one-way (lecture-type) form of communication. This first training session was followed by three others, each consisting of six to eight participants performing two-way (interactive) communication.

Results

The findings from our desk research suggest that low-literate people like pastoralists can learn concepts and new knowledge if they are presented through methods that are adapted to the participants' conditions and literacy constraints (Cohen, 2008; Rogers & Horrocks, 2010). We found from the literature that low-literate learners remember most from discussions and learn-by-doing exercises, and from using visuals, like pictures, flow diagrams, charts, and videos (Clarke et al., 2006; Grossman et al., 2013; Knowles et al., 2014). Also, the pedagogy experts

that we consulted noted that discussions with pastoralists need to take the form of socially structured oral dialogues, metaphors and storytelling because pastoralists use similar means to transfer knowledge over generations. The methods also need to create close social relationships, because in the pastoralist culture such trust-based relations are seen as important when sharing information. Pastoralists transfer information through proverbs, stories, and oral and verbal expressions. Accordingly, we designed pictorial presentations, guided oral and group discussions and presentations, role-model storytelling and video presentations to convey the learning objectives, promote active participation and effectively engage the participants (Table 4.2, second column). Participants were provided with a poster displaying a livestock value chain, and pictures were created to prioritize livestock production and marketing business components. In group exercises, the participants discussed the pictures and presented what they agreed upon (Table 4.2, cell of row 4, column 2).

During the first pretest with twelve participants, we observed participants facing difficulties to actively follow the explanations from the trainer. For example, after the trainer gave the lecture, he asked the participants ‘Do you understand what I mean?’ The participants replied ‘No, you said many things on your own’. As such, an oral one-way explanation of concepts and pictures from the trainer (a classroom lecture-type discussion) is less likely to be effective at conveying the learning outcomes. Thus, in the other sessions, we followed a two-way interactive and group discussion that helped us engage the participants and enable them to understand the concepts (e.g., Table 4.2, cell of row 1, column 2). Also, explaining the subject matter using local sayings and story-telling by a role-model who belongs to the participants enabled them to remain focused (Table 4.2, cell of row 7, column 2). Some methods also come with practical challenges. To explain the concept of customer-centred business activities, we decided to show a video that demonstrates the production and marketing activities of a customer-oriented pastoralist (Table 4.2, cell of row 7, column 2). This was challenging, as electricity is unavailable in the area. We therefore used solar energy and brought a generator in case the power from the solar system was too weak.

4.8. Pilot testing of the complete training program

The methods were incorporated in a complete training protocol that could subsequently be tested. The fourth study was conducted to test this complete protocol. It was aimed at ensuring the feasibility and likely success of the complete training protocol and obtain qualitative responses during the training days and during exit interviews or discussions. Finally, the study

aimed to identify any unforeseen and discomfoting factors that would potentially deter active participation and engagement in longer hours and consecutive training days.

Method

To test the complete training program and obtain qualitative results that promise a further quantitative experimental study, we continued our cooperation with the BTMD office and a test in a pastoral village in Borana. We selected the village with pastoralists who have sufficient level of market exposure to make the training program meaningful. With the help of two development agents in the village, twelve pastoralists who can benefit from their participation were recruited and trained for three consecutive days in March 2015. We consulted members of two development organizations (SOS Sahel and the FAO) that have experience in training pastoralists on conflict-handling and natural resource management for the feedback on the training schedule. Following their recommendations, we trained participants for five hours each day. Because pastoralists have to make sure that herds are assigned to grazing areas (early morning) and that they are all back safely to settlements at sundown, each training day was scheduled between 10:00 AM and 04:00 PM. We also exempted participants from 12:30 PM to 01:30 PM for lunch, to share information and to chew khat (a traditional stimulant). Major market days were avoided to allow the participants to visit the marketplaces. For pastoralists, visiting marketplaces is not only a matter of selling or buying things, it is also a social gathering to share and discuss socio-political issues like meeting relatives, arbitrating disputes and arranging marriages. For pictures taken during the training, see Figure 4.2.

A trainer who works at BTMD was recruited to train the participants. He has more than 20 years of working experience with pastoralists in different positions, including as a trainer. Currently, he is working as the head of BTMD and as a senior expert in market development to facilitate the market integration of pastoralists. He is also working as a part time technical adviser to the Borana office of SOS Sahel. The trainer had completed tertiary education and has a pastoralist background (shares their culture and language) and, he was, therefore, comfortable in using metaphors, traditional storytelling and other customs. To internalize the concepts and the overall objective of the study, he was also involved in the studies on training needs assessment, contextualization of learning objectives and pre-testing the teaching methods. The first author assisted the trainer in facilitating and coordinating the program. The trainer thus fully devoted his time on the training. Like Viswanathan et al. (2009), we covered

costs incurred during testing the program, expecting our participants to give us their time and attention.

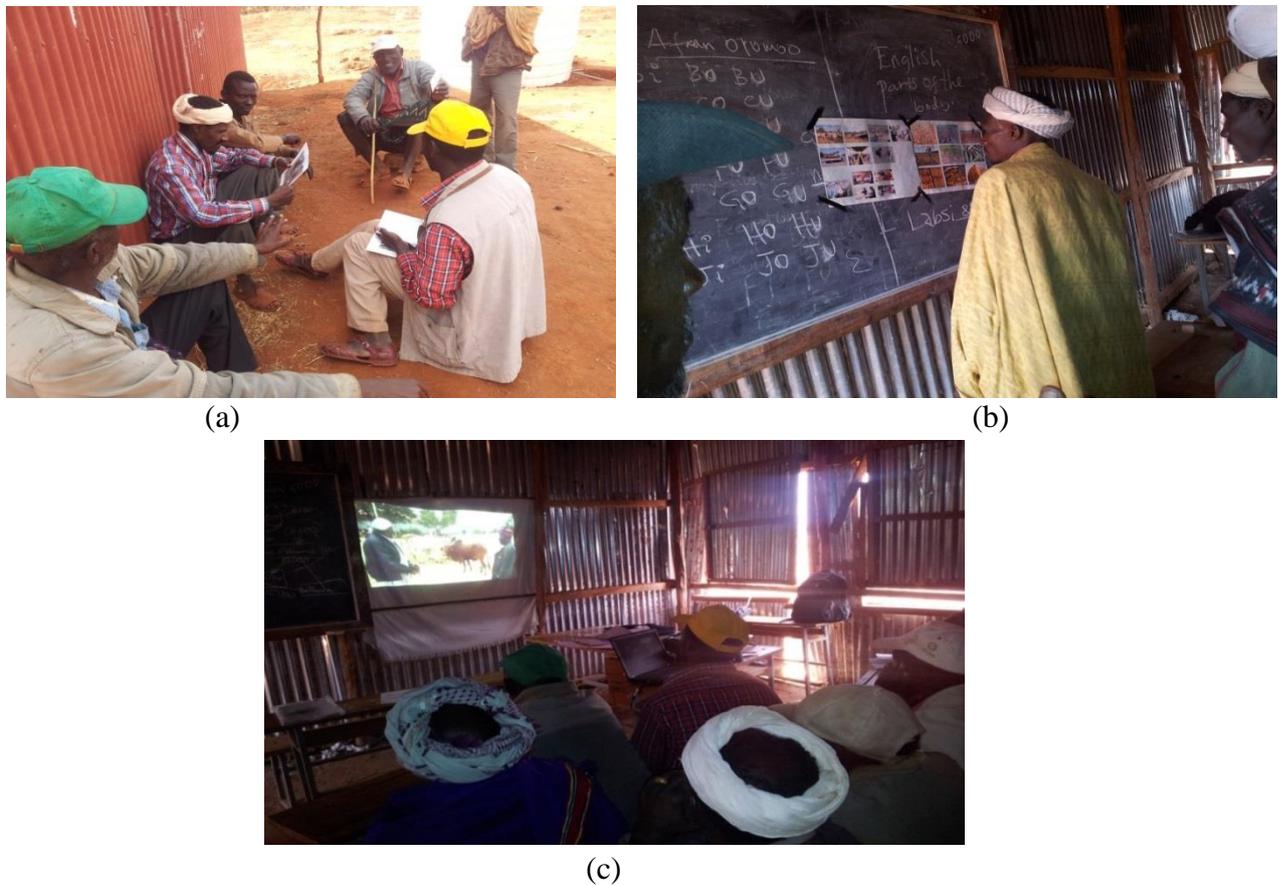


Figure 2: Pictures taken of participants during training. (a) Group discussion. (b) Studying the livestock supply chain poster. (c) Watching the video.

Results

During the training, we gradually observed that the participants started to recognize and internalize the concepts. Initially, the participants refused to recognize that they were conducting business, but the trainer stimulated discussion by explaining what business is. At the end of the discussion, the participants had come to a consensus that raising and marketing livestock is a business and that they are the owners of this business. This further triggered their interest in how they could conduct their business more successfully.

Many of the participants also held the belief that livestock is most important to them, followed by money, because it is their livestock that brings them money from selling. One participant exclaimed ‘It is our livestock that brings us money from the market; Daldalaas (traders) give us money by taking our livestock in return. Even the daldalaas pay us lower prices for our animals.’ Using this opinion as input, the trainer extended the discussed by offering practical examples. A case in point was the question, ‘Why are your livestock facing

frequent rejection in the marketplaces?’ After a long discussion, the participants concluded that the traders reject their livestock because they do not meet their quality requirements. Consequently, they agreed on the importance of focusing on the customer and adopted the terms “*customer-first*” and “*quality over quantity*” to guide the rest of the training discussions.

The methods used in the training helped to properly convey the learning objectives and relax the hierarchical relationship of pastoralists. For example, a poster used to present the livestock supply channel, which charted the path from the pastoralists to the final consumer, helped the pastoralists to see the flow of their livestock and the impact of their production activities in the value chain. After studying the value chain, one participant noted ‘It is clear from the picture that we have many who can buy our animals at several stages’. They also watched a video that showed the story of a successful pastoralist who changed his life for the better by undertaking customer-focused production and marketing activities (see Figure 2). Ice-breaking games also played a critical role in relaxing the hierarchy among pastoralists by making the participants to interactively participate and speak to each other. One ice-breaking game we used was a paired rotation discussion by dividing participants as sellers and buyers, with the sellers group holding pictures of animals (goat, ox, camel or sheep) to sell to the buyer group. Each buyer met with each seller to negotiate and buy an animal; this allowed participants to talk with each other.

At the end of the training session, exit interviews were held with the participants to learn how they experienced the training. One participant noted, ‘After watching the video, I realize now why my livestock have been rejected—it is because I do not prepare them for the market. I learned that I should raise my livestock through the eyes of the buyer.’ In the exit discussion, we also asked the participants whether it is important to offer such training to pastoralists. An elderly man answered the question using their local saying. He said: ‘Once there was a blind man who asked his God: “The day has passed unproductive, please give me someone who can make my night bright”, So this blind man asked his God to give him someone who can make his future productive. Providing a training like this to pastoralists is answering the critical question that the blind man was asking his God’. The responses obtained during the training session and exit discussion of this study promise that a rigorously designed marketing training program following formal steps can equip participants with insights and knowledge that may help them to improve their living conditions.

4.9. Implications for training designers in other subsistence contexts

Marketing has a long tradition of developing marketing trainings for people in the advanced markets with knowledge and abilities that help them to perform marketing activities in the rapidly changing global markets. However, the rapidly changing global markets are also affecting the lives of people in more remote areas of D&E countries. Marketing training therefore helps to empower these people to survive in and benefit from the markets. This study has designed a training program for the extremely remote, sparsely populated, and highly traditional rural context of pastoralists. The pastoralist context provides an interesting contrast with the densely populated, urban contexts, for which Viswanathan et al. (2009) developed their training. Below we provide concrete advice on how to design training programs to a range of other subsistence contexts in Africa, Asia and Latin America that lay somewhere in between the two extremes. We present these lessons in Table 4.3.

The first advice for training designers is to initiate their training design process by assessing the problems and challenges (the knowledge gap) that entrepreneurs in subsistence contexts encounter to run value-creating and profit-making businesses. The training needs can logically differ depending on factors like access to resources, exposure to institutions and competences they have developed as well as on their traditions and ways of coping with their environment. The ability of the entrepreneurs to sort and communicate their needs is also likely to depend on such factors. Entrepreneurs in dynamic, fast-growing and rapidly urbanizing areas are for example more merited to broaden their thought horizons and to develop responsive behaviour because of their exposure to education, educated people, companies and media (Dahiya, 2012; UN-HABITAT, 2010). As such, they are more capable to understand and concretely tell what they need in order to improve their job performance. In this situation, a checklist or questionnaire can be used to determine their learning needs. Pastoralists, however, have limited access to education, companies and media, which logically undermines their ability to understand and diagnose the real problems to effectively function in the market. In such contexts, a check list or simple survey will not reveal the actual training needs of the target group. Rather, a thorough contextual insight derived from a variety of qualitative research methods may generate the insights that are required in the learning needs to formulate learning objectives.

Second, learning objectives can exist at different levels of abstraction. The basic understanding of why businesses exist and why customers are important is more likely present among entrepreneurs in urban areas. Their trainings may therefore focus on more concrete objectives, like specific marketing skills and practices that increase profits. Pastoralists have a

limited understanding about why customers are the basic reason for the existence of businesses. The learning objectives therefore require a relatively high abstraction level. Depending on the context of their training, training designers can vary the required level of abstraction.

More specifically, the learning objectives on business ethics differ between the dynamic, urban and traditional, rural areas. In urban places the aim is more likely to teach entrepreneurs to be ethical and not to cheat on others, but to build strong customer relationships. In traditional remote settings it is however more important to make participants aware that not all market players have the same strong values as they have. So it is important to make them aware how they may be cheated and what they can do to protect themselves from such practices.

Third, the importance of contextualizing and concretizing the concepts and learning objectives is logically more important if they are formulated at higher levels of abstraction. Training designers that develop trainings for other rural contexts will therefore need to specify the objectives for the business activities that apply to their context, often depending on the natural environment. Urban entrepreneurs have a much larger diversity of businesses that they potentially can start. While rural contexts are often constraint to one or a few cash-generating activities, the diversified urban economy offers many different opportunities.

Fourth, contextual differences also have an impact on the types of teaching methods that training designers can employ. The wide range of products and services that are present in the urban context offers trainers a large diversity of examples that they can use in their training. In the rural context instead, all examples should pertain directly to the business activities undertaken by the participants. Other examples may not be understood. Rural areas are also more likely to have practical constraints in the application of different teaching methods. While urban settings may be equipped with training rooms equipped with basic facilities to show pictures, posters and videos, in the rural context all basic facilities may be absent, even the training rooms themselves. This logically requires more creativity in terms of developing feasible learning methods as well as a greater burden to the trainers and organizers who should bring in more equipment themselves. Pre-testing helps to contextually validate the methods and to draw on the ways in which the target community itself transfers knowledge from one generation to the next.

Fifth, pre-testing the training also forces training designers to think about the selection of the respondents. People in urban contexts may have a relatively higher willingness to participate in trainings as it is clear to them how they will benefit from it. They may even

Chapter 4

search for such trainings and be willing to pay for it. In more remote, rural areas, the potential participants may however lack the awareness that the modern market-based economy is knocking on their doors and they may fear that the training interrupts their daily activities. Close collaboration with development agents, determining a convenient time-schedule, and hiring a trainer that shares the background of the participants may help to secure participation in this context.

Table 4.3: Designing a Marketing Training for Entrepreneurs

Steps in designing a training program		Explanation
1	Methods of the training needs assessment vary with the context.	Training needs of entrepreneurs can be assessed with based questionnaires in urban places where people already understand the basic functioning of a market economy. In more remote places, potential participants of the training may not be able to express their learning needs.. Triangulated methods like field visits, face-to-face interviews and discussions are then more likely to reveal these needs.
2	The context determines the abstraction level of the learning objectives.	The abstraction of learning objectives is likely to vary with the training needs of entrepreneurs. While in urban places or other contexts where people understand how a market economy basically operates, they may still need to learn basic skills and coping strategies, in the more remote areas it will be more important to teach participants the basic aspects of what a business is and why customers are important. The learning objectives will therefore be more abstract in such contexts.
3	Contextualizing the learning objectives is more important in remote contexts.	Depending on the context where training designers focus, identifying the training needs and setting learning objectives may not be enough to prepare a complete training protocol. Ensuring whether the learning objectives fit with the literacy level, specific activities and concrete understanding of the target group provides assurance about the feasibility of the learning objectives. An example is the study on page 75 in this chapter.
4	Identify and pretesting of pedagogical methods is more important in more remote contexts.	Pedagogical methods suitable for urban context cannot be used directly in rural contexts because of variations in training facilitators (e.g., electricity, rooms), business practices, and literacy level of participants. Testing the methods will help training designers to ensure the validity of methods and identify locally practiced methods. See, for example, the study on page 79 in this chapter.

Table 4.3 (continued)

5	In more remote places, the organization of the training requires a more specific understanding of the training context.	<p>Testing the training protocol enables to obtain qualitative responses on the likely success of the program. In testing the complete training program:</p> <ul style="list-style-type: none"> i) Selection of participants needs attention. Unlike to urban people who may be willing to pay for trainings, people in rural subsistence contexts can be unwilling to participate in a training due to lack of awareness and for fear that such training will pay off for them. Working with local organizations and approaching the target group through development agents enables to secure their willingness. Setting a training schedule that is convenient to them also plays a vital role to engage them in the training. ii) Hiring an experienced trainer who shares background with the participants can highly engage participants by using community metaphors as teaching methods in the training (refer, for example, the study on page 81 in this chapter). iii) In contexts where communication means are poorly available, bringing participants together is not an easy task. Paying attention to training facilitation and assigning a coordinator helps the trainer to fully focus on the training.
6	Making the training available to others.	Training designers can benefit from the materials and experiences used by others. It is therefore important to store the training material in an easy-to-access Internet platform.

4.10. Future research and application

The impact assessment of our training is restricted to qualitative responses on the reaction-level of traditional Kirkpatrick types of training evaluations (Tamkin et al., 2002). Future research should examine other impact levels, notably whether the training results in learning, behavioural change, and the desired improvement of livelihood performance of pastoralists. While impact assessment of trainings is already a challenging task in advanced economies (e.g., Tamkin et al., 2002), it is even more challenging in remote subsistence contexts. We therefore propose an impact study that uses field-experimental methods commonly used in development research (Duflo, 2006). This means that variables pertaining to knowledge, behaviour, and socio-economic performance should be measured before and after the training intervention and that the experimental design should contain a control group to establish a counterfactual.

Based on the insights of such an impact study, the results of the training can be traded of against the costs. We incurred a total cost of Ethiopian Birr (ETB) 147,754 (approximately US\$ 6,732.92) to design and pilot-test the training program. The costs categories include material preparation and translation (ETB 49,124 \approx US\$ 2,238.51), supporting materials (e.g., pictures, posters and video) (ETB 3,420 \approx US\$ 155.85), power (solar equipment/generator rental) (ETB 1,500 \approx US\$ 68.35), hiring a professional trainer, and facilitators (development agents and clan/local leader for their service in the coordination process) (ETB 37,000 \approx US\$ 1,686), transport (ETB 25,000 \approx US\$ 1,139.21) and catering (31,710 \approx US\$ 1,444.98). In future applications of the training these costs may be covered by stakeholders that benefit from the training, including buyers like slaughterhouses and fatteners who may obtain livestock of a higher quality. Also the national governments may benefit as pastoralists make an important contribution to the international trade balance. Finally, a smooth and peaceful entry of pastoralists into the market economy is of interest to society at large, as pastoralists constitute a large population that crosses borders with politically relatively unstable countries like Somalia and South Sudan.

4.11. Conclusion

This study has shown that well-established training design procedures are also useful to design training program for the remote and traditional context of pastoralists. The study provides new insights on how marketing can be taught to people that have little experience with the market-based economy. We recommend research to conduct studies in other D&E countries to design and to systematically examine their impact. Such insights will help to

Chapter 4

integrate people in remote areas around the world with the market economy in a smooth and peaceful manner.

5

Does a Marketing Training for Ethiopian Pastoralists Improve their Market Knowledge, Customer Value Creation and Livelihood Performance? A Field Experiment

This chapter is to be submitted for publication as Mebrahtu L. Teklehaimanot, Paul T.M. Ingenbleek, Workneh K. Tessema, & Hans van Trijp. Does a Marketing Training for Ethiopian Pastoralists Improve their Market Knowledge, Customer Value Creation and Livelihood Performance? A Field Experiment.

Abstract

Pastoralists in developing and emerging countries are increasingly integrating with markets. However, due to their isolation from the market environment, they often have not developed the understanding of why their buyers become willing to exchange their money for products and, more in general, how the markets function. As a consequence, they can be exploited easily when they deal with buyers. This paper shows that marketing training is a potential solution to this problem because it empowers pastoralists with the knowledge and abilities necessary to create value for their customers and generate returns. It presents the results of a field experiment in which a group of 60 Ethiopian pastoralists received a marketing training on fundamental marketing concepts for five days. The results show that pastoralists who enrolled in the training perform better in value creation and livelihood related outcomes than a control group. The study did not find significant differences in competition-informed pricing and negotiation between the two groups. This suggests that pastoralists pick up the creation of value more easily than the appropriation of value through pricing and negotiation, and that trainings that pay extra attention to these components may have even a stronger impact on livelihood performance. The findings imply that marketing training is a promising tool to strengthen the positive effects related to market integration programs of pastoralists, and that intended and unintended effects on market knowledge should be considered in all development interventions.

Keywords: Customer value creation, marketing training, field experiment, pastoralists, Ethiopia

5.1. Introduction

With the increase of globalization, modern supply chains are increasingly expanding to obtain their supplies from producers who previously functioned in local markets in developing and emerging countries (hereafter, D&E countries) (Rivera-Santos & Rufin, 2010; van Trijp & Ingenbleek, 2010). The expansion of modern supply chains and exporting businesses creates opportunities to rural producers such as pastoralists to sell their products to high price paying markets (Maertens, Colen, & Swinnen, 2011; Rao, Bummer, & Qaim, 2012). The market integration of pastoralists is not only important for poverty reduction among pastoral communities, it also helps supply chains to meet the increasing demand for animal-protein (Davies & Hatfield, 2007). However, integrating with markets is not without challenges particularly to remote pastoralists who operate almost in isolation from other value chain members.

Pastoralists usually reside in the extremely remote grazing fields reproducing their herds to ensure sustainable milk production to feed their family and gain social status. They operate in underdeveloped rural areas that feature productive resource scarcity, including roads, education and information communication facilities (Fratkin, 2001). The remote, productive resource scarce-context makes it difficult for the pastoralists to learn from the environment outside the pastoral world to understand how the market functions and what the market requires. As a result, pastoralists raise their livestock based on traditional, production-oriented knowledge that they have gained from previous generations. The “voice of the customer” is thus almost absent in their activities. When pastoralists try to sell what they have produced, they frequently face rejections in the marketplaces for not meeting buyers’ requirements (Baldwin, Foster, & Jones, 2011; McPeak & Little, 2006). Research has shown that pastoralists also hardly respond to livestock market dynamics, such as changes in demand for and supply of livestock, and import-export policy adjustments, and therefore hardly take advantage of favourable market conditions (Little, Debsu, & Tiki, 2014; Verbeke et al., 2009).

In their incidental encounters at marketplaces, pastoralists deal with well-informed livestock brokers and traders who frequently communicate with large buying companies like exporters and slaughterhouses (Fafchamps & Gavian, 1996). The traders and brokers use their knowledge about the market conditions to influence the negotiation and to take advantage from the pastoralists (Aklilu & Catley, 2009). Traders and brokers use communication signs, psychological tricks that pastoralists do not understand to persuade pastoralists to sell their animals at lower prices (Little, Debsu, & Tiki, 2014; Aklilu & Catley, 2009). Their deeper and broader knowledge about the market environment enables brokers and traders to take advantage

of the pastoralists. The lack of knowledge to comprehend how the market operates and how to respond timely and consistently to market conditions impedes pastoralists to benefit from the market.

This study tests whether marketing training can equip pastoralists with the required knowledge to produce in line with market requirements and to more effectively manage marketplace transactions. Marketing training refers to a specific element of education planned to convey new and/or to modify or expand existing marketing knowledge, skills and attitudes of learners or to maintain levels of competence needed to respond to new developments and changing circumstances, as well as enhance productivity (e.g., Goldstein, 1993). Marketing educators recognize marketing training as a strategic approach in equipping businesses with the necessary knowledge to organize their operation to focus on customers (e.g., Hultman & Hills, 2001; McCartan-Quinn & Carson, 2003; Rosa, 2012). Marketing researchers have also argued that marketing trainings can be used to teach low-literate micro-entrepreneurs on how the market operates, to recognize the importance of why to focus on the customer, and to influence marketplace dealings (e.g., Viswanathan et al., 2009; Rosa, 2012). Such claims are however not yet tested in a systematic study. The present study tests the effects of marketing training by conducting a field experiment among Ethiopian pastoralists. We test the effectiveness of offering marketing training with a field experiment where an experimental group, receiving training, is compared with a control group that received no training. We show that, compared to a control group, the experimental group exhibits higher market knowledge, creates more value to customers, and has higher livelihood related outcomes eight months after the training.

The paper begins by describing a theoretical background on customer value creation and formulating hypotheses. The chapter subsequently describes the study design and context, followed by sampling and data collection procedures. Then, it presents the results. It concludes with a discussion and implications for development workers and further research.

5.2. Value creation in the pastoral context

The livestock herding and selling activities of pastoralists can be seen as a business. From a marketing perspective, businesses exist to satisfy their customers by creating and delivering customer value (Slater, 1997; Woodruff, 1997). Creating customer value entails to the assessment of the market by gathering and interpreting market information, and subsequently utilizing it to identify the needs of customers that businesses can capably and profitably serve by translating the value needs of targeted customers into concrete product and service attributes (Kotler & Keller, 2012; MacDonald, 2006; Varadarajan, 2010). Customer value creation thus

includes a set of behavioural activities that involve integrating resources to create and deliver the right (customer demanded) quality at the right location in the right time to satisfy the needs of target customers (Lanning & Michaels, 2000; Kotler & Keller, 2012; Vargo & Lusch, 2004). Customers reward the value they receive with repurchases, positive word of mouth and higher willingness to pay, all leading to higher profits (Slater, 1997; Varadarajan, 2010).

Customer value creation is important for pastoralists to earn profits and thus lift themselves out of poverty. In the context of pastoralists, creating customer value involves production- and marketing-related activities to raise livestock according to livestock buyers' specifications, to communicate the attributes of the livestock to potential buyers and sell the livestock. To raise and market livestock according to specifications of different groups of livestock buyers (exporters, fattening operators or slaughterhouses), market-oriented pastoralists first gather information about the livestock market to identify the different types of livestock buyers and determine the livestock attributes of each buyer group (e.g., Tessema, 2012). They can also observe and inspect how other livestock suppliers ("competitors") raise livestock to respond to the demands of livestock buyers, choose appropriate communication channels to reach to the buyers they target, as well as set and negotiate a price that reflects the quality of the livestock that buyers look for. By creating value and satisfying the needs of specific customer groups, pastoralists could greatly benefit from market-oriented production and marketing activities.

We breakdown the market-oriented production-related activities of the pastoralists into specific indicators, namely, market-oriented breeding, market-oriented fattening, market-oriented quality care, and relative product quality. Marketing activities include target market selection, market-oriented communication, value-informed pricing, competition-informed pricing and negotiation (Table 5.1). The breeding, fattening, quality care and livestock selling activities are well documented in the literature on pastoralists (e.g., Amanor, 1995; Lamprey, 1983; Tessema, 2012). When they are conducted with a market-oriented focus, they are likely to add value for livestock buyers. Market-oriented breeding pertains to selecting and cross mating with better breeds, so that pastoralists get off-spring with high fattening potential and good beef quality that has demand from fattening operators, exporters or slaughterhouses. Market-oriented fattening includes engaging in value adding activities like proper feeding to increase the weight and height of animals to meet the physical appearance that potential buyers look for. Pastoralists can also add more value to their animals by focusing on market-oriented quality care, which entails reducing fatigue, keeping the animals in good physical posture, giving drugs and salt when needed, and separating some animals from others to protect them from transmittable animal diseases. Market-oriented pastoralists thus supply a relatively higher quality livestock (better

breed, fattened and healthy) that livestock buyers are willing to purchase and pay for, referred to as relative product quality.

Next, identifying and deciding on target buyers referred to as target market selection, enables pastoralists to communicate the attributes of their animals to the buyers are looking for such attributes. Note that the preferences of animals attributes differ between fattening operators, slaughterhouses and exporters. Market-oriented communication practices of pastoralists refers to explaining the attributes of the animals and corresponding price to persuade target buyers. Through value-informed pricing, pastoralists set prices for their products on the basis of the value of the products to the buyers (Ingenbleek et al., 2003; Nagle & Holden, 1995). Pastoralists can also benefit from competition-informed pricing, which involves learning and observing the strategies of how others that supply similar products set prices for their products to set a point of comparison and accordingly negotiate for a reasonable price (Ingenbleek et al., 2013). Pastoralists therefore can negotiate better prices depending on the attributes of their products, buyers' negotiation strategy and the strategy they observe from other suppliers (Dobler & Burt, 1996; Talluri, Vickery, & Narayanan, 2008).

Table 5.1: Customer value creation indicators in pastoral areas

Indicators	Description
Market-oriented breeding	The selection and cross-mating of animals to get offspring with good quality (e.g., quality beef production), high fattening potential and other attributes that potential buyers look for.
Market-oriented fattening	Undertaking activities including proper feeding of animals to increase their weight and height to meet the physical appearance that potential buyers look for.
Market-oriented quality care	Performing activities including restricting the movement of animals, giving drugs and salt and separating some animals from others to protect them from transmittable animal diseases and to keep the animals in a good physical posture.
Relative product quality	The supply of animals with better attributes (breed, age, weight, height, health and sometimes colour) to the market compared to other livestock suppliers.
Target market selection	Identifying the different types of potential buyers (fattening operators, exporters and slaughterhouses), defining their needs in specific livestock attributes and selecting a specific group of buyers to serve.

Table 5.1 (continued)

Market-oriented communication	Activities that producers conduct to explain, persuade, and remind potential buyers-directly or indirectly-about the attributes of their animals and to ask market conditions like price, preferences of buyers and supply of livestock from others.
Value-informed pricing	Setting prices based on the value or attributes (e.g., breed, age and weight) that the livestock offer to the buyers.
Competition-informed pricing	Setting and adjusting the prices for livestock depending on other's price setting strategies and actions, and supply of similar livestock.
Negotiation	The ability of pastoralists to bargain, influence or balance the deal with buyers to obtain better prices that justify the quality of their animals.

5.2.1. Consequences of value creation

Pastoralists who accomplish the value creating production and marketing activities will likely achieve higher price satisfaction and improved livelihood performance, similar to businesses that obtain better prices and achieve higher financial performance by creating more value to their customers compared to their competitors (Slater, 1997; Smith & Colgate, 2007). Price satisfaction pertains to the price outcome compared to the initial expectations (cf. Oliver, 2010). Customers that experience value from the products that they purchase become less price sensitive and more willing to pay reasonably better prices that satisfy the sellers (Campbell, 1999; Matzler, Wurtele, & Renzl, 2006). Pastoralists that receive a more satisfactory price can use the extra money to improve their livelihoods. Pastoralists' livelihood performance in that respect refers to the amount of money they generate and save from selling livestock, consumption of high value products (e.g., vegetables), purchasing clothes, opening petty shops, contributing to clan members and increasing their herd size (e.g., Ingenbleek, Tessema, & van Trijp, 2013). In line with these foregoing arguments, we hypothesize:

H₁: Pastoralists who engage more in customer value creation activities will have higher (a) price satisfaction, and (b) livelihood performance.

5.2.2. The roles of market knowledge and marketing training

The capacity of pastoralists to organize their livestock production in a way that creates value for livestock buyers likely depends on the knowledge they possess about the market environment. According to the knowledge-based view of the firm (Grant, 1996), knowledge that pertains to the market, the logic of market exchange, market dynamics, preferences of customers, and

competitors' behaviour, is a strategic resource for businesses in the process of creating more value to their customers (Marinova, 2004; Glazer, 1991). Market knowledge provides businesses with the ability to interpret information about the market environment and to grasp what their potential customers value (Slater, Olso, & Sorensen, 2012). In this respect, pastoralists who are able to develop knowledge about what the market is and on the logic why it is important to produce livestock based on the preferences of customers can scrutinize the market and select the most suitable target buyers to serve. They can also define the value attributes of the targeted buyers and translate them into market-oriented breeding, market-oriented fattening and quality care to supply the preferred livestock. They can as well communicate the value attributes to fattening operators, exporters or slaughterhouses based on respective specific quality specifications, as well as set and negotiate for prices based on the value to the buyers, and the actions of other livestock suppliers (competition). We, therefore, hypothesize as follows:

H₂: Pastoralists with higher market knowledge will engage more in customer value creation activities. Specifically, they will (a) engage more in market-oriented breeding, (b) engage more in market-oriented fattening, (c), engage more in market-oriented quality care, (d) supply a relatively higher quality livestock to the market, (e) more target livestock buyers with specific livestock attributes, (f) engage more in market-oriented communication, (g) base prices more on value for livestock buyers, and (h) actions of competitors, and (i) negotiate more on the basis of the attributes of the livestock.

Businesses build their market knowledge through self-directed learning, among others, by allocating resources to capacity building schemes, like education, hiring personnel with knowledge acquired from professional education (Smith, Collins, & Clark, 2004), and/or through exploratory learning from the market environment (Kim & Atuahene-Gima, 2010; Petersen, Pedersen, & Lyles, 2008; Sinkula, 1994). Developing market knowledge by learning from the interaction and experiences with the market environment is therefore (relatively speaking) not difficult for these businesses because they usually hire professionals equipped with at least basic marketing knowledge from marketing education. To contrast, pastoralists are traditional society with no formal business education and minimal interaction with markets. As such, developing market knowledge by exploring the market environment is unlikely to be effective. Pastoralists need support to develop a foundational layer for their market knowledge that helps them to understand the basis from which they can build further. One approach to support pastoralists in developing knowledge is by intensifying their contacts with markets. This can, for example, be achieved by building roads, communication facilities and marketplaces (e.g., Barrett, 2008;

Verbeke et al., 2009). Learning from interactions with and exploring from the market is in that respect, for example, found in a study on urban micro-entrepreneurs as a way to increase market knowledge (e.g., Viswanathan et al., 2009). For pastoralists, such a process will take however much longer before they develop a fundamental level of market knowledge from this process because they are much more isolated. Moreover, in the meantime, they are easy for opportunistic buyers to exploit, which may lead to a negative consequences, including rejection of the marketing system.

Marketing training that teaches fundamental marketing concepts can acquaint pastoralists with marketing knowledge in a relatively short time period. Building on insights from educational psychology literature (e.g., Bostrom & Sandberg, 2009; Rittle-Johanson et al., 2001), marketing literature states that basic knowledge building in the marketing domain can be established by teaching fundamental marketing concepts (Burnett, 2008; Henke, 1985; Kotler & Keller, 2012). These concepts include *market*, *market exchange*, *market dynamics*, *customer-centric business*, *competition*, *marketing instruments*, *business ethics* and *value chain* (see chapter 4). Teaching these basic marketing concepts is a key component of academic thinking in the field of marketing (Henke, 1985; Kotler & Keller, 2012). The literature on marketing education has further established that teaching concepts to low-literate learners by connecting to their training needs and prior knowledge enable the learners to acquire and store market knowledge (e.g., Angelo, 1993; Halpern & Hakel, 2003; Tannenbaum & Yukl, 1992). To test whether marketing training has such effect in the pastoral context, we enrolled one group of pastoralists in a training program and compared them with a similar group, not receiving training. We thus hypothesize as follows:

H_3 : Pastoralists who enrol in the marketing training program will have higher market knowledge than those who don't enrol in the program.

5.3. Methodology

5.3.1. Study design and context

To test the hypotheses, we conducted a before-and-after experimental study (Churchill, 1999), by enrolling 60 participants as an experimental group in the training program and compared them with a control group of 60 respondents. The training program was implemented in Borana region. Borana is remote from the central markets and largely devoid from development projects such as investment farms or processing, that could have created opportunities for the pastoralists to learn about the market. As compared to the other pastoral regions, pasture, as the main input for livestock fattening, is widely available in Borana. Because Borana is known for its large

livestock population and special cattle breed important for fertility and beef production (Zander and Mburu, 2013), training Borana pastoralists will contribute to responding to the growing demand for animal protein and to feed the growing population.

5.3.2. Sampling procedure

A multi-stage sampling approach was adopted in recruiting respondents from the Borana region for the study. The Borana region has ten woredas (administrative districts). To select woredas with conditions that minimize field experiment contextual variations (Harrison & List, 2004), we paid much attention to analysing and comparing the economic and ecological potential of the woredas; we gave less emphasis to sociocultural factors because these are mainly similar among Borana pastoralists (Pavanello & Levine, 2011). We selected two woredas (Yabello & Dire) with matching pre-existing economic and ecological conditions, in terms of livestock population, distance from the main road and main marketplaces, and natural resources (pasture and rainfall distribution).

Within the woredas, we selected four villages, two villages from Yabello and two villages from Dire, to serve as sampling units. The two villages from Yabello served as experimental sites and the two from Dire as control sites, to keep a reasonable distance between the experimental sites and control sites to avoid, as much as possible, information spillover from the trained group to the non-trained group (Sinclair, McConnell, & Green, 2012), to administer the training program, and correspondence in economic characteristics (Banerjee & Duflo, 2009; Harrison and List, 2004).

To create a sampling frame (e.g., Turner, 2003), we recruited as many potential respondents as we could from each village based on predefined selection criteria. To create the list for the sampling frame for the experimental group and control group, we selected 1) male pastoralists with the age of 25 or above and married, because gender and age play important roles in decision-making in the pastoral context (WISP, 2008); 2) those who have sold animals at least three times a year to make sure they have some level of market interaction so that they will benefit from their participation in the training program; and 3) those with willingness and aspiration to participate and to invest their time to benefit from the training. The selection criteria were based on the lessons learned during the pre-study, pilot testing, discussion with experts from Borana Trade and Market Development office, NGOs and the development agents (DAs), as well as desk research (e.g., Chiaburu & Marinova, 2005; Bandura, 2004). As the selection criteria control for pre-existing differences and reduce the chance of a selection bias (Duflo & Kremer, 2005; Churchill, 1999), the impact of the training program can be assessed from the

average mean difference between the group enrolled in the training program and those who were not enrolled (Duflo & Kremer, 2005).

Following the recommendation of Duflo and Kremer (2005), we randomly selected 120 participants (30 from each village) from the sampling frame selected from the four villages. Consequently, 60 respondents from the two villages of Yabello woreda formed an experimental group (EG) and the remaining 60 respondents from the two villages of Dire woreda constituted the control group (CG). We collected baseline information from all 120 respondents on a number of critical variables including age, family size, distance from main road, level of market interaction, aspiration level and self-efficacy. The results show that there are no significant differences between the experimental group and control group on these variables (see Appendix 5.1), implying that there is no indication of selection differences and bias (cf. Duflo & Kremer, 2005; Heckman et al., 1998).

The training program

We designed and pre-tested a five-day tailor-made marketing training program for pastoralists (see Appendix 5.2). The training addressed the key marketing concepts explained before, using training methods suitable and specifically designed for this purpose (see chapter 4). The experimental group was enrolled in the training program. To effectively convey the learning objectives, we divided the 60 participants into four manageable training groups, each with five training days (Figure 5.1). Based on the lesson learned from our pilot testing and recommendations from experts in NGOs (particularly SOS Sahel and FAO), participants were trained for 5 hours a day. Because pastoralists have to make sure that herds are assigned to grazing areas (early morning) and that all are back safely to settlements or are safely available around sundown, each training day started at 10:00 AM and ended at 04:00 PM. We also exempted participants from 12:30 PM to 01:30 PM for lunch, to share information and to take traditional stimulants (khat). Major market days were also excluded to allow the participants to visit the marketplaces. Influential personalities (clan and village leaders) helped us in coordinating and monitoring the attendance of participants, which secured full attendance except for two participants an excused half a day absence for personal reasons.



Figure 5.1: Training participants in group discussions

5.3.3. Data collection procedure

Table 5.2 summarizes the data collection procedure and training program implementation. Data were collected in face-to-face interviews using structured questionnaires by employing four enumerators with a minimum of tertiary level education and experience in data collection in the pastoral context. We gathered information on price satisfaction and livelihood performance, and value creation indicators just before the training (March 2015; month 0, hereafter M_0) and eight months after the training (November 2015; month 8, hereafter M_8). We measured the market knowledge of trained participants immediately after the training with an exam (hereafter MK1). For the control group, this exam was added to the questionnaire used at M_0 . This allows us to test whether the training was effective in achieving its learning goals.

Customer value creation indicators and livelihood performance were all measured with multiple items on 5-point scales. We also measured market knowledge at baseline (M_0) and eight months after the training (M_8) based on short five-point scale items extracted from the learning objectives (we refer to this measure hereafter as MK2 to distinguish it from the exam-type market knowledge measure, MK1).

To avoid the difficulties of providing response to written five-point scale items and make the response task more visual, which is important to obtain reliable data from low-literate respondents (e.g., Gau, Jae, and Viswanathan 2012), we employed the technique used by Ingenbleek et al. (2013) that replaces the traditional five-point Likert-type scale with five sticks of increasing worth, such that stick 5 is worth five times as much as stick 1. Pastoralists responded to the multi-item questions by picking sticks (stick 1 = “strongly disagree/much less/never....,” stick 5 = “strongly agree/much more/always....”) (Figure 5.2). To ensure that respondents understood the procedure, they practiced before the start of the interviews. The interviews took, on average, one and half hours. The questionnaire was designed in English and discussed with an expert who has field research experience in pastoral areas. After incorporating

Chapter 5

the comments of the expert, a professional linguist translated the questionnaire into Oromiffa, the language of the pastoralists. Another expert crosschecked the English version with the Oromiffa version to ensure the original and intended meaning of the items is maintained. The questionnaire was pretested with 15 pastoralists to check its flow and clarity to respondents.

Does a Marketing Training for Ethiopian Pastoralists Improve their MK, CVC and LP?

Table 5.2: Data collection and training program implementation procedure (Year = 2015)

Group	Variables included on 4-18 March (M ₀) data collection	9-21 March (M ₀)	22-25 March (M ₀)	Variables included on November 2015 data collection (M ₈)
Control	<ul style="list-style-type: none"> - Exam on training components (MK1) - Market knowledge, five point scale (MK2) - Customer value creation indicators - Price satisfaction - Livelihood performance - Market Interaction - Background information (age, family size, village distance from main road; aspiration level; self-efficacy) 	No intervention	-	<ul style="list-style-type: none"> - Market knowledge, five point scale (MK2) - Customer value creation indicators - Price satisfaction - Livelihood performance - Market Interaction - Background information (age, family size, village distance from main road)
Experimental	<ul style="list-style-type: none"> - Market knowledge, five point scale (MK2) - Customer value creation indicators - Price satisfaction - Livelihood performance - Market Interaction - Background information (age, family size, village distance from main road; aspiration level; self-efficacy) 	Marketing training intervention	Exam on training components (MK1)	<ul style="list-style-type: none"> - Market knowledge, five point scale (MK2) - Customer value creation indicators - Price satisfaction - Livelihood performance - Market Interaction - Background information (age, family size, village distance from main road)



Figure 5.2: Interviewers explaining pictorial representations

5.3.4. Market knowledge exam (MK1)

The exam to check the effectiveness of the training was in a multiform (i.e., multiple choice, true/false, yes/no and ranking). *Market* and *market exchange* concepts were assessed using one multiple choice question for each, each question with five alternative choices (A to E); one as best possible answer and four alternatives as distractors (Haladyna, Downing, & Rodriguez, 2002). *Market dynamics* was captured by 20 true/false choice items. *Customer-centric business* was captured in three ways: responding to nine customer-oriented activities with yes/no answers, three yes/no questions to distinguish most likely target buyers (fattening operators, exporters or slaughterhouses) of oxen with specific attributes, and prioritizing (ranking) five livestock business elements. Because low-literate respondents often think and process information in pictographic and concrete terms (e.g., Viswanathan et al., 2012; Ingenbleek et al., 2013), we supported questions on ranking of livestock business elements by pictures. Pictures of animals with different attributes (breed, age, weight) were shown to respondents to identify the target buyer (fattening operators, exporters or slaughterhouses) of the animals (Figure 5.2).

Respondents understanding on the concept of *competition* was measured by providing the list of potential competitors for the respondents to identify as their competitors or not with a “Yes”, “No” or “I don’t know” options. The option “I don’t know” was provided as a middle response to incorporate the opinion of respondents who do not know the answers and do not want to guess, but only 2 out of 120 respondents used this response category. We treated the “I don’t know” response as “No”. Four multiple choice questions were used to assess respondents’ understanding of *marketing instruments* including three questions on product (livestock attributes)-price relationship and one question on negotiation. *Business ethics* and *value-chain* concepts were not explicitly included in the exam, because they were an integral part of

everyday discussion in the training program and also to avoid complicated exam for the low-literate pastoralists. A pedagogy science expert verified that the exam questions are based on the components included in the training program and each question stated in clear terms.

5.3.5. Operationalization

The multi-item measures for livelihood performance, customer value creation indicators and MK2 were formulated as concrete as possible to make them easily understandable to the respondents (Gua, Jane, & Viswanathan, 2012). To refine and validate the structural relationship of the items with the constructs they measure, we used exploratory factor analysis and Cronbach's alpha (Churchill, 1997) to retain items for confirmatory factor analysis. Items that loaded low and/or loaded on multiple factors were dropped. The values of Cronbach's alpha range between .71 and .91 (see Table 5.3). For consistency, we retained the same number of items at M_0 and M_8 . An item that loaded high to a factor at M_0 but low to the same factor at M_8 and the vice versa was dropped. The items retained from the exploratory factor analysis were reassessed in terms of whether they significantly contribute to the constructs being measured using confirmatory factor analysis. We ran a four-factor model for production-related indicators and a five-factor model for marketing-related indicators using R (Lavaan 3.2.4) (Rosseel, 2012)¹. Table 5.3 displays the correlations, Cronbach's alpha, means and standard deviations of the variables used at M_0 and M_8 surveys. Appendix 5.3 presents the final scale items and factor loadings.

After the measure refinement procedure, we measured market-oriented breeding with four items, measuring the degree to which the respondents engaged in breeding and crossbreeding to obtain good quality breed for the market. Market-oriented fattening was measured with five items measuring respondents' level of engagement in fattening animals for market. Three items that capture the degree to which respondents engaged in improving and maintaining the health and quality of their animals were used to measure market-oriented quality care. Relative product quality was measured using six items measuring the quality level of the animals that respondents supply to the market. The measures of target market selection and market-oriented communication that demonstrate the degree to which respondents engaged in selecting the target buyers for their animals with specific attributes, and their communication with market actors on price and livestock attributes, respectively, consist of four items each. Value-informed pricing

¹ All factor loadings were significant ($z > 1.96$). The confirmatory factor analysis showed a relatively good fit for the model (above the threshold of .90 (van de Schoot, Lugtig, & Hox, 2012)), (Chi-Square (129) = 218.28, $p = .01$, RMSEA = .076, CFI = .92) and (Chi-Square (98) = 175.86, $p = .01$, RMSEA = .077, CFI = .94), respectively.

was measured with four items measuring how much respondents depend on livestock attributes (value to the customers) to set the price of their animals. The competition-informed pricing and negotiation measures use three and four items that measure the degree to which respondents determine the prices of their animals based on the actions of other livestock suppliers, and how they negotiate with buyers in the market, respectively. The multi-items for value-informed pricing and competition-informed pricing were adapted from previous studies (e.g., Ingenbleek et al., 2003). We measured price satisfaction with one item measuring how much the respondents are satisfied by the price they received during the last eight months. Livelihood performance was measured using five items tapping key aspects of the pastoralists' livelihood, including money generated and saved from livestock selling, consumption of food items, purchase of clothes for household members, livestock contribution to clan members, and investing in petty shops (e.g., Ingenbleek et al., 2013). The items were composed to formulate a formative scale on livelihood performance (Edwards & Bagozzi, 2000). The measure of MK2, included in the M_0 and M_8 questionnaire, uses nine items developed based on the concepts that underlie the learning objectives of the training program.

We also included a measure on market interaction to check whether performance differences are caused by a higher level of market interaction instead of by value creation. Consistent with previous studies (Gabre-Madhin, 2009; Ingenbleek et al., 2013), we measure market interaction by the number of livestock that pastoralists bought and sold eight months before M_0 and eight months before M_8 .

Does a Marketing Training for Ethiopian Pastoralists Improve their MK, CVC and LP?

Table 5.3: Correlation matrix, Cronbach's alpha, means and standard deviations

		1	2	3	4	5	6	7	8	9	10	11	12	13	
1.	Market-oriented breeding	1													
2.	Market-oriented fattening	.366**	1												
3.	Market-oriented quality care	.303**	.468**	1											
4.	Relative product quality	.331**	.377**	.211*	1										
5.	Target market selection	.246**	.301**	.358**	.228*	1									
6.	Market-oriented communication	.259**	.394**	.338**	.207*	.504**	1								
7.	Value-informed pricing	.085	.352**	.460**	.261**	.255**	.368**	1							
8.	Competition-informed pricing	-.120	.109	.295**	-.024	.137	.068	.288**	1						
9.	Negotiation	.096	.281**	.294**	.287**	.239**	.307**	.386**	.384**	1					
10.	Price satisfaction	.141	.497**	.457**	.346**	.295**	.402**	.453**	.167	.215*	1				
11.	Livelihood performance	.205*	.502**	.374**	.384**	.352**	.321**	.389**	.115	.252**	.539**	1			
12.	Market interaction	.026	.251**	.248**	-.061	.237**	.218*	.100	.126	-.142	.328**	.319**	1		
13.	Market knowledge (MK2)	.199*	.324**	.287**	.293**	.242**	.261**	.239**	.136	.187*	.331**	.550**	.142	1	
Cronbach's alpha (M ₀)		.84	.88	.83	.78	.80	.91	.89	.80	.76	NA	.76	NA	.87	
Cronbach's alpha (M _g)		.73	.85	.79	.76	.75	.83	.77	.78	.70	NA	.76	NA	.86	
Mean (Std. dev)	Experimental group	M ₀	2.408 (.816)	2.183 (1.07)	3.089 (1.24)	2.950 (.538)	2.671 (1.05)	2.263 (1.15)	3.088 (1.23)	3.100 (1.16)	3.158 (1.09)	1.92	2.373 (.704)	18.33 (23.4)	2.911 (.763)
		M _g	2.496 (.648)	2.478 (.935)	3.694 (.963)	3.197 (.625)	2.896 (1.11)	2.696 (.913)	3.450 (.880)	3.157 (.805)	3.382 (.889)	2.47	2.787 (.843)	21.15 (26)	3.254 (.862)
	Control group	M ₀	2.408 (.867)	2.103 (.973)	3.394 (.962)	2.872 (.546)	2.583 (1.15)	2.483 (1.32)	3.117 (1.25)	3.028 (1.08)	3.088 (.997)	2.07	2.547 (.948)	19.90 (27.93)	3.011 (.902)
		M _g	2.058 (.691)	2.01 (.773)	2.972 (.951)	2.867 (.579)	2.467 (.867)	2.163 (1.00)	2.971 (.941)	2.910 (.803)	3.137 (.869)	1.90	2.502 (.897)	18.07 (19.44)	2.928 (.882)

**p< 0.01; *p<0.05; two-tailed significance; NA = Not applicable

5.4. Analyses and results

5.4.1. *Effects of the marketing training on market knowledge*

We first test the third hypothesis which predicted that pastoralists that enrolled in the marketing training have more market knowledge than the pastoralists in the control group. We test this hypothesis with data of MK1 and MK2. We first analyse the impact of marketing training on MK1. To analyse the responses on the multiple-choice questions on the market and market exchange concepts, we rated the correct answer provided as 1 and the incorrect answers as 0. The number of correct answers of the experimental group was then compared against the number of correct responses of the control group using a 2x2 cross-tabulation (Chi-Square). For the true/false questions on market dynamics, we compare the number of correct answers (out of 20) in the experimental group with the number of correct answers provided by respondents in the control group using a t-test. Likewise, the number of correct responses provided by the experimental group and control group for the nine yes/no questions for customer-oriented activities and the three yes/no questions for target buyer selection used to capture customer-centric business were compared using t-tests. The question on prioritizing (ranking order) business elements is analysed using kruskal-wallis nonparametric ranking test (Chi-Square). For competition, we compared the number of correct responses of each group out of five yes/no questions using a t-test. The questions on marketing instruments were tested by comparing the number of correct responses for the three questions on product and price using a t-test. For the multiple-choice question on negotiation, we use a 2x2 crosstabulation (Chi-Square) (correct answer rated as 1 and incorrect answer rated as 0).

Table 5.4 presents description of the exam content, number of correct responses or mean for each group, the effect size (λ), the mean differences, χ^2 , and t-value. The results in this table show significant differences between the two groups for all variables, except for competition and negotiation. For example, the multiple choice questions for market and market exchange were answered considerably better by the training participants than by the members of the control group (33 respondents in the experimental group versus 13 respondents in the control group answered question about the market concept correctly, and 38 respondents in the experimental group versus 23 respondents in the control group answered the questions for market exchange correctly). For market dynamics the difference was smaller (11.65 versus 10.72 correct answers), but still significant. Competition appeared however a concept that caused great difficulties for pastoralists in the experimental and control groups. In both groups, participants identified on average not even two out of the five potential competitor groups in their market. Also negotiation was not performed significantly better by the experimental than by the control group.

Only 32 respondents in the experimental group chose to negotiate price based on market value of their animals (while the remaining agreed to accept the price offered by the trader from their clan) while 29 respondents in the control group chose to negotiate (above half chose to accept the price offered by the trader from their clan member).

Second, we test the hypothesis on the data of MK2 collected at M_0 and M_8 using the difference-in-differences estimation method (hereafter Diff-in-Diff). We used this method because it compares the changes in outcomes over time periods between a group enrolled in a program and a control group by removing time-invariant unobserved factors (Imbens & Wooldridge, 2009; Gertler et al., 2011). The difference-in-differences estimation is recommended, for example, by the World Bank for training impact evaluation because the treatment effect relies on the collection of data before and after the treatment from both the experimental and comparison units, and provides a controllable, intuitive way to account for selection on unobserved characteristics (Khandker, Koolwal, & Samad, 2010). The double differencing removes biases in second period comparisons between the enrolled group and non-enrolled group that could be the result from permanent differences between those groups, as well as biases from comparisons over time that could be the result of other factors over time trends unrelated to the training program (Gertler et al., 2011). Specifically, we used the following model to analyse the impact of our training program:

$$Y = \beta_0 + \beta_1 E + \beta_2 \text{after} + \beta_3 E*\text{after} + e$$

Where Y is the dependent variable, namely MK2 (or as we will report below: market-oriented breeding, market-oriented fattening, market-oriented quality care, target market selection, market-oriented communication, value-informed pricing, competition-informed pricing, negotiation, price satisfaction and livelihood performance), that indicate the changes because of the training program given to the experimental group; E = 1 if in experimental group, 0 if in control group; after = 1 if after training program, 0 if before training program.

β_0 = the mean outcome for the control group before the training program (at the baseline or M_0)

$\beta_0 + \beta_2$ = the mean outcome for the control group in the follow-up (after the training or M_8)

$\beta_0 + \beta_1$ = the mean outcome for the experimental group before the training program (at the baseline or M_0)

$\beta_0 + \beta_1 + \beta_2 + \beta_3$ = the mean outcome for the experimental group in the follow-up (after the training or M_8)

β_3 = the impact of the training program (the difference-in-differences)

The results show that the market knowledge (MK2) of pastoralists in the experimental group increased from an average of 2.91 at M_0 to 3.25 at M_8 . At M_8 the experimental group also

Chapter 5

shows a higher level of knowledge than the control group (3.25 versus 2.93 , $p < .05$). The diff-in-diff (i.e., the overall difference from M_0 and M_8) is significant at $p < .10$ (one-tailed) (Figure 5.3 and Table 5.5). We therefore find marginal support for hypothesis 3 on the basis of the MK2 measure for market knowledge. However, the support from the more elaborate measures included in MK1 generally support the hypothesis, with the exception of the competition and negotiation elements of the training.

Table 5.4: Description and results of the exam on marketing training components (MK1)

Training program components	Description	Number of correct answers/Mean		Effect size (λ)/mean differences	Chi-Square (χ^2)/t-value
		EG (n=60)	CG (n=60)		
Market (λ)	In a multiple choice question with five alternatives (one correct answer and four destructors), the respondents were asked on what livestock market is. The experimental group and control group were compared based on the number of correct responses in each group.	33 (.55)	13 (.22)	.33***	12.73
Market exchange (λ)	In a multiple choice question with five alternatives (one correct answer and four destructors), the respondents were asked on what market exchange implies. The experimental group and control group were compared based on the number of correct responses in each group.	38 (.63)	23 (.38)	.25**	6.54
Market dynamics	In a true/false question, respondents were asked on 20 questions that influence demand for and supply of livestock that generally including: <ul style="list-style-type: none"> - Changes in consumers consumption preferences, income. - Changes in policy related to domestic consumption and export/import - Changes in supply of livestock by other producers - Absence/availability of livestock buyers - Seasonality (dry/wet, holidays) 	11.65	10.72	.93**	2.12
Customer-centric business:					

Table 5.4 (continued)

Prioritizing business elements	Respondents were asked to prioritize livestock business elements	Always focus on the customer (1 st rank)	39	10	NA	6.82**
		Fatten animals you intend to sell (2 nd rank)	41	24		
		Select and sell when only you need cash (3 rd rank)	36	25		
		Sell only if drought is expected (4 th rank)	31	19		
		Always focus only on increasing herd size (5 th rank)	34	15		
Customer-orientation activities	Respondents were asked to respond on nine yes/no items whether they agree that a pastoralists who wants to convert his livestock into cash should: <ul style="list-style-type: none"> - Separate his livestock he intends to sell from others in feeding, mobility - Continuously follow changes in the preferences of traders - Intentionally breeding and crossbreeding animals for market - Sell livestock only when he needs cash (in a reversed question form) 	5.43	4.78	.65**	2.39	
Target buyer selection	The respondents were provided with three questions (with yes/no response) that describe the attributes of three animals and identify who the most potential target buyer (fattening operator, slaughterhouse or exporter) each could be.	1.92	1.48	.44**	2.03	
Competition	Respondents were provided with the list of potential competitors (other pastoralists, agropastoralists, farmers, fattening operators, I don't have competitors) to rate as their competitors in the market (yes/no/I don't know).	1.65	1.23	.40	1.50	

Table 5.4 (continued)

Marketing instruments:					
Product and price interaction	In three multiple choice questions with two choices each, respondents were: <ul style="list-style-type: none"> - provided with information on attributes of two oxen (weight, age, castrated/uncastrated) to identify which one can be sold at a higher price (value-informed pricing decision) - provided with information to image that they have good quality bull, they don't need cash to cover immediate expenditure, high current price (cost or market informed selling decision). - Provided information to imagine that there are many suppliers and that price is low, but they need cash now to decide whether to sell a fattened one or an old one and borrow any extra money needed from a microfinance. 	1.58	1.25	.33**	2.03
Negotiation (λ)	Respondents were provided with information that they want to sell an animal and attributes of the animal; a rural trader from their clan has offered them a price; and opportunity to negotiate other buyers based on market conditions.	32 (.53)	29 (.48)	.05	.133
Business ethics	Not included in the exam to avoid lengthy and complicated exam content.	NA	NA	NA	NA
Value chain	Not included in the exam to avoid lengthy and complicated exam content.	NA	NA	NA	NA

***p<.01, **p<.05, two-tailed significance; NA = not applicable

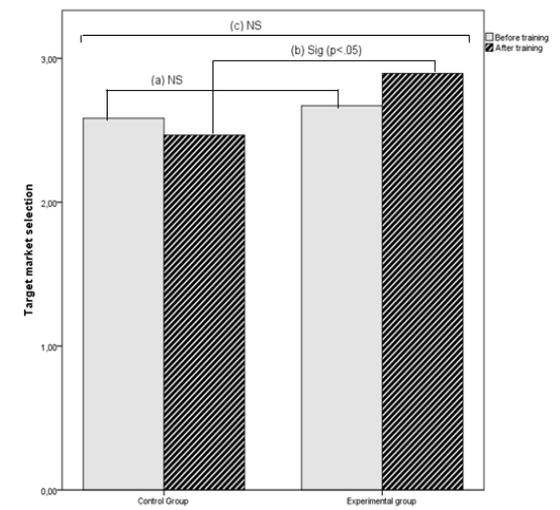
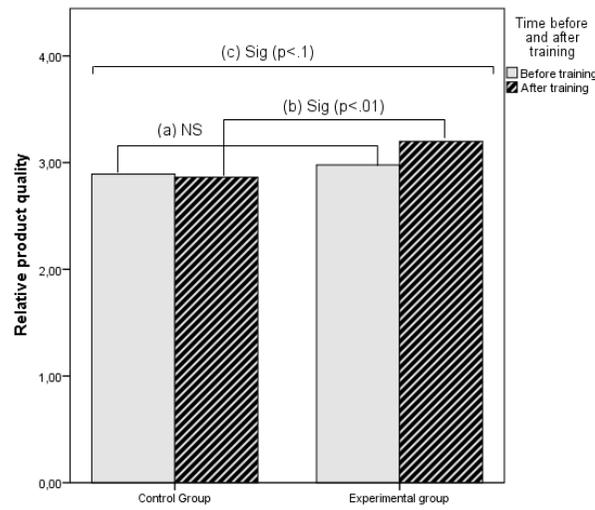
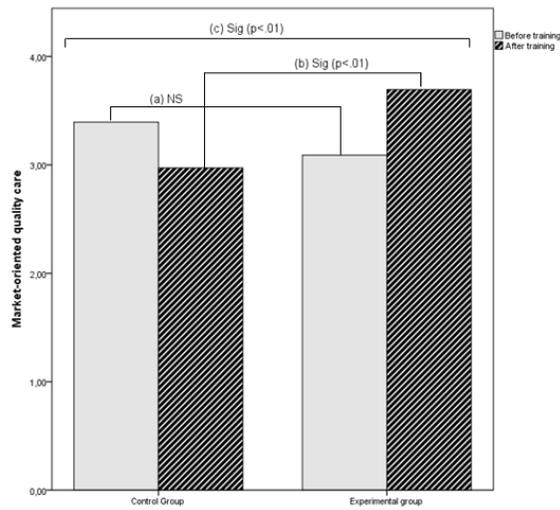
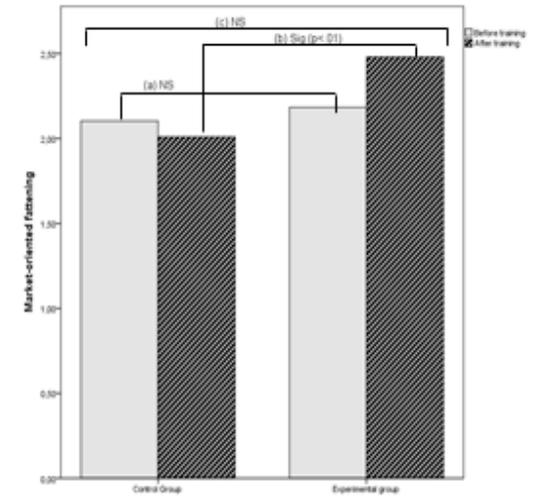
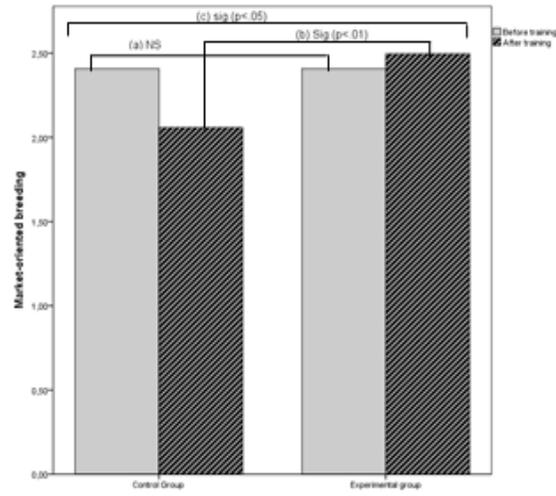
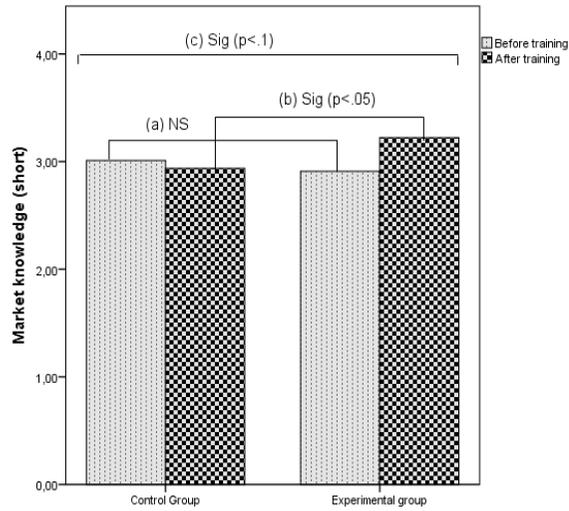
5.4.2. *Effects of the marketing training on value creation, price satisfaction and livelihood performance*

In addition to the effects on market knowledge, we further examined whether trained pastoralists engage more in value creating activities and whether they exhibit higher levels of price satisfaction and livelihood performance. Figure 5.3 and Table 5.5 presents the mean differences and diff-in-diff estimation for customer value creation indicators, price satisfaction and livelihood performance based on the M_0 and M_8 surveys.

As becomes clear from Table 5.5 (and also the figure), the experimental group scores higher after the training than before on nine value creation activities. It also shows that their average scores at M_8 are higher than those of the control group for market-oriented breeding (2.50 versus 2.06), market-oriented fattening (2.48 versus 2.01), market-oriented quality care (3.69 versus 2.97), relative product quality (3.20 versus 2.86), target market selection (2.90 versus 2.47), market-oriented communication (2.70 versus 2.16) and value-informed pricing (3.45 versus 2.97) of the value creation activities. The diff-in-diff results show that the experimental group significantly differs from the control group on market-oriented breeding ($p < .05$) and market-oriented quality care ($p < .01$). The effect of relative product quality is however marginal ($p < .10$). The diff-in-diff result is significant for market-oriented communication ($p < .01$) and marginally significant for value-informed pricing ($p < .10$). Consistent with the findings for market knowledge (MK1), the diff-in-diff results for competition-informed pricing and negotiation are not significant (see Figure 5.3). Interestingly, the results show that the experimental group exhibits higher levels of price satisfaction (mean = 2.33) and livelihood performance (mean = 2.79), than the control group (respectively 1.88 and 2.50) at M_8 . The diff-in-diff for livelihood performance is significant at $p < .05$ while it is marginally significant for price satisfaction ($p < .10$).

We also compared the experimental group and comparison group on their level of market interaction (measured based on the number of livestock they sold and bought within eight months before the training and within eight months after the training) to understand whether the differences in value creation and livelihood performance are caused by *selling more* rather than by *selling better*. We did however not find a significant difference on market interaction between the experimental group and control group.

Does a Marketing Training for Ethiopian Pastoralists Improve their MK, CVC and LP?



Chapter 5

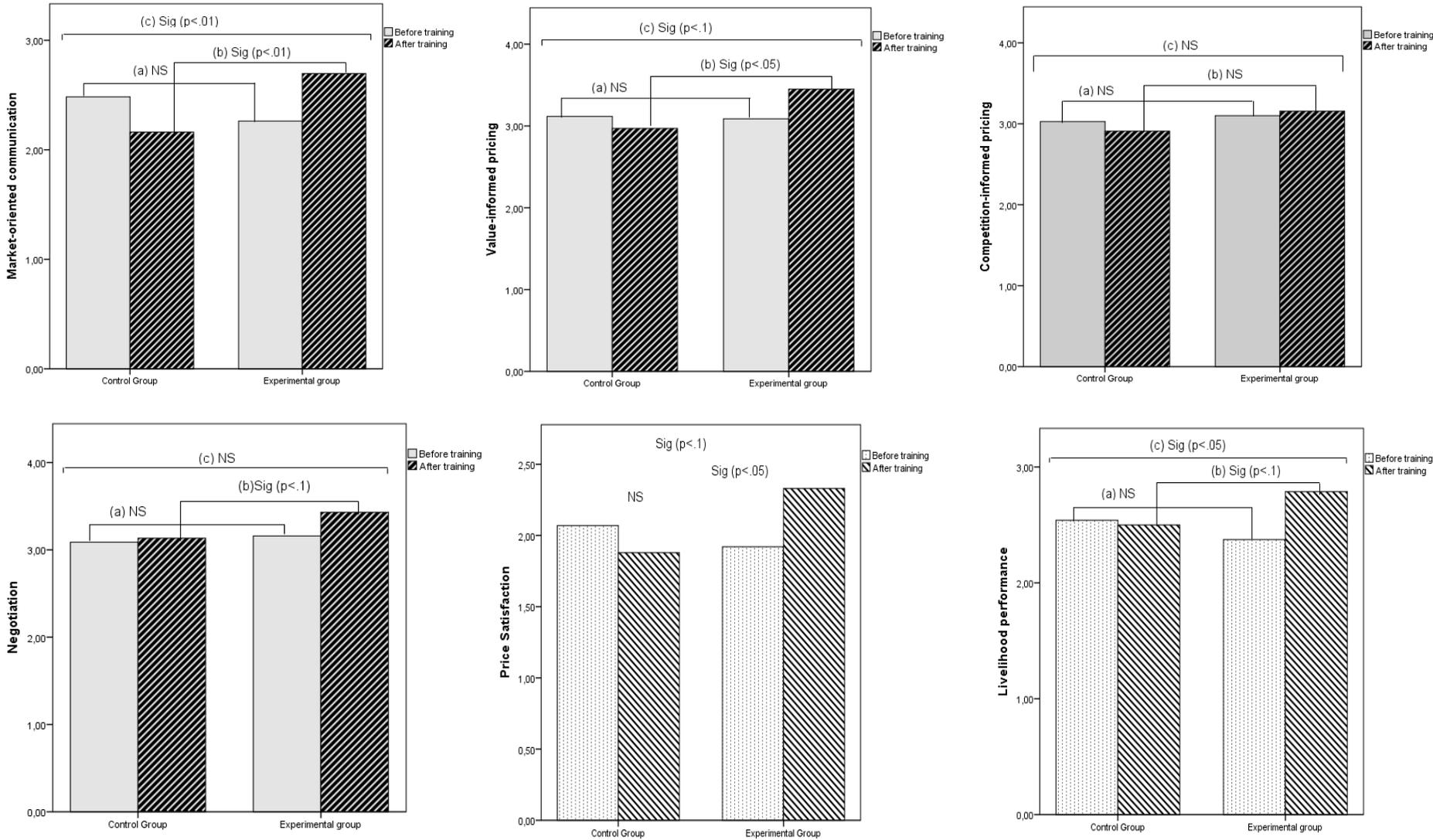


Figure 5.3: Comparison of the experimental group (EG) and control group (CG). NS= not significant; Sig= significant. “(a)” represents the mean differences of the EG and CG at baseline (M_0) and “(b)” represents the mean difference at follow-up (M_8). “(c)” is the diff-in-diff (or β_3).

Table 5.5: Results from difference-in-differences estimation

Variables	Diff (M ₀)	t	Diff (M ₈)	t	Diff-in- diff	t
Market knowledge (MK2)	-.10	-.64	.33**	2.09	.43*	1.93
Customer value creation indicators:						
Market-oriented breeding	0	0	.44***	3.15	.44**	2.23
Market-oriented fattening	.08	.46	.47***	2.72	.39	1.69
Market-oriented quality care	-.31	-1.62	.72***	3.82	1.03***	3.84
Relative product quality	.08	.82	.33***	3.14	.25*	1.70
Target market selection	.09	.46	.43**	2.24	.34	1.26
Market-oriented communication	-.22	-1.09	.53***	2.64	.75***	2.64
Value-informed pricing	-.03	-.15	.48**	2.41	.51*	1.81
Competition-informed pricing	.07	.41	.25	1.38	.17	.69
Negotiation	.07	.40	.29	1.65	.22	.88
Price satisfaction	-.15	-.68	.57**	2.56	.72**	2.29
Livelihood performance	-.17	-1.07	.29*	1.83	.46**	2.08
Market interaction	-1.57	-.35	3.08	.69	4.65	.74

*** p<0.01; ** p<0.05; * p<0.10, one tailed significance.

5.4.3. Hypotheses 1 and 2

While the previous results on value creation activities and livelihood performance present important findings, strictly speaking they don't test hypotheses 1 and 2. Hypothesis 2 predicted that pastoralists with higher market knowledge will engage more in customer value creation activities. To test this hypothesis, we estimated an ordinary least squares regression model. We controlled for the effects of age, family size and distance to main road (measured in terms of travel hours) on customer value creation indicators. Specifically, we tested the effects using the following model:

$$Y = \beta_0 + \beta_1MK2 + \beta_2A + \beta_3FS + \beta_3DMR + \varepsilon$$

Where Y represents either market-oriented breeding, market-oriented fattening, market-oriented quality care, relative product quality, target market selection, market-oriented communication, value-informed pricing, competition-informed pricing and negotiation (the dependent variables). A represents the age of respondents, FS stands for family size and DMR entails to distance (in terms of time) from the main road to the villages of the respondents, and the β_s indicate the parameter estimates.

We found significant direct effects of market knowledge (MK2) on customer value creation indicators. These include effects of market knowledge on market-oriented breeding ($\beta = .158, p < .05$); on market-oriented fattening ($\beta = .319, p < .01$); on market-oriented quality care ($\beta = .328, p < .01$); and on relative product quality ($\beta = .211, p < .01$). We also found significant direct effects from market knowledge on target market selection ($\beta = .306, p < .01$); on market-oriented communication ($\beta = .279, p < .01$); on value-informed pricing ($\beta = .239, p < .05$); and on negotiation ($\beta = .180, p < .10$). We do not find effect of MK2 on completion-informed pricing ($\beta = .115$). Age of respondents, family size and distance from main road do not significantly affect the customer value creation indicators. In sum, we find a significant support for hypothesis 2 that pastoralists with higher market knowledge engage more in customer value creation activities.

Subsequently, we tested hypothesis 1 that predicts that customer value creation activities positively affect price satisfaction and livelihood performance. We estimated the effects of customer value creation indicators using the following models.

$$PS = \beta_{10} + \beta_{11}MOB + \beta_{12}MOF + \beta_{13}MOQC + \beta_{14}RPQ + \beta_{15}TMS + \beta_{16}MOC + \beta_{17}VIP + \beta_{18}COMIP + \beta_{19}NEG + \varepsilon_1$$

$$LP = \beta_{20} + \beta_{21}MOB + \beta_{22}MOF + \beta_{23}MOQC + \beta_{24}RPQ + \beta_{25}TMS + \beta_{26}MOC + \beta_{27}VIP + \beta_{28}COMIP + \beta_{29}NEG + \varepsilon_3$$

Where PS and LP represent price satisfaction and livelihood performance (the dependent variables), respectively. MOB, MOF, MOQC and RPQ represent market-oriented breeding, market-oriented fattening, market-oriented quality care and relative product quality, respectively. TMS, MOC, VIP, COMIP and NEG denote, respectively, target market selection, market-oriented communication, value-informed pricing, competition-informed pricing and negotiation.

Table 5.6 presents the estimation results of the customer value creation indicators on price satisfaction and livelihood performance. The results show that market-oriented fattening ($\beta = .344, p < .01$), market-oriented quality care ($\beta = .228, p < .05$), relative product quality ($\beta = .351, p < .05$), market-oriented communication ($\beta = .207, p < .10$) and value-informed pricing ($\beta = .234, p < .05$) significantly affect price satisfaction. The effects of market-oriented breeding, target market selection, competition-informed pricing and negotiation on price satisfaction are not significant. Market-oriented fattening ($\beta = .306, p < .01$), relative product quality ($\beta = .269, p < .05$), target market selection ($\beta = .14, p < .10$) and value-informed pricing ($\beta = .151, p < .10$) significantly affect livelihood performance. Over all, the results provide support for hypothesis 1 that pastoralists who engage more in customer value creation exhibit higher levels of price satisfaction and perform better in their livelihood.

The significance of the direct effects of market knowledge on customer value creation suggests that the customer value creation indicators may partially mediate the relationships between market knowledge and price satisfaction, and market knowledge and livelihood performance. We formally tested the mediation paths using the bootstrapping procedure developed by Hayes (2013), which uses the same measures and number of observations for each bootstrap sample of the mediating variable. Table 5.7 displays the results of the mediation test. The results show that market-oriented fattening and value-informed pricing significantly mediate the relationship between MK2 and price satisfaction. The results also show that only market-oriented fattening significantly mediates the relationship between MK2 and livelihood performance. We tested for multicollinearity between the customer value creation indicators through the variance inflation factor (Hair, et al., 2010). The highest variance inflation factor was 1.92 for value-informed pricing. Multicollinearity was therefore not a concern in our data.

Table 5.6: Effects of customer value creation on price satisfaction and livelihood performance

	Price satisfaction		Livelihood performance	
	Beta (β)	t-value	Beta (β)	t-value
Market-oriented breeding	-.215	-1.54	-.062	-.56
Market-oriented fattening	.344***	2.87	.306***	3.22
Market-oriented quality care	.228**	2.13	.064	.75
Relative product quality	.351**	2.24	.269**	2.17
Target market selection	.053	.53	.14*	1.72
Market-oriented communication	.207*	1.92	.012	.14
Value-informed pricing	.234**	2.10	.151*	1.72
Competition-informed pricing	.055	.46	.008	-.08
Negotiation	-.135	-1.19	-.009	-.01

***P<0.01, **p<0.05, *p<0.10, one-tailed significance

Table 5.7: Mediation tests

	Sobel test (Z)
MK2 → Market-oriented fattening → Price satisfaction	1.99**
MK2 → Market-oriented quality care → Price satisfaction	1.56
MK2 → Relative product quality → Price satisfaction	1.32
MK2 → Market-oriented communication → Price satisfaction	1.39
MK2 → Value-informed pricing → Price satisfaction	1.66*
MK2 → Market-oriented fattening → Livelihood performance	2.36**

5.5. Discussion

This study tests the impact of a marketing training program on market knowledge among pastoralists in order to create value for their customers and as a result to improve their livelihood performance. The results of the study confirm that marketing training on fundamental marketing concepts, such as market, market exchange, customer-centric business, market dynamics and marketing instruments enhances market knowledge among pastoralists. The results also support the prediction that trained pastoralists engage more in customer value creation activities compared to the non-trained ones. As a consequence of their focus on customer value creation activities, pastoralists become more satisfied with the prices they received and improve their livelihood performance.

We predicted that the pastoralists we enrolled in the training program will perform better in competitor-informed pricing and negotiation, but these predictions are not supported. Possible explanations for the unsupported prediction can be that competition-informed pricing and negotiation may require their own specific focus and separate modules in order for participants to explicitly distinguish the concepts. Pastoralists may not capture the essence of monitoring others' (competitors) production and marketing strategies and actions if such learning objectives are not explicitly delivered separately to serve them as a yardstick to compare their production and marketing practices with their competitors. The insignificance difference on negotiation can also highlight that training on negotiation needs a prolonged emphasis to deepen among traditional societies, such as pastoralists, who customarily expect support and favours from others while dealing with market actors (Viswanathan et al., 2010). In our mediation analysis, we find that only a few customer value creation indicators mediate the relationship between market knowledge and price satisfaction, and market knowledge and livelihood performance. The fact that many of the customer value creation indicators directly influence price satisfaction and livelihood performance may highlight that still more effort is needed until the pastoralists concretely internalize the importance of market knowledge to create value for their customers, and as result improve their livelihood performance.

5.6. Implications

The importance of marketing training to acquaint learners with marketing knowledge is already evidenced from studies conducted among entrepreneurs in urban economy contexts (e.g., Carson, 1993; Viswanathan et al., 2009). This study substantiates this importance of marketing training by supporting it with evidence from the remote rural context of pastoralists. This evidence paves the road for the consideration of marketing training in the

policies and actions designed to facilitate the market integration of rural smallholders, and for its broader application to diverse rural contexts in D&E countries. To date, policies and actions that aim to facilitate the market integration of rural producers get little input from studies on the implications of marketing training and market learning (e.g., Adekambi, Ingenbleek, & van Trijp, 2015). Such policies and actions have rather been designed based on recommendations from agricultural and development economics studies that largely focus on transaction costs (e.g., Barrett, 2008; Chamberlin & Jayne, 2013; McPeack, 2001). Reducing transaction costs can be useful to minimize physical barriers, but may not necessarily relax the mental barriers that impede the rural producers to deeply understand how the market functions. Without an understanding of the market, what customers prefer to purchase and how to respond to the preferences of the customers, rural producers find it difficult to integrate with (e.g., Arnould & Mohr, 2005; Weatherspoon & Reardon, 2003).

The results of this study highlight that marketing training is relevant to overcome the mental barriers by helping rural producers to develop market knowledge and engage in customer value creation activities. As such, it deserves attention from policy makers and nongovernment organizations (NGOs). By incorporating marketing training in their long-term programs and projects, policy makers and NGOs can help pastoralists to improve their market knowledge. By doing so, marketing trainings may not only help pastoralists to engage in market-oriented breeding, fattening, quality care and communication activities but also can instil the ability to use the information about others to set prices (competition-informed pricing) and to negotiate with market actors for mutual benefits. Supporting pastoralists to build their market knowledge is relevant to facilitate the supply of higher quality livestock to markets and for pastoralists to improve their livelihood. High quality and quantity livestock supply from pastoralists contributes to responding to the increasing demand for animal-protein.

The evidence on the importance of marketing training is also relevant for other types of smallholders that share same characteristics with pastoralists. Marketing training can equip rural smallholders with what to produce to comply with customers' quality and safety demands (know-what), why to comply with quality and safety demands (know-why) and how to develop products to comply with customer requirements. Policies and programs designed to support smallholders to integrate with markets in that respect should consider marketing training to equip smallholders with such knowledge, which can guide them to make informed production decisions to make profits on the basis of satisfying customer needs. An understanding of why to focus on satisfy customer, which is the basic reason for market

exchanges, can be established by teaching fundamental marketing concepts (Kotler & Keller, 2012). Acquainting smallholders, for example the majority of young African people residing in rural areas (World Bank, 2014; FAO, 2012), with an understanding of how the market-based economy functions and when and why buyers become willing to purchase products and services can guide them on how to optimize their available resources to focus on value adding production activities to be rewarded by the market. Market rewards (i.e., profits) will allow the young work force to improve their livelihoods and to contribute to the development of rural Africa, which by implication reduces associated socioeconomic problems, such as rural-urban migration and humanitarian crisis caused by illegal migration of the young through life threatening routes.

An important final remark is that marketing training that will be designed and implemented to help smallholders to develop market knowledge should follow the principles of market exchange. In other words, marketing training programs should be offered to smallholders to equip them with knowledge to organize their operation to create customers value in order for the market to reward them. Interfering marketing trainings with other programs that provide incentives, such as distributing farming or fishing equipment or animal feed, to alleviate financial problems of the smallholders may lead to a wrong way of knowledge development.

5.7. Limitations and further research

The limitations of this study offer directions for further research. First, the findings of this study are based on the effects of a marketing training program with an eight months follow-up. The effects of the training program on many customer value creation indicators are significant while effects on competition-informed pricing and negotiation are not significant. Research can further test the effectiveness of marketing training in strengthening customer value creation among pastoralists by offer the learning objectives over longer period, and treating competition-informed pricing and negotiation in their own rights as separate learning modules.

Second, the insights of this study are based on applying a marketing training in the context of pastoralists. More substantiating evidence can be obtained by applying marketing training programs to other smallholder businesses including farming, fishing, forest keeping, processing and artisanship both in Ethiopia and other developing and emerging countries in Africa, Latin America and Asia. Evidence from diverse contexts will provide an interesting insight that strengthens the underlying assumption on the contribution of marketing training to

enable low-literate, low-income communities to effectively function in and benefit from markets. Furthermore, the evidence from diverse contexts will provide confidence to policy makers and development workers to allocate resources to design and implement marketing trainings to empower the poor with knowledge to seize market opportunities and thus promote rural development. If smallholders, who create the majority of employment opportunities in D&E countries (FAO, 2012), will not be equipped with the knowledge necessary to understand how the market operates and envisage why producing based on the needs of customers is vital, they will likely continue to produce less marketable products. They will also have minimal influence on their marketplace transactions, and thus losing profits and falling deeper into poverty, which makes it difficult to promote rural development.

Appendix 5.1: Background information at baseline (M₀, March 2015)

Background information at baseline		EG (n=60)	CG (n=60)	t/ χ^2
Age distribution (mean)		45.98	45.58	.166
Family size (mean)		8.59	7.88	.907
Education level (percentage out of total respondents- <i>crosstabs</i> @@)	None	43.3	40.8	1.57
	Primary	3.3	5	
	Secondary	1.7	3.3	
	Adult education	1.7	.8	
Income generating activities (percentage out of total respondents- <i>crosstabs</i> @@)	Only livestock and livestock products	40	38.3	5.82
	Livestock <i>plus</i> other causal work other (day labourer)	-	2.5	
	Livestock and livestock products <i>plus</i> cropping	4.2	1.7	
	Livestock and livestock products <i>plus</i> brokerage	2.5	1.7	
	Livestock and livestock products <i>plus</i> petty trade	2.5	4.2	
	Livestock and livestock products <i>plus</i> brokerage <i>plus</i> petty trade	-	.8	
	Livestock and livestock products <i>plus</i> cropping <i>plus</i> other causal works	.8	.8	
Market interaction (mean)	Based on the number of livestock sold and bought	18.33	19.90	.33
Perceived rainfall (mean)		4.58	4.63	.45
Aspiration level (mean)		4.31	4.00	1.88
Self-efficacy (mean)		4.15	3.95	1.43
Market knowledge (mean)		2.911	3.01	.65

All differences insignificant, except for aspiration level, significant at $p < .10$.

@@ Fisher's exact test (χ^2)

Appendix 5.2. Training program description

The first day of the training program acquaints participants with the learning objectives on concepts, namely, what livestock *market* is, how it functions, the livestock market actors, and what role they play. It also focused on distinguishing the different types of livestock buyers (exporters, fattening operators, slaughterhouses, and domestic end-consumers) and the various ways to realize *market exchanges* with these buyers (through direct contacts like phone calls,

in marketplaces or indirectly through government offices or NGOs). *Market dynamics* was also discussed in terms of the changes (and trends) in livestock prices because of changes in the demand for and/or supply of livestock and the availability of livestock traders, changes in preferences of domestic and international consumers or changes in export and import policies. The first day ends with hinting on the *customer-centric livestock business* philosophy for the next day.

The learning objective on *customer-centric business* emphasized the logic why pastoralists should initiate their livestock production with a thorough understanding of the preferences of livestock buyers (customer-first, rather than product-first). It acquaints participants with the customer-first mindset so that the participants see the benefits of considering the needs of livestock buyers as an input in the production process, and thus produce the livestock for which there is market demand. For this purpose, we used a simulated scenario and a role-model pastoralist to demonstrate the benefits of producing and supplying high quality livestock, better breeds, fattened livestock and quality care activities. Participants were exposed to simulated scenarios with one pastoralist portrayed as a product-oriented producer and another as a customer-oriented producer. The product-oriented pastoralist discusses with his elder son on the need for cash, then selects an ox that can be sold at or equivalent to the cash needed and then contacts a broker to sell the animal on his behalf. The customer-oriented pastoralist first visits marketplaces and makes phone calls to brokers and traders, discusses with a trader who supplies livestock to exporters, and explains that he has fattened, healthy and better breed animals. They finally reach a deal that the customer-oriented producer sells his animal at a better price. The role-model pastoralist also explains how he undertakes livestock production to ensure that his animals are fit to the needs of customers. The logic of why to focus on the preference of livestock buyers was underpinned further by discussing how other livestock suppliers including highland farmers, commercial cooperatives, and fattening operators (*competition*) respond to the needs of their customers.

The learning objective on *competition* acquaints the pastoralists with the different types of livestock suppliers and their actions to align their animals with the demands in the market. *Competition* is discussed about how, for example, fattening operators scrutinize the needs of their customers (e.g., exporters), buy skinny young animals with high fattening potential, fatten the animals until they gain the weight and height that exporters look for and directly sell to the exporters. By doing so, the fattening operators take advantage of their competitors including the pastoralists by buying skinny animals at lower prices and increase their quality to sell fattened animals at a right time and higher prices.

To further deal with the learning objective on *customer-centric business*, sequential livestock production and marketing activities that a customer-centred pastoralist is supposed to accomplish, continues on Day-3. Participants watch a video (with a hired role playing pastoralist) that details customer-centric livestock business activities including assessing the livestock market, searching for livestock buyers; discussing with the buyers about their quality preferences and talking to livestock sellers about demand and prices in the marketplace. The role model pastoralist creates a linkage with and receives the consent of specific buyers to buy from him if he prepares livestock based on their livestock quality preferences they look for. Subsequently, the pastoralist assembles feed, selects best breed animals, fattens, and keeps the quality of the animals by restricting mobility, removing ticks and giving drugs. Finally, the pastoralist contacts the pre-specified buyers, explains the attributes of his animals, invites the buyers to see for themselves, negotiates for prices and sells the animals. After watching the video, participants discuss the activities in groups (in a competitive exercise) and outline the activities in sequence as explained in the video; each member of a winning group is awarded with torch lights.

After an extensive and detailed discussion on *customer-centric business*, the next training day focuses on the learning objective on *marketing instruments*. The learning objective on marketing instruments acquaints participants with an understanding of the interaction between product quality, communication mechanisms, product distribution channel and pricing. It demonstrates the raising of livestock with appropriate attributes (type, breed, weight, height, age and color) with a focus on the right buyers (e.g., exporter or fattening operator) and supplying the livestock to the buyers at the right time and through an effective channel. The learning objective also emphasizes on determining prices based on the attributes of the animals, the demand in the market and the supply of livestock by others. Posters with two oxen with different attributes are used to guide participants, in groups, to outline the attributes, compare the animals, set prices and identify the potential buyer for each.

The last session of the training program focuses on *business ethics* and the *value chain*. *Business ethics* is discussed as the values and principles that guide the dealings among the actors in the livestock value chain. Participants identify the unethical and ethical behaviours of their business partners, and how the behaviours influence mutually beneficial exchanges. The reasons behind the unethical behaviours (tricks, psychological games, communication signs and disputes) are also discussed. The discussion subsequently focuses on the *value chain* starting from primary livestock production and proceeding to final consumption (end consumers) in order to acquaint participants with the bigger picture, from primary production

Strengthening Customer Value Creation through Marketing Training

to end-consumption. A depiction of the value chain on a poster shows the linkages between the primary producers and the end-consumers. The five-days training session ends with exit discussions on what the participants acquired from the training and how they are planning to apply what they have learned in their livestock raising and marketing business.

Appendix 5.3: Scale items, loadings, and alpha values

	Market-oriented breeding (alpha =.84; eigenvalue = 2.71 for M₀ and alpha = .73; eigenvalue = 2.26 for M₈)	M₀	M₈
1	How often did you crossbreed livestock?	.70	.66
2	How often did you purposefully breed with livestock that most likely give offspring that traders are looking for?	.87	.84
3	How often did you purposefully breed with livestock that most likely give offspring with high fattening potential?	.85	.81
4	How often did you purposefully breed with livestock that most likely give healthier offspring important for market?	.86	.68
5	How often did you purposefully breed with livestock that most likely give offspring that will give more milk?	Dropped	Dropped
6	How often did you purposefully breed with livestock that most likely give offspring with high drought resistant?	Dropped	Dropped
	Market-oriented fattening (alpha =.88; eigenvalue = 3.42 for M₀ and alpha = .85; eigenvalue = 3.11 for M₈)	M₀	M₈
1	To what extent did you fatten the livestock you selected for market?	.89	.87
2	To what extent did you separately feed the livestock for market to increase their weight?	.87	.77
3	To what extent did you assemble better feed to fatten the livestock for market?	.82	.73
4	To what extent did you protect some grazing area to fatten livestock for market?	.85	.77
5	To what extent did you reserve feed for fattening during dry season?	.71	.80
6	To what extent did you consult traders to bring you better feed to fatten livestock?	Dropped	Dropped
7	To what extent did you store feed for all your herds to use during dry season?	Dropped	Dropped
	Market-oriented quality care (alpha =.83; eigenvalue = 2.25 for M₀ and alpha = .79; eigenvalue = 2.10 for M₈)	M₀	M₈
1	To what extent did you reduce the movement of the livestock you selected for market	Dropped	Dropped
2	To what extent did you remove the tick from the livestock you intend to sell	.90	.88
3	To what extent did you give more drugs for the livestock you intend to sell	.91	.91
4	To what extent did you separate the livestock you raise for market from other herds to protect them from transmittable animal disease	Dropped	Dropped
5	To what extent did you seek advice from the extension workers to improve the quality of your livestock	.78	.71

Strengthening Customer Value Creation through Marketing Training

	Relative product quality (alpha =.78; eigenvalue = 2.85 for M₀ and alpha = .76; eigenvalue = 2.79 for M₈)	M₀	M₈
1	I offered to the market during the last eight months were better breeds	.73	.61
2	I offered to the market during the last eight months were fattened	.82	.76
3	I offered to the market during the last eight months were less exhausted (fitter)	.61	.65
4	I offered to the market during the last eight months were contained no or few ticks	.64	.63
5	I offered to the market during the last eight months were healthier	.67	.70
6	I offered to the market during the last eight months were of higher quality for buyers	.65	.74
7	I offered to the market during the last eight months were non-lactating, old or bad breeds (R)	Dropped	Dropped
	Target market selection (alpha =.80; eigenvalue = 2.49 for M₀ and alpha = .75; eigenvalue = 2.32 for M₈)	M₀	M₈
1	I deliberately search for traders who look for the same livestock type	.85	.73
2	I carefully select the buyers that I can adequately serve their preferences	.88	.88
3	I discuss with brokers on the type of livestock buyers they should look for	.79	.79
4	I sell livestock to traders with very different livestock preferences	Dropped	Dropped
5	I select the livestock buyers only on how well I know them	Dropped	Dropped
6	I neglect the traders that do not look for the livestock I usually produce and offer	.62	.63
7	I do not know who buys my livestock as my broker takes care of that (R)	Dropped	Dropped
	Market-oriented communication (alpha =.91; eigenvalue = 3.18 for M₀ and alpha = .83; eigenvalue = 2.68 for M₈)	M₀	M₈
1	To what extent did you discuss livestock prices?	.86	.72
2	To what extent did you discuss the right time to sell livestock?	.85	.83
3	To what extent did you discuss the type of livestock that traders are looking for?	.93	.87
4	To what extent did you discuss the preference of livestock traders?	.93	.85
5	To what extent did you discuss how brokers better help you sell your livestock? (R)	Dropped	Dropped
	Value-informed pricing (alpha =.89; eigenvalue = 3.02 for M₀ and alpha = .77; eigenvalue = 2.35 for M₈)	M₀	M₈
1	To what extent are your livestock prices determined by the quality of your livestock for the buyer?	.85	.77
2	To what extent are your livestock prices determined by the breed, age, weight and height of the livestock?	.89	.83
3	To what extent are your livestock prices determined by the health and physical condition (appearance) of the livestock?	.91	.79
4	To what extent are your livestock prices determined by what the trader is willing to pay for unique quality?	.84	.68

Chapter 5

	Competition-informed pricing (alpha =.80; eigenvalue = 2.14 for M₀ and alpha = .78; eigenvalue = 2.07 for M₈)	T₀	T₈
1	To what extent are your livestock prices determined by the number of livestock in the market	.86	.82
2	To what extent are your livestock prices determined by the prices fixed by other sellers for similar livestock	.87	.86
3	To what extent are your livestock prices determined by the number of livestock traders available in the market	.81	.82
4	To what extent are your livestock prices determined by the negotiation tricks of livestock brokers and traders	Dropped	Dropped
5	To what extent are your livestock prices determined by the negotiation tactics that you observe other livestock sellers exercise	Dropped	Dropped
	Negotiation (alpha =.76; eigenvalue = 2.34 for M₀ and alpha = .70; eigenvalue = 2.13 for M₈)	M₀	M₈
1	I negotiate prices for my livestock depending on their breed, weight, and age	.88	.72
2	I reject prices that don't fit the breed, weight and age of my livestock	Dropped	Dropped
3	I negotiate price for my livestock depending on the price for similar livestock	.65	.69
4	I negotiate prices for my livestock depending on the number of available traders in the market	.83	.76
5	I negotiate prices for my livestock depending on last market day prices	Dropped	Dropped
6	I always accept the prices offered by broker/trader for my livestock (R)	Dropped	Dropped
7	My broker negotiates and decides the prices of my livestock (R)	.67	.75
	Livelihood performance (alpha =.76; eigenvalue = 2.54 for M₀ and alpha = .76; eigenvalue = 2.57 for M₈)	M₀	M₈
1	I make more money now than eight months before	.81	.71
2	I save more money now than eight months before	.75	.79
3	I consume more vegetables now than eight months before	.65	.71
4	I buy better quality shoes and clothes for myself and my family now than eight months before	.70	.72
5	I can contribute more to my clan members now than eight months before	.64	.66
6	I invested in business activities (e.g., a petty shop)	Dropped	Dropped
7	The size of my herd is now bigger than eight months ago	Dropped	Dropped

Strengthening Customer Value Creation through Marketing Training

	Market knowledge (alpha =.87; eigenvalue = 4.48 for M₀ and alpha = .86; eigenvalue = 4.43 for M₈) A pastoralist who wants to convert his livestock into cash:	Factor loadings	
		M₀	M₈
1	Has no other option than selling his livestock at a marketplace like Dubuluq. (R)	Dropped	Dropped
2	Can search for any buyer who could pay a better price.	Dropped	Dropped
3	Will benefit more if he finds a buyer who seeks ways in which both himself and the pastoralist selling livestock gain something.	.68	.72
4	Should know that climate and export markets influence prices for livestock.	.66	.62
5	Should know changes in what livestock buyers prefer.	.76	.79
6	Will benefit more if satisfying the buyer's need is central in his livestock raising practice.	.77	.82
7	Will only benefit more if he is lucky in the market the day he sells his livestock. (R)	Dropped	Dropped
8	Will benefit more if he searches for better breeds that livestock traders look for.	.71	.75
9	Will benefit more if he always sells his old or bad breed livestock. (R)	Dropped	Dropped
10	Will receive lower prices if he sells a lower quality livestock compared to highland farmers.	.62	.65
11	Will benefit more if he prefers to sell when other pastoralists bring many similar livestock that day (R)	Dropped	Dropped
12	Should know the specific activities required to raise high quality livestock.	.76	.66
13	Should follow accustomed procedures to deal with livestock brokers/traders.	Dropped	Dropped
14	Should be able to explain the quality of his livestock to livestock buyers.	.74	.64
15	Should accept the first price that the buyers offer for his livestock. (R)	.64	.65

6

General Discussion, Conclusion and Implications

6.1. Discussion

The overall aim of the present thesis is to design a marketing training program and test its effectiveness in improving pastoralists' market knowledge, strengthening their customer value creation activities and thereby improving their livelihood performance. To achieve this aim, the thesis answers the following four research questions: 1) How and why do marketing trainings (theoretically) affect market knowledge, value creation and livelihood performance in the context of smallholders? 2) What are the marketing training needs of pastoralists? 3) What training concepts and methods does a marketing training require to acquaint the pastoralists with the market knowledge they need? and 4) Does marketing training indeed strengthen value creation and improve the livelihood performance of pastoralists? The thesis answered these questions by means of one conceptual chapter and three empirical chapters.

To answer research question 1, chapter 2 integrates the literature on smallholders, business training and customer value creation. From the strategic marketing literature, the chapter takes as its starting point that customers become willing to purchase and pay for products if they find that the products contain and deliver the value that their customers desire (e.g., Slater, 1997). Building on the concept of market orientation, businesses (including smallholders) are capable in developing the products that customers prefer if they have the knowledge what the customers value, and able to organize their operations in such a way that it creates value to the customers (e.g., Marinova, 2004; Slater et al., 2012). If such knowledge on what customers value and how the delivery can be organised is lacking, such knowledge and action gap can be filled through teaching fundamental marketing concepts (e.g., Kotler & Keller, 2012). Marketing concepts, such as market, market exchange, customer-centric business and marketing instruments are the building blocks from which businesses (smallholders) can acquire the foundational knowledge about why customers exchange their money for a product (e.g., Kotler & Keller, 2012; Slater, 1997).

Chapter 3, a qualitative field study, deeper explores the marketing training needs of pastoralists to answer research question 2. To identify which types of market knowledge of pastoralists need improvement, this qualitative field study investigates the knowledge that Ethiopian pastoralists have and the knowledge they lack, and which hampers them to focus on customer value creation activities to raise and supply livestock that buyers are willing to pay for. The study identifies that the market knowledge of Ethiopian pastoralists, particularly remote Borana pastoralists is largely confined to an understanding of (daily) routines, and everyday experiential and physically existing facts. Pastoralists consider the livestock market as a fixed physical place with regular market days for sellers and buyers to meet and transact.

Consistent with the evidence from the literature (e.g., Desta & Coppock, 2004), the chapter finds that the majority of Ethiopian pastoralists try to sell animals that they have produced primarily to satisfy their own needs and interest, which is building herd size to ensure sustainable milk production and gain higher social status, rather than producing from the perspective of customer needs for market. As such, the chapter identifies that pastoralists can benefit from marketing training aimed at an understanding of markets as mechanisms with a variety of systems, procedures, institutions and individuals interconnected to influence and play different roles to facilitate market exchanges between sellers and buyers. Pastoralists are in need of a comprehension of why it is important to consider the needs and interests of buyers during livestock reproduction (know-why) in order to reproduce animals that their customers will purchase and pay for.

At a higher level of abstraction, the results of this chapter on the one hand confirm that pastoralists are ecologically and economically rational actors who use integrated approaches including a mobile lifestyle and markets to efficiently utilize communal rangelands (e.g., Adriansen, 2006; Sandford & Scoones, 2006). They use markets to generate a cash income for their livelihoods (Nori et al., 2006) and to destock and restock their animals enabling them to live in harmony with their natural environment (Kerven, 1992; Sandford & Scoones, 2006). On the other hand, the results make clear that in order to make better use of markets, pastoralists would benefit from more marketing knowledge. While this finding in itself doesn't justify the conclusion that pastoralism in itself is not a sustainable system (cf. Nori & Davis, 2007), it does call for interventions that can strengthen the market knowledge. If sustainable pastoralism requires markets and a proper functioning of livestock market requires pastoralists to understand the functioning of markets, the current level of marketing knowledge of many pastoralists that participated in the study is unlikely to be sufficient to ensure the improvement of their livelihoods and adaptation to natural conditions.

Building on the training needs of pastoralists identified in Chapter 3, Chapter 4 explicates theoretically underpinned learning objectives from fundamental marketing concepts essential to acquaint pastoralists with the knowledge they need to engage in customer value creation activities. Through a desk study, the chapter identifies *market*, *market exchange*, *market dynamics*, *customer-centric business*, *competition*, *marketing instruments*, *business ethics* and *value chain* as important concepts from the mainstream marketing literature for which more specific learning objectives need to be derived in order to equip pastoralists with basic knowledge of what a market is, what customers value and why to focus on what customers value (know-why) (e.g., Kotler & Keller; 2012; Burnett, 2008). These

abstract learning objectives are contextualized to the interpretation scheme and economic activities of the pastoralists. The findings from the contextualization study reveal that concretizing the concepts into the concrete thinking and livestock economy of pastoralists minimized confusion and communication gaps, and fostered participants' understanding of the concepts. In terms of teaching methods, chapter 4 also identifies pictorial presentations, guided oral and group discussions and presentations, role-model storytelling and video presentations as suitable teaching methods to educate low-literate learners (e.g., Grossman et al., 2013; Knowles, Holton, & Swanson, 2014; Viswanathan, Gajendiran, & Venkatesan, 2008), such as pastoralists. First evidence for the feasibility of the training program is provided through a pilot test of the complete training program.

The findings from chapter 5 help to answer research question 4. Through a field experiment, the effectiveness of the marketing training program is formally tested by enrolling one group of pastoralists (an experimental group) in the program. This group's performance on market knowledge, customer value creation, price satisfaction and livelihood performance indicators is compared to that of a matched control group of pastoralists not receiving the marketing training. The experimental group was enrolled in the training program for five days of five training hours each, and compared with the control group based on data collected at baseline (i.e., collected before the training, M_0) and eight months follow up after the training (M_8). The results show that, compared to the control group, the experimental group has significantly higher market knowledge and performs better in market-oriented breeding, fattening, quality care, communication, in supplying relatively higher quality livestock and value-informed pricing. As a result of their increased focus on customer value creation activities, the experimental group performs better in their livelihood performance. The results, however, show that there are no significant differences between the experimental group and control group on competition-informed pricing and negotiation. Overall, the results highlight the importance of marketing training in strengthening pastoralists' market knowledge, customer value creation and improving their livelihood performance.

Compared to previous work on marketing training in D&E countries, which was mainly focussed on peri-urban smallholders (e.g., Viswanathan et al., 2009), our study is the first quantitative experiment to show that marketing training is also effective in highly remote contexts with limited market interactions. Our findings on pastoralists, what one might call the extreme case of remoteness, are not confined to pastoralists specifically. The findings are also relevant to other types of rural smallholders with similar characteristics as pastoralists. Comparable to pastoralists, many rural smallholders decide themselves on what to produce,

how to produce, and when and to whom to sell their products. These rural smallholders also typically operate in areas with minimal influence from the market environment and with limited productive resources (Ouma et al., 2010; Poulton, Kydd, & Dorward, 2006), which are necessary to learn from the market environment. Because they have minimal opportunities to learn from the market, the smallholders, in their production and marketing decisions, are left with the knowledge they have developed within their own community, often over many generations. Their production scheme is in that regard mostly aimed at self-consumption and small volume transactions in local markets, with minimal adaptation to the rapidly changing demands of non-local, higher price rewarding markets (e.g., Collier & Dercon, 2014; Diao & Hazell, 2004; London et al., 2010).

Marketing training can equip the smallholders with the knowledge on what to produce for the market (know-what), why to adapt their operation to the demands of the markets (know-why) and how to develop products that meet the demands of the market (know-how). By teaching fundamental marketing concepts (e.g., Koteler & Keller, 2012; Narvar & Slater, 1990), marketing training can establish a marketing-based knowledge view among the smallholders that will likely help them to envisage market realities and to make informed production and marketing choices and decisions. With such marketing-based knowledge, the smallholders may scrutinize market conditions and engage in customer value creation activities to develop products that buyers are willing to purchase. If smallholders engage in customer value creation activities, multinational, supermarket, fast food and exporting companies will likely secure sufficient supplies to meet the quantity demand from the growing population, and the quality and safety demand from the upcoming middle class (e.g., Reardon et al., 2015). As a result, smallholders can earn a cash income that enables them to improve their livelihood performance.

It is, however, important to note that marketing training may not be equally relevant for all smallholders. For example, some smallholders are members of well-functioning cooperatives and other forms of organizations that make joint production and marketing decisions (Piesse et al., 2005). There are also smallholders whose production decisions are highly influenced by powerful supply chain leaders and outgrower schemes (Glover, 1990; Porter & Phillips-Howard, 1997). These cooperatives and outgrower schemes organize farmer field schools and visits to large scale commercial farms and give orientations to smallholders on what and how they should produce to fulfil quality and safety standards (Okoth et al., 2006). Marketing training may have minimal impact on these group of smallholders as they

do not have the authority to independently exercise their knowledge to make production and marketing choices.

6.2. Conclusion

The thesis arrives at the following main conclusions. First, the market integration of smallholders is not only a matter of creating an enabling institutional environment through developing roads, marketplaces and accessing finance. It is also a matter of the mental abilities of the smallholders that pertain to their market knowledge.

Second, by developing market knowledge, smallholders can understand what customers value and what changes occur in market conditions, and manage to utilize their understanding to create offerings that satisfy the needs of customers. In other words, smallholders with market knowledge organize their operation in a way that more consistently creates value to customers and is responsive to customer preferences and market standards.

Third, by producing and supplying products that meet the quantity and quality requirements of markets, such as the export markets, smallholders can sell their products at better prices and can earn a (higher) cash income. With the cash that they earn, smallholders can purchase food with higher nutrition value, consumer goods and accumulate capital to upgrade their business, which promotes rural development.

Fourth, because the majority of smallholders reside in rural areas with limited productive resources, they have minimal chances to learn by themselves about the market requirements. This thesis confirms that marketing training is a relevant intervention to enable rural producers to focus on customer value creation. Marketing training therefore deserves attention from policy makers, NGOs and companies in the value chain. The chapters in this thesis provide important insights that a rigorously designed and contextually meaningful training program is useful to teach people who have little experience with the market-based economy.

6.3. Implications

The evidence from the present thesis implies that marketing training deserves attention in the policies, programs and projects designed to facilitate the market integration of pastoralists. To date, policies, programs and projects of governments and nongovernmental organizations (NGOs) are largely inspired by findings from agricultural and development economics studies that more focus on reducing transaction costs to bring remote pastoralists closer to markets (e.g., Barret, 2008; Fratkin & Mearns, 2003). However, pastoralists' remoteness from markets is not only explained from the physical distance perspective but also from the fact that they

are mentally isolated from the commercial market, which they tend to label the “non-pastoral world”. To operate in their own world, pastoralists have developed traditional knowledge that enables them to raise livestock by adapting to the natural resources in the remote drylands. Their traditional knowledge however does not capture the knowledge necessary to understand and function in the marketing-based economy that is knocking on their doors and demanding them to respond to the quality and safety requirements of buyers.

For pastoralists to develop market knowledge they need to envisage the realities and benefits beyond their daily and traditional practices and to make informed production and marketing decisions. This is why we recommend policy makers and NGOs to make marketing training part of their programs and projects. In this regard, governments and NGOs can focus on consistently training pastoralists to deeply understand how the market operates, what persuades livestock buyers to purchase animals, why it is important for pastoralists to consider the preferences of the livestock buyers during livestock reproduction and how the pastoralists can raise animals that the buyers want to purchase. By doing so, policy makers and NGOs can contribute to facilitating the supply of quality animals that enables pastoralists to earn better prices and for the market to obtain quality animals to meet the growing demand for animal protein.

Marketing training on market knowledge also deserves attention from the companies in the livestock value chain who directly face the challenges of quality and quantity livestock supply shortage. As explained in chapter 3 of this thesis, fattening operators, slaughterhouses and exporting companies complain that pastoralists (the primary source in the chain) do not supply the right age, breed, weight and physical appearance, nor sufficient quantity. These companies also complain that pastoralists do not maintain the history of their animals, which makes it difficult for the companies to communicate the right attributes and history of the animals to their customers, such as importing countries. A win-win solution to these problems can be to mobilize resources to train pastoralists to understand the logic of market exchange, the importance of raising livestock based on market requirements and the connection of the pastoralists as primary producers with the end-consumers. Unless pastoralists are trained to produce the required quality and quantity of livestock (i.e., as long as they pursue their traditional way of livestock reproduction), the supply shortage that these companies are facing is unlikely to be solved.

This thesis has also implications for policy makers and NGOs that work on facilitating the market integration of rural smallholders other than pastoralists. As in the case of pastoralists, the agriculture and development economics literature largely approaches the

market integration problems of the smallholders from the transaction cost perspective (e.g., Barret, 2008; Jayne, Mather, & Mghenyi, 2010) and has overlooked the role of market knowledge in the market integration of smallholders. Policy makers and NGOs should consider the importance of building the market knowledge of smallholders through marketing training. By building the market knowledge of rural smallholders through marketing training, policy makers and NGOs can play an important role in helping smallholders to engage in customer value creation activities to develop and supply products and services valuable for the market. As a consequence of supplying products that meet market demand, smallholders can improve their livelihood performance while contributing to feeding the growing population and to responding to the demand for high quality products.

As a concluding remark, it is important to remind that smallholders also learn from their experiences and interactions with governmental organizations and nongovernmental organizations (NGOs) that implement programs and projects that facilitate the smallholders' market integration. These organizations should ensure that their programs and projects do not lead smallholders to capture a misleading message that goes against the logic of market exchange. When organizations give resources, such as improved variety seed and farming equipment, for free as incentives and to overcome smallholders' financial constraints, the smallholders may take such free resources for granted and may refrain from investing on necessary resources to create value that the market is willing to reward. The organizations should in that respect ensure that trainings designed to improve the market knowledge of the smallholders are not intermingled with the incentives.

6.4. Directions for future research

The lessons learned during conducting this thesis provide directions for future research. The thesis has focused on pastoralists. It trained a group of pastoralists for five days on market knowledge that pertains to know-what, know-why and know-how, compared their performance with a control group through an eight months follow up, and finds significant but modest effects on market knowledge, customer value creation and livelihood performance indicators. The first implication is that further research can provide marketing training program for prolonged and repeated periods and measure, separately, the impacts of know-what, know-why and know-how in order to specifically indicate which component of the training program more significantly causes the effects. Such deeper evidence can guide policy makers and NGOs to decide to which component of the training program to give more emphasis in building the market knowledge of pastoralists and other types of smallholders.

Second, beyond training smallholders to acquire and apply knowledge in undertaking their businesses to win over their livelihood challenges, it would be profitable if further marketing research could investigate approaches that can promote a mindset and habit for lifelong learning. Lifelong learning entails to an ongoing and self-motivated exploration of knowledge for critical thinking, well-informed choices and application across time and places (e.g., Bolhuis, 2003). Training programs that promote such kind of mindset, for example, among the majority of young rural Africans may germinate curiosity for self-motivated and sustained personal development to enhance productivity and remain continuously informed about the increasingly market-based global economy.

Finally, the current thesis has identified learning objectives and teaching methods suitable to convey the knowledge that pastoralists need to engage in customer value creation activities. Another study can explore an approach that empowers smallholders with the ability to learn from one another after the training (training of trainers, for example). Through a longitudinal experiment, such further research can validate whether such training approaches are effective in empowering smallholders to teach and transfer knowledge to their community members.

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Summary

The market integration of African smallholders is important to feed the growing world population, to respond to increasing demand for high quality products, to strengthen national economies and to alleviate rural poverty. However, integrating with markets continues to be challenging for the majority of rural smallholders. Particularly, it is challenging for pastoralists who raise livestock in remote rural areas with scarce productive resources and minimal institutional support. Thus far, solutions to the barriers that hinder pastoralists to integrate with and function in the markets are recommended from the agricultural and development economics literature. This literature has mostly investigated the institutional environmental barriers related to transaction costs. However, it has overlooked the importance of market knowledge, which is necessary for the pastoralists to understand what livestock buyers value and are willing to pay for. To fill this gap, the current thesis approaches the market integration of pastoralists from a strategic marketing perspective and considers pastoralists as customer value creating business owners. Pastoralists make decisions mainly at the individual level on what and how to produce using their own available resources. Value to customers is created through the decisions of such individual businesses and the way they organize their operations to assemble resources and to create offerings that satisfy their customers.

The marketing literature has documented that successful businesses make production and marketing decisions based on their knowledge of how the market operates, why to consider the preferences of customers during product development, and how to respond to what the customers prefer to purchase (e.g., Glazer, 1991; Kotler & Keller, 2012). Pastoralists in that respect should have the knowledge about how the market functions and why they should consider the preferences of potential livestock buyers during livestock reproduction in order to persuade buyers to purchase their animals and successfully integrate with markets. This thesis therefore investigates the market knowledge that pastoralists need to engage in customer value creation activities. The thesis aims to design and test whether marketing training can strengthen customer value creation among pastoralists through improving their market knowledge.

To achieve this aim, the thesis answers the following four research questions: 1) How and why do marketing trainings (theoretically) affect value creation and livelihood performance in the context of smallholders? 2) What are the marketing training needs of pastoralists? 3) What training concepts and methods does a marketing training require to acquaint the pastoralists with the market knowledge they need? and 4) Does marketing

training indeed strengthen value creation and improve the livelihood performance of pastoralists?

To understand how marketing training affects customer value creation and livelihood performance of smallholders, chapter 2 integrates the literature on smallholder, business training and customer value creation. Chapter 2 concludes that smallholders who are able to create more value that their customers are willing to pay for earn more profits that enable them to pay for food, education for their children, and medical services for their family. The smallholders can create value for their customers only if they know what their customers value and such knowledge can be established by training them on fundamental marketing concepts that convey an understanding on how markets function, why businesses exist and why customers spend their money on certain products. This chapter develops a conceptual framework that demonstrates that marketing training improves market knowledge, and improved market knowledge enables to create customer value, which in turn leads to improved livelihood performance.

Chapter 3 investigates the market knowledge that pastoralists need to engage in customer value creation activities (i.e., the marketing training needs of pastoralists). This chapter finds that pastoralists lack the market knowledge that pertains to the logic why it is relevant to consider the needs of livestock buyers during livestock reproduction. Due to lack of such knowledge, the majority of pastoralists raise livestock primarily to satisfy their own needs and interests rather than those of their customers. The chapter thus concludes that to make market informed production and marketing decisions, pastoralists need a training that helps them to change their mindset from production-oriented to market-oriented. In the relatively remote and isolated living areas of pastoralists, such a marketing-based mindset can only be established through a marketing training.

Departing from the marketing training needs of the pastoralists as studied in chapter 3, chapter 4 determines learning objectives from fundamental marketing concepts, and develops teaching methods suitable to equip the pastoralists with the learning objectives. The concepts that establish the basic marketing knowledge include market, market exchange, market dynamics, customer-centric business, competition, marketing instruments, value chain and business ethics (e.g., Kotler & Keller, 2012; Vitale, Giglierano, & Pfoertsch, 2011). From the education and marketplace literacy literature, the chapter identifies pictorial presentations, guided oral and group discussions and presentations, role-model storytelling and video presentations as suitable methods to educate learners like pastoralists (e.g., Grossman et al., 2013; Knowles, Holton, & Swanson, 2014; Viswanathan, Gajendiran, & Venkatesan, 2008).

Chapter 4 subsequently contextualizes the concepts and teaching methods to fit the interpretation scheme and livestock economy of the pastoralists. Finally, it designs and pilot tests a complete training program.

Through a field experiment, chapter 5 tests the effectiveness of the training program by enrolling a group of pastoralists (experimental group) and by comparing them with a control group on market knowledge, customer value creation, price satisfaction and livelihood performance indicators. The findings in the chapter confirm that the experimental group performs better in terms of market knowledge and customer value creation activities including market-oriented breeding, fattening, quality care and communication compared to the control group. The experimental group is, eight months after the training, also more satisfied with the prices it received and training participants experienced higher livelihood performance. These results confirm the expected benefits of the marketing training for pastoralists.

Finally, chapter 6 discusses the results of the different chapters in the thesis, the implications and directions for future research. The thesis shows the importance of marketing training to acquaint pastoralists with knowledge (know-what, know-how and know-why) to strengthen customer value creation activities. The thesis in that respect concludes that market integration of pastoralists and other similar rural producers does not depend only on availability of institutions and resources, but also on the knowledge to produce what the market demands and to understand how the market functions. With the knowledge of what, how, and why to produce, smallholders can make informed decisions on how to organize their operations. The thesis therefore recommends stakeholders, including policy makers, NGOs and companies in the value chain, to use marketing training to equip smallholders with the required knowledge. This can create on the one hand higher returns for smallholders and more value for buyers and on the other a higher and higher-level food supply to feed the growing world population.

Samenvatting

Het integreren van kleinschalige Afrikaanse agrarische producenten met de markt is belangrijk om de groeiende wereldbevolking te kunnen voeden, om aan de groeiende vraag naar producten van een hogere kwaliteit te kunnen voldoen, om de nationale economieën te versterken en om armoede in landbouwgebieden te verlichten. Voor de meerderheid van de Afrikaanse kleinschalige agrarische producenten blijft de integratie met de markt echter een uitdaging. Het is vooral uitdagend voor de pastoralisten (herders), die vee hoeden in afgelegen landelijke gebieden met weinig productiemiddelen en een minimum aan ondersteunende instituties. Oplossingen voor de hindernissen voor pastoralisten om te integreren met en te functioneren in markten, zijn tot op heden vooral aangereikt vanuit de agrarisch en ontwikkelingseconomische literatuur. Deze literatuur heeft zich vooral gericht op hindernissen in de institutionele omgeving die de transactiekosten verhogen. Deze literatuur heeft echter het belang van marktkennis over het hoofd gezien. Marktkennis is noodzakelijk voor pastoralisten om te begrijpen wat kopers waarderen en hoeveel ze bereid zijn om te betalen voor het vee dat wordt aangeboden op de markt. Omdat pastoralisten in hun afgelegen leefomgeving maar zeer beperkt contact hebben met de markt, doen zij deze kennis niet of nauwelijks op via hun dagelijkse activiteiten. Om deze lacune te vullen, benadert dit proefschrift de marktintegratie van pastoralisten vanuit een strategisch marketing perspectief en beschouwt het pastoralisten als bedrijfseigenaren die klantwaarde creëren. Pastoralisten maken beslissingen voornamelijk op individueel niveau over hoe en wat ze produceren op basis van de hun beschikbare middelen. Waarde voor klanten wordt gecreëerd door de manier waarop individuele bedrijven hun activiteiten organiseren, beslissingen nemen en middelen bij elkaar brengen om een aanbod te creëren dat hun klanten tevreden stelt.

De marketingliteratuur heeft aangetoond dat succesvolle ondernemingen productie en marketingbeslissingen maken op basis van hun kennis over hoe de markt opereert, waarom de voorkeuren van klanten belangrijk zijn bij het ontwikkelen van nieuwe producten en hoe te reageren op de wensen van klanten (zie bijvoorbeeld, Glazer, 1991; Kotler & Keller, 2012). Om succesvol te integreren met markten en potentiële kopers te overtuigen om hun vee te kopen, zouden ook pastoralisten daarom de kennis moeten hebben over hoe de markt functioneert en waarom ze de wensen van potentiële kopers in acht moeten nemen tijdens de productie. Dit proefschrift onderzoekt daarom de marktkennis die pastoralisten nodig hebben om klantwaarde te creëren. Het proefschrift beoogt een marketing training te ontwikkelen en te testen of deze marketing training de creatie van klantwaarde kan versterken.

Om deze doelstelling te bereiken beantwoordt het proefschrift de volgende vier onderzoeksvragen: 1) Hoe en waarom beïnvloeden marketing trainingen (theoretisch gezien)

de waarde creatie activiteiten en de kwaliteit van leven in de context van pastoralisten en andere kleinschalige agrarische producenten? 2) Wat zijn de behoeftes van pastoralisten ten aanzien van marketing trainingen? 3) Welke training concepten en methoden heeft een marketing training nodig om pastoralisten de kennis te leveren die zij nodig hebben? En 4) Versterkt een marketingtraining inderdaad de waarde creatie en verbetert het de kwaliteit van leven van pastoralisten?

Om te begrijpen hoe marketing training de creatie van klantwaarde en de kwaliteit van leven van kleine agrarische producenten beïnvloedt, integreert hoofdstuk 2 de literatuur over kleinschalige agrarische producenten, ondernemingstrainingen en klantwaarde creatie. Hoofdstuk 2 concludeert dat kleinschalige agrarische producenten die er in slagen om meer waarde te creëren, meer winst zullen maken die hen onder andere in staat stelt voedingsmiddelen, de opleiding voor hun kinderen, en medische zorg voor hun familie te betalen. De kleinschalige agrarische producenten kunnen echter alleen waarde creëren voor hun klanten wanneer ze weten wat hun klanten waarderen en dergelijke kennis kan verkregen worden via trainingen in fundamentele marketingconcepten. Deze creëren begrip over hoe markten functioneren, waarom ondernemingen bestaan en waarom klanten hun geld aan bepaalde producten uitgeven. Dit hoofdstuk ontwikkelt een conceptueel raamwerk dat laat zien dat marketing training de marktkennis verbetert en dat de verbeterde marktkennis agrarische producenten in staat stelt om klantwaarde te creëren, wat vervolgens tot een betere kwaliteit van leven leidt.

Hoofdstuk 3 onderzoekt de marktkennis die pastoralisten nodig hebben om klantwaarde te kunnen creëren (de marketing training behoeftes van pastoralisten). Dit hoofdstuk vindt dat pastoralisten gebrek hebben aan de marktkennis die betrekking heeft op de logica waarom de behoeftes van de kopers van vee in overweging genomen moeten worden tijdens de productie van vee. Door gebrek aan dergelijke kennis brengen de meeste pastoralisten vee groot dat vooral aan hun eigen behoeftes en belangen tegemoet komt, maar niet aan die van hun klanten. Het hoofdstuk concludeert daarom dat om productie- en marketingbeslissingen te kunnen maken op basis van de markt, pastoralisten een training nodig hebben die helpt om hun mindset te veranderen van productiegericht naar meer marktgericht. In het relatief afgelegen en geïsoleerde leefgebied van pastoralisten, kan een dergelijke marketing-gebaseerde mindset alleen verkregen worden door een marketing training.

Vertrekkend vanuit de trainingsbehoefte van de pastoralists zoals bestudeerd in hoofdstuk 3, bepaalt hoofdstuk 4 de leerdoelen op basis van fundamentele marketing concepten en het ontwikkelt lesmethoden die geschikt zijn om de leerdoelen te behalen in de

context van de pastoralisten. De concepten die de basale marketing kennis vestigen zijn markt, markt transacties, marktdynamiek, klantgerichte onderneming, concurrentie, marketinginstrumenten, waarde ketens en bedrijfsethiek (zie bijvoorbeeld, Kotler & Keller, 2012; Vitale, Giglierano, & Pfoertsch, 2011). Op basis van de literatuur over educatie en “marketplace literacy” identificeert het hoofdstuk pictografische presentaties, geleide mondelinge en groepsdiscussies en presentaties, rolmodel verhalen en video presentaties als geschikte methoden om laagletterde participanten zoals pastoralisten te trainen (e.g., Grossman et al., 2013; Knowles, Holton, & Swanson, 2014; Viswanathan, Gajendiran, & Venkatesan, 2008). Hoofdstuk 4 contextualiseert vervolgens de leerdoelen en leermethoden zodat deze passend zijn voor de interpretatieraamwerken en de op vee gebaseerde economie van de pastoralisten. Tot slot ontwerpt het hoofdstuk het volledige trainingprogramma en voert het een pilot test uit van de volledige training.

Middels een veldexperiment test hoofdstuk 5 de effectiviteit van het trainingsprogramma door een groep pastoralisten aan de training deel te laten nemen (de experimentele groep) en hen te vergelijken met een controle groep op basis van hun marktkennis, klantwaarde creatie, prijsstevredenheid en kwaliteit van leven indicators. De bevindingen van het hoofdstuk bevestigen dat de experimentele groep beter presteert in termen van marktkennis en klantwaarde creatie, bestaande uit marktgericht reproduceren, vetmesten, kwaliteitszorg en communicatie, vergeleken met de controle groep. De experimentele groep is acht maanden na de training ook meer tevreden met de prijzen die het ontvangt op de markt. De deelnemers ervaren ook een hogere kwaliteit van leven. Deze resultaten bevestigen de verwachte positieve uitkomsten van de marketingtraining voor pastoralisten.

Tot slot bespreekt hoofdstuk 6 de resultaten van de verschillende hoofdstukken in het proefschrift, de implicaties en de richtingen voor vervolgonderzoek. Het proefschrift toont het belang aan van marketing training om pastoralisten te voorzien van marktkennis (kennis over het “wat”, “hoe” en “waarom”) om klantwaarde creatie te versterken. Het proefschrift concludeert in dat opzicht dat de marktintegratie van pastoralisten en vergelijkbare kleinschalige agrarische producenten niet alleen afhangt van de beschikbaarheid van instituties en middelen, maar ook van de kennis om te produceren wat te markt vraagt en te begrijpen hoe de markt functioneert. Met de kennis wat, hoe en waarom te produceren kunnen kleinschalige agrarische producenten geïnformeerde beslissingen nemen over hoe ze hun activiteiten willen organiseren. Het proefschrift raadt belanghebbenden zoals beleidsmakers, ontwikkelingsorganisaties en bedrijven in de keten, daarom aan marketingtrainingen te

gebruiken om producenten van de benodigde kennis te voorzien. Dit verhoogt enerzijds de inkomsten voor producenten en de klantwaarde voor kopers en kan anderzijds een groter en hoogwaardiger aanbod creëren om de groeiende wereldbevolking te voeden.

About the Author



Mebrahtu Leake Teklehaimanot was born on 18 August 1983 in Adigrat, Ethiopia. He completed his secondary education at Agazi comprehensive secondary school, Adigrat in 2001. In the same year, he joined Alemaya (now Haramaya) University and studied Accounting for four years. He obtained Bachelor of Arts Degree (with distinction) in Accounting in 2005. Immediately after his graduation, he joined Haramaya University as a graduate assistant in the Department of Accounting. In 2007, after two years working experience, he joined Addis Ababa university where he studied and obtained Master of Science (MSc) degree in Accounting and Finance. After MSc, he reinstated at Haramaya University as a lecturer. In addition to his teaching and research activities, he served as dean to the College of Business and Economics, head of Accounting Department and other extra-curricular and administration activities of the university. In March 2013, he started his PhD research at Marketing and Consumer behaviour group, Wageningen University. His PhD research examined the design and impact of marketing training in strengthening customer value creation and improving the livelihood performance of remote smallholders, particularly pastoralists, who largely develop products for self-consumption. His research interests include business and marketing knowledge and skills training; entrepreneurship and marketing education; development marketing; project management and analysis; financial markets and institutions. He can be reached at mebratuleake@yahoo.com.

Completed Training and Supervision Plan

Mebrahtu Leake Teklehaimanot

Wageningen School of Social Sciences (WASS)



Wageningen School
of Social Sciences

Name of the learning activity	Department/Institute	Year	ECTS*
A) Project related competences			
Eden doctoral seminar on strategic marketing	EIASM, Brussel	2013	4
PhD discussion series	MCB, WUR	2013	1
Econometrics AEP21306	WUR	2013	6
Advanced statistics MAT20306	WUR	2013	6
Quantitative data analysis: Multivariate techniques YRM60306	WUR	2013	6
B) General research related competences			
Introduction course	WASS	2013	1
Writing PhD proposal	MCB, WUR	2013	6
<i>'Broadening the Applications of Marketing Trainings in Subsistence Marketplaces'</i>	The Sixth Subsistence Marketplaces Conference, June 17-19, University of Illinois at Urbana-Champaign, Illinois.	2016	1
MCB PhD and Lunch club series	MCB, WUR	2013-2017	2
C) Career related competences/personal development			
Techniques for writing and presenting a scientific paper	WGS	2013	1.2
Information literacy for PhD including EndNote introduction	WUR library	2013	0.6
The essentials of scientific writing and presenting	WGS	2016	1.2
Review of paper from Journal of African Business	WJAB	2016-2017	0.6
Total			36.6

EIASM stands for European Institute for Advanced Studies in Management

MCB stands for Marketing and Consumer Behaviour Group

WUR stands for Wageningen University and Research

WASS stands for Wageningen School of Social Sciences

WGS stands for Wageningen Graduate School

WJAB stands for Journal of African Business

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