Approaches and tools for inclusive value chain development: lessons from Uganda for improved impact

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Value chain development (VCD) with smallholders forms a central element of the poverty reduction strategies of governments and NGOs in developing countries. Nevertheless, too little is known about how VCD interventions are designed and implemented, the approaches and tools used, and the challenges faced in the process. This paper helps to fill this gap with evidence from six cases in Uganda. For each case, data was collected from interviews with NGOs, government organizations, buyers, and smallholder business organizations. Results indicate that use of available VCD guides and tools facilitated productive partnerships among chain actors, engagement with support organizations, and feedback mechanisms on intervention processes. Results also challenge NGOs, government agencies, and researchers to better understand the circumstances of resource-poor chain actors, the implications of VCD on gender relations, and the cultural and business context when designing and implementing VCD. This calls for stakeholders to employ a broader approach to VCD, using a combination of available and new tools, and to seek out deeper collaboration with key actors within and outside the value chain.

Keywords: agricultural value chains, smallholders, private sector, development programming, smallholder business organizations, Uganda

For many governments, donors, and NGOs, value chain development (VCD) with smallholders lies at the heart of their strategies for inducing economic growth in rural areas, increasing marketed food surpluses, and enhancing rural livelihoods (Stoian et al., 2012). Underlying VCD is the expectation that downstream buyers and processors are willing and able to engage with smallholders and smallholder business organizations (SBOs) in supply agreements, strategy formulation, feedback mechanisms, and capacity building (GIZ, 2012; Shepherd, 2016). The design of

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http://dx.doi.org/10.3362/1755-1986.00036, ISSN: 1755-1978 (print) 1755-1986 (online)

VCD interventions by development agencies and, in some cases, the private sector, can take various forms. Interventions may aim to build the capacity of cooperatives to provide services to their members and engage with downstream buyers (e.g. Donovan and Poole, 2014). Others may facilitate interactions between large-scale agribusiness and smallholders (IFAD, 2014) and strengthen coordination between these and other chain stakeholders. The opportunities, challenges, and limitations of these initiatives have been well documented (Humphrey and Navas-Alemán, 2010; Stoian et al., 2012; Orr et al., 2015).

Responding to the growth of VCD in development programming, development and research organizations have published methodological guides, frameworks, and tools to support the design and implementation of VCD. Donovan et al. (2015) reviewed and compared 11 such guides with a focus on their capacity to facilitate the design, implementation, and assessment of VCD aimed at the rural poor. Their review highlighted various gaps and limitations: for example, existing guides generally provide limited guidance to users on how to take into account findings from value chain analysis to respond to the unique market, social, and political context in which the planned interventions are to be carried out. Over the last 10 years or more, these guides have been used widely by NGOs and government agencies for designing and implementing VCD interventions. However, little is known about their adoption in the field, the needs and capacities of those implementing VCD, and the ways in which stakeholders collaborate for improved design, implementation, and joint learning.

Drawing on six case studies in Uganda, this article attempts to answer the following questions: 1) How were interventions to build inclusive value chains designed and implemented and what approaches, methods, and tools were used? and 2) What are the bottlenecks, gaps, and challenges faced by support organizations (e.g. government agencies and NGOs) that facilitate VCD processes with smallholders? This paper forms part of a broader effort by the CGIAR Research Program on Policies, Institutions and Markets (PIM) aimed at identifying options for more effective development processes and opportunities for enhanced practical guidance to VCD interventions. Similar studies were conducted in Nicaragua (Donovan et al., 2017) and Vietnam (Even and Donovan, 2017).

The paper develops as follows: the next section presents the research methodology and the case studies. A discussion on the results then follows, with particular attention to the design of the intervention, the VCD approaches and guides used, the way value chain actors and other service providers engaged in the VCD process, and the critical gaps of the organizations leading the intervention and the SBOs. Finally, the last section presents a discussion of the results and main conclusions are drawn.

Methodology

A case study approach was used to analyse VCD design and implementation. We defined a VCD intervention as a set of actions, such as providing training, or technical or financial assistance to smallholders, their business organizations, and other value chain actors, with the intention to build capacities and strengthen market linkages. The six cases assessed here were selected from a longer list of 10 interventions that met two criteria: 1) recently concluded or in process for over three years; and 2) engaged with producer groups and buyers to improve their market linkages. The final selection of six presents a mix in terms of product (e.g. perishable vs. durable), commodity value (e.g. high vs. low), and market destination (e.g. national vs. export). The selected interventions were carried out in the following value chains: sorghum, oilseed, dairy, cassava, pineapple, and fruits. The latter involved a number of fruits used in processing juices, namely banana, pineapple, passion fruit, and citrus.

For each intervention, primary information was gathered from: 1) the lead implementing organization responsible for the design and implementation of the VCD intervention; 2) a major buyer that interacted with the lead organization and purchased from smallholders, some of whom also received services from the lead organization; and 3) one or two SBOs that engaged with the lead organization, buyer, and smallholders. Structured questionnaires which included a mix of open-ended and closed questions, including Likert scales, were developed, pre-tested, and finalized for each type of respondent to guide the discussion. The interviews were conducted in 2016 with key staff of lead organizations, buyers, and SBOs. For each case, at least seven informants participated in the interviews. Information gathered during the interviews was triangulated and, in case of discrepancy, clarifications were sought. Furthermore, whenever possible, secondary information was obtained from project websites and available documentation (e.g. technical reports).

Results

This section first presents an overview of the cases. Next, findings are presented on VCD design, including tools and guides used and underlying assumptions, and engagement with value chain actors and other supporting organizations. Finally, we explore how the interventions responded to the circumstances of vulnerable groups and the perceptions of the lead organization and SBOs on their capacities to engage in VCD and their needs for enhanced performance.

Overview of the case studies

Table 1 presents an overview of the case studies. NGOs led the design and implementation of all VCD interventions, with the exception of the pineapple case, where the lead organization was a national agricultural research institute (NARI). The sorghum and fruit interventions were designed in response to a specific request by a medium-large-scale processor that had struggled to source raw materials from smallholders. In the dairy case, interventions were conceived by an NGO to target the growing demand of an emerging local processor, while in the oilseed case, interventions focused on strengthening the commercial link between processors and small-scale suppliers by establishing a multi-stakeholder platform (i.e. a space for dialogue, collaboration, and coordination of actions among chain actors). In the other two cases, the potential buyers were identified during intervention

Table 1 Overview of case studies

Case	*Year started*	*Lead implementing organization*	*Partners*	*End buyer(s) and end product*	*Brief description of the VCD initiative and funding sources*
Sorghum	2011	iNGO	1 iNGO; 1 national social enterprise; 11,000 farmers (unspecified no. of SBOs)	1 large-scale multinational beverage company (beer)	Government's tax rebate policy triggered attempts by the processor to build the supply chain for domestically sourced raw material. The company approached an iNGO to facilitate engagement with smallholders. The intervention mainly focused on strengthening smallholder capacities, establishing bulking centres and building the capacities of medium-scale businesses to act as intermediaries (including by setting up out-grower schemes). [Funds: 50% from donor; 50% from processor]
Oilseed	2012	iNGO	2 iNGOs; 1 national NGO; 2 universities; gov. agencies; 1 UN agency; several hundred SBOs; 20–30 traders; 4 medium size input suppliers	4 large processors (edible oil)	The initiative focused on establishing a multi-stakeholder platform for improved coordination and collaboration along the value chain. It facilitated smallholders' access to market, input suppliers, and financial services and it strengthened technical and management capacities of SBOs. It also engaged with policymakers for a conducive business environment. [Funds: 80% from donor; 20% from lead organization]
Dairy	1998	National NGO	3 iNGO; 1 NARI; gov. agencies; 20 SBOs	2 SMEs (fresh milk and dairy products)	The project, initiated by a national NGO, responded to the increasing demand of a local dairy farm that had started processing and adding value to milk. It focused on increasing the production capacities of smallholders by providing improved cattle breeds and artificial insemination. Farmers were also assisted in organizing themselves into SBOs and improving branding and promotion. One SBO was supported in establishing a chilling plant. [Funds: 100% from donor]
Cassava	2005	iNGO	1 national NGO; 3 local NGOs (service providers supporting each cluster); 9 SBOs	1 SME (packaged composite flour)	The intervention aimed at developing value chains for high-quality cassava flour (HQCF). It was designed and led by an iNGO and focused on: 1) supporting smallholders' production and primary processing; 2) developing viable intermediaries; and 3) driving market demand for HQCF and promoting it as a versatile raw material. [Funds: 100% from donor]

Case	*Year started*	*Lead implementing organization*	*Partners*	*End buyer(s) and end product*	*Brief description of the VCD initiative and funding sources*
Fruit	2002	National NGO	1 iNGO; 10 SBOs	1 SME (fruit juices)	Due to challenges in ensuring consistent supplies of quality raw material, the owner of a juice company submitted a concept note to a donor. Once shortlisted he was supported by a national NGO for developing the fully fledged proposal and implementing it. The intervention focused on increasing the company's processing capacity and strengthening linkages with smallholders including by provision of improved planting material, training, technical assistance, and inspections to ensure compliance to required agronomic practices. [Funds: 100% from donor]
Pineapple	2010	National Agricultural Research Institute	1 NARI; 1 national NGO; 4 SBOs	5 SMEs (fresh and canned pineapple)	The project built on a previous pilot and focused on the entire value chain, using a newly introduced VCD approach (PMCA). The major objective of the project was to increase smallholders' market access. The intervention also aimed at enhancing public–private partnerships and building the innovation capacities of market chain actors, chain supporters, and other stakeholders. [Funds: 95% from donor; 5% from processor]

implementation, sometimes following specific market studies (e.g. cassava). Five interventions focused on enhancing the supply of raw material for processing (fruit, cassava, sorghum, oilseed, and pineapple) and two on improving the fresh product value chain (dairy and, again, pineapple). Buyers and processors' outputs were sold in the domestic market (all cases), and at times in the regional (sorghum, oilseed, and dairy) and international (sorghum and oilseed) markets. The annual budget of the selected interventions ranged from \$10,000 to \$750,000. The largest total budget, for sorghum, was co-funded by the buyer.

The buyers who engaged in the VCD process varied widely in size, with number of employees ranging between 11 and 1,000 and average annual sales of \$25,000 to over \$100 m. SBOs were fairly young, on average seven years old, and in the fruit and dairy cases, they were established by the intervention itself to facilitate the links between smallholders and downstream processors. SBOs had between 25 and 7,000 members. The largest one reported average annual sales of \$1.3 m over the last five years. Most SBOs bulked raw material for sale to downstream buyers, with limited value addition being carried out. The exception was the cassava case, where SBOs processed cassava roots into high-quality cassava flour, an ingredient used by the buyer in a range of packaged composite flours. The main services provided by SBOs to their members was bulking and facilitating the sale of their product (i.e. without taking ownership). In the cassava, sorghum, and oilseed cases, the SBO provided additional services, including buying and selling members' produce, coordinating the purchase of inputs or the utilization of storage facilities and processing equipment, and facilitating access to training, technical assistance, and financial services.

Origin and design of the VCD interventions

The lead organizations were all NGOs, with the exception of the pineapple case. In three cases, the interventions were designed by the lead NGO, either international (oilseed and cassava) or national (dairy). For cassava, the international NGO partnered with a national NGO to adapt the design of a multi-country intervention to the Ugandan context and coordinate implementation in the country. For pineapple, the NARI engaged with selected partners from the public and private sector for designing the intervention. Finally, as indicated earlier, in the case of sorghum and fruit, it was the buyer who initially conceived the VCD intervention and thereafter identified NGOs able to support it in the design process.

Lead organizations selected the chains for intervention based on the potential they perceived for smallholders to improve their incomes and food security. These perceptions were based in part on interactions with downstream buyers who sought more effective engagement with smallholders. In three cases, either the lead organization's mission and experience or donor interests were prioritized in chain selection. In two cases, the potential for contributing to national growth (e.g. job creation) was taken into account, while other aspects (e.g. addressing gender and youth inclusion and environment protection) were not considered important in selecting the value chain. None of the lead organizations applied specific tools or methodological approaches for chain selection. Obviously, in the case of sorghum and fruit, where private companies initiated the process, the value chain was selected to address bottlenecks in their procurement of raw materials.

Across all cases, lead organizations indicated that the ultimate goal of the interventions was to reduce poverty through enhanced market access. In no case were smallholders consulted or provided an opportunity to contribute to intervention design. It is noticeable that in the oilseed case, an initial context analysis (using one of the SNV Inclusive Business tools – see next section) was conducted during project design to identify key constraints facing smallholders and how these could be addressed. In the two interventions initiated by the buyer, smallholders were expected to benefit from increased demand for raw material, but no specific activities were implemented to support smallholders' capacity to engage. For example, in the fruit case, the buyer mentioned that 'In Uganda, agriculture is the backbone of the economy and commercial production of fruit is almost nonexistent. Therefore, we expect to be supplied by small-scale farmers only and they will benefit from this'.

In summary, VCD design tended to be led by NGOs often, but not necessarily, after having identified and interacted with medium-large-scale buyers to which smallholders would be linked. Neither SBOs nor smallholders engaged with lead organizations to shape intervention design that, as a result, tends to primarily reflect the vision, experience, and perceptions of the lead organization.

Use of VCD approaches and tools

The lead organization of the oilseed case employed the Inclusive Business Solutions for intervention design (SNV, internal document), while that of the pineapple case adopted the Participatory Market Chain Approach (PMCA) (Bernet et al., 2006), with additional tools used for specific tasks (e.g. for monitoring, evaluation, and learning). In the sorghum case, the lead organization picked elements from both LINK (Lundy et al., 2012) and Inclusive Business Solutions. In the fruit and cassava cases, no specific approaches were adopted for intervention design; however, specific tools were used during the implementation process, such as for market appraisal, business planning, and financial and gender analysis. In the dairy case, the lead organization did not identify any specific approach or tool for intervention design. Overall, the use of approaches and tools for intervention design, implementation, and assessment varied considerably across the cases. The main factor behind the selection of a specific VCD approach and the relevant guide was the familiarity of the lead organization in using it, either because it had developed it or had been trained in its application. We also found that, in some cases, users of one approach were not familiar with other VCD approaches.

Engagement for VCD implementation

Lead organizations established partnerships for intervention implementation. Table 2 presents the characteristics of the engagement by lead organizations with smallholders, SBOs, and buyers. Emphasis is placed on the type of support provided and the feedback mechanisms established.

Table 2 Engagement of the lead organization (LO) with smallholder farmers, smallholder business organizations, and larger buyers and processors

Case	*Smallholder farmers (SHF)*	*SBOs*	*Large buyers and processors*	*Barriers to forming deeper partnerships*
Sorghum	High: Regular contact for introducing high-yielding varieties, quality control, and commitment to commercial arrangements.	High: The LO works with farmers' groups to ensure consistent quality of the raw material.	High: The LO regularly engages with traders and the buyer to ensure they purchase from the target areas.	Shift from small-scale, fragmented production and trade to larger-scale production and supply chain management is challenging. Some actors with high potential are already engaged by other LOs active in the same area.
Oilseed	Low: The LO engages with SHF only through local business partners who provide services to SHF and report to LO for M&E purposes.	Medium: Some cooperatives invited to participate in activities. The LO supposed to report via a subsector performance dashboard.	Low: Buyers are engaged only indirectly through the multi-stakeholder platform.	No obligation of VC actors to actively participate in the platform or for buyers/processors to report progress and achievements. Dashboard never received financing and remained a prototype only, setting the M&E effort further back.
Dairy	High: The focus of the intervention is supporting SHF's primary production for increased production, quality, and efficiency, but monitoring is weak.	Medium: The LO provides equipment and capacity building only to SBOs with a sufficient number of farmers.	Low. The LO is not strongly involved in facilitating market linkages and leaves buyers to approach farmers directly, attracted by the increased availability of quality milk.	Funding limitations and the realization that local market for milk is readily available in the SHF communities, led to focus on primary production and a reduced emphasis on building linkages with buyers.
Fruit	None: the LO does not have (and never had) any direct interaction with individual smallholders.	Low: The LO facilitated training and technical assistance but without prior capacity need assessment. No feedback mechanism in place and no tracking of SHF/SBO progress (M&E indicators focus on the SME).	Medium: Weak engagement during design but stronger during implementation and for M&E/reporting. No engagement with the intermediaries used by the SME.	The LO provides limited input and primarily acts as facilitator/supervisor of intervention. Different views and problems of communication between LO and the SME have emerged. Target SBOs are weak and often unable to comply with market arrangements.

Case	*Smallholder farmers (SHF)*	*SBOs*	*Large buyers and processors*	*Barriers to forming deeper partnerships*
Cassava	Medium: The LO identified capacity gaps and facilitated trainings provided by service providers or extension staff. No monitoring or feedback mechanism for non-members of the target SBOs.	High: The LO provided/facilitated training and technical assistance and supported consolidation and tracking of market linkages. Feedback on performance, challenges, and required adjustments regularly discussed.	High: The LO identified potential HQCF users and supported linkages with SBOs. Some buyers benefited from training, industrial trials, development of business plans, and linkages to financial services. Feedback mechanism in place to capture purchases from target SBOs and challenges.	SBOs are young and weak with several internal issues. Processing companies reluctant to use HQCF due to challenges in dealing with a large number of small primary processors. Engagement with bulking intermediaries has not received sufficient attention.
Pineapple	Medium: The LO strengthened SHF capacities in agronomy and marketing. Through the platform, farmers were linked to other private sector players (e.g. buyers).	High: Through participation in thematic group meetings facilitated by the LO (as per PMCA) and other activities, they obtained trade linkages, knowledge, and business planning skills.	High: The buyers received capacity development (e.g. in business planning) as well as technical and financial support (e.g. for packaging) by service providers identified, and sometimes paid, by the LO.	SBOs' internal conflicts affected the ability to comply with supply contracts. Furthermore, SBOs' expectations to immediately benefit from participation in the platform (e.g. financing, consistent sales) were not met. Limited access to finance by processors affected the uptake of potentially interesting innovations.

Engagement of the lead organizations with smallholders. In the sorghum and dairy cases, the lead organization engaged directly with individual smallholders in the provision of services. In another two (cassava and pineapple), the lead organization engaged with local service providers and SBOs to supply smallholders with inputs and processing equipment, build capacities for primary production and, in some cases, small-scale processing (e.g. cassava), and facilitate access to buyers and credit providers. In the other two cases (oilseed and fruit), there was no engagement by the lead organization with smallholders. In all cases, the feedback mechanisms between lead organizations and smallholders were generally weak or non-existent. Where direct engagement with individual farmers was limited, this sometimes reflected the intervention design that focused primarily on farmers' groups (cassava) or the establishment of multi-stakeholder platforms (oilseed and pineapple). Regardless, weak feedback mechanisms limit the opportunities for joint learning and the lead organizations' capacity to adjust interventions based on changing circumstances or unrealistic assumptions.

Engagement of the lead organizations with SBOs. In all cases except one (fruit), lead organizations considered strong engagement with SBOs important to achieve intervention goals. Lead organizations supported SBOs primarily by providing equipment, training, and technical assistance or by facilitating their provision by the buyer. Engagement took place either directly or through multi-stakeholder platforms established by the intervention (oilseed and pineapple). Rigorous monitoring and evaluation (M&E) of SBO achievements was limited or non-existent. Feedback mechanisms existed where some representatives of SBOs participated in multi-stakeholder platforms (oilseed and pineapple) and in the cassava case, where the lead organization made substantial effort to enhance communication between producers and processors so that the former could meet buyers' requirements in terms of volume, quality, and timely delivery.

Lead organizations indicated major challenges to working with SBOs, many of which are informal and unable to engage in contractual agreements with buyers and organize members' production accordingly. Among the challenges faced by SBOs were members' limited production capacity, restricted access to credit, and side-selling mostly arising when SBO members prioritized short-term profits (typically higher farm-gate price offered by rural traders) over perceived benefits stemming from longer-term marketing arrangements with the buyer. In some cases, SBOs expressed frustration with side-selling. There were cases where services and inputs had been advanced by the processor but SBO members eventually sold their output to other buyers. As a beverage company representative stated: 'We have supplied a large amount of good-quality seed of improved varieties to smallholders and then, at harvest time, many failed to deliver the sorghum. Because of this, our company was unable to recover the cost of seed worth several million dollars'. At the time of data collection, the company was seeking options to reduce reliance on smallholders and expand engagement with medium- to large-scale suppliers. Some lead organizations indicated that enhanced dialogue and feedback mechanisms, such as the ones facilitated by participation in multi-stakeholder platforms, can mitigate some of the challenges of working with smallholders and help maintain long-term business relationships between SBOs and medium-large-scale buyers over time.

Engagement of lead organizations with buyers. With the exception of the dairy case, lead organizations considered partnerships with the major buyer as critical or at least important to achieve intervention goals. In the dairy case, the focus of the intervention progressively shifted towards supporting primary production upon realizing that the local informal market was also short of milk supply, demanded less stringent quality, and offered better terms of payment (local traders paid at time of delivery).

With the exception of the sorghum and oilseed cases, buyers were small scale and resource-constrained and received a range of support by the VCD interventions. Support was provided based on the assumption that stronger buyers would be better able to engage with smallholders and SBOs. Assistance included industrial trials, development of business plans, and access to business development and financial services. In the fruit case, the processor received financial support to upgrade its processing capacities. Structured feedback mechanisms were found only in the fruit and cassava cases, while in the oilseed and pineapple interventions this was mainly ensured through the participation of buyers in platform meetings.

Lead organizations identified various challenges to effectively engage with downstream buyers, including their limited understanding of smallholder production and marketing practices, expectations for quick benefit and simple solutions, and limited capacity or willingness to embed services needed by smallholders into their commercial transactions with them. In most cases, in order to mitigate these challenges, specific technical (and sometimes financial) support had to be provided to the smaller firms. In none of the studied interventions was it indicated that available VCD guides and tools were important to overcome these challenges. However, some lead organizations (of pineapple and oilseed cases) indicated that platform meetings were effective venues where value chain players could interact for jointly proposing and agreeing, potential solutions and rectifying problems.

Engagement with other organizations

Lead organizations identified other organizations, in addition to suppliers and major buyers, with whom they engaged and the role and relevance of these engagements for achieving the ultimate goals of VCD interventions. All lead organizations engaged with other NGOs, either national (two cases), international (three cases), or both (one case). In addition to their perceived advantage in mobilizing farmers, partner NGOs were sought out for delivering a range of technical (e.g. training and advisory service on primary production and processing) and business development services (e.g. branding, certification, and business planning). The lead organizations identified no major problems in engaging with partner NGOs; however, in a couple of cases, the capacities of these organizations to deliver services fell below expectations, primarily due to limited experience in market-oriented interventions.

In most cases, lead organizations worked with government agencies to advance VCD goals. In addition to their capacity to work at scale, thanks to extended networks in rural communities, government agencies were key players in providing extension, certification, and accreditation services. In the fruit case, agencies facilitated access to reliable power supply to the juice processing plant. Government agencies were not involved in project design (apart from some input provided for pineapple), and were usually approached during the course of project implementation to provide their services or to address specific challenges (e.g. supply of clean planting material). Interestingly, only in cases where a structured VCD approach (i.e. following one of the available guides) was adopted were government agencies brought on board at the onset of the intervention, either to help identify communities to work with (sorghum) or to join multi-stakeholder platforms (oilseed and pineapple).

Universities and national research organizations supported the VCD intervention in three cases (oilseed, dairy, and pineapple). Their contribution ranged from provision of specific technologies, such as higher-yielding (oilseed) and artificial insemination (dairy), to coordination of and active participation in innovation platforms (oilseed and pineapple). Engagement with these organizations was similar to that of government agencies in terms of timing (never at time of the design and brought on board at a later stage, particularly when VCD guides were adopted), fund allocation (none to extremely limited), and challenges (high expectations, limited commitment, and weak capacities – particularly in the socio-economics domain).

Overall, banks and other providers of financial services were perceived by lead organizations as important players in VCD efforts. Nevertheless, in all cases, lead organizations' engagement with these institutions was limited to scouting for potential lenders, for either crop finance or capital investment. Attempts to link them to buyers or SBOs showed mixed success, with a few loans actually disbursed, primarily to buyers. Major problems encountered included high interest and short repayment periods, unwillingness to deal directly with SBOs (unable to offer sufficient collateral and meet stringent eligibility requirements), and risk aversion often due to lack of understanding of the business and the relevant value chain.

Figure 1 shows the importance of the supporting organizations for achieving desired outcomes as perceived by the lead organization and in relation to the large-scale buyer, who was unanimously recognized as key player in the VCD effort. Providers of technical assistance (usually other NGOs) were seen to be as important as the buyer while providers of business development services (again, usually NGOs) were considered the least relevant, perhaps due to the lower NGO capacities in this domain. Government agencies, media, and researchers were also rated very high. Overall, the number of support organizations ranged between two (fruit) and eight (oilseed). Interestingly, two of the three broader partnerships relate to cases in which VCD approaches that promoted the establishment of multi-stakeholder platforms were adopted by the lead organization (oilseed and pineapple). Guided VCD approaches are likely to have contributed to broadening the partnerships, in particular facilitating the engagement with government agencies, universities, and media. Conversely, they seem not to have contributed to enhanced engagement with financial service providers.

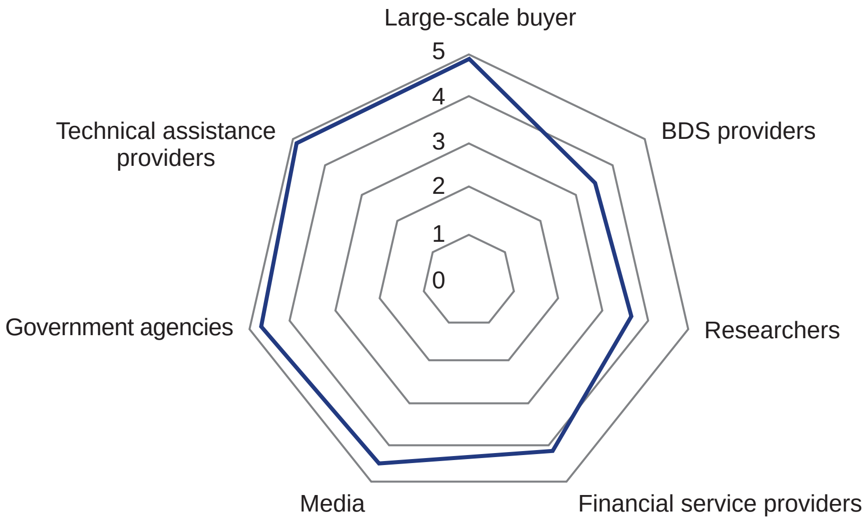

Figure 1 Importance of buyer and supporting organizations in achieving VCD outcomes
Note: Scale 1 (not important) to 5 (very important); BDS, business development services

Attention to women and the very poor

In all cases, except one (fruit), the lead organization indicated that intervention design considered the needs and ambitions of women and provided equal opportunity for them to benefit. In several instances, gender-disaggregated targets were included in the proposal but in only one case (oilseed) was a specific tool for gender mainstreaming used during project design. However, attention to gender issues at project design did not always translate into effective gender mainstreaming during the VCD implementation. In some cases, this was limited to a deliberate effort to ensure that a certain proportion of women attended trainings and held leadership positions in the SBOs. In the sorghum intervention, initiated by the buyer, a stronger gender lens emerged when the supporting NGO came on board. For pineapple, the gender focus was dropped when the lead organization realized that the crop was male-dominated. In the cassava case, the pressing need to meet some key performance indicators during implementation led to less attention to gender issues than originally envisioned. The dairy intervention paid particular attention to gender aspects and hired a social and gender adviser specifically to address this component. This resulted in the majority of supported households being women-headed. The oilseed intervention consistently mainstreamed gender throughout project design and implementation by using the tool Balancing Benefits 4 Women (SNV, internal document).

The very poor were not targeted in either the design or implementation. Conversely, in some cases, they were purposively excluded since targeted smallholders were expected to already produce a surplus and have a certain level of commercial orientation. By and large, the lead organizations indicated that 'not all farmers can be included in value chain development' and landless and very poor households were not seen as viable direct beneficiaries for this kind of intervention. In some cases, criteria for selecting smallholders included minimum land holdings (e.g. in the cassava case), which likely excluded women in some instances. While most lead organizations indicated that the poorest farmers would need a different type of intervention, it was noticeable that at the time of designing the sorghum VCD intervention, local authorities pushed for targeting districts characterized by the highest level of poverty. However, later on and in response to several challenges during the implementation process, there was an increased shift towards larger farmers at the expense of smallholders in out-grower schemes. In addition, in the case of dairy, the lead organization conducted a preliminary livelihood survey to identify the most vulnerable target groups. Finally, it is worth noting the different view of development practitioners in this regard, even within the same organization. For example, the lead organization of the oilseed intervention said, 'There is some conflict between the old thinking and the new thinking: the former sees value in targeting also the most disadvantaged and vulnerable farmers; the latter prefers to target primarily economically active beneficiaries'.

Capacities of the lead implementing organization

The lead organizations self-assessed their capacities to implement VCD initiatives. Responses show that they felt most confident in their ability to understand the needs of SBOs in complex business environments, to work with stakeholders from multiple sectors (government, NGOs, private sector, media), and to assess the business context and its implications for the VCD design and implementation (Figure 2). This can be explained by their considerable experience in working closely with rural communities, their sizable networks built over time, and, therefore, their frequent interactions with chain actors and other support organizations. The lead organizations perceived themselves as slightly less capable of conducting impact assessments and facilitating joint learning, and understanding value chain dynamics and consumer demand. With regard to impact assessment and joint learning, three organizations indicated that their relevant capacities were low to medium and suggested that available tools were too complex given their limited resources. Finally, lead organizations considered themselves to have the least capacity to address gender dynamics and assess the risks faced by poor households. Lead organizations reported that they were unaware of available relevant tools or lacked confidence in using them.

Need for support of the smallholder business organizations

SBOs identified aspects of their operations where they perceived themselves as weak and in need of support to more effectively engage in the value chain. Interestingly, all SBOs rated their need for support in risk management and mitigation as highest (Figure 3). Another aspect, also related to risk, indicated by SBOs was support to improve their internal governance and management. Major risks perceived by SBOs included loss of product due to spoilage, members' side-selling, dependency on a single buyer, inability to collect payment from buyers, and rejection of raw

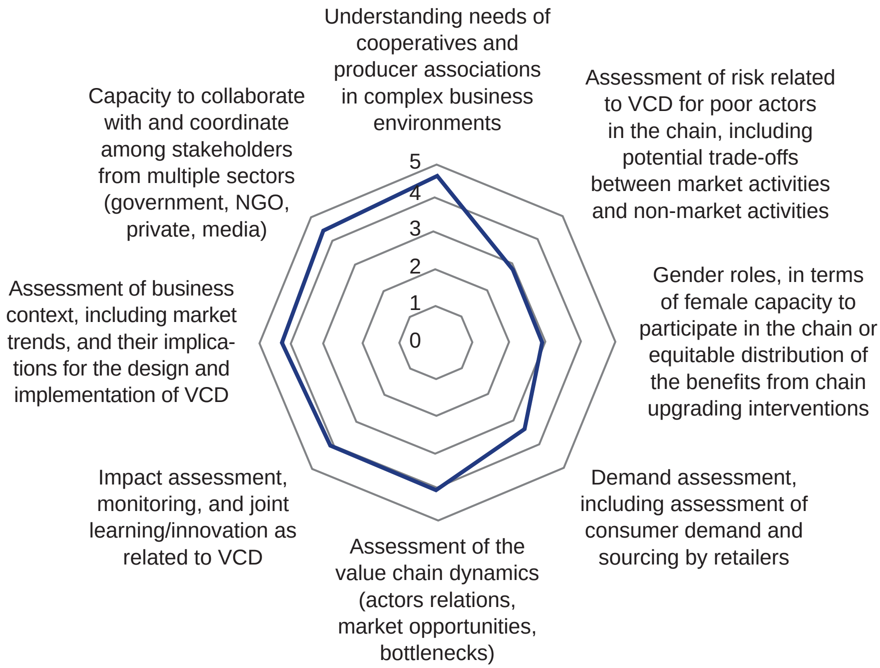

Figure 2 Lead implementing organizations' self-evaluation of their capacities to address different elements of VCD
Note: Scale 1 (very limited capacities) to 5 (very strong capacities)

material due to non-compliance to standards. Support in logistics and understanding difficult export processes was also rated very high. The nature of the raw material has a bearing on both risks and logistics, the relationships among value chains actors, and, ultimately, the design of the VCD intervention. For example, post-harvest losses, which can be high for perishable crops, are to be taken into account and this calls for VCD to include improved transparency and information flow, enhanced trust between seller and buyer, and appropriate logistics as well as record-keeping. SBOs also indicated their interest in support to increase the opportunities for women and youth to engage in the business. SBOs rated the need for support in more technical aspects of agricultural production as less important, perhaps reflecting their confidence in the lead organizations and their partners to facilitate the strengthening of smallholders' capacity.

Taking stock and looking ahead

This study investigated how six VCD interventions in Uganda were designed, the partnerships established for implementation, the role played by different stakeholders in the process, and the opportunities for governments, donors, and research organizations to better support VCD processes. We found that existing guides for designing VCD interventions were applied in three cases. Assessing the comparative advantage

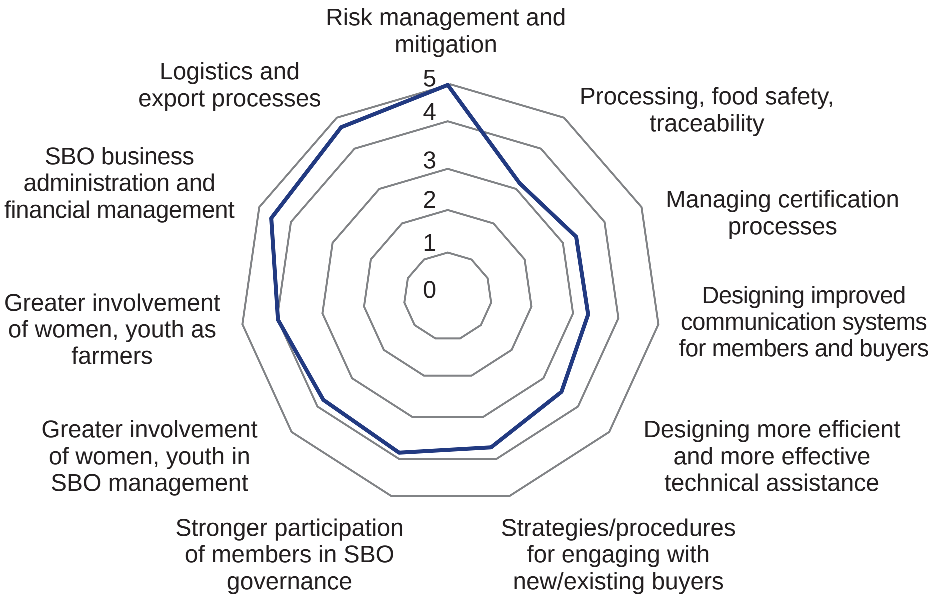

Figure 3 Areas where most support to SBOs is needed for effective engagement in value chains
Note: Scale 1 (very limited support needed) to 5 (very strong support needed)

of one VCD guide over the other or whether the adoption of VCD guides translated into enhanced impact was outside the scope of this work. However, we found that the use of VCD guides was associated with broader partnerships and earlier engagement with supporting organizations. It was recognized that while some of these support organizations play an important role in achieving the expected development outcomes, they rarely have a presence in intervention design.

While we could not find a strong involvement of support organizations at the time of conceptualizing the VCD initiatives, it is likely that the adoption of VCD guides helped bring them on board at an earlier stage of the implementation. For instance, government agencies, universities, and other research organizations played a greater role in the cases where VCD approaches were used. Conversely, no evidence of enhanced engagement with financial service providers following the adoption of VCD approaches emerged. We also found that structured VCD approaches promoted the establishment of multi-stakeholder platforms that facilitated the engagement with supporting organizations and helped to promote feedback mechanisms, particularly with SBOs and buyers (e.g. in the oilseed and pineapple cases). These platforms (or similar fora) are considered by lead organizations as a sensible way to build a joint vision among value chain actors and identify specific market opportunities as well as to ensure that roles, responsibilities, and benefit sharing are defined and regularly updated. Furthermore, during platform meetings, performance and challenges could be discussed and required adjustments made. Larger partnerships for implementation, stronger engagement with supporting organizations, and enhanced dialogue among stakeholders were crucial for VCD implementation.

Accordingly, in cases where VCD interventions were initiated by buyers with limited involvement of other players (sorghum and fruit), the initial strategy had to be changed during implementation to include NGOs and other organizations capable of supporting engagement of smallholders in the process.

Several lead organizations were either not aware of the available VCD guides and tools or did not have the capacities to adopt them. Some organizations pointed out their limitations, for instance indicating that they are too complicated and time-consuming (e.g. for joint learning and impact assessment) given their limited human and financial resources. These findings call for additional efforts to increase the awareness of organizations implementing VCD interventions about the availability and benefits of the approaches and tools, strengthen their capacities to use them, and, in some instances, make these resources more user-friendly and adapted to the needs of value chain actors. Accordingly, some buyers pointed out that the guidelines did not seem relevant for addressing some of the specific challenges faced by the private sector when trying to engage with smallholders. For instance, addressing the challenge of side-selling will require more protracted efforts to increase trust between chain actors and to strengthen the ability of lead implementing organizations to assess value chain dynamics.

Lead organizations and their partners faced pressure to implement actions on time and within budget, sometimes without a complete understanding of the livelihood strategies, actors' interests and influence, and the socio-economic context. For example, in the dairy case, there was a general condemnation of local buyers willing to accept lower-quality milk without realizing that these informal traders offer farmers a range of benefits which are not provided by the formal processor, including cash payment and market information through one-to-one interactions. A deeper understanding of the usually important role played by the traditional trading sector could ease the engagement with local traders in VCD interventions and hence enhance the sustainability of out-grower schemes and other forms of farmer–buyer arrangements. While existing guides facilitate the analysis of local market dynamics, the capacities of many, albeit not all, NGOs and other implementing organizations to fully utilize them could be further strengthened. Furthermore, implementing organizations dedicated limited or no resources for critical reflection and joint learning, which would allow for refinements in project design during implementation. Overall, the study points to the need for increased joint learning among organizations implementing VCD interventions and a deeper collaboration with researchers and other development practitioners. This will necessitate greater flexibility by donors and businesses that invest in VCD to allow for diversion from original intervention design to respond to emerging opportunities, challenges, and needs. As far as SBOs are concerned, their limited ability to effectively act as reliable intermediaries between members and buyer, due to weak governance, leadership, accountability, basic planning, and financial principles, among others, is recognized as a key challenge for successful VCD interventions.

Besides the need for simplifying available VCD guides and building capacities in using them, this study identified various opportunities for elaborating new tools or broadening the scope of the existing ones to address the actual needs of VCD stakeholders. First, tools can be designed to improve the understanding of both the existing agricultural practices and rural livelihoods of farming households as well as the environment in which they operate (including access to services). Second, specific VCD tools could be developed to improve production planning (including issues related to realistic yield forecasts, fragmentation, and seasonality) so as to ease the alignment between buyers' expectations and farmers' capacities. Third, the limited engagement with financial institutions, even when VCD guides are adopted, can reflect the lack of specific tools to help lead implementing organizations bring such institutions on board in the first place and to keep them gainfully engaged so that appropriate financial products and financing arrangements are developed. Finally, our findings suggest that there is a need for sound tools to support both lead organizations and SBOs in engaging with women. The degree of gender mainstreaming during VCD implementation varied and was stronger either when gender expert input and backstopping was consistently ensured (dairy) or when specific tools were used to guide and support project staff (oilseed). Likewise, our findings call for additional efforts in designing tools for assessing and managing the wide spectrum of risks (actual or perceived) faced by producers and buyers willing to participate in inclusive value chains.

This study presents some limitations. The cases selected did not cover interventions led by the private sector. The extent to which NGO and government-led versus private sector-led VCD interventions differ in design and implementation should be further investigated. Nor can we claim that the cases selected here were representative of VCD led by NGOs and government agencies. Our insights into VCD design and implementation were informed to a large extent by the perceptions of individuals within the lead organizations. Efforts were made to overcome the potential bias in interviewee responses: for example, through extensive interviews with SBOs and downstream buyers. However, bias may have persisted, as representatives of SBOs and buyers may have been reluctant to question the lead organization or openly criticize the intervention. That said, this research is a first attempt to assess VCD design and implementation and shed some light on important gaps and challenges. Given the overall complexity of designing interventions to support smallholder participation in value chains, future research and discussion on this matter is urgently needed for supporting enhanced design of future VCD interventions.

Acknowledgements

This study was funded by the CGIAR research program on Policies, Institutions and Markets (PIM). The paper was partially written while Donovan was a Research Leader for Value Chains and Transformational Change at the World Agroforestry Centre in Lima, Peru.

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