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Jason Donovan, Steven Franzel, Marcelo Cunha, Amos Gyau, Dagmar Mithöfer,

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Guides for value chain development: a comparative review

Jason Donovan

World Agroforestry Centre (ICRAF), Lima, Peru

Steven Franzel

World Agroforestry Centre (ICRAF), Nairobi, Kenya

Marcelo Cunha

Freie Universität Berlin, Berlin, Germany

Amos Gyau

World Agroforestry Centre (ICRAF), Nairobi, Kenya, and

Dagmar Mithöfer

Rhine Waal University of Applied Sciences, Kleve, Germany

Abstract

Purpose – In recent years, governments, donors, and NGOs have increasingly embraced value chain development (VCD) for stimulating economic growth and combating rural poverty. In line with the rise in interest, there has been a proliferation of guides for VCD. The purpose of this paper is to present the results of a review of 11 guides for value chain along six different dimensions, ranging from objectives and value chain definitions to monitoring impact. The paper concludes with suggestions for the use of guides based on local needs and context, and recommendations for future guide development.

Design/methodology/approach – The review compares the concepts and methods endorsed and it assesses the strengths and limitations of the guides for steering development practice.

Findings – Overall, the guides provide a useful framework for understanding markets and engaging with chain stakeholders, with a strong emphasis on strengthening institutions and achieving sustainability of interventions. However, the guides often lack discussions on the conditions necessary at different levels for VCD to advance development objectives and achieve that sustainability. The guides are designed to be implemented largely independently of the specific context, in which the chain is situated, despite the major implications context has for the design of interventions and overall success of the chain. Attention to mutual learning, whether related to tool design or the outcomes and impacts of VCD interventions, is limited.

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Research limitations/implications – More critical reflection and debate is needed on the design of guides for VCD. The authors suggest three areas for this reflection and debate: concepts, methods, and tools for addressing the needs of the poor in value chains; tools for addressing variations in the context; and mechanisms for mutual learning on the design and implementation of VCD.

Originality/value – The paper concludes with various recommendations for guide authors and donors that support VCD.

Keywords Small and medium-sized enterprises, Methods, Business environment, Developing countries, Business performance, Rural economies, Value chains, Development practice, Value chain development, Guides

Paper type Research paper

1. Introduction and background

Value chain development (VCD) features prominently in development programming aimed at stimulating economic growth and increasing the competitiveness of the agricultural sector (Humphrey and Navas-Alemán, 2010; Staritz, 2012). The approach challenges governments and civil society to look beyond individual actors, such as smallholders or cooperatives, when considering how to achieve development goals. It is argued that by focusing on the value chain and the links between the actors spread along it, development interventions can better identify common problems among actors in the chain and solutions that generate win-win outcomes. Improved chain relations and overall chain performance are expected to yield tangible benefits in terms of economic performance and, in some cases, poverty reduction. The potential to include medium and large-scale businesses as active partners in VCD offers development agencies opportunities for achieving outcomes at greater scale, with potentially increased impact and sustainability. For many development agencies, donors, and governments, VCD has become a principal element of their poverty-reduction strategies.

Interest in VCD stems, in large part, from an increased awareness among development organizations that success in increasingly complex agrifood markets requires stronger collaboration among chain actors, including producers, processors, and retailers (Hobbs *et al.*, 2000; Humphrey and Memedovic, 2006). Important factors that have spurred interest in VCD include growing urban demand for added-value foodstuffs in developing countries, more stringent quality and food safety standards by governments and private firms, the growth of niche markets (e.g. organic and fair trade), and concern over the scarcity of agricultural raw materials. In some cases, VCD responds to a need to reinvigorate development processes that led to the formulation of the Millennium Development Goals (MDGs), which view increased income as a precursor to livelihood security and a decent standard of living. The rapid growth in demand for agrifood products in which smallholders are considered to have a comparative advantage – for example, specialty crops like coffee and horticulture that require high labour inputs – has been considered an opportunity to combine economic growth and poverty-reduction goals (Bacon, 2005; Weinberger and Lumpkin, 2007).

With the emergence of value chains in development programming came a burst of activity to develop guides and diagnostic tools to help practitioners conduct value chain analysis, usually as input for the design of interventions. Guides for VCD are an analytical tool to design interventions on behalf of smallholders and small rural businesses that are affected by the expansion of international agribusiness (Haggblade, 2007). In some cases, these tools respond to shifting power structures in global agribusiness markets, which have led to both opportunities and threats for small players in developing countries. However, recent studies have shown that significant

differences exist in how the guides interpret chain-related concepts (Altenburg, 2007; Nang'ole *et al.*, 2011; Proctor and Lucchesi, 2011), which can have important repercussions for how interventions are designed and what their development impacts eventually may be. Guides differ in their developmental approach (e.g. a focus on better market links vs improved business environment), their developmental goals (poverty reduction, economic growth, decent work), and their targeted users (government agencies, NGOs, private sector). Guides also vary in terms of their information requirements, objectives and overall complexity, conceptualization of value chain concepts, and incorporation of local actors into research and strategy formulation, among other factors.

This paper reviews 11 guides for value chain analysis and development. It compares the guides' concepts, objectives, and methods and identifies strengths, weaknesses, and gaps. The assessment characterizes the state-of-the-art for designing interventions and interactions that seek to build value chains with smallholders. The paper is organized as follows: Section 2 presents the methodology applied in carrying out the review, Section 3 presents the results of this review, and Section 4 provides concluding comments.

2. Guide selection and comparison

For the purposes of this review, we considered a guide to include a book, document, or internet-based platform that provides users with a logical sequence of activities for designing and implementing VCD with smallholders and other chain actors. At a minimum, implementation of a guide must contribute to the generation of a strategy for the design of interventions by development organizations for building mutually beneficial chain relations; the design of new interactions between resource-poor chain actors (often smallholders and businesses in the upstream chain segment) and larger, better-endowed businesses further downstream; and/or the design of policies that improve the institutional environment in which value chain actors operate. Guides whose primary audience is researchers rather than development organizations or private sector representatives were excluded in this review. In some cases, guides may aim to facilitate the building of value chains with smallholders without actually applying the concept of value chain or VCD. For example, guides built around the concept of "making markets work for the poor" (e.g. DFID, 2008; SDC, 2008) aim to identify opportunities for improving the business environment in which the poor operate, and thus, for the purposes of this review, would constitute a guide for VCD.

This review reviewed 11 guides for value chain analysis and development[1] (Table I). Selection considered previous work by Nang'ole *et al.* (2011), who identified 32 guides, tools, and manuals related to value chains that were available on the internet in 2010. We selected eight guides that were the most comprehensive in the design of VCD (CIP, 2006; FAO, 2007; CIAT, 2007; IIED, 2008; M4P, 2008; GTZ, 2008; ILO, 2009; World Bank, 2010). These guides were complemented with three others: USAID (n.d.) – an internet-based portal that provides a comprehensive collection of tools and concepts related to VCD; DFID (2008), which describes how to design policies that improve the participation of the poor in markets; and UNIDO (2011), a recently published guide that provides guidance on important issues for the design of interventions for VCD.

Table II presents the parameters by which the guides were assessed. The parameters aimed to capture important elements of guide design and implementation including objectives and motivations for using the guides, including expected results and outputs; key elements of methodological design, for example, chain selection, recommended steps

Guideline	Authors	Sponsoring organization
Participatory market chain approach (CIP, 2006)	Thomas Bernet, Graham Thiele, Thomas Zschocke	International Potato Center (CIP)
Guidelines for rapid appraisals of agrifood chain performance in developing countries (FAO, 2007)	Carlos A. da Silva, Hildo M. de Souza Filho	Food and Agriculture Organization of the United Nations (FAO)
Participatory market chain analysis for smallholder producers (CIAT, 2007)	Mark Lundy, Veronica Gottret, Carlos Ostertag, Rupert Best, Shaun Ferris	International Center for Tropical Agriculture (CIAT)
The operational guide for the making markets work for the poor (M4P) approach (DFID, 2008)	Authors not specified	Department for International Development (DFID), Swiss Agency for Development and Cooperation (SDC)
Chain-wide learning for inclusive agrifood market development (IIED, 2008)	Sonja Vermeulen, Jim Woodhill, Felicity Proctor, Rik Delnoye	International Institute for Environment and Development (IIED)
Making VC work better for the poor: A toolkit for practitioners of value chain analysis (M4P, 2008)	Tim Purcell, Stephen Gniel, Rudy van Gent	Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID)
ValueLinks manual (GTZ, 2008)	Andreas Springer-Heinze	German Agency for Technical Cooperation (GTZ), now German Agency for International Cooperation (GIZ)
VC development for decent work (ILO, 2009)	Matthias L. Herr, Tapera J. Muzira	International Labour Organization (ILO)
Building competitiveness in Africa's agriculture: A guide to value chain concepts and applications (World Bank, 2010)	Martin Webber, Patrick Labaste	World Bank
Pro-poor VC development: 25 guiding questions for designing and implementing agroindustry projects (UNIDO, 2011)	Lone Riisgaard, Stefano Ponte	UN Industrial Development Organization (UNIDO), International Fund for Agricultural Development (IFAD), Danish Institute for International Studies (DIIS)
Value chain development wiki (USAID, n.d.)	Not specified	United States Agency for International Development (USAID)

Notes: CIAT's guide for value chain development was first published in Spanish in 2003. A revised version was published in 2007 in English and Spanish. The revised English version was assessed for this review; The guide reviewed here, UNIDO (2011), is part of a toolkit of value chain development for understanding and diagnosing value chains. See www.unido.org/fileadmin/user_media/MDGs/IVC_Diagnostic_Tool.pdf

Table I.
Guidelines for value
chain analysis and
development
reviewed

in data collection and analysis; and the interpretation of key concepts that underpin guide design, such as value chain and VCD. Information on these parameters was used to understand the extent to which the guides allowed users to understand the needs and circumstances of resource-poor actors in a given value chain (e.g. smallholders, small and medium enterprises, including cooperatives), the business environment in which chain actors operate, and the access by chain actors to various types of services (e.g. technical assistance, credit, inputs). Discussions and recommendations on the design of guides were inspired by debates in the literature which highlight the challenges faced by smallholders and other resource-poor actors to participate in more demanding

Table II.
Parameters for the
review of guides for
VCD

General	Specific
Objectives and motivations	Development objective (the expected result of guide implementation) Expected outputs from guide implementation
Definitions	Definition of value chain Definition of VCD
Methodological design	Key concepts applied Key methodological steps and components Chain selection process Expected outputs from guide implementation Expected participation of stakeholders in implementation
Data collection and analysis	Recommendations for data collection from household member (including issues related to gender), households, businesses, facilitating organizations Recommendations for data collection on market environment
Methods and tools for data collection and analysis	Prescribed data collection methods Prescribed data analysis methods and tools
Assessing and monitoring outcomes and impacts	Suggested indicators Suggested methodology

agrifood markets (Dolan *et al.*, 1999; Reardon *et al.*, 2003; Zylberg, 2011), and the related need for more tailored development interventions involving poor rural households with diversified livelihood strategies (Dorward, 2009; Stoian *et al.*, 2012; Donovan and Poole, 2013).

Multiple reviews of the information on the parameters and the assessment of the information were carried out to achieve accuracy and objectivity. A co-author of this paper carried out a first review of a guide, collecting information on the parameters. This review was then examined by two other co-authors, to ensure accuracy and objectivity. The review was then passed to the guide author(s) for feedback. Authors were asked to identify potential misunderstandings or omissions and to highlight any disagreements with the information collected. Feedback was received from authors of eight of the guides. Their comments and suggestions were incorporated into the final data set. Preliminary versions of the assessment were shared with all authors of the guides. Five authors provided feedback on the assessment. Draft versions of this paper were reviewed by three external reviewers.

Our methodology has limitations. There are likely to be guides that meet the selection criteria yet were not included in this review. Nonetheless, our selection of guides is broad enough to provide a strong indication of the overall state-of-the-art. Our review is based exclusively on the guides themselves – it does not present information from other sources on experiences with the application of the guides and the subsequent results. In general, case studies with critical feedback on tool design and application are scarce.

3. Results

3.1 Objectives and outputs

Development objectives. In general, the interventions or changes in business relations that result from a VCD strategy are expected to yield tangible benefits for actors in the chain as well as for the overall business environment. The discussion here focuses on the specific development objectives to be achieved when the VCD strategy is implemented.

Seven guides include a development objective that focuses on improved income for marginalized populations. Examples include DFID, which considers that VCD offers opportunity to “effectively and sustainably improve the lives of poor people by understanding and influencing market systems,” and IIED (2008, p. 11), which argues that “with the right support, small-scale producers can be efficient and reliable providers of quality produce.” Other development objectives are also specified. ILO includes an overall improved business environment, as well as increased employment and income as outcomes of VCD. UNIDO considers that guide implementation will result in VCD with a greater likelihood of achieving positive impacts on poverty and gender equity.

Exceptions to the strong emphasis on poverty reduction are the guides by FAO and World Bank, which emphasize the economic development aspects of VCD. FAO conceptualizes that guide implementation will contribute to the economic growth of a given subsector, with no direct mention of smallholders or small businesses. The World Bank (2010, p. 2) recognizes, that “The value chain approach is being used to guide and drive high-impact and sustainable initiatives focused on improving productivity, competitiveness, entrepreneurship, and the growth of small and medium enterprises”. While the guide also recognizes that “enhancing value chain competitiveness is increasingly recognized as an effective approach to generating growth and reducing rural poverty” (World Bank, 2010, p. 2), the tools presented and the related discussions focus on business and chain performance.

Expected outputs. At a minimum, implementation is expected to yield a strategy for tailoring VCD to a specific situation that includes inputs from chain actors and from organizations that are external to the chain, such as service providers. For example, FAO (2007, p. 2) states that implementation allows for the formulation of a “general approach toward the definition of chain interventions aiming at performance improvement, with the identification of stakeholder responsibilities for implementation”. Similar approaches to conceptualizing the outputs of guide implementation are taken by DFID, ILO, World Bank, and UNIDO.

In other cases, implementation is also expected to result in new or stronger business relationships that emerge from the sustained dialogue among chain actors during the guide implementation process. The design of these guides places greater emphasis on the participatory process for implementation. A focus on both strategy formulation and relationship building is clear in the guide by CIP (2006, p. 16), which considers that “building trust among market chain actors is a prerequisite for successful collaboration”. The design of guides by CIAT and IIED also relies heavily on sustained engagement with smallholders and other chain actors to understand the chain and facilitate negotiations and interactions between actors. GTZ and USAID provide guidance for the elaboration of a strategy with chain stakeholders, as well as guidance on how to implement VCD, with modules, for example, on strengthening public-private partnerships, financing value chains, and improving the business environment of value chains.

3.2 Key definitions

Concepts related to value chains and VCD have been debated in the field of business management, sociology, and development studies. Consensus has yet to emerge on the definitions of these concepts. This review examines the guides to understand how they define chain-related concepts.

Value chain definition. The reviewed guides utilize different terms to describe market actors and the arrangements for production and marketing of agricultural products and services. Among the terms used are value chain, supply chain, market system, market chain, and agrifood chain. For the purpose of this review, the term value chain will be used independent of the particular term used in the guide.

There are major differences in the understanding of the value chain concept among the selected guides. Value chain definitions can be divided into three groups:

- (1) Value chains as a set of activities: various guides base their definition on activities. World Bank (2010, p. 9) provides an illustrative example: “The term *value chain* describes the full range of value adding activities required to bring a product or service through the different phases of production, including procurement of raw materials and other inputs”. The same definition or definitions similar in nature are offered by FAO, IIED, GTZ, ILO, and USAID.
- (2) Value chains as a set of actors: other guides base their definition on actors. For example, UNIDO (2011, p. 3) defines a value chain as “actors connected along a chain producing, transforming, and bringing goods and services to end-consumers through a sequenced set of activities”. CIP (2006, p. 159) defines a value chain as “all the actors, and the entirety of their productive activities, involved in the process of adding value to a specific crop or product”.
- (3) Value chains as a strategic network: in this case, value chains do not simply exist in a particular space but are built for the purpose of better responding to consumer demand. Borrowing from Hobbs *et al.* (2000), CIAT (2007, p. 25) defines value chains as a strategic network among a number of independent business organizations, where network members engage in extensive collaboration. DFID’s (2008, p. 6) defines a market system as a “multi-player, multi-function arrangement comprising three main sets of functions (core, rules, and supporting) undertaken by different players...through which exchange takes place, develops, adapts, and grows”.

The variation in definitions reflects the evaluation of the chain concepts from the different strands of debate (e.g. agribusiness systems and supply chain management, world systems theory, participatory appraisal, and French research on *filières*). The definitions are complementary to some degree: activities are carried out by actors, and actors of different types comprise a strategic network. That said, the chain definition applied has theoretical implications for the design of interventions that follow the chain assessment. With an activity-related definition, one may assume that VCD would focus on improving the efficiency of production processes, logistics, or the regulatory framework – farmers and businesses may not be central to the process. A focus on the “full range of activities” implies that the selected chain is local or national in reach, as interventions rarely extend beyond countries where the primary production takes place. With an actor-based definition, the focus is on actors, usually, resource-poor actors, which are often among the weaker links in a chain. It follows that interventions for VCD would aim to strengthen the capacity of these actors to participate in the chain, with the idea that strengthening the weaker links provides benefits to all involved. With a network-based definition, value chains do not simply exist, but are cultivated over time. In this case, the formation of a value chain becomes the actual goal of interventions, which will be possible only in certain market contexts.

Definition of VCD. Two general types of definitions for VCD can be drawn from the guides: an actor/chain type that focuses on strengthening certain actors and improving relations between smallholders and other actors in a chain; and a business-environment type that focuses on improving the business environment in which chain actors operate. Seven of the guides include a more actor/network-focused VCD definition. For example, CIAT suggests that VCD aims to increase competitiveness for a subset of chain actors, which results in higher income for smallholders and small businesses. USAID considers that VCD is achieved by establishing win-win relationships among chain actors. The World Bank (2010, p. 12) defines VCD as actions that “upgrade the whole system to the benefit of all value chain participants”. Other guides with similar definitions for VCD include: CIP, FAO, GTZ, and ILO. However, some of the guides that utilize an actor-focused definition of VCD employ an activity-based definition for value chain. Examples include USAID, ILO, and GTZ. This suggests that greater clarity is needed in the conceptual frameworks that underpin guides aimed at achieving rural development goals through work with resource-poor actors. In general, we consider an actor- or network-based definition to provide a more coherent conceptual framework when VCD is focused on a targeted group of chain actors.

DFID, IIED, and M4P consider improving the environment in which the smallholders and other chain actors produce and market agricultural products as the basis for achieving VCD. The guides facilitate the identification of options to enhance opportunities for smallholder chain participation by influencing the political, legal, and business environment and by establishing new linkages between smallholders and promising markets. For example, M4P (2008, p. 4) considers that analysis should focus on gaining an understanding of the context in which producers and/or small traders operate as participants of the value chain. Similarly, IIED considers VCD to centre on understanding the institutional framework in which smallholders and other chain actors operate and identifying options for influencing institutional change in a way that creates smallholder opportunities and benefits. A focus on the business environment reflects the influence of debates on globalizing food markets (Reardon *et al.*, 2003) and discussions among practitioners about making markets work for the poor (Ferrand *et al.*, 2004).

3.3 Conceptual and methodological frameworks

Conceptual frameworks. Several guides build their conceptual framework around the concepts of governance[2] and upgrading. These guides include ILO, GTZ, World Bank, and USAID. These guides help users to formulate a VCD strategy for building or improving relations between smallholders and other chain actors, taking into account: the existing governance patterns; and the political, legal, and market context in which the chain actors operate. The guides assume that a clear governance pattern can be identified and that chain development prospects are present within existing patterns that provide meaningful benefits to smallholders and other actors. Guides by CIAT and IIED do not use the terms governance or upgrading but contain conceptual frameworks that are similar in nature. For example, IIED builds its conceptual framework around the formal and informal institutions that make up “modern markets” and the potential for smallholders to respond to the demands of these markets.

Other guides are constructed around a conceptual framework that pays attention to the political, legal, and market context in which chain actors operate. For example, DFID aims to understand the “market system” (i.e. the actors that make the production of final products possible and the set of rules that they follow) and identify options

for addressing “systemic constraints” (i.e. the underlying reasons for underperformance and possible intervention points). Unlike the value chain concept, the market system concept does not explicitly include an element of vertical coordination. FAO also focuses attention on understanding the political, legal, and market environment in which firms operate as a basis for promoting synergies and increased competitiveness in a chain. Particular areas of focus include the regulatory environment, technologies and inputs available to chain actors, and the degree of competition in the subsector.

Among the guides that focus on governance and upgrading, two important questions remain largely unaddressed in the guides. First, how can an upgrading strategy be defined in cases where no clear or uniform governance pattern is discernible? Clear governance patterns do not always exist, as holds true for undifferentiated crops sold in local markets, for example. In other cases, governance patterns may differ within a given node in the chain as well as between different nodes in a chain. At times, government policy in producing countries may be the most important determinant of development options, rather than rules established by value chain actors (Cramer, 1999). Where weak vertical relationships exist and unclear governance patterns prevail, a focus on a market structure-conduct-performance framework or the supply chain concept may be a more appropriate framework for diagnostics. Second, when does upgrading represent an opportunity for smallholders or other marginalized actors? For some smallholders, the potential benefit from upgrading (e.g. improved prices) may be less than the costs (such as increased labour allocation, collective action), particularly in the absence of support from development organizations and/or downstream chain actors.

None of the guides discusses how guide implementation leads to development outcomes and impacts for smallholders, other actors in the chain, or the chain itself. For example, the guide by CIP, which conceptualizes VCD around innovation, says little about the potential returns from innovation or the conditions under which innovation by one actor could lead to innovation and improved outcomes for others in the chain. In a similar fashion, the guide by ILO, which considers VCD in the context of decent work, does not discuss which chain actors are more likely to promote decent work and how such outcomes would contribute to VCD. Guides by CIAT, FAO, GTZ, and IIED consider the potential to achieve VCD based on investments by smallholders and other chain actors but do not describe the actor-specific conditions under which these investments are most likely to take place (for instance, investment needs, potential costs and benefits, and the risks related to investment).

Attention to the context. The context in which farmers and businesses operate has important implications on the design and implementation of strategies for VCD. For instance, comprehensive strategies to develop value chains that link smallholders with international markets for specialty products will likely discuss issues related to certification compliance and the ability of cooperatives and producer associations to meet the demands of their members and of downstream buyers. Alternatively, strategies to develop value chains in local markets will likely focus attention on understanding consumer demand and the opportunities for value adding with local processors and intermediaries. Context is also important when considering the ability of smallholders to participate in VCD. In cases where VCD requires relatively large investments by smallholders, understanding their interests and capacities will be important for the design of sustainable interventions. The greater a guide’s focus on issues particular to a given context, the greater its potential to provide tailored guidance to its users. Many of the guides recognize the overall importance of the context and provide guidance on how to assess the marketing and business context (e.g. CIAT and DFID). However, none of the guides conditions

implementation based on a key element of the marketing or business context. At the level of producing households, some guides stipulate that the value chain selected for analysis and development should be relevant to rural livelihoods. However, there is limited discussion on how to measure differences in the interests and capacities among households or on the implication of these differences for achieving the reported goals of VCD.

Chain selection. Value chain selection has important implications for the households and businesses involved, as well as for the external organizations that aim to facilitate the development process. Some guides identify steps for chain selection, while others assume that a chain has already been selected (Table III). Where steps for chain selection are provided, decisions on chain selection rest mainly in the hands of chain stakeholders or with NGOs and others that are external to the chain, often with validation from local stakeholders. In general, steps for chain selection involve the selection of indicators/criteria, an extensive period of data collection and analysis, and one or more workshops to present results and make decisions. Most guides include criteria related to market potential. Those guides aiming to address rural poverty also include criteria on the potential of the value chain to improve rural livelihoods. Few guidelines deal with how to collect and analyse the data. In some cases, effectively responding to a criterion would require complex data collection and analysis, for example, assessing the “potential of the product/activity for poverty reduction” (M4P, 2008, p. 20) and identifying the “markets with potential for achieving improved growth and access” (DFID, 2008, p. 24).

Recommended data collection. Depending on the objectives of the guide and its intended users, data collection at some levels (e.g. household, business, value chain) may be more relevant than at others. The guides therefore differ markedly in their attention to data collection at different levels of value chain analysis. Some guides place more emphasis on understanding actors in the chain and their perspectives on opportunities for VCD, while others concentrate data collection on understanding the value chain itself and the overall context in which it operates. Table IV compares the recommended data collection at five levels of value chain analysis: intra-household, household, business, chain/market, and service provider.

Few guides consider data collection at the intra-household level. As a result, the strategies that emerge from guide application may overestimate the potential for women and other disadvantaged members to participate in and benefit from VCD. In case of VCD aiming at inclusive or pro-poor development, this omission may also result in outcomes below their potential. UNIDO addresses the lack of attention by existing guides to specific social issues, including gender equity. With regard to gender, UNIDO identifies various important issues that should be considered as part of value

Selection lead by local stakeholders	Selection led by external experts	Assumption that chain has already been selected
CIAT M4P	FAO DFID GTZ ILO World Bank UNIDO	CIP IIED USAID

Table III.
Approach to chain
selection

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Level of data collection	Limited or no data recommended	Moderate amount of data recommended	High amount of data recommended
Intra-household	CIP CIAT FAO DFID GTZ IIED M4P ILO World Bank USAID		UNIDO
Household	CIP DFID IIED World Bank	FAO GTZ ILO USAID	CIAT M4P UNIDO
Businesses, including cooperatives and producer groups	DFID IIED World Bank UNIDO	GTZ ILO USAID	CIP CIAT FAO M4P
Chain/market		CIAT UNIDO	CIP FAO DFID GTZ IIED M4P ILO World Bank USAID
Service provider	CIP	CIAT FAO DFID GTZ IIED M4P ILO World Bank UNIDO USAID	

Table IV.
Data collection recommended (indicators, guiding questions) by the guides, by level

chain analysis when marginalized producers are involved, including access to assets, social roles, and risks faced specifically by women. The guide does not provide suggestions on how to collect or analyse gender-related information, but it does provide various references to grey literature where issues related to gender and VCD are addressed.

Attention placed on issues at the household level varies considerably. Three guides stand out for paying relatively strong attention to household-level production and marketing issues: CIAT, M4P, and UNIDO. In addition to basic information on output and income, these guides recommend data collection on livelihood strategies, capacities and asset endowments, and perceptions on benefits and challenges in chain participation. In most cases, however, detailed information on how to collect and analyse these data is not provided (e.g. assessment of livelihood strategies), although

some references to important articles in grey literature are provided. In general, neither the academic nor grey literatures provide extensive insights into rural livelihoods in the context of value chains and VCD (Stoian *et al.*, 2012). Four guides (FAO, GTZ, ILO, USAID) recommend data collection on basic issues related to producing households (such as income, productivity, and farm gate prices), while the remaining four guides do not discuss the role of households in value chains and VCD.

Attention placed on businesses[3] and producer groups also varies considerably. Four guides focus considerable attention on these actors: CIAT, M4P, FAO, and CIP. Data collection recommended by these guides focuses on businesses, their capacities and access to resources, and their incentives to invest in upgrading and/or increased collaboration with chain actors. These guides do not distinguish data collection methods or indicators according to the type of business, for example, smallholder-managed cooperatives or privately owned industrial processors. Guides that briefly discuss data collection on businesses are USAID, ILO, and GTZ. These guides recommend a basic set of assessment indicators, including annual income and sales, export prices, and business functions. Four guides forgo data collection on businesses as part of the strategy formulation for VCD: DFID, IIED, World Bank, and UNIDO.

All of the guides place a moderate to high level of attention on data collection at the level of value chain and market. Those that place relatively less attention on data collection at the chain and market level were those that focus relatively more attention on individual actors in the chain (CIAT, UNIDO). Most of the guides also recommend data collection on service providers. Data collection is basic, often focusing on the identification of existing service providers in a given area and generally avoiding more complex issues, such as the need for services by chain actors, gaps in service provision in a given territory to meet these needs and how to resolve the latter, and the overall suitability of existing services. CIAT provides the most extensive coverage on service provision, giving guidance on methods for assessing the quality of service provision and identifying the unfulfilled demand for services.

3.4 Recommended methods and tools

Methods for data collection. The guides provide various indicators or research questions for guiding the collection of data for value chain analysis. Recommendations emphasize both qualitative and quantitative data, although there is a strong inclination towards qualitative data. As for the type of methods prescribed, the guides vary little. These methods include: review of existing information, key informant interviews with chain actors and participatory chain mapping, as well as workshops and focus groups with chain actors. In some cases, methods are also provided for carrying out a market assessment, either as an annex to the guide (CIP) or as a separate, but linked, guide (CIAT). Three guides (DFID, World Bank, UNIDO) omit information on how to collect or analyse data, perhaps reflecting an orientation towards researchers.

The guides suggest that tool users increase the rigour or depth of data collection and analysis through triangulation and participatory workshops. However, no guide provides in-depth discussions on the optimal levels of rigour and depth or on the various practical options for achieving them. Discussions on practical options for sampling (both how to sample and how many units to sample), data management, and questionnaire design are also scarce among the guides. A salient gap in virtually all guides is the issue of variability in costs and returns for farmers and business that invest in upgrading their operations and the implications of these on decision making.

Methods and tools for data analysis. All of the guides seek data from chain stakeholders for the design of VCD strategies. The two most commonly recommended methods for analysing data are participatory workshops and key informant interviews. During participatory workshops, tool users report raw and processed data on chains, markets, and chain actors to stakeholders for discussion, analysis, and decision making. Most guides provide questions and templates for preparation of workshops. Workshops and key informant interviews form the methodological pillar of CIP, CIAT, IIED, and ILO. In some cases, guides provide additional support for data analysis as input for participatory workshops, such as value chain mapping (GTZ), participatory rural appraisal tools (CIAT), and analysis of strengths, weaknesses, opportunities, and threats (CIP, FAO, USAID). Involving stakeholders in the process serves two purposes: participatory analysis for decision making and encouraging buy-in to the strategy formulation process.

In general, these guides offer relatively simple analytical tools and methods that allow users to obtain a rough idea of the value chain and the needs and circumstances of its participants. In some cases, the outputs of implementation are likely to be insufficient for the design of development strategies among actors with different interests and varying capacities to invest in more intensive value chain participation. When VCD does involve resource-poor households and businesses, then the case for careful exploration of the needs and capacities of resource-poor chain actors becomes more pressing. An expanded set of tools and methods could improve the outcomes of guide implementation. These might include tools for assessing the return and variability in return on investments, incorporating risk into decision making, scoring investment options by households, assessing the viability of small and medium enterprises, and drawing inferences from quantitative data. In some cases, participatory research tools designed for farm and natural resource management may be applicable (e.g. Dorward *et al.*, 2007). In other cases, new tools specific to the context of VCD may be needed. Discussions are needed among tool designers and tool users about the applicability of different tools under different conditions.

Other guides offer a greater selection of methods and tools for data analysis. M4P, World Bank, UNIDO, and USAID provide the most extensive set of methods and tools for analysis of value chains, value chain actors, and markets. For example, USAID includes knowledge assessment, cost and margin analysis, distribution of income analysis, and competitiveness analysis. M4P stands out for its discussion of a range of qualitative tools for understanding value chain relations and the financial implications of investments in value chains. Among the tools presented by UNIDO, a particularly noteworthy one is the tool for incorporating gender issues in the analysis. In general, for each method or tool presented in the guides, authors provide an overview of the method or tool to be applied, as well as examples of its use and results. In most cases, however, discussion is brief and examples lack detail. The lack of discussion about options for adjusting the methods and tools to different contexts may frustrate implementation by some users given the diversity of contexts in which VCD is carried out and the difficulty of collecting data from households and the private sector.

Following a discussion on data collection and analysis, the guides present a process for the actual design of the interventions for VCD. The process usually begins by organizing a subset of chain actors into a “task force” or “working group” or something similar in nature. Most guides suggest that “key actors” from one or more chain nodes be included in the process, although criteria for identifying key actors are often left to the discretion of those implementing. The guides recommend one or more workshops

be carried out with the selected actors. During these meetings, results from prior data collection and analysis are presented: the chain is described, the end market discussed, bottlenecks presented, and in some cases, potential solutions are presented for validation (e.g. FAO). More participatory guides consider strategy development as a separate and final step in the process. This may consist of a single workshop (e.g. CIAT, which recommends a “negotiation workshop”) or a more elaborate process (e.g. CIP, which recommends various sessions over several months). Guides may warn users on the potential for conflicts during the process (e.g. IIED). In general, however, discussion lacks on the process by which actors come together to negotiate solutions and pursue common interests and how this process evolves over time (see Staatz and Donald, 2010 for discussion). Under what conditions is joint strategy development and implementation most likely to succeed? What options exist when win-win solutions fail to emerge? How does the process vary according to differences in the local context? Looking beyond the actual workshops, the guides avoid challenging users to question the strategy itself: what worked?, what did not work?, and how could strategies be re-designed (improved) for future work? This would imply a strong focus on joint reflection and learning to be carried out throughout the strategy implementation process.

3.5 Monitoring and evaluation

Five of the guides do not discuss monitoring and evaluation (CIP, FAO, IIED, M4P, World Bank). Thus, the following analysis focuses on the six guides that do.

CIAT, GTZ, and USAID provide the most extensive set of indicators for monitoring and evaluation. Most of their indicators focus on data collection at the chain and market level. Among the recommended indicators are sales volumes and values, production costs, yields, profitability, product offer, and technologies applied. CIAT and GTZ also suggest indicators at the household level. In both cases, indicators relate mainly to income and the contribution of the value chain being developed to household income. UNIDO includes the largest selection of indicators at the household level, with indicators on skills and capacities, productive assets, and women’s control over income. ILO suggests various indicators related to the concept of decent work, including employment creation and labour conditions. The indicators suggested by the guides provide relevant and important information for understanding the outcomes and, in some cases, the impacts of VCD. With the exception of UNIDO, these guides are not designed to provide a deep understanding of the needs and circumstances of more vulnerable actors in a given chain, including household producers and small businesses, or how VCD-related interventions shape their ability to participate and benefit from deeper engagement with markets.

Guidance on how to collect and analyse information for monitoring and evaluation is limited. GTZ stands out for presenting a rigorous approach to monitoring and evaluation, with recommendations for the elaboration of an impact pathway, formulation of impact hypotheses, and use of control groups for attribution. However, given the complexity of the suggested approach, the guide does not provide sufficient help to practitioners in its implementation. In general, users are expected to already understand the basics of monitoring and evaluation in a VCD context or apply readily available monitoring and evaluation guides designed for project assessment (e.g. Baker, 2000; Grun, 2006). However, guides designed for the monitoring and evaluation of project assessment are likely to fall short in the context of VCD, given the multiple levels at which VCD takes place and the possibility that changes result from multiple sources (see Stoian *et al.*, 2012).

4. Recommendations for guides use

Based on the results from our analysis of guides, we provide recommendations for tool users according to the context in which they are working, their objectives in pursuing VCD, and the methods for data collection and analysis that best suit their needs and interests (Table V). For example some guides are particularly suited to developing value chains that link smallholders to local markets (CIP, CIAT, and IIED) whereas others are especially appropriate for links to export markets (World Bank).

5. Conclusions

The guides provide a framework for development practitioners to engage with market actors and set the stage for collaboration in VCD following guide implementation. They prioritize the institutions that shape the actions and interactions of chain actors and the related implications for chain development. Institutions of particular interest are those governing the relationships, agreements, and interactions among chain actors, the informal and formal rules that determine what individuals and organizations should or can do, and the recurring actions carried out by individuals or organizations (such as provision of services, functions, and products). The implementation process brings chain actors and development organizations together to seek answers to questions of common interest, including enquiry into the limitations to chain growth and potential solutions that benefit all stakeholders. The guides embrace the use of participatory research methods, including key informant interviews, participatory workshops (participatory chain mapping), and focus groups, thus facilitating their implementation by practitioners working in environments where data are scarce and large-scale sampling may be prohibitively expensive.

The guides reflect the interest of development organizations in achieving greater sustainability for their interventions. An underlying premise is that sustainability can only be achieved with a strong focus on consumer demand and the needs of certain chain actors (e.g. supermarkets or overseas importers) for quality, volume, and social and environmental responsibility. By focusing attention on demand, the guides recognize that smallholders and other upstream chain actors must be able to respond to the demands of consumers, which opens the door for building more productive dialogue and interactions with the private sector. The role of support services in helping smallholders better meet the needs of downstream chain actors is another aspect in which the guides address sustainability.

The review also sheds light on certain gaps and limitations in the guides related to VCD design. First, greater attention must be given to the needs and circumstances of poor households. The guides often implicitly assume that rural households are a homogeneous group and have sufficient resources to participate in VCD, do not face substantial trade-offs when using these resources, and are able to assume higher risks when investing their capital and labour. Insights from the literature show that these assumptions often do not reflect the needs and conditions of the poor. Recent publications have highlighted the need for greater attention to the needs and interests of smallholders when considering options for VCD (Seville *et al.*, 2010; Stoian *et al.*, 2012; Vorley *et al.*, 2012). The design of strategies for VCD that include poor and vulnerable populations may require additional concepts and tools that take these aspects into account. This will increase the complexity of tool implementation; however, it also offers the opportunity to design more viable and efficient strategies. Debate continues on which concepts and tools are most useful and how to incorporate them into guides without alienating users.

Area of interest	Recommended guides	Remarks
<i>Value chain development for specific contexts</i>		
Design of policies for VCD at the macro level (covering all actors involved in the production and marketing of a given product)	FAO, DFID, M4P, USAID	Considerable attention to understanding the political, legal, and marketing context in which value chain actors operate
Design of interventions and new chain interactions among a selected group of actors in a given subsector	CIP, CIAT, GTZ, ILO	Implementation tied to considerable participation from selected value chain actors for both analysis and design and implementation of development interventions and new chain interactions
Development of value chains that link smallholders to export markets	World Bank	11 detailed case studies on VCD oriented towards export markets
Development of value chains that link smallholders to local and national markets	CIP, CIAT, IIED	Considerable attention given to understanding the circumstances of actors in a chain and the overall marketing context in a given area
<i>Conceptual frameworks (CF)</i>		
CF built around governance and upgrading	GTZ, ILO, World Bank, USAID, M4P, USAID	Designed to assess existing chain governance and opportunities for upgrading by smallholders and other chain actors
CF based on synergy, efficiency, and competitiveness	FAO, CIAT	Bottlenecks in chain performance and options for increasing chain competitiveness through improved cooperation and coordination identified by users
CF based on political, legal, institutional, and market context	DFID, IIED	Assistance with identifying options to design policies that offer smallholders greater development opportunities in regional and national markets
CF based on innovation and potential to achieve innovation	CIP	Implementation aimed at identifying opportunities for innovation within a given market context
CF that address issues related to the conditions of labour in a value chain	ILO	Help with focusing attention on the conditions of labour in a value chain and methods provided for identifying opportunities to improve conditions for labour
<i>Methodological elements</i>		
Selecting a chain for VCD using outside experts	FAO, DFID, ILO, GTZ, USAID	Parameters for data collection recommended that inform the decision on which chain to engage
Selecting a chain for VCD with local stakeholders	CIAT	Steps suggested for carrying out interviews with actors in selected territories for selection of chain
Participatory and practitioner-friendly approach to VCD	CIP, CIAT	Relatively easy-to-follow text, with numerous examples complemented by simple figures and tables; strong focus on participatory workshops and key informant interviews for data collection

(continued)

Table V.
Recommendations to
users on which
guides are most
appropriate for
particular objectives,
contexts, and
methods

Area of interest	Recommended guides	Remarks
Innovative methods and tools for analysing value chains and chain actors and for designing VCD strategies	World Bank, USAID, M4P	Most complete selection of concepts and tools for value chain analysis and VCD provided by USAID, followed by M4P and World Bank
Detailed and well-structured approach to value chain mapping and analysis	GTZ, USAID	Detailed discussion of tools and methods for understanding and mapping the value chain provided by GTZ
Monitoring and evaluation	CIAT, GTZ, USAID	Indicators recommended for data collection for monitoring and evaluation; limited discussions on methodology – for more detailed discussions on monitoring and evaluation in a VCD context, see Tanburn and Sen (2011); CARE (2012); and Donovan and Stoian (2012)
Focus on circumstances of households, businesses, and individuals	USAID, UNIDO	Module with general guidance on VCD in conflict zones in USAID; discussion of options for addressing risks and gender in UNIDO
<i>Data collection at different scales</i>		
Gender and intra-household	UNIDO	A short discussion of intra-household data collection and analysis – see Mayoux and Mackie (2008), Rubin <i>et al.</i> (2009), Riisgaard <i>et al.</i> (2010), and Coles and Mitchell (2011) for more detailed discussions on gender and VCD
Household-scale production and marketing	CIAT, M4P, UNIDO	Most in-depth discussion on household-level data collection in UNIDO
Businesses and producer groups	CIAT, M4P, FAO, CIP	Most data collection from key informant interviews with business leaders – more detailed assessments likely to require additional resources – for example see: Ortiz-Marcos <i>et al.</i> (2011)
Chain and business environment	CIP, FAO, DFID, GTZ, IIED, M4P, ILO, World Bank, USAID	Most detailed discussion of assessment at the level of chain and business environment in GTZ, DFID, and USAID
Service providers	CIAT	Methods to assess the quality of service provision and to identify services without demand, and demands without services

Table V.

Second, the guides should provide deeper guidance for dealing with variations in the context. Most guides assume that users will identify critical elements of the context, understand their relevance for VCD, and make the necessary adjustments for data collection and analysis. These contextual differences may relate to scale in shipping and processing (and the related need for smallholder organization), the preexisting asset endowments of smallholders and small businesses (and the related need for investments in asset building prior to VCD), and the overall business environment (and the related need for advocacy as part of the VCD). Future guides would benefit from increased attention to critical contextual issues related to VCD – for example, the need for collective business development, the existing governance pattern along the chain (or lack thereof), and the reach of the chain (international versus national/regional/local). Alternative implementation pathways based on differences in the context may increase the complexity of the guides themselves but should result in more tailored strategies for VCD.

Finally, more attention should be given to capacities of those that implement the guides. Greater discussion on how to deal with complex research design and implementation issues, such as variability in returns may help to improve the overall rigour of assessment and usefulness of the VCD strategies. The incorporation of fully developed case studies (rather than snapshots of good practices from diverse sites) will also help to inform users about potential implementation pitfalls and options for avoiding them. Conceptual frameworks should explicitly show the relationships between tool implementation and the ultimate development goals to be achieved. Guides would benefit from a conceptualization of how guide implementation leads to outcomes and impacts for different types of chain actors. The incorporation of new tools and methods must recognize the trade-offs faced by users between ease of use and rigour. New debates and interactions among tool designers and users are needed to identify the costs and benefits of additional tools and rigour and promote learning for improved design and implementation of VCD guides. While individual authors and organizations have developed learning groups around specific guides, a wider group of users and guide designers is needed to address important issues and dilemmas facing tool design and implementation.

Notes

1. For the sake of brevity, the guides are referenced in this article according to the organization that backed development of the guide. The authors of each guide are identified in Table I. Citations for each guide (by authors' name) are included in the reference section.
2. Chain governance often refers to the vertical coordination by firms in one node of the chain with firms in other chain nodes. Coordination can assume various modalities that include strategic alliances, and contractual partnerships. These determine how product flows are regulated in terms of prices, quality, quantity, and delivery specifications, among other aspects (Humphrey and Schmitz, 2005). Governance structures are considered to have important consequences for the access of chain actors in developing countries to markets and the range of activities that developing-country actors can undertake. A wider framing of the governance concept includes legislative aspects that shape business interactions, such as food safety and environmental standards (Kaplinksy and Morris, 2002; Tallontire *et al.*, 2011). The concept of upgrading refers to the potential of businesses and producers in developing countries to improve their performance and obtain greater benefits from value chain participation.
3. The term business refers to privately owned small, medium, and large businesses, as well as community-based businesses such as cooperatives, producer associations, and farmer organizations that are commercially active. In some cases, businesses may receive VCD assistance from governments and civil society (e.g. cooperatives with links to smallholders) and, in other cases, businesses may support VCD, for example, through their investments in more intensive relations with smallholders and upstream businesses (for instance, large-scale retailers, exporters, and processors).

References

- Altenburg, T. (2007), "Donor approaches to supporting pro-poor value chains", *Donor Committee for Enterprise Development*, London.
- Bacon, C. (2005), "Confronting the coffee crisis: can fair trade, organic, and specialty coffees reduce small-scale farmer vulnerability in northern Nicaragua?", *World Development*, Vol. 33 No. 3, pp. 497-511.

- Baker, J.L. (2000), *Evaluating the Impact of Development Projects on Poverty: A Handbook for Rationers*, LCSPP/PRMPO, The World Bank, Washington, DC.
- Bernet T., Thiele, G. and Zschocke, T. (2006), *Participatory Market Chain Approach (PMCA): User Guide*, International Potato Center (CIP) – Papa Andina, Lima, available at: <http://cipotato.org/publications/pdf/003296.pdf>
- Coles, C. and Mitchell, J. (2011), “Gender and agricultural value chains: a review of current knowledge and practice and their policy implications”, ESA Working Paper No. 11-05, FAO, Rome.
- Cramer, C. (1999), “Can Africa industrialize by processing primary commodities? The case of Mozambican cashew nuts”, *World Development*, Vol. 27 No. 7, pp. 1247-1266.
- Da Silva, C.A. and de Souza Filho, H.M. (2007), *Guidelines for Rapid Appraisals of Agrifood Chain Performance in Developing Countries*, Food and Agriculture Organization of the United Nations, Rome, available at: www.fao.org/docrep/010/a1475e/a1475e00.htm
- Department for International Development (DFID) (2008), *The Operational Guide for the Making Markets Work for the Poor (M4P) Approach*, Department for International Development, London, available at: www.setoolbelt.org/resources/1836
- Dolan, C., Humphrey, J. and Harris-Pascal, C. (1999), “Horticulture commodity chains: the impact of the UK market on the African fresh vegetable industry”, Working Paper No. 96, Institute of Development Studies, Brighton.
- Donovan, J. and Poole, N. (2013), “Asset building in response to value chain development: lessons from taro producers in Nicaragua”, *International Journal of Agricultural Sustainability*, Vol. 11 No. 1, pp. 23-37.
- Donovan, J. and Stoian, D. (2012), *5Capitals: A Tool for Assessing the Poverty Impacts of Value Chain Development*, Technical Series 55, Rural Enterprise Development Collection 7, CATIE, Turrialba, Costa Rica.
- Dorward, A. (2009), “Integrating contested aspirations, processes and policy: development as hanging in, stepping up and stepping out”, *Development Policy Review*, Vol. 19 No. 2, pp. 131-146.
- Dorward, P., Shepherd, D. and Galpin, M. (2007), *Participatory Farm Management: Methods for Analysis, Decision Making and Communication*, Food and Agriculture Organisation of the United Nations (FAO), Rome.
- Ferrand, D., Gibson, A. and Scott, H. (2004), *Making Markets Work for the Poor: An Objective and an Approach for Governments and Development Agencies*, ComMark, Pretoria.
- Grun, R.E. (2006), *Monitoring and Evaluating Projects: A step-by-step Primer on Monitoring, Benchmarking, and Impact Evaluation*, The World Bank, Washington, DC.
- Haggblade, S. (2007), Subsector supply chains: operational diagnostics for a complex rural economy. Chapter 15, in Haggblade, S., Hazell, P. and Reardon, T. (Eds), *Transforming the Rural Nonfarm Economy*, Johns Hopkins University Press, Baltimore, MD, pp. 352-378.
- Herr, M.L. and Muzira, T.J. (2009), *Value Chain Development for Decent Work*, International Labour Office, Geneva, available at: www.ilo.org/empent/areas/value-chain-development-vcd/WCMS_115490/lang-en/index.htm
- Hobbs, J., Cooney, A. and Fulton, M. (2000), *Value Chains in the Agri-Food Sector: What are they? How do they work? Are They for Me?*, Department of Agricultural Economics, University of Saskatchewan, Saskatoon.
- Humphrey, J. and Memedovic, O. (2006), *Global Value Chains in the Agrifood Sector*, United Nations Industrial Development Organization, Vienna.

- Humphrey, J. and Navas-Alemán, L. (2010), "Value chains, donor interventions, and poverty reduction: a review of donor practice", Research Report No. 63, IDS Brighton.
- Humphrey, J. and Schmitz, H. (2005), "Governance in global value chains", in *Local Enterprise in the Global Economy: Issues of Governance and Upgrading*, Schmitz, H. (Ed.), Edward Elgar Press, Cheltenham, pp. 95-109.
- Kaplinsky, R. and Morris, M. (2002), *A Handbook for Value Chain Research*, Institute for Development Studies, Brighton, available at: www.srp-guinee.org/download/valuechain-handbook.pdf
- Lundy, M., Gottret, M.V., Ostertag, C., Best, R. and Ferris, S. (2007), *Participatory Market Chain Analysis for Smallholder Producers*, CIAT, Cali, available at: http://webapp.ciat.cgiar.org/agroempresas/ingles/good_practice_guide_4.htm
- Mayoux, L. and Mackie, G. (2008), "Making the strongest links: a practical guide to mainstreaming gender analysis in value chain development", *International Labour Office (ILO)*, Addis Ababa.
- Nang'ole, E., Mithöfer, D. and Franzel, S. (2011), "Review of guidelines and manuals for value chain analysis for agricultural and forest products", Occasional Paper No. 17, World Agroforestry Centre.
- Ortiz-Marcos, I., Sánchez-Naranjo, M.J. and Cabo, J.R. (2011), "A diagnostic tool design for cooperatives and fair trade organisations", *Total Quality Management and Business*, Vol. 22 No. 7, pp. 743-753.
- Proctor, F. and Lucchesi, V. (2011/2012), "Mapping study on value chain initiatives in ACP regions: key findings and observations", study prepared for CTA (original version), public version revised August, available at: <http://makingtheconnection.cta.int/sites/default/files/Value-Chain-Mapping-part-1.pdf>
- Purcell, T., Gniel, S. and van Gent, R. (2008), *Making Value Chains Work Better for the Poor: A Toolkit for Practitioners of Value Chain Analysis. Making Markets Work Better for the Poor Project*, UK Department for International Development and Phnom Penh, Cambodia: Agricultural Development International, London, available at: http://aci.gov.au/files/node/14580/making_value_chains_work_better_for_the_poor_a_to_14413.pdf
- Reardon, T., Timmer, C.P., Barrett, C.B. and Berdegue, J. (2003), "The rise of supermarkets in Africa, Asia, and Latin America", *American Journal of Agricultural Economics*, Vol. 85 No. 5, pp. 1140-1146.
- Riisgaard, L. and Ponte, S. (2011), *Pro-Poor Value Chain Development: 25 Guiding Questions for Designing and Implementing Agroindustry Projects*, United Nations Industrial Development Organisation, Vienna, available at: www.unido.org/fileadmin/user_media/Services/Agro-Industries/Pro-poor_value_chain_development_2011.pdf
- Rubin, D., Manfre, C. and Barrett, K.N. (2009), *Promoting Gender Equitable Opportunities in Agricultural Value Chains: A Handbook*, USAID, Bern, Washington, DC
- Seville, D., Buxton, A. and Vorley, B. (2010), *Under What Conditions are Value Chains Effective Tools for Pro-Poor Development? Sustainable Food Lab*, (report prepared for the Ford Foundation, Hartland, VT), IIED, London.
- Springer-Heinze, A. (2008), *Valuelinks: The Methodology of Value Chain Promotion*, GTZ, Eschborn, available at: www2.gtz.de/wbf/lred/library/detail.asp?number=3721
- Staritz, C. (2012), *Value Chains for Development: Potentials and Limitations of Global Value Chain Approaches in Donor Interventions*, Austrian Research Foundation for International Development, Vienna.
- Stoian, D., Donovan, J., Fisk, J. and Muldoon, M. (2012), "Value chain development for rural poverty reduction: a reality check and a warning", *Enterprise Development and Microfinance*, Vol. 23 No. 1, pp. 54-69.

- Staatz, J. and Donald, R. (2010), "Value chain participant councils: a tool for improved market coordination and broad-based growth", in van Trijp, H.J. and Theodorus, P. (Eds), *Markets, Marketing and Developing Countries: Where We Stand and Where We are Heading*, CAB International, Ashford, pp. 97-102.
- Swiss Agency for Development and Cooperation (SDC) (2008) *A Synthesis of the Making Markets Work for the Poor (M4P) Approach*, SDC, Bern, available at: www.value-chains.org/dyn/bds/docs/681/Synthesis_2008.pdf
- Tallontire, A., Opondo, M., Nelson, V. and Martin, A. (2011), "Beyond the vertical? Using value chains and governance as a framework to analyse private standards initiatives in agri-food chains", *Agricultural and Human Values*, Vol. 28 No. 2011, pp. 427-441.
- Tanburn, J. and Sen, N. (2011), *Why have a Standard for Measuring Results? Progress and Plans of the Donor Committee for Enterprise Development*, DCED, London.
- USAID (US Agency for International Development, Undated, Value chain development wiki. <http://microlinks.kdid.org/good-practice-center/value-chain-wiki>
- Vermeulen, S., Woodhill, J., Proctor, F. and Delnoye, R. (2008), *Chain-Wide Learning for Inclusive Agrifood Market Development: A Guide to Multi-Stakeholder Processes for Linking Small-Scale Producers to Modern Markets*, International Institute for Environment and Development, and Wageningen, Wageningen University and Research Centre, London, available at: www.regoverningmarkets.org/en/articles/global/chain_wide_learning_guide_for_inclusive_agrifood_market_development_a_guide.html
- Vorley, B., del Pozo-Vergnes, E. and Barnett, A. (2012), *Small Producer Agency in the Globalized Market: Making Choices in a Changing World*, HIVOS, IIED, The Hague, London.
- Webber, C.M. and Labaste, P. (2010), *Building Competitiveness in Africa's Agriculture: A Guide to Value Chain Concepts and Applications*, World Bank, Washington, DC, available at: http://siteresources.worldbank.org/INTARD/Resources/Building_Competitiveness_in_Africa_Ag.pdf
- Weinberger, K. and Lumpkin, T.A. (2007), "Diversification into horticulture and poverty reduction: a research agenda", *World Development*, Vol. 35 No. 8, pp. 1464-1480.
- Zylbergberg, E. (2011), "Bloom or bust? A global value chain approach to smallholder flower production in Kenya", *Journal of Agribusiness in Developing and Emerging Economies*, Vol. 3 No. 1, pp. 4-26.

About the authors

Dr Jason Donovan is a Marketing Specialist at the World Agroforestry Centre (ICRAF) based in Lima, Peru. His research focuses on understanding the opportunities for achieving poverty reduction through enterprise and value chain development. Prior to joining ICRAF, he worked for ten years at CATIE in Costa Rica. Recently, Donovan wrote, together with Dietmar Stoian, *The Methodology 5Capitals: A tool for assessing the poverty impacts of value chain development*. Dr Jason Donovan is the corresponding author and can be contacted at: j.donovan@cgiar.org

Professor Steve Franzel is a Principal Agricultural Economist at the World Agroforestry Centre (ICRAF) and leads the centre's research on marketing and rural advisory services. Based in the USA, his main research interests are smallholder farming systems, adoption and diffusion of innovations, marketing, extension approaches, and participatory technology development.

Marcelo Cunha is an Economist at the World Agroforestry Centre (ICRAF) based in Belém, Brazil. He received his MSc in Economics from the University of Cologne, Germany. His research interests focus on value chain analysis and development and value adding, marketing, and livelihood strategies for mutual benefits to value chain actors, as well as risk assessment and cost-benefit and vulnerability analyses related to potential inclusion of smallholders in value chains.

Dr Amos Gyau is a Marketing Specialist at the World Agroforestry Centre (ICRAF) and is based at the headquarters in Nairobi. Before joining ICRAF, he worked as a Lecturer at the School of Agriculture, Food, and Wine at the University of Adelaide in Australia, where he researched and taught courses in agriculture, food, and wine business. His research interest focuses on identifying strategies to link and increase participation of smallholder farmers in local, regional, and international markets.

Dr Dagmar Mithöfer is a Professor of Agribusiness at the Rhine Waal University of Applied Sciences. Before joining the Rhine Waal University, she was a Senior Marketing Specialist at the World Agroforestry Centre (ICRAF) and an Impact Assessment Economist at the International Centre of Insect Physiology and Ecology (ICIPE) in Nairobi, Kenya. Her research interests focus on smallholder integration in value chains and the impact of private standards on smallholders and sustainable development.

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3. Pablo Mac Clay, Roberto Feeney. 2019. Analyzing agribusiness value chains: a literature review. *International Food and Agribusiness Management Review* 22:1, 31-46. [Crossref]
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6. International Finance Corporation. The Business Case 21-37. [Crossref]
7. Katharine Tröger, Margareta Amy Lelea, Brigitte Kaufmann. 2018. The Fine Line between Trusting and Cheating: Exploring Relationships between Actors in Ugandan Pineapple Value Chains. *The European Journal of Development Research* 30:5, 823-841. [Crossref]
8. Agbevade Akpeko. 2018. Value chain and local economic development in the shai-Osudoku district assembly of Ghana: The experience of the Asutware rice farming project. *Journal of Public Administration and Policy Research* 10:2, 7-19. [Crossref]
9. KnollSusanne, Susanne Knoll, PadulaAntônio Domingos, Antônio Domingos Padula, BarcellosJulio Otávio Jardim, Julio Otávio Jardim Barcellos, PumiGuilherme, Guilherme Pumi, ZhouShudong, Shudong Zhou, ZhongFuning, Funing Zhong. 2018. The role of distance on international commerce: the impact on Sino-Brazilian beef trade. *Journal of Agribusiness in Developing and Emerging Economies* 8:4, 693-711. [Abstract] [Full Text] [PDF]
10. Pradeep Kumar Mishra, Kushankur Dey. 2018. Governance of agricultural value chains: Coordination, control and safeguarding. *Journal of Rural Studies* 64, 135-147. [Crossref]
11. José Díaz-Montenegro, Elsa Varela, José María Gil. 2018. Livelihood strategies of cacao producers in Ecuador: Effects of national policies to support cacao farmers and specialty cacao landraces. *Journal of Rural Studies* 63, 141-156. [Crossref]
12. Katharine Tröger, Margareta Amy Lelea, Oliver Hensel, Brigitte Kaufmann. 2018. Embracing the Complexity: Surfacing Problem Situations with Multiple Actors of the Pineapple Value Chain in Uganda. *Systemic Practice and Action Research* 31:5, 557-580. [Crossref]
13. FerdousSubarna, Subarna Ferdous, IkedaMitsuru, Mitsuru Ikeda. 2018. Value creation and competitive advantages for the Shrimp industries in Bangladesh. *Journal of Agribusiness in Developing and Emerging Economies* 8:3, 518-536. [Abstract] [Full Text] [PDF]
14. Laura Kuhl. 2018. Potential contributions of market-systems development initiatives for building climate resilience. *World Development* 108, 131-144. [Crossref]
15. Lucas Oliveira de Sousa, Marcelo Dias Paes Ferreira, Marcus Mergenthaler. 2018. Agri-Food Chain Establishment as a Means to Increase Sustainability in Food Systems: Lessons from Sunflower in Brazil. *Sustainability* 10:7, 2215. [Crossref]

16. Massimiliano Agovino, Massimiliano Cerciello, Andrea Gatto. 2018. Policy efficiency in the field of food sustainability. The adjusted food agriculture and nutrition index. *Journal of Environmental Management* **218**, 220-233. [[Crossref](#)]
17. ReddyA. Amarender, A. Amarender Reddy, RajuS.S., S.S. Raju, SureshA., A. Suresh, KumarPramod, Pramod Kumar. 2018. Analysis of pearl millet market structure and value chain in India. *Journal of Agribusiness in Developing and Emerging Economies* **8**:2, 406-424. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
18. Dietmar Stoian, Jason Donovan, Marlène Elias, Trent Blare. 2018. Fit for purpose? A review of guides for gender-equitable value chain development. *Development in Practice* **28**:4, 494-509. [[Crossref](#)]
19. DonovanJason, Jason Donovan, PooleNigel, Nigel Poole, PoeKeith, Keith Poe, Herrera-ArauzIngrid, Ingrid Herrera-Arauz. 2018. Ambition meets reality: lessons from the taro boom in Nicaragua. *Journal of Agribusiness in Developing and Emerging Economies* **8**:1, 77-98. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
20. OrrAlastair, Alastair Orr, DonovanJason, Jason Donovan, StoianDietmar, Dietmar Stoian. 2018. Smallholder value chains as complex adaptive systems: a conceptual framework. *Journal of Agribusiness in Developing and Emerging Economies* **8**:1, 14-33. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
21. DevauxAndre, Andre Devaux, ToreroMaximo, Maximo Torero, DonovanJason, Jason Donovan, HortonDouglas, Douglas Horton. 2018. Agricultural innovation and inclusive value-chain development: a review. *Journal of Agribusiness in Developing and Emerging Economies* **8**:1, 99-123. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
22. OrrAlastair, Alastair Orr, DonovanJason, Jason Donovan. 2018. Introduction to special issue: smallholder value chains as complex adaptive systems. *Journal of Agribusiness in Developing and Emerging Economies* **8**:1, 2-13. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
23. Trent Blare, Jason Donovan. 2018. Building value chains for indigenous fruits: lessons from camu-camu in Peru. *Renewable Agriculture and Food Systems* **33**:1, 6-18. [[Crossref](#)]
24. M. L. Singla, Apeksha Hooda. Value Chain Development for Government Sector: A SAP-LAP Approach 181-207. [[Crossref](#)]
25. Nancy Laibuni, Susanne Neubert, Losenge Turoop, Wolfgang Bokelmann. 2018. An exploratory study on organisational linkages along the African indigenous vegetable value chains in Kenya. *Cogent Food & Agriculture* **4**:1. . [[Crossref](#)]
26. Nicolas Antoine-Moussiaux, Marisa Peyre, Pascal Bonnet, Charles Bebay, Mohammed Bengoumi, Astrid Tripodi. 2017. The Value Chain Approach in One Health: Conceptual Framing and Focus on Present Applications and Challenges. *Frontiers in Veterinary Science* **4**. . [[Crossref](#)]
27. Hugo S. de Figueiredo Junior, Miranda P. M. Meuwissen, Ivo A. van der Lans, Alfons G. J. M. Oude Lansink. 2017. Beyond upgrading typologies – In search of a better deal for honey value chains in Brazil. *PLOS ONE* **12**:7, e0181391. [[Crossref](#)]
28. Judith Beatrice Auma Oduol, Dagmar Mithöfer, Frank Place, Eddah Nang'ole, John Olwande, Lilian Kirimi, Mary Mathenge. 2017. Women's participation in high value agricultural commodity chains in Kenya: Strategies for closing the gender gap. *Journal of Rural Studies* **50**, 228-239. [[Crossref](#)]

29. Hugo Santana de Figueiredo Junior, Miranda P. M. Meuwissen, Ivo A. Van der Lans, Alfons G. J. M. Oude Lansink. 2016. Identifying successful strategies for honey value chains in Brazil: a conjoint study. *British Food Journal* **118**:7, 1800-1820. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
30. Howieson Janet, Janet Howieson, Lawley Meredith, Meredith Lawley, Hastings Kathleen, Kathleen Hastings. 2016. Value chain analysis: an iterative and relational approach for agri-food chains. *Supply Chain Management: An International Journal* **21**:3, 352-362. [[Abstract](#)] [[Full Text](#)] [[PDF](#)]
31. J. Bijman, V. Bitzer. 1. Quality improvement in food value chains: searching for integrated solutions 15-32. [[Crossref](#)]
32. A. Royer, J. Bijman, V. Bitzer. 2. Linking smallholder farmers to high quality food chains: appraising institutional arrangements 33-62. [[Crossref](#)]