VALUE FOR SMALLHOLDER FARMERS PARTICIPATING IN THE AGRICULTURAL VALUE CHAIN: TOWARDS THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK

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Abstract. Participation of smallholder farmers in the agricultural value chain is determined by their ability to capture value. There are different concepts of value that should be considered: those that drive an improvement in output value of a smallholder farmer, and those that pertain to smallholder farmers themselves, the functional (upgrading) and experiential value. Upgrading in the value chain takes three major areas of upgrading strategies: product, process and functions (Kaplinsky and Morris, 2008); the authors of this paper argue that these represent the functional value. The authors therefore claim that functional value refers to an improved or enhanced value in a more physical sense (e.g. higher prices per product sold). That leaves experiential value, which is intrinsically gained by the smallholder farmer, and is driven by improved learning and experience, confidence gained and control. Therefore, for a balanced analysis and understanding of the value for farmers participating in the value chain, the authors propose a conceptual framework which includes the elements of experiential value and functional value. The contribution of this work is therefore an expansion of the perceived value approach that may shed more light on the drivers of inclusion and exclusion of smallholder farmers in value chains. This paper begins by expanding the concept of value as it relates to smallholder farmers. Then, the authors propose a conceptual framework for participating in the value chain in an effort to understand the participation of smallholder farmers in agricultural value chains.

Keywords: agricultural value chain, experiential value, functional value, smallholder farmers, smallholder farmer participation

INTRODUCTION

Participation of smallholder farmers in the agricultural value chain is determined by their ability to capture value. Value is added at various stages and by different actors along the value chain (Trienekens, 2011). Moreover, value can be added in different forms such as quality, innovativeness, costs, delivery times and flexibility. Farmers who participate in a value chain add value to their product as it moves from the beginning of the chain towards the final consumer. In exchange for adding value, all participants receive an economic rent (Kaplinsky, 2000). The economic rent is an incentive for, or a benefit derived from, their participation in the value chain. Trienekens (2011) argues that in order for farmers to capture these rents, they have to meet a number of conditions, such as: the infrastructure to bring the products to a market; availability of resources; and knowledge and capabilities of chain actors. This, in turn, leads to increased transaction costs. The economic rent derived by the farmers from participating in the value chain is largely referred to as upgrading.
Upgrading is the core of inclusive value chain development because it adds value by improving efficiency (process upgrading) and/or product quality (product upgrading). However, the way the farmers perceive their experiences in participation in the value chain is crucial. This will facilitate an overall understanding of the value proposition in the value chain and an enhancement of the value chain development involving smallholder farmers. The authors believe there are different concepts of value that should be considered: those that drive an improvement in output value of a smallholder farmer, and those that pertain to smallholder farmers themselves, the functional (upgrading) and experiential value. For a balanced analysis and understanding of the value for farmers, this study proposes the conceptual framework illustrated in Figure 3 to include the elements of functional value and experiential value. The contribution of this work, as presented in this paper, is therefore an expansion of the functional value approach that may shed more light on the drivers of inclusion and exclusion of smallholder farmers in value chains.

Various studies, such as Trienekens (2011), Dunn et al. (2006), Fromm (2007) and Makosa (2015), have focused on evaluating smallholder farmer upgrading (which in this paper is referred to as functional value) as a benefit from participating in the value chain. This evaluation of functional value includes measuring outcomes in terms of unit production, physical yield, product prices and enterprise profits. The literature to date captures value at the product level, referred to as functional value in this paper, but neglects experiential value at the farmer level. According to Schmitt (1999), experiences emerge out of observation or participation in events as a response to certain stimuli: rather than being spontaneous, experiences are created. Caru and Cova (2003) argue that experiences are individual events that could change people’s behavior and beliefs, and that experiences are rather felt than read as text. The authors therefore argue that smallholder farmers’ participation in the value chain induces experiential value. Little attention has been given to capturing experiential value from their participation in the value chain. Evidence on experiential value for smallholder farmers participating in the value chain is important in order to understand the overall value proposition.

The purpose of this paper is therefore threefold: to introduce the concept that smallholder farmers gain value by participating in the value chains and that it may influence their decision and ability to participate; to review the literature on the concept of value to smallholder farmers participating in value chains; and to propose a conceptual framework to study the value for smallholder farmers participating in the value chain as a way to understand their participation in agricultural value chains. This paper begins by expanding the concept of value as it relates to smallholder farmers. Then, the authors propose a conceptual framework for participating in the value chain in an effort to understand the participation of smallholder farmers in agricultural value chains.

**Expansions of the Value Construct with Respect to Smallholder Farmers**

This section will provide a literature review on the value concepts and link it to the participation of smallholder farmers in the value chain.

**Concept of Value**

The benefits of value chain integration for smallholder farmers have been largely attributed to upgrading which includes the use of improved seeds, fertilizers, irrigation, new crops, services (such as spraying, artificial insemination) and adoption of new production technologies. The understanding of the experiential value derived by farmers from value chain integration will help to get a balanced view of the whole process of value creating and capturing in the smallholder value chain. In the literature, there are many ways to explain, define or describe value. From a marketing theory perspective, customer value refers to customers’ perceptions of what they receive in return for what they sacrifice (Zeithaml, 1988). Monroe (1990) also argues that the buyers’ perception represents a trade-off between the qualities or benefits they perceive in the product relative to the sacrifices they perceive by paying the price. In other words, *perceived value = perceived benefits/perceived sacrifice.* Woodruff (1997) defines customer value as “a customer’s perceived preference for and evaluation of those products’ attributes, attribute performance, and consequence arising from uses that facilitate (or prevent from) achieving customer goals and purposes in use contexts. Monroe (1990) defines value as a “buyer’s perception that represents a trade-off between the qualities or benefits they perceive in the product relative to the sacrifices they perceive by paying the price.”
Anderson and Sullivan (1993) define value as the "perceived worth in monetary units of the set of economic, technical, service and social benefits received by a customer or firm in exchange for the price paid for the product." Woo (1992) proposed four general meanings of value. Firstly, he defines value as "what is a true worth to people in a broader context of the well-being and survival of individuals and, by extension, of species as a whole." Secondly, Woo (1992) defines value as "what a society collectively sees as important, regardless of whether or not such highly valued objects of consumption really contribute to an individual’s well-being.” In this definition, value is reflected as a more collective/objective interpretation. Thirdly, Woo (1992) defines value as “what the individual holds to be worthwhile to possess, to strive or exchange for.” What can be deduced from this definition is that value is more individual and subjective. The fourth definition of value according to Woo (1992) refers to “the amount of utility that consumers see as residing in a particular act of buying or consuming.” In this definition, value is derived from the purchase, consumption and disposition of products and services. Due to this variety, there is no unanimity on the definition of perceived value.

Woodall (2003) did an extensive review of literature on perceived value, and distinguished four types of value (intrinsic, exchange, use and utilitarian value). This distinction was also based on whether value assessment is subject-based or object-based (in other words, individual vs. collective) and on whether value should be viewed in light of market characteristics and/or consumer sacrifices. Woodall (2003) therefore defines intrinsic value as an object-based value that resides within the product and does not depend on market circumstances. What can be deduced from this definition is that objective value assessment is made when people analyze intrinsic product characteristics before or during use. Woodall (2003) defines exchange value as an object-based value which, however, is influenced by market circumstances. Use value is observed when individuals evaluate the product during or right after use, and is subjective as it is attributed to the rewards a person individually desire from the use of the product. Utilitarian value is also explained/viewed as being subject-based, and refers to the point where intrinsic value and/or use value are compared with the sacrifice the person made in order to experience those forms of value.

Upon investigating the concept of perceived value, two major approaches emerge which include conceptualization and dimensionality of perceived value. In the conceptualization approach, perceived value is defined as a construct configured by two parts, the first part being the (e.g. economic, social and rational) benefits received. The second part are the sacrifices made by the customer, e.g. price, time, effort, risk and convenience (Roig et al., 2006 citing Dodds et al., 1991; Grewal et al., 1998; Cronin et al., 2000; Moroe, 2002). As the authors argue above, they are summarized as a cost to the customer, with five cost drivers identified. Zeithaml (1988) further explained that the benefit component would include the perceived quality of the service received from the purchase and a series of psychological benefits. The sacrifice component (or, in other words, what the customer must contribute) would be informed by monetary and non-monetary prices (Roig et al., 2006).

In the multidimensional approach of perceived value, Woodruff (1997), De Ruyter et al. (1997), Sweeney and Soutar (2001), Sánchez et al. (2006) conceived perceived value as a multidimensional construct. In this approach, perceived value incorporates an affective dimension (Roig et al., 2006). Part of this dimension is the quality of the product and quantity of the service. The affective dimension is divided into emotional (feelings or internal emotions) and social (social impact of the purchase) (Roig et al., 2006). Authors such as Mattson (1992) deal with multidimensionality of perceived value by capturing its cognitive and affective aspects. In a study on the durable goods industry, De Ruyter

![Fig. 1. Multidimensionality of perceived value](Source: elaborated based on Sheth et al. (1991a), Sweeney and Soutar (2001).)
et al. (1997) suggested a more comprehensive approach to value which captures the cognitive response (i.e. value for money) and affective components. Sheth et al. (1991a) and Sweeney and Soutar (2001) also went in the same direction as Mattsson (1992) and proposed five dimensions of the concept of value; these include emotional, social, functional, conditional and epistemic aspects. Sweeney and Soutar (2001) also proposed the same dimensions but did not consider conditional and epistemic dimensions that were proposed by Sheth et al. (1991a; 1991b). These value dimensions are expanded below.

**Social value** can be defined as the value derived from association with demographic, socio-economic and cultural ethnic groups or communities (Maas and Graf, 2007). Sweeney and Soutar (2001) refer social value to the utility derived from the customer association with certain social groups. Peachey and Arora (2016) explain social value as “what the customer gets in terms of status, often within a group context, from being served.” According to Park and Lessig (1977), the customer’s evaluation of services provided is thought to be significantly influenced by the association a customer has with members of important reference groups. Sheth et al. (1991b) argued that social value is “the benefit perceived or obtained in relation to one or more social groups and this obtained social benefit can be positive or negative depending on demographic, socio-economic and cultural (ethnic) groups.”

**Conditional value** is “described as the set of situations faced by a customer when making a decision, meaning that a customer’s choice is contingent on the presented set of circumstances” (Sweeney, 2008). Conditional value came through introduction by Sheth et al. (1991b); it emanates from literature that examines situational contingencies, physical surroundings, antecedent states, task definitions and classification of situational characteristics. Holbrook (1994) stipulates that conditional value depends on the context in which value judgment occurs and only exists within specific conditions.

**Functional value** “is related to economic utility, which indicates the benefits associated with possessing the service as in the economic person theory, and underlines the performance of the object in terms of a series of salient attributes including price, reliability and durability” (Sweeney, 2008). Holbrook (1994) states that functional value represents value derived from effective task fulfillment and often relates to monetary value. **Epistemic value** “is the capacity of a service to provide novelty or satisfy a desire for knowledge” (Sweeney, 2008). Customer behaviors are generally driven by the epistemic value of a product with curious, novel, complicated or unique values (Schiffman and Kanuk, 1987). However, Sheth et al. (1991a) state that customers who are motivated by epistemic value often return to their regular consumption patterns after satisfying their need for change.

**Emotional value** represents the capacity of a service to ensure feelings or affective states, and is measured in terms of a set of feeling towards its objective (Sweeney, 2008). Sheth et al. (1991b) and Sweeney and Soutar (2001) contend that emotional value is derived when a product or service arouses feelings or an affective

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**Value capture by smallholder farmers in the value chain**

Smallholders participate in higher value markets in an attempt to improve their products and processes through upgrading. However, the outcome of concern is the smallholders’ ability to capture some of the additional value they create. Upgrading is viewed as a mechanism used to capture value within the value chain as it relates to the product. McDermott (2007) defines upgrading as “the shift from lower- to higher-value economic activities by using local innovative capacities to make continuous improvements in processes, products and functions.” For farmers, upgrading means improving their farming and business skills. This will allow them to capture more value in a value chain. Upgrading could also help farmers improve their activities, find new partners, new practices, and new ideas to get their products to market. Upgrading in the value chain takes three major upgrading strategies: product, process and functions (Kaplinsky and Morris, 2001).

**Process upgrading** essentially means improving farming practices, increasing yields, enhanced pest control or storage, and may include better marketing and packaging. These practices can result in better inclusion in a value chain, driven by higher yields, greater sales and more profits for the farmers.

**Product upgrading** entails introducing new products or improving old products. This includes changing new product development processes. Product upgrading in smallholder agriculture includes planting new crop varieties that consumers prefer, and complying with food safety standards.

**Functional upgrading** entails the performance of more tasks in the chain. This may include processing, packaging or even selling. This type of upgrading
allows farmers to capture a greater economic rent which can translate to higher incomes. The economic rent is an incentive for, or a benefit derived from, their participation in the value chain. Trienekens (2011) argues that in order for farmers to capture these rents, they have to meet a number of conditions such as: the infrastructure to bring the products to a market; availability of resources; and knowledge and capabilities of chain actors. According to Trienekens (2011, citing Kaplinsky, 2000), there are five categories of capturing value added:

- "trade rents (forthcoming from production scarcities or trade policies),"
- "technological rents (related to asymmetric command over technologies),"
- "organizational rents (related to management skills),"
- "relational rents (related to inter-firm networks, clusters and alliances),"
- "branding rents (derived from brand name prominence)."

Upgrading is essential to create value chain competitiveness (Dunn, 2014). Entry into high-value and international markets has required value chains to meet new standards for product quantity, quality, size, safety and other characteristics. Upgrading includes changes in production processes, products, functions or market channels. Smallholder farmers have to make their upgrading decisions based on their assessment of the risk-adjusted returns to upgrading, within the context of their alternative opportunities, their resources and capabilities, and their access to information and learning opportunities (Dunn et al., 2011). Smallholder farm upgrading is at the core of inclusive value chain development because upgrading adds value by improving efficiency and/or product quality. Upgrading provides an opportunity for smallholder farmers to employ their resources more productively and earn higher returns if market conditions are favorable.

It is clear that, as it was presented, the upgrading effects on value and the functional value of participating in a value chain largely overlap. The authors therefore claim that functional value refers to an improved or enhanced value in a more physical sense (e.g. higher prices per product sold). That leaves experiential value, which is intrinsically gained by the smallholder farmer, and is driven by improved learning and experience, confidence gained and control, and similar aspects as will be shown in the constructs presented later. In addition, smallholder farmers also gain value by participating. Therefore, over and above product value addition, this paper also considers the functional and experiential value as a more complete assessment of value that can help understand the drivers of participation in value chains. Hence, the following section gives more insight on the experiential value concept.

**Experiential value**

As argued above in the two previous sections, the authors found that the literature provides a variety of approaches and definitions that describe value. For the purposes of this study, these different types of value are grouped in two main categories: functional value and experiential value. The authors argue that value derived by farmers through upgrading is functional value. It is the physical value they derive by upgrading (products, processes and functions).

However, the concept of value has evolved over time (Fig. 2). Customers used to look for value in products and services (functional value), which in the case of farmers refers to upgrading. However, now they look for value in experiences which may be named as “experiential value” (Varshneya and Das, 2017). According
to Schmitt (1999), experiences emerge out of observation or participation in events as a response to a certain stimuli. He further argues that rather than being spontaneous, experiences are created. Caru and Cova (2003) argue that experiences are individual events that could change people’s behavior and beliefs, and that experiences are rather felt than read as text. The authors of this paper believe that smallholder farmers’ participation in the value chain induces experiential value.

Schmitt (1999) developed a concept of experiential value based on consumers’ social and psychological behaviors. This conceptual framework includes five strategic experiential modules: Sense, Feel, Think, Act, and Relate (Yi-Hua and Chihkang, 2008). Sense experience refers to how consumers get information and perception through sight, hearing, smell, taste and touch. Feel experience refers to customer emotions. In other words, it creates an emotional experience about a company or brand. Think experience refers to the consumer’s intellect and rational interests (Hsien-Lun and Mei-Chi, 2010). It can be further explained as engaging in creative and innovative thinking about the company and its products (Yi-Hua and Chihkang, 2008). Act experience means new ways of doing things, new lifestyles and attitudes, and relates to consumers’ physical body and long-term patterns of behavior (Hsien-Lun and Mei-Chi, 2010; Yi-Hua and Chihkang, 2008). Relate experience is when an individual connects with other people, society or group, and this connection produces a powerful experience. This experience is closely bound up by external factors such as culture, class and family background (Hsien-Lun and Mei-Chi, 2010).

The authors therefore argue that these experiences are applicable to the farmers’ participation in the value chain. For example, being part of the value chain provides an opportunity for farmers to get new experiences through Sense (seeing and hearing new information). Again, being part of the agricultural value chain could potentially create an emotional experience (Feel experience) for farmers. The farmer’s interaction with actors (Relate experience) in the value chain has a potential to induce such a powerful experience. Mathwick et al. (2001), citing Holbrook (1994), proposed four dimensions of experiential value to include consumer return on investment, service excellence, playfulness and aesthetic appeal. Customer return on investment refers to active investment of financial, behavioral and psychological resources that potentially yield a return (Mathwick et al., 2001). The consumer might experience this return as utility derived from the efficiency of an exchange encounter and economic utility. Based on the definition and explanation of the above concepts, five of them were selected to constitute the conceptual framework shown in Figure 3 below.

Fig. 3. Value framework for smallholder farmers participating in the value chain: functional and experiential value
Source: elaborated based on literature.
CONCLUDING REMARKS

The benefits of value chain integration for smallholder farmers have been largely attributed to upgrading which includes the use of improved seeds, fertilizers, irrigation, new crops, services (such as spraying, artificial insemination) and adoption of new production technologies. This is referred to as functional value. The understanding of the experiential value derived by farmers from value chain integration will help to get a balanced view of the whole process of value creating and capturing in the smallholder value chain.

Therefore, this paper introduced the value concept, its theoretical background and an application framework in the value chain involving smallholder farmers. Although studies on functional value (upgrading) have provided valuable insights into the value derived by smallholder farmers from their participation in the value chain, attention should also be drawn to experiential value which could give an overall picture of the value the farmers derive from their participation in the value chain (which is an important aspect to be understood). To provide a complete view of value delivered to smallholder farmers by their participation in the value chain, it is proposed to carry out a study on their experiential value.

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REFERENCES


