

How to do

Commodity value chain development projects

Sustainable inclusion of smallholders in agricultural value chains



How To Do Notes are prepared by the IFAD **Policy and Technical Advisory Division** and provide practical suggestions and guidelines for country programme managers, project design teams and implementing partners to help them design and implement programmes and projects.

They present technical and practical aspects of specific approaches, methodologies, models and project components that have been tested and can be recommended for implementation and scaling up. The notes include best practices and case studies that can be used as a model in their particular thematic areas.

How To Do Notes provide tools for project design and implementation based on best practices collected at the field level. They guide teams on how to implement specific recommendations of IFAD's operational policies, standard project requirements and financing tools.

The **How To Do Notes** are "living" documents and will be updated periodically based on new experiences and feedback. If you have any comments or suggestions, please contact the originators.

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List of acronyms

CPMT	country programme management team
DFID	Department for International Development (United Kingdom)
DIIS	Danish Institute of International Studies
ECD	Environment and Climate Division (IFAD)
FAO	Food and Agriculture Organization of the United Nations
GIZ	German Agency for International Cooperation (formally German Agency for Technical Cooperation – GTZ)
HTDN	How To Do Note
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
M&E	monitoring and evaluation
NGO	non-governmental organization
PDT	project design team
PMU	project management unit
PPPP	public-private-producer partnership
PTA	Policy and Technical Advisory Division (IFAD)
SDC	Swiss Agency for Development and Cooperation
SMEs	small and medium-sized enterprises
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VC	value chain

Introduction

Most newly designed projects at IFAD are either “value chain projects” or include a value chain (VC) development component. In 1999, only 3 per cent of projects included VC development interventions; by 2009, 46 per cent¹ did, and the figure is well over 50 per cent today.

The main objective of these projects is to integrate IFAD’s target groups (small rural producers) into VCs to improve their access to secure markets and raise their incomes sustainably.

Given the variety of countries, commodities, geographic locations within countries, specific project contexts, degrees of government interest and capacities of target groups, IFAD’s VC interventions vary considerably, from simply linking farmers to local spot markets (which may not even be considered as a pure VC intervention) to establishing formal partnerships among farmers’ organizations, input suppliers, banks and private agribusiness companies along a specific VC.

This variety of approaches makes it difficult to design a standard “one-size-fits-all” set of guidelines for designing VC projects or components. At the same time, there is a vast literature, both theoretical and practical (manuals, guidelines, tools), on this topic. The objectives of this How To Do Note (HTDN) are, therefore, to provide a practical introduction to basic concepts, identify key issues to be analysed at the design stage and provide references to the most relevant literature.

Some topics in this HTDN are covered in more depth in existing or planned IFAD Technical Notes or other HTDNs, including:

- Technical Note: *Agricultural value chain finance strategy and design* (Policy and Technical Advisory Division [PTA], 2012)
- Technical Note: *Matching Grants* (PTA, 2012)
- HTDN: *Designing value chain projects for small livestock development* (PTA, forthcoming, 2016)
- HTDN: *Strengthening commodity organizations* (PTA, forthcoming, 2016)
- HTDN: *Climate change and value chains* (Environment and Climate Division [ECD], 2015)
- HTDN: *Public-Private-Producer Partnerships (4Ps) in Agricultural Value Chains* (PTA, forthcoming, 2016)
- HTDN: *Developing an economic and financial analysis of value chain projects* (PTA, forthcoming, 2016)
- Technical Notes or HTDNs on gender-sensitive VCs and farmers’ organizations and market access (PTA, forthcoming, 2016)

Using this How To Do Note

The reader could use the topics addressed in this note as interrelated modules. Still, one could just choose a topic of interest and use it as a stand-alone module.

¹ V. Raswant and E. Heinemann, *Access to markets: making value chains work for poor rural people* (Rome: IFAD, 2012)

Background and context

What is a value chain (VC)?

A VC is a vertical alliance of enterprises collaborating to varying degrees over the range of activities required to bring a product from the initial input supply stage, through the various phases of production, to its final market destination (Figure 1). The term “value chain” is credited to the business strategist Michael Porter² and has been widely adopted in business and development circles.

The expression “farm-to-fork” is often used to describe food VCs. This means that a food product moves upstream in the chain from where farmers grow and harvest it, towards the market – through intermediaries including producers’ organizations, processors, transporters, wholesalers and retailers – and on to the downstream level of consumers.



Source: World Bank, *Rapid agricultural supply chain risk assessment: a conceptual framework* (Washington, D.C., 2010).

Figure 1: A VC system

What is a VC approach?

A VC approach is based on a comprehensive look at the entire commodity chain, from producers to end-market consumers. Inherent in the VC approach is acknowledging that there are other stakeholders in the chain (in addition to the IFAD target group) and that they are interrelated; for example, improved business opportunities for processors or other downstream actors can have a positive influence on IFAD’s target group. Sometimes, intervening at stages other than just at the production level in the VC can have a greater impact on poverty reduction.

² M.E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Simon and Schuster, 1985).

What is the difference between a VC and a supply chain?

The term “supply chain” is often used interchangeably with the term “VC”. However, the two may differ in that value is added at each step of a VC, while a supply chain relates more specifically to the chain of events that lead from the supply source to product consumption in a sector or subsector.

What are the key elements of a VC?

The market is the basic driver of all VCs. Without market demand from consumers, there is no force pulling a farmer’s production through the VC. “The possibility of achieving any development impact with VC promotion depends on the growth potential and the prospects for market expansion. Market demand and the interest of buyers are killer criteria in selecting a VC. Unless the final product can be sold and value-added increases, there is no additional income for poor people either.”³

A VC serves a specific market. Different chains entail different opportunities and constraints for poor farmers; the costs of entering a VC serving export markets may be too high for a farmer who lacks the equipment and skills to ensure production of high enough quality for that chain; alternatively, a farmer’s production may enter several diverse and sometimes overlapping VCs serving different sets of consumers in the end markets. For example, Mongolian beef exports to Siberia may reach consumers at butchers in traditional markets, through an informal slaughterhouse, forward freight and wholesale market VC; or as packaged meat in the refrigerated section of a modern supermarket, via licensed slaughterhouses, meat packing plants and marketing agents.

There is no single right or optimal way to organize a VC. However, there are ways of enhancing small-scale producers’ involvement in a VC and this is the basis of IFAD’s VC approach. A VC approach can imply a strategy of improving the product (e.g. quality enhancement) or the processes (e.g. more efficient production and organization of farmers, market information) so that producers capture a higher share of the profit margin within the chain.

Vcs can be very dynamic, responding to shifting consumer preferences, competition, input costs and changes in technology. In some VCs, major actors and processes can shift from season to season.

Macrolevel factors (government regulation, quality of utilities) and **mesolevel factors** (industry standards, business association activities) play major roles in shaping the structure, functions and efficiencies of a VC.

VC actors and channels

A commodity VC marketing system consists of actors (input suppliers, producers, processors, traders, consumers, etc.) and channels (the flows through which commodities move and are transformed, from production to consumption). In this system, farmers are linked to the needs of consumers and work closely with suppliers and processors to produce the specific goods required by consumers (Figure 2). Through continuous innovation and feedback between different stages along the VC, farmers’ market power and profitability can be enhanced. Rather than focusing profits on one or two links, players at all levels of the VC can benefit. Well-functioning VCs are found to be more efficient in bringing products to consumers and, therefore, all actors – including small-scale producers and poor consumers – can benefit from VC development.

In a VC marketing system, the market “pull” is driven by integrated transactions and information. Consumers purchase products that are produced according to their preferences. The farmer becomes the core link in producing the products that consumers desire. Communication is in both directions. It is equally important that consumers and processors are aware of the factors that limit production, as that farmers and other producers are aware of consumer requirements. This contrasts with unorganized commodity spot markets, in which farmers produce commodities that are “pushed” into the marketplace, and transactions at each step are independent from each other.

³ GTZ, *ValueLinks manual: The methodology of value chain promotion*, first edition (Eschborn, Germany, 2007).

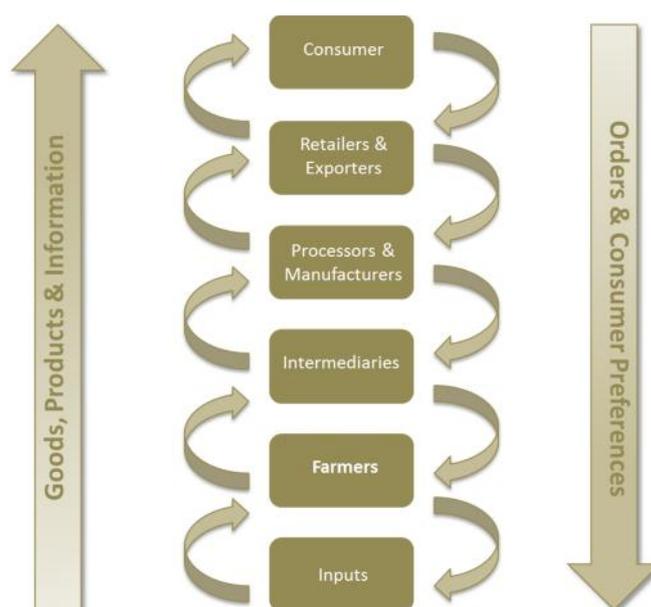


Figure 2: VC actors and channels

Common issues/questions

Is VC development a suitable poverty reduction approach for all poor rural people?

Rural dwellers have very diverse levels of access to capital (social, financial and physical), organization, technology and infrastructure. Aspirations and entrepreneurial attitudes differ among and within different segments of rural populations.

Rural dwellers can be very generally classified into three groups that form a pyramid:⁴

- (i) At the top of the pyramid is a small subset of producers who are better organized and have access to finance, productive assets, expertise and information. They already participate fairly effectively in VCs but their capabilities could be strengthened.
- (ii) The deepest segment of the pyramid is composed of small-scale farmers who are less formally organized and have fewer assets and skills, face difficulties in obtaining access to services, tend to sell in local or informal markets and may derive part of their incomes from waged work.
- (iii) The bottom (base) of the pyramid is made up of the poorer segments of rural populations – people with the fewest assets or skills, the landless, youth, widows, ethnic minorities, etc. – who generally depend on off-farm and labour opportunities or informal/formal social welfare programmes and who sell occasional surpluses to local markets.

A VC approach can work at all three layers of the pyramid.

Smallholders at the top of the pyramid can be supported (e.g. as “lead farmers”) in disseminating knowledge and skills and creating additional demand and jobs for those in the middle and bottom layers.

⁴ This typology is adapted from B. Vorley, L. Cotula and M.-K. Chan, *Tipping the Balance: Policies to shape agricultural investments and markets in favour of small-scale farmers* (Oxford, United Kingdom: Oxfam International, 2012).

Those in the middle layer could be helped to transition to the top of the pyramid by becoming more reliable partners of local, national or even international VC business actors in a rewarding and sustainable way. If the associated risks are adequately mitigated, small-scale farmers' participation in well-organized VCs can translate into higher incomes: for example, farmers' incomes in Guatemala, Indonesia and Kenya increased by between 10 and 100 per cent (World Bank World Development Report 2008).

Even smallholders at the bottom of the pyramid can be assisted in earning more from employment or microentrepreneurship by becoming more productive participants in VCs.

In general, however, involving the rural poor requires extra efforts and investments, making rural poor people costly to reach in VC development interventions. Poorer women and men producers, processors and traders face difficulties with access to markets because they lack information, are unable to meet product and delivery requirements,^{5,6} and have limited or no access to finance. Balancing poverty reduction goals with the commercial objectives of the VC is, therefore, challenging; farmers and their organizations require high levels of support before they can be progressively integrated into VC markets and take advantage of the opportunities offered.⁷

When is a VC development project less effective in addressing rural poverty?

There are circumstances in which a fully-fledged VC development project may *not* be the appropriate or most effective tool for addressing rural poverty and where a territorial, livelihoods, asset-building or natural resources management project, or more general policy dialogue and reform would be better. The following conditions or circumstances generally make it more difficult for a VC development project to achieve poverty reduction objectives:

- Rural producers have very little surplus (beyond subsistence) or potential for surplus production – their main livelihood strategy is production for food security.
- Producers are located in isolated and marginal areas where access to markets is costly and unprofitable.
- Producers are scattered and it is difficult to organize them into groups or to aggregate their produce.
- Productivity and the quality of produce are too low to attract buyers and there is little potential for enhancing quantity or quality.
- Basic public services and infrastructure such as roads, storage and sheds are lacking.
- Rural producers lack skills and knowledge and are largely illiterate.
- Secure access to key natural production factors (land, water) is a challenge, particularly for women.
- Markets or VCs are underdeveloped, there is little potential or demand for market expansion and there are few private actors/buyers.
- The country is in a conflict or post-conflict situation where rebuilding livelihoods, assets and infrastructure are the most pressing needs.

⁵ C.R. Farnworth, Module 5: Gender and Agricultural Markets. In *Gender in Agriculture Sourcebook* (Washington, D.C.: World Bank, 2008). <http://worldbank.org/genderinag>

⁶ J.A. Berdegue and T. Reardon, The retail-led transformation of agrifood systems. In C.R. Farnworth, J. Jiggins and E.V. Thomas, *Creating Food Futures: Trade, Ethics and the Environment*. (Farnham, United Kingdom: Gower Publishing; London: International Institute for Environment and Development [IIED], 2008). ISBN 978-0-7546-4907-6.

⁷ I. Guijt and E. van Walsum, Balancing business and empowerment in fair fruit chains: the experience of Solidaridad. In C.R. Farnworth, J. Jiggins and E.V. Thomas, *Creating Food Futures: Trade, Ethics and the Environment*. (Farnham, United Kingdom: Gower Publishing; London: IIED, 2008). ISBN 978-0-7546-4907-6.

- The enabling framework – business environment, institutions and government regulations – is not conducive to a market-oriented VC project.

Under these constraints, a more effective strategy may be first to address the food security, production, technology, skills and basic services/infrastructure needs before moving on to developing VCs or more market-oriented interventions. *However, even if a fully-fledged VC development approach is not viable, it is recommended that opportunities be explored for including in the project actions to enable poor producers to establish linkages to local markets and business opportunities.* Such actions could include building poor producers' capacity to identify local market opportunities and make appropriate production decisions, and assisting poor producers in organizing themselves to improve their bargaining power and lower the transaction costs of market access.

How can a VC development project target the rural poor more effectively?

Targeting strategy. A project needs a strategy and a set of criteria/tools and activities ("affirmative actions") for targeting the poor producers in the middle of the pyramid and the most vulnerable groups at the bottom. This strategy has to be in line with IFAD's Targeting Policy (see section on Entry points for gender-sensitive VC development strategies)⁸ and should be based on a sound analysis of the specific constraints and barriers to entry into the commodity VC, and the risk profiles of both groups.

Risk management. Agriculture is a very risky activity. Attention should be paid to how participation in commodity VCs exposes small-scale farmers to increasing benefits but also additional risks. Poor rural people usually depend on multiple and complementary livelihood activities to protect them from shocks. Expanding cash crop farming to the detriment of food crops might have a negative impact on household food security. *Commodity VC development projects need to assess and monitor the impact of planned interventions on household food security to find an appropriate balance between food and cash crop farming, particularly if rural producers have very little surplus beyond subsistence.*

VC interventions can also increase the pressure on key productive resources such as land, labour and natural resources, creating the potential for conflicts. Landless people who must purchase food are particularly likely to suffer from reduced food availability and higher prices. All the side effects of a VC intervention must be carefully examined at the design stage to mitigate risks.

The very poor and most vulnerable people tend to be more risk-averse than others as they do not have ways of coping with adverse events. An important aspect of a VC project strategy is, therefore, to help small-scale farmers and more vulnerable people manage the risks they face: for example, by assisting them in negotiating risk-sharing arrangements in farmers' organizations and with VC partners (e.g. in contract farming and outgrower schemes) and by formulating strategies for environmental and climate change risk management (see ECD and PTA Technical Notes).⁹

Microenterprise development. Rural people who find involvement in primary production difficult (because they lack assets and farming skills) or unattractive (e.g. youth) may participate in VCs through microenterprises. Microenterprises can provide services and inputs (equipment maintenance, extension, transportation, basic processing, etc.) that could be a key part of a VC upgrading strategy.

Employment generation. Wage employment opportunities can be provided by farmers at the production level (e.g. for harvesting) and by producers' organizations and local small and medium-sized enterprises (SMEs) involved in later stages of the VC (e.g. collection, grading, processing). Highly labour-intensive VCs such as horticulture can offer employment opportunities for severely land-constrained farmers or landless rural poor people. In Zimbabwe (before the political crisis), small-scale farmers were successfully integrated

⁸ The targeting policy, along with other relevant policies (private-sector engagement, gender, etc.), can be found at <http://www.ifad.org/operations/policy/policydocs.htm>

⁹ Such as IFAD and WFP, *Weather-Index based Insurance in Agricultural Development: a Technical Guide* (Rome: IFAD, 2011).

into export VCs for baby maize and snow peas using only 0.05–0.1 hectares of their land. In Kenya, where horticulture is now the top export earner, the income generated by the hundreds of thousands of workers in horticultural VCs in rural areas may exceed the income earned by small-scale horticultural growers supplying the industry. Employment generation projects should also promote compliance with the decent work agenda (workers' rights, social protection and social dialogue) and the principle of equal pay for equal work.

Policy dialogue. Crops of high political value, such as rice in South Asia, often have serious market distortions (input subsidies, price floors, pan-territorial pricing, export bans) that discourage VC upgrading activities. For example, in Zambia, a country with massive agricultural potential, maize has traditionally been so heavily subsidized that promising new cash crops (such as soybean) have been crowded out because most small-scale farmers are not interested in them. In these cases, IFAD policy dialogue – in collaboration with other development partners – may help establish a more favourable environment for sustainable VC growth. Policy dialogue is discussed further in the section on How to address policy issues in a VC development project.

VC selection and analysis (mapping)

There is no single methodology that fits the design of all VC projects. This section provides an overview of a generic VC project design process that must be adapted to the specific circumstances.¹⁰

How to select VCs

The starting point for a VC project is the selection of the VC(s) on which the project will focus. Sometimes this selection is predefined by the government as part of a national strategy (e.g. for cocoa and coffee in Nicaragua, or for cocoa in Indonesia). In other cases, a government may request that the project be limited to a certain geographic area, so selection will be based on the VCs available in that area. In all cases, however, it is recommended that a few VCs be identified for the project to start with but that selection be flexible to allow additional VCs to be added during project implementation, as new opportunities can arise and market dynamics change quite rapidly. To ensure the sustainability of benefits for small-scale farmers, it is also recommended to build the capacity of farmers to continuously look for new market opportunities rather than be tied to a single VC product. When possible, the country programme manager and host government should agree on the initial VCs, leaving sufficient flexibility for VCs to be added or dropped as circumstances change.

Two sets of criteria should be considered when undertaking a preliminary VC selection:

- **VC growth potential:**
 - current/potential (unmet) market demand for an existing or new products
 - competitive advantages (cost, product characteristics) of small-scale producers, especially versus larger-scale producers or imported products of equal quality
 - potential to adopt and adapt available and improved knowledge and technology
 - capacities, access to infrastructure/services and inputs
 - natural resource endowments – land, soil quality, water (rainfall or irrigation).
- **Development /poverty alleviation potential:**
 - percentage of the target group engaged in the VC (as producers or workforce)
 - low barriers to entry for producers and microenterprises

¹⁰A VC project design team should include a VC specialist – either an IFAD staff member or a contracted consultant.

- potential for improving the current distribution of benefits along the VC or among the actors working at the same VC node
- additional income to be generated from farm production, microenterprises and SMEs and employment
- potential for achieving a balance between market-oriented production and risk management strategies (e.g. diversification, food security)
- cultural or social factors that could influence the adoption or impact of the intervention.

Understanding the needs and abilities of the target group¹¹

Before proceeding with a detailed VC analysis and project design, it is critical that the project design team (PDT) understands the abilities and aspirations of the target group. For IFAD, VC strengthening is not a goal in itself but rather a means of reducing rural poverty.

Rural populations are not homogeneous and there will be diverse answers to the questions below, based on the socio-economic status, personal preferences, abilities, etc. of the project's target group, which need to be weighed and considered.

Background documentation on the target population is usually available from host government counterparts, local staff and other development partners but must be updated and cross-checked/verified by the PDT.

Essential questions for the PDT include:

- What are the target population's strengths, weaknesses, opportunities and threats, such as in:
 - infrastructure (e.g. roads, storage)
 - agroclimatic conditions (e.g. water availability, temperature, soil quality)
 - human capital (e.g. knowledge and skills) and social capital (e.g. organizations)¹²
 - access to finance and other production factors?
- What are the target population's aspirations regarding:
 - new cash crops with better income potential, and which crops
 - risk reduction (e.g. crop diversification)
 - better productivity or markets for existing crops
 - part-time income that does not interfere with primary crop or childcare responsibilities
 - employment (off- or on-farm)?

How to analyse VCs

A common question among designers of VC projects is whether to carry out a VC analysis during the project design stage and how detailed this analysis should be. IFAD has a relatively short time line and limited resources for project design. To prioritize how these resources should be used, the three main reasons for undertaking a detailed VC analysis should be considered:

- to demonstrate that the project design report makes sense and is convincing to the host government and IFAD's Executive Board

¹¹ IFAD's *Targeting Policy: Reaching the Rural Poor Policy* (Rome: 2008) defines IFAD's target group as "rural poor living in poverty and experiencing food insecurity in developing countries" http://www.ifad.org/pub/policy/target/targeting_e.pdf

¹² See IFAD, HTDN on *Strengthening commodity organizations* (Rome: PTA, forthcoming, 2014).

- to demonstrate that the minimum quality standards for IFAD project design have been met
- to serve as a framework – but not a blueprint – to guide detailed design and implementation.

The VC analysis should, therefore, be up to date and thorough enough to serve these three purposes but should not be seen as an end in itself.

A VC analysis can involve a desk study of markets, with simultaneous field visits to analyse the position and behaviour of the target group, and interviews with market actors such as processors, traders and supermarkets to obtain a preliminary understanding of their requirements and interest in engaging with smallholders. Potential sources of information for making the initial selection of VCs include:

- sector or VC studies
- IFAD local and project staff
- government ministries, export promotion agencies and extension services
- farmers' associations, cooperatives and production companies
- exporters, processors, wholesalers and their associations
- importers (especially of niche crops such as those certified as fair trade or organic)
- input suppliers.

A VC analysis generally entails the following:

- (i) **Mapping and analysis of preselected VCs.** When the VCs have been selected at the design stage, an in-depth VC/market analysis of the relevant commodities is needed. This analysis should include:
 - a map of all the actors along the VC, from production to consumption (often referred to as a “VC map”);
 - relationships between IFAD’s target groups and other VC players, including interactions, power relations and the information flows among VC nodes
 - the structure and behaviour of VC players – the numbers, sizes, characteristics and market shares of primary buyers, processors, wholesalers, retailers, etc.
 - the comparative/competitive advantages of the commodities being considered, in terms of price and quality
 - prices and margins at each node of the VC¹³
 - the specific roles, constraints and opportunities faced by IFAD’s target groups – women, youth, indigenous people, disadvantaged segments – at each node of the VC, including at the household level
 - the current state of supply – production volumes, quality standards, level of aggregation, marketing costs (including transport costs), etc.
 - the current demand and future trends – demand and growth potential for products that are or could be produced by target smallholders, in terms of quantity and quality and - whether for local, national, regional or international markets
 - the policy and regulatory environment and its impact on the functioning of the VC.

¹³ IFAD, HTDN on *Developing an economic and financial analysis of VC projects* (Rome: PTA, forthcoming, 2014/2015).

- (ii) **Mapping and analysis of potential (demand-driven) market opportunities.** Where the selection of VC commodities is left open at the design stage, it is advisable to identify the various commodity sectors where small-scale/poor rural producers may be engaged. The objective of this is to pre-identify market opportunities (domestic and export) in competitive VCs where poor smallholder farmers can establish sustainable links. Analysis at the design stage is similar to but less detailed than that for preselected VCs and should be accompanied by analysis of the barriers to entry, interests and power relationships of different stakeholders and contextual factors that might generate inequalities and blockages in the chain.

Both types of mapping should be as demand-driven, consultative and participatory as possible, involving the target groups directly. Box 1 suggests the main steps in drawing up a VC map.

Box 1: Ten steps to draw a VC map

1. Collect information through desk research – existing studies, reports and statistics.
2. Define the nature of the main VC product.
3. List the various functions along the VC (e.g. input supply, production, processing, wholesale, export) from the left to the right or from the bottom to the top of the page.
4. Identify types of VC actor and allocate them to the various functions.
5. Use arrows to represent the flow of products from one actor to the next and include information about the types of contractual arrangements.
6. Specify end markets and define market channels.
7. Include generic categories of support services (e.g. extension, business development, credit, quality certification) and use arrows to indicate which categories of VC player benefit from each.
8. Add data overlays when information is available (from primary and secondary sources): for example, N = number of producer groups, V = volume of products, E = number of jobs.
9. Indicate where poor VC players are concentrated.
10. Write a narrative explanation of the functioning of the VC.

Source: UNIDO, IFAD and DIIS. 2011. Pro-Poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects. Vienna: UNIDO.

An example of VC mapping

The VC map (Figure 3) is made up of three interlinked components:

- VC actors (central section in Figure 3) – input sellers and the producers, buyers, sellers or transformers of the product as it passes along the VC¹⁴
- service providers (bottom section in Figure 3) – of financial, business or extension services that support the VC operations
- the enabling environment (top section in Figure 3) – the infrastructure and policies, institutions and processes that shape the market environment.

¹⁴ This can be complemented by information on volumes, prices and margins, value-added at each VC stage and how this value is distributed among actors.

VC maps are useful in giving an overall general view of a given VC and indicating key aspects of project intervention. They can be used to illustrate how specific project activities fit into the VC. The VC map can also be a practical tool for identifying the policy issues that may be hindering or enhancing the functioning of the chain and the institutions and organizations providing the services (e.g. market information, quality standards) that different chain actors need to make informed decisions.

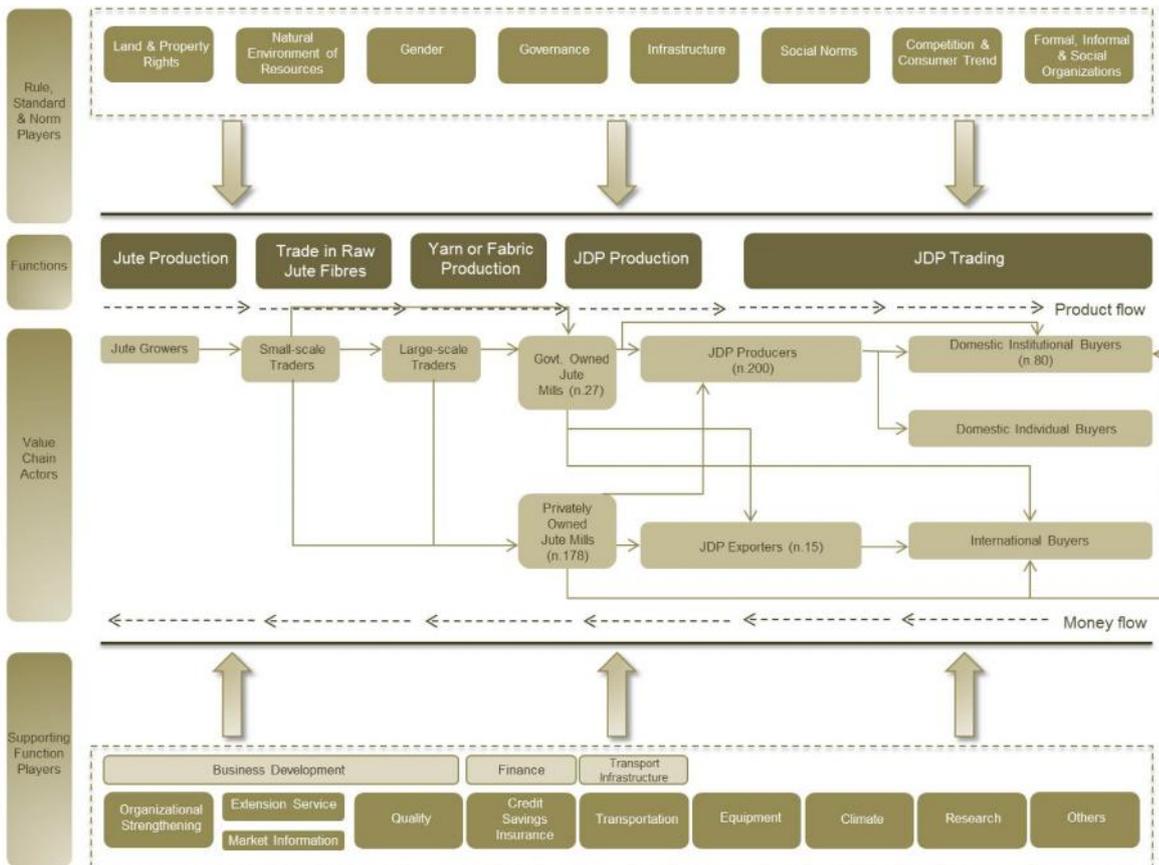


Figure 3: Example of a VC map

Source: PACE Design VC study, 2014.

Caveats: to map or not to map?¹⁵

Detailed VC maps can have limitations in guiding detailed project design because of the following:

- **VCs are usually highly dynamic.** Competitive pressure, shifts in global supply and demand, technology innovations and substitute product price/value characteristics can all fundamentally alter the VC map. A detailed map can, therefore, be outdated as soon as it is created.

¹⁵A good discussion of the limitations of VC analysis can be found in C.M. Webber and P. Labaste, 2010, *Building Competitiveness in Africa's Agriculture: a guide to value chain concepts and applications* (Washington, D.C.: World Bank).

- **VC projects themselves often change or disrupt the existing VC map** by introducing new technologies, service providers or customers, again making a detailed but static map less useful as a guide to project implementation.
- Guidance to PDTs emphasizes that a VC map is an important part of project documentation but it is not necessary or practical to invest a lot of time in developing highly detailed maps capturing every VC player, service provider or influencer of meso/macro policy. Undertaking a detailed VC analysis and maps can be very time-consuming and resource-intensive, and PDTs must weigh the costs of obtaining information versus the incremental benefit that the information provides. In most cases, studies and desk research on the selected VCs are available. The PDT should ask the IFAD country team to carry out preliminary research on the VCs of interest and the PDT can update, complement, focus and finalize this information, along with carrying out additional fieldwork.

Resources

- UNIDO, IFAD and DIIS. 2011. *Pro-Poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects*, Chapter 2: Functional Value Chain Analysis. Vienna: UNIDO.
- GTZ. 2007. *ValueLinks Manual: The Methodology of Value Chain Promotion*, first edition, Module 2: Analysing a value chain. Bonn. (currently being updated)
- Raswant, V., R. Khanna and T. Nicodeme. 2012. *Thematic Study: Pro-poor rural value chain development*, pp. 77–80: Best practices for consideration by project designers. (unpublished report)
- UNIDO. 2009. *Value Chain Diagnostics for Industrial Development: building blocks for a holistic and rapid analytical tool*. UNIDO Working Paper. Vienna.
- IFPRI. 2010. *The role of public–private partnerships in promoting smallholder access to livestock markets in developing countries: Methodology and case studies*. IFPRI Discussion Paper No. 01001. Washington, D.C.

Identification and analysis of key VC partners

The most important step in design (and implementation) is to identify the key potential VC partners that will address the needs of the target population and to develop an understanding of these partners' business models and risk/profit drivers. Good partners have the flexibility and motivation to make a VC project succeed.

Key VC partners include buyers of products, suppliers of goods and services, farmers' organizations, national associations and financial service providers.¹⁶

Agricultural commodity buyers are the fundamental partners that almost always need to be included in VC projects. The focus is on buyers that are interested or could be interested in purchasing from the project's target group. These buyers can include processors, wholesalers, traders, exporters, importers or others, depending on the VC.

The most important questions to ask buyers are:

- What are their price, quantity, quality, timing and other criteria for buying?
- What will motivate them to work with small-scale farmers on a fair and sustainable basis? The many reasons for buyers to source from small-scale producers include:
 - *access to an alternative supply* to reduce the risk of dependence on a narrow supplier base
 - *more attractive prices*
 - *quality* that small-scale producers can provide better than commercial producers
 - *certification of products*, which adds value (e.g. fair trade production).

¹⁶ See also the IFAD PTA publication *A Field Practitioner's Toolkit: Institutional and Organizational Analysis and Capacity Strengthening* (forthcoming, 2014), which provides a framework for analysing organizations (public/private), developing capacity-strengthening plans and tracking institutional and organizational change during implementation.

Suppliers of inputs, services and equipment. Upgrading production to meet the demand of buyers requires access to improved inputs, services and equipment: inputs include seed, chemicals, fertilizers, livestock, pharmaceuticals and packaging; services include transport, storage, certification, marketing and market information, extension and business development; and equipment includes greenhouses, irrigation, farm machinery and post-harvest infrastructure (e.g. storage and processing equipment).

Important questions to ask suppliers include the following:

- Do they currently serve small-scale farmers or other members of the target group? Could their business model be modified to serve the target group?
- Do they understand small-scale farmers as a market segment (e.g. understanding the current, unmet and potential demand for products and services)?
- Do they help by facilitating marketing (e.g. design of more appropriate package sizes and distribution systems)?
- How do they address the risks and costs of working with small-scale producers?.

Crop buyers and input suppliers are almost always private-sector businesses but can range in size from small, local/village agrodealers serving the target group to multinationals, which are increasingly viewing small-scale farmers and their associations as viable business partners, customers or suppliers. For IFAD, building partnerships with private entities can result in win-win, public-private-producer partnerships (PPPPs) that the project can support. When selecting private businesses to work with, it is important to use criteria that meet minimum standards of transparency, fairness and equity. A separate HTDN will be prepared to guide CPMTs in building PPPPs in IFAD projects, including guidance on evaluating and selecting private partners that meet the needs of IFAD's target groups.

Farmers' organizations. Small-scale producers must be organized to participate effectively in VCs. Farmers' organizations reduce production costs by achieving economies of scale for procuring inputs, reducing produce collection costs and enhancing value-added through processing and better handling/storage. They can also be effective in representing farmers' interests, improving their bargaining power with buyers, suppliers and government policymakers.¹⁷

National associations. National and regional organizations can play important roles in VC projects. There are various models of national association, with different memberships and mandates:

- (i) *National farmers' associations* (e.g. apex-level cooperatives or farmers' unions) can be a highly effective means of facilitating dialogue between farmers and government. However, due diligence is required to ensure that organizations are truly representative, responsive to their members and competent.
- (ii) *Sector associations* seek to bring all or most members of a VC together to work on programmes of interest to all. For some policy issues, these organizations can be useful partners for VC projects.

¹⁷ See IFAD, HTDN on *Farmers' organizations and market access* (Rome: PTA, forthcoming, 2014).

Design of a VC development project

VC development (upgrading) strategies

Building on the VC mapping, the design team should develop a strategy – often called a “VC upgrading strategy” – to improve the functioning of VCs that have potential for involving IFAD’s target group.¹⁸ (Annex 1 provides additional details on tools for upgrading VCs.) There are many ways of formulating a VC upgrading strategy but the underlying principle is that the strategy should reflect a *vision* of the VC in the future that is shared by all key VC players rather than the point of view of only one actor or group (e.g. small-scale farmers). Essential elements of the strategy are: i) identification of opportunities for and constraints to VC upgrading, based on the mapping exercise and analysis of target groups; and ii) establishment of objectives and actions that respond to the opportunities, constraints and risks.

At this stage, it is crucial to identify the most strategic *project intervention points* along the VC (i.e. IFAD’s target groups, lead VC actors, VC service providers, the policy and regulatory environment, public infrastructure), as the various parts of the VC are interconnected. The traditional entry point for IFAD projects is at the primary production level, through building the capacity of IFAD’s target groups – including more vulnerable groups – to gain access to markets and engage in business relationships along the VC. However, selectively strengthening VC functions downstream (e.g. processing) may have more impact on overall VC performance and IFAD’s target groups than focusing exclusively on primary production. For example, investments in storage or processing capacity could enable a local processor or farmers’ cooperative to buy larger quantities of products from producers.

A general framework can facilitate the formulation of specific VC upgrading strategies for each case. Such a framework includes three dimensions: i) process/product upgrading; ii) functional upgrading; and iii) upgrading of coordination and business models.¹⁹

Process/product upgrading aims at “doing things better and/or bigger”, and may include enhancing the efficiency of production processes such as by using better inputs or reducing costs, which can lead to greater margins or more productivity (e.g. higher yields) and, hence, larger volumes of produce sold. Upgrading can also encompass product quality development to comply with buyer requirements for quality, certification, food safety, traceability, packaging, etc.

Functional upgrading looks at the opportunities of a particular actor (e.g. a producers’ organization) to move up the VC by taking on new value-adding functions such as bulking, transporting, grading, processing and marketing. It implies a careful assessment of additional costs and risks, as well as potential rewards. Partnerships with other VC actors already performing these functions could be explored as part of the upgrading strategy.

Upgrading of coordination and business models starts with a good understanding of existing business relationships throughout the VC and looks for ways of making these as mutually beneficial as possible for both IFAD’s target group and other VC partners (private sector). It often implies helping to formalize and make more transparent (through contracts) both horizontal relationships among actors in the same VC segment (e.g. different groups of farmers selling to the same cooperative) and vertical relationships between actors in different VC segments (e.g. between farmers and a processor).

¹⁸ IFAD’s Targeting Policy (2008) defines the target group as “rural poor living in poverty and experiencing food insecurity in developing countries”. However, rural poor people are not a single homogenous group in any part of the world and target groups should be identified through a gender-sensitive poverty and livelihood analysis in each country.

¹⁹ “A business model is the way by which a business creates and captures value within a market network of producers, suppliers and consumers” (MIT Sloan: <http://process.mit.edu/info/eModels.asp>).

The VC upgrading strategy chosen in a particular country and sector could include one or all three of these dimensions. No matter who drives it, a VC will be competitive (and, by implication, sustainable) only if it is efficient. Activities that may enhance chain efficiency include:

- (i) boosting yields through better *technology and quality inputs*
- (ii) facilitating access to *affordable finance* for production, processing and marketing
- (iii) adopting measures that *reduce farming risks* (e.g. water conservation/irrigation, pest/disease control, animal husbandry and health)
- (iv) introducing appropriate technologies through effective *technology transfer* mechanisms
- (v) establishing *bulking and primary-level processing* to reduce post-harvest losses in or close to production areas, thereby ensuring that only products meeting quality requirements are delivered to buyers (with rejects being sold locally or used for other purposes, such as composting or animal feed)
- (vi) promoting *bulk purchasing* of inputs
- (vii) making provisions for *appropriate capacity-building/training* of farmers and the leadership of their organizations
- (viii) reducing *transport costs* by improving road communications, collective transportation, early processing, etc.
- (ix) providing timely and relevant *market information*, generating information to monitor subsector performance and fostering *trust and long-term relationships* among VC stakeholders.

Annex 2 lists the common issues encountered in quality enhancement/assurance.

Organizational models for small-scale producers

Linked to the business model, another important aspect to be considered as part of the VC development strategy is the organizational model for enabling small-scale producers to achieve economies of scale, access to technology and support services, and risk management capacities so they can consistently meet the quantitative and qualitative targets of the market.

The three most common types of organizational model are:

- (i) **producer-driven**, based on the collective actions of informal or formal producers' organizations (groups, associations, cooperatives) that take on production – and sometimes post-production – functions to capture a larger share of the retail value
- (ii) **buyer-driven**, involving the private business sector (e.g. processors, retailers, traders, wholesalers) organizing producers as suppliers through various contractual arrangements (e.g. outgrower schemes, contract farming and, occasionally, joint ventures)
- (iii) **intermediary-driven**, led by a VC actor, which may be a better-off farmer (or “lead farmer”) or an external entity (e.g. a non-governmental organization [NGO], intermediary trader or broker).

The producer-driven model is a way of organizing supplies from small-scale producers through a VC to the end market. This is the model that IFAD has traditionally supported. When successful, collective action can enable the renegotiation of power relationships within a VC but this model has a mixed record of providing small-scale farmers with sustainable benefits through access to dynamic markets.

Buyer-driven organizations generally have a good track record for efficient service delivery and successful participation in a particular VC but are less effective in the general empowerment of farmers. As each model has its own strengths and weaknesses, the viability of one model versus the others typically depends on the local socio-economic context and commodity/market structure.²⁰

Whatever option is adopted (producer-, buyer- or intermediary-driven), farmers will require some sort of organization. As well as reducing production costs by achieving economies of scale, farmers' organizations can also improve their members' bargaining power with private companies, which generally have the power to dictate terms of trade and the profit margins earned by other actors, and may take advantage of this dominant position to shift investment risks to weaker partners, without sharing the profits. In times of difficulty, payments to producers are delayed, resulting in a situation in which producers are effectively financing their buyers. Measures for balancing these relationships include:

- (i) assisting farmers in organizing horizontally so that communities can act collectively and negotiate with buyers on a more equitable basis
- (ii) encouraging farmers' organizations to work with several buyers, to create competition among the buyers
- (iii) strengthening access to market information for farmers' organizations and improving their business and negotiation skills
- (iv) encouraging and supporting farmers' organizations in adding value for their members by expanding beyond primary production, such as into storage, processing and transport – when based on a sound business model, this can be very successful in capturing greater returns from the VC but strong and professional management is required
- (v) ensuring that the members of farmers' organizations have independent access to finance because when buyers provide their suppliers with credit they can dictate the terms of trade.

In some VC projects (especially those for perennial estate crops with high entry costs), IFAD has supported producers' organizations in acquiring equity shares in purchasing companies. The objective is to help primary producers capture downstream returns but minority shareholders are often in a weak position and companies can use transfer pricing with their trading partners to depress financial returns, thus minimizing the actual pay-outs to farmers through dividends. Careful structuring is required to ensure that this type of investment generates attractive returns.

Support to the formation and strengthening of both producer- and buyer-driven farmers' organizations is a core part of most VC projects. It can take the form of:

- business and financial training to help farmers understand and develop business proposals (both group and individual) and negotiate with prospective partners
- organizational training to facilitate more transparent and competent management of farmers' organizations, development of member services, etc.
- introductions to prospective VC partners such as buyers, suppliers and bankers
- technical training such as in agronomy or information technology.

In many countries, producer-driven groups, particularly cooperatives, have had a mixed record because of political interference, mismanagement and lack of a business-focused market orientation. In these cases, project designers have to judge whether supporting the organizations will deliver the desired results and may decide to invest in the lead company on behalf of smallholders rather than continue to pour money into dysfunctional cooperatives.

²⁰ In some countries, different models are developed for different crops, such as in Nicaragua, where organizations are producer-driven for coffee and buyer-driven for cocoa.

The role of rural microenterprises and SMEs

Promoting self-employment by supporting the microentrepreneurial interests of IFAD's target group – particularly of people who lack the necessary assets and skills for or are not interested in primary production (e.g. women and youth) – should be part of the VC project design strategy. To enhance the sustainability and synergies of projects, microenterprises could be engaged to provide services and inputs (e.g. seeds, fertilizers, equipment maintenance, transportation, processing of primary products) to the VC actors (including producers) supported by the project.²¹

As part of the mapping and upgrading strategy, the design team could identify the scope for supporting local SMEs that operate in a particular function (collection, grading, processing, packaging, transportation, etc.) within the VC. These enterprises are potentially good business partners for producers and a source of wage employment for other categories of IFAD's target group.

Resources

- UNIDO, IFAD and DIIS. 2011. *Pro-Poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects*, Chapter 4: Design of VC Interventions. Vienna: UNIDO.
- GTZ. 2007. *ValueLinks Manual: The Methodology of Value Chain Promotion*, first edition, Module 3: Determining the chain upgrading strategy, and Module 4: Facilitating the chain development process. Bonn. (currently being updated)
- IIED and CD&IC. 2008. *Chain-Wide Learning for Inclusive Agrifood Market Development: A guide to multi-stakeholder processes for linking small-scale producers to modern markets*. London: IIED; and Wageningen, Netherlands: Capacity Development and Institutional Change Programme of Wageningen University.
- DFID and SDC. 2008. *The Operational Guide for the Making Markets Work for the Poor (M4P) Approach*. London: DFID; and Bern: SDC.
- USAID, fhi360 and World Vision. 2012. *Pocket Guide: Integrating Very Poor Producers into Value Chains*. Federal Way, Washington, D.C.: World Vision.

VC finance

An essential element of project design is identifying how VC actors, starting with small-scale producers and rural microentrepreneurs (IFAD's target group), can meet their financing needs (working capital and investment) for profitable and sustainable participation in VCs.

The mapping exercise described in the section on VC selection and analysis (mapping) should include analysis of the financial flows within and outside the chain and of the financial products needed by different VC players. The choice between internal or external sources of finance will depend on such factors as the country and project location; the presence of financial service providers and their strengths; the availability of financial products and their outreach to small-scale farmers; and the willingness of VC actors to extend credit to other actors. Based on this analysis, the design team should determine the scope for action to expand VC finance, particularly for IFAD's target group, in the context of the proposed VC upgrading strategy.

Internal sources of finance may include VC financial mechanisms such as the following:

- *Buyer credit* can be provided by the crop buyer (or agents/intermediaries such as traders) to cover the costs of inputs and services for growing a crop that has been contracted from a farmer.
- *Supplier credit* can be extended by the providers of goods and services to farmers or rural microentrepreneurs.
- *Warehouse receipt financing* offers farmers a means of borrowing against securely stored crops and using the funds to prepare for next season's crop or to cover other business or household needs.

²¹ This has proved to be an effective strategy in several IFAD-funded projects, including in Western and Eastern Africa.

- *Asset-based financing* (e.g. leasing) can be used to acquire certain types of agricultural machinery such as tractors, ploughs and harvesters.

In seeking **external sources** of financing, IFAD projects could support:

- *brokerage of contacts* between VC participants and microfinance institutions or other financial service providers
- *technical assistance to producers' organizations or lead actors* in the chain, enabling them to apply for loans and to meet the requirements of financial institutions
- *technical assistance to enhance the capacity of financial institutions* to assess VCs and develop more attractive/suitable products
- *provision of limited, time-bound risk sharing instruments to VC financiers* (e.g. partial credit guarantees), which give financial institutions the confidence to test new products, services and markets by lowering their risks.

When working with grant-funded interventions in a financial market, IFAD should be very careful to avoid the risk of market distortion. Temporary use of grants (typically, matching grants) should be applied only when there is a strong rationale and under specific conditions, as part of a strategy for addressing financial market failures and helping the poorest and more vulnerable segments of the rural population to become eligible for banking services and links to financial institutions. Grant funding should be avoided where debt financing is already being provided for the same purpose or where there is the potential for doing so.²² Financial service providers should be consulted early in the design process. Grants should only finance gaps and only as a temporary, start-up measure.

Resources

- IFAD. 2012. *Agricultural value chain finance strategy and design: Technical Note*. Rome.
- IFAD. 2012. *Matching Grants: Technical Note*. Rome.
- IFAD's website on Rural Finance: <http://www.ifad.org/ruralfinance/index.htm>

Cross-cutting issues

Why are gender considerations important for VC development?

Gender-specific roles and responsibilities along a VC have impacts on the chain's functioning and inequalities can prevent a chain from working efficiently. The knowledge and responsibilities embodied in the different functions of a VC are often gender-specific and this aspect has to be taken into account during VC mapping and strategy design. Men and women control different assets and have different decision-making roles and responsibilities, generally resulting in an unequal situation that is detrimental to women. VC strategies have to take into account these inequalities in needs, capacities and access to knowledge, resources and livelihoods to ensure that women are fully included in VC interventions.

Typical challenges faced by women in benefiting from VC interventions

- Women's rights and obligations within their households often reduce their ability to take up opportunities, invest, go to markets and take risks.
- Most women cultivate traditional food crops for subsistence and sale, making it more difficult for them to benefit from the expansion of tradable agricultural goods.

²² See IFAD, *Matching Grants: Technical Note* (Rome: 2012).

- Cultural bias hinders women's mobility – especially if they are married and have small children – and, therefore, their access to more distant profitable markets.
- Women's lack of control over income, skills and access to credit may lead to elite capture phenomena. As soon as women-led VCs are upgraded and become profitable, men step in to take control.
- In mixed VCs, women often do not receive a fair share of the benefits from their work on cash crops. They may, therefore, lack motivation, which can lead to poor product quality.
- Women's ability to participate in markets and the formal sector is curtailed by their limited access to land and rural finance. Women's lack of collateral and connections can make it very difficult for them to secure loans and find investment capital or guarantors.
- Women traders and processors may face additional costs for loading and transport, while men have the physical strength to load goods themselves and are more likely to have their own means of transport.
- Women often lack the social networks critical to developing relationships with other actors in a VC. They may also find it difficult to participate in mixed-gender producers' and traders' cooperatives.

Entry points for gender-sensitive VC development strategies

Project designers should focus on ensuring that women are in a position to benefit from VC development strategies. In addition to defining the general pro-poor strategies described in previous sections, project designers should:

- identify dynamic VCs that can be adapted to the time and resource constraints of women, such as small livestock or bee-keeping value chains
- ensure that the services and products proposed (i.e. vocational training, business skills development, small-scale processing machines, etc.) respond to the needs of women's groups and their capacity to acquire and use them
- develop understanding of women's contribution to VC development to trigger responsive corporate social responsibility strategies that improve women's position within VCs.²³

Resources

- Farnworth, C.R. 2008. Module 5: Gender and Agricultural Markets. In *Gender in Agriculture Sourcebook*. Washington, D.C: World Bank.
- The Agri-Pro Focus Learning Network's website on Gender in Value Chains: <http://genderinvaluechains.ning.com/page/tools-32a-selection-of-a-value>

Food security and VCs

The internationally accepted definition of food security comes from the Food and Agriculture Organization of the United Nations (FAO) World Summit on Food Security: "When all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". VC projects are economic development projects designed to focus primarily on the economic access dimension of food security by creating rural jobs and raising the incomes of small-scale farmers and rural microenterprises and SMEs.

²³ Oxfam's *Behind the brands* (<http://www.oxfam.org.uk/get-involved/campaign-with-us/our-campaigns/food-and-climate/behind-the-brands>) provides a good example of how private companies can be held accountable for the gender and environmental performance of their VCs.

Designers should make sure that – wherever possible – VC projects do not detract from food security by working with farmers and their associations to ensure that:

- sufficient household labour, inputs and land are devoted to staple food production to provide a minimum level of food security in case of production or marketing problems with the cash crop, or shortages of other food crops
- when the cash crop is also a staple food (e.g. rice or maize), farmers do not commit all their production to sales but leave a reserve for household food security
- ways of integrating food security with cash crops are explored in a mutually supportive fashion
- the VC food products meet the minimum acceptable standards for human and animal health and nutrition.

Environmental risk management

For VCs, environmental factors create both risks (e.g. land degradation, biodiversity loss, pollution) and opportunities (e.g. suitable soil types, plentiful water for irrigation or processing, climate change creating conditions that allow new crops). The design of VC projects should include climate analysis; climate change adaptation is usually closely linked to environmental management so the project designers should integrate these two dimensions as thoroughly as possible by:

- taking climate and environmental criteria²⁴ into account when selecting VCs (when the VCs have not been pre-selected);
- identifying the major risks and opportunities from climate change in the VC and the most effective interventions for addressing them
- focusing climate-related interventions on building resilience in the VC, targeting poorer and more vulnerable people
- ensuring that VC interventions help enhance and sustain a healthy natural resource base over the long term and increase climate change resilience benefits for the most vulnerable project participants.

Where possible, effective climate-related interventions in VC projects should include two main elements:

- (i) a wide set of options for diversification to increase farmers' livelihood, farming and environmental management portfolios as a risk management strategy
- (ii) specific interventions that make key stages of the VC more climate-resilient in ways that improve farmers' livelihoods and resilience.

Resources/tools

- IFAD. Climate vulnerability analysis, climate risk how to do note, environmental impact assessment
- IFAD. forthcoming. *Climate change and value chains*. Rome: IFAD, ECD.

Stakeholders and roles in project implementation

A VC is not only an economic concept but also constitutes a private social system in which VC actors (people and companies) interact according to cultural norms and their own interests and negotiating power. VCs are, therefore, private sector-led systems so governments and donors should intervene only when they have a clear justification for doing so and should determine the most appropriate modality to avoid distorting VC functioning. A

²⁴ These criteria can include the project's viability under climate change; its contribution to driving climate-related impacts such as erosion, which might cause problems for the VC; and its ability to increase the resilience of the poorest and most vulnerable populations associated with the target VC.

general principle is that donor-funded support should facilitate VC development and complement the actions of other stakeholders (government, private sector, IFAD's target group). As well as the private agribusiness sector, small-scale producers' organisations, rural microentrepreneurs and financial institutions discussed in previous sections, key stakeholders in implementing IFAD-supported VC development projects include governments, project management units (PMUs) and external service providers.

Governments. Government's role is to ensure a conducive regulatory, business and legal environment for the development and upgrading of VCs.²⁵ As part of project design, this environment should be assessed in consultation with core VC actors to determine whether the project should include activities for promoting improvements. Government is also responsible for the provision of basic public services and goods.

Project management units. In IFAD, the usual entry points for projects are the PMUs, which are usually hosted by the government implementing agency (often the Ministry of Agriculture). As IFAD starts to work more with the private sector, this PMU-led model has limitations because the working habits and rhythms of PMU staff (who are often agronomists working in the public sector) do not match those of the private business sector. During the design of a VC intervention, attention should be given to identifying and assessing the *strengths* and *weaknesses* of different institutional partners and arrangements within or outside the public sector and to structuring the PMU and its system for allocating resources.²⁶ Ideally, country programme managers should encourage and support the government in using qualified and specialized service providers to implement the VC project or one of its components, under the overall policy supervision of the government; this is typically how VC projects are managed by donors such as the German Agency for International Cooperation (GIZ) or the United States Agency for International Development (USAID).

External service providers. A quick mapping exercise is recommended to identify institutions and organizations with proven expertise in VC development and providers of technical and business development services. These organizations can provide services related to the VC upgrading strategy during project implementation (e.g. market studies, support to the formulation of a business plan). If the mapping exercise finds that local business development providers are weak, the project could allocate funds for building their capacity.

If the government agrees, qualified and specialized service providers may also be made responsible for implementing an entire VC development project component or subcomponent under the overall supervision of the government. This approach may be particularly effective in facilitating (brokering) the development of PPPs involving producers, business companies and the public sector (government and the development project).

Policies and the business environment

Which policies matter for a VC development project?

Well-functioning agricultural markets and VCs rely on supportive policies and a conducive regulatory environment for doing business and interacting with markets. Macroeconomic policies (inflation, exchange rate regulations, taxes, etc.), political stability and good governance (e.g. absence of corruption) are equally important, as they affect the incentives for and the capacity of private businesses to invest in a particular VC or expand their operations to include small-scale farmers. Another area where public investment is crucial is infrastructure: roads, electricity, water supply, bridges, etc. Without infrastructure, transport, processing and other marketing costs may become prohibitively expensive, making market transactions or value-addition impossible. IFAD does not have much leverage in the macroeconomic arena and usually supports only small-scale infrastructure (irrigation schemes, processing/storage facilities, tertiary rural

²⁵ This includes ensuring that laws/rules are observed, standards are met, etc., and that VC operations are monitored and evaluated.

²⁶ See also IFAD, *Effective Project Management Arrangements: A Synthesis of Case Studies* (Rome: PTA, forthcoming, 2014).

roads, etc.), although it can mobilize cofinancing from other donors and the private sector. An area where IFAD can engage the government in VC projects is in the laws and regulations that have a direct influence on the functioning of agricultural markets and VCs or on the rural business environment, such as:

- market competition and market players' behaviour, to promote market diversification
- the regulatory and supervisory framework for cooperatives and farmers' organizations
- access to financial and business development services
- rural business regulation, such as business start-up; obtaining permits, licences or certification; taxes and fees; registering property; enforcing contracts; protecting investors; and business closure
- rural transport policy
- agricultural trade policy, including tariffs and non-tariff barriers to trade
- food safety and standards, including labels and certification
- price and non-price subsidies or controls for agricultural inputs and outputs
- labour legislation for farm workers and agribusiness employees
- land tenure
- agricultural advisory services and research and development.

Ideally, IFAD VC development projects should serve as both a vehicle for operationalizing existing relevant policies and a lever for supporting the policy change needed to promote pro-poor and well-functioning VCs. Unless an IFAD project can influence a broader set of policies or policy agenda, it will remain a small-scale intervention with little scope for scaling up and/or having a broad outreach and impact.

How to address policy issues in a VC development project

A step-by-step approach to support an enabling policy framework for pro-poor VC development projects entails the following:

1. During the VC analysis and mapping stage, assess the policy environment and, where appropriate, identify the policies (or policy gaps) that create constraints or have an impact on the efficient functioning of the VC of interest and the policy areas that the IFAD project will target and could change or influence.
2. Map the national policy context: i) the agencies and institutions responsible for formulating policy for agricultural/rural VC development and their capacity; ii) existing forums for policy dialogue, including with development partners; iii) national processes for formulating and approving policies; and iv) the roles of different national (and non-national) stakeholders in these processes.
3. Draw up the project activities to identify, analyse and highlight policy issues that may emerge during implementation. Addressing these may involve capacity-building of government agencies or farmers' organizations; training and exchange visits; commissioning of policy research; support for the communication of policy findings; forums for policy dialogue among national stakeholders; engagement with legislators; and support to the promulgation/implementation of policy.
4. Define the responsibilities for managing/implementing activities, focusing on building linkages among the monitoring and evaluation (M&E), knowledge management and policy agendas, as parts of the same process of assessment, analysis, and generation and communication of evidence.
5. List the national stakeholders with which the project will engage in policy dialogue, such as the government (local and national), farmers'/community organizations, private-sector representatives, policy research institutions/universities and other development partners.

6. Define the entry points or platforms/networks that the project will use to engage government and other stakeholders. These could include agriculture sector working groups, national policy consultations and the national agricultural strategy.
7. Explain what policy outputs and impacts are expected and how the project will monitor and evaluate these in the M&E framework.

References

- IFAD. 2014. *IFAD's emerging approach to country-level policy engagement*. Rome.

M&E of VC development projects

VC development projects are about promoting changes in the functioning of VCs, which should ultimately result in benefits for IFAD's target groups and more efficient VCs. It is, therefore, critical to define appropriate indicators for tracking changes and to establish a baseline against which to gauge progress.

Indicators for the baseline and subsequent M&E may be either qualitative or quantitative. They can be used to measure progress against the overall goal of the project (impact level) and the project's purpose (outcomes). Much of the information needed to establish a baseline and identify outcome and impact indicators should derive from the VC analysis and mapping and from the chosen VC upgrading strategy. Box 2 provides examples of outcome indicators that could be used to monitor VC development projects. Some of these are incorporated in IFAD's Results and Impact Management System.²⁷

Box 2: List of possible indicators for VC development projects

Outcomes

- Continuity of the relationship between producers and their buyer.
- Number of written contracts between producers and their buyer.
- Increase and stability of prices received by producers.
- Increase in producers' sales (volumes).
- Number of well-functioning producers' groups integrated into the VC.
- Participation of poor people, women and youth in these groups and their leadership positions.
- Percentage of producers maintaining certification.
- Number of people sustainably employed in the VC (by gender).
- Number of microenterprises sustainably linked to the VC (by gender of owner).

Annex 3 provides a list of VC training programmes.

Resources

- CARE. 2012. *Guide to Monitoring and Evaluation System Design for Value Chain Projects*. Atlanta, Georgia, USA.
- UNIDO, IFAD and DIIS. 2011. *Pro-Poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects*, Chapter 5: Implementation. Vienna: UNIDO.
- GTZ. 2007. *ValueLinks Manual: The Methodology of Value Chain Promotion*, first edition, Module 11: Monitoring and managing impact. Bonn. (currently being updated)
- IFAD. 2014. *Results and Management System (RIMS) First and Second Level Results Handbook*, Markets and SME indicators. Rome.

²⁷ IFAD. 2014. *Results and Management System (RIMS) First and Second Level Results Handbook*. Rome.

Annex 1: Tools for upgrading VCs

This annex describes some of the most important and common tools of the VC approach. In practice, project activities do not fall into neat categories; usually, a number of these tools are combined in an intervention that is tailored specifically to upgrading the efficiency of the VC and empowering the target group of producers or rural poor people.

Marketing and market linkages

Providing better information

A **market survey** can be undertaken (or updated) to analyse the markets or buyers identified at the VC analysis stage that would be in a position to purchase from small-scale farmers. These studies are best developed in collaboration with the key actors in the VC in the country (who will use the results) to ensure that the most important market-determined parameters of quality, quantity, timing, prices, etc. are covered.

A **production survey** indicating where the crop is currently produced by small-scale farmers and providing volumes, timing, qualities, varieties, prices, etc. gives a picture of the supply side of the equation. It is not necessary to undertake an exhaustive census of production but at a minimum the survey should pull together existing documentation and supplement it with interviews with key informants.

Analysis of traders, brokers and other intermediaries helps increase understanding of their current and potential roles in the VC project. Often, much of the value in a commodity chain is captured by traders, who may appear to add little efficiency. However, traders can play a vital role in conveying price information, negotiating contracts with buyers, aggregation, transport, finance, etc., which need to be understood before deciding to “cut out the intermediaries” and promote direct sales from producers. Projects that help improve traders’ efficiency and transparency (through training, better finance, etc.) may have a very positive impact on smallholders’ welfare.

Market information systems that supply timely, accurate and geographically specific price information based on real offers to buy or sell are an attractive means of helping small-scale producers make decisions on harvesting, storage and marketing for many commodities. Initiatives such as Esoko²⁸ collect such information and distribute it inexpensively through mobile phone applications. Some of these systems provide opportunities for producers to find buyers, and the means of initiating a trade. However, in developing countries, donor-driven agricultural market information systems have generally not been able to develop a business model that would be appropriate for a sustainable VC.

Participation in trade fairs/business delegations (inward/outward). Sponsoring participation at national, regional and international trade fairs can be a powerful means of exposing small-scale producers to the realities of the marketplace and enabling them to make initial contacts with buyers, brokers and traders to increase their understanding of market requirements. Small-scale producers or their organizations are not usually in a position to exhibit or market their crops through major trade fairs, unless they are highly specialized producers in highly specialized markets (e.g. niche organic certified fruit).

Facilitating transactions

Brokering contracts between small-scale suppliers and buyers or traders. VC projects can facilitate several contract brokering functions: seeking potential firms, communicating information between buyers and sellers, and advising on the terms of contracts. However, VC projects should play a purely advisory role, without entering into business contracts or assuming any risks. Where possible, projects should work with commercial business brokers or facilitators who can form part of a dynamic VC.

Identifying alternative marketing channels for crops is important where marketing windows are short, quality requirements are high or buyers are not always in a position to purchase. For example, unsold

²⁸ <https://esoko.com/>

export horticultural crops could be composted or used for livestock feed, although these are lower-value options; sales to local wholesalers or food processors may offer higher value and should be explored.

Contact farming/outgrower schemes can be developed or upgraded for certain crops, especially those with strict quality and timing requirements and for which there is a strongly motivated buyer. Highly perishable crops that require sophisticated capital-intensive processing, such as tea or sugar cane, are often best grown under an outgrower scheme that links farmers to nearby processors.

Contract farming arrangements offer producers a guaranteed market for production and generally include some form of “embedded” technical or financial assistance (see the following section on Inputs and equipment supply and linkages). With these benefits, come obligations: producers are required to sell their produce in accordance with the contract and the temptation to break the contract and “side sell” can be overwhelming, particularly if cash buyers will buy the crop at the farm gate after harvest.

Project designers can facilitate the design and operation of contract farming arrangements that ensure mutual benefits and minimize conflicts. In these types of VC, project designers can help ensure that outgrowers’ production is efficient and of appropriate quality, that the buyer is providing sufficient returns and that there are adequate dispute resolution mechanisms.

Inputs and equipment supply and linkages

Timely access to appropriately priced inputs that smallholder farmers are able to use enables more efficient, timely and quality-conscious production that serves the needs of VCs more effectively. To ensure sustainability, VC programmes seek to involve for-profit, private-sector providers rather than depending on government-sponsored subsidy programmes.

Strengthening input distribution networks. Even in countries where appropriate inputs are available at the national level, they are often not available to farmers at the right price and time and in the right quantity. Local retailers may not have sufficient stock or may have expired or even fake goods. In contract farming/outgrowing, buyers can provide inputs to farmers on time, at a fair price or even as in-kind credit to be repaid when crops are delivered. In other VCs, the best approach may be to strengthen the independent rural input distribution system through training, technical assistance and credit facilitation. It may also be helpful to work further back in the VC, to improve the services that input manufacturers or wholesalers provide to rural dealers (by offering trade credit, training, more appropriate package sizes, smaller tractor models, etc.).

Bottom-of-the-pyramid distribution. In some circumstances, inputs can be provided cost-effectively by microdistributors, who can be neighbouring farmers or other members of the target group who are seeking supplemental income. For example, seed agents can aggregate seed orders from many small-scale farmers, send the aggregated orders to seed distributors and coordinate payments for and deliveries of seed at the appropriate time, earning commissions. Seed agents can also expand their product lines, to cover crop protection chemicals or fertilizer, for example.

Access to equipment, mechanized services and transport. To meet market requirements and generate profits, it may be necessary to invest in equipment, such as for access to water (treadle pumps), irrigation (drip systems), protected agriculture (tunnels or greenhouses) or mechanization (ploughs or harvesters). Based on information from buyers and equipment providers, VC projects can help producers and their groups decide whether to buy, lease, hire or use a service provider. Smallholder farmers may require smaller-sized equipment, which may be more affordably priced than larger models but more expensive per hectare cultivated or metric ton produced.

Participation in national or regional agricultural fairs can be an excellent way of exposing farmers and rural SMEs to new products, services and technologies, and valuable business contacts.

Empowerment of local service providers is a key VC tool for providing small-scale farmers with access to otherwise prohibitively expensive capital equipment.

Demonstration plots that show farmers tangible results near their own fields often have a convincing impact on farmers. While VC projects can help share the cost of these demonstration plots, at least initially, project designers should collaborate with input or equipment manufacturers, which are often very keen to

disseminate information about their products and will provide either in-kind or technical assistance for maintaining demonstration plots.

Farmer-to-farmer training or exchange visits are very effective ways of spreading knowledge among farmers by selecting a champion farmer or a successful farmers' group initiative and disseminating knowledge and good practice through visits and hands-on training.

Services

Embedded services. Increasingly, VC projects are maximizing the use of "embedded" services, which are provided to small-scale producers together with the commercial transactions for inputs or equipment facilitated by the project. These services can be either buyer- or supplier-based:

- *Buyer-based services* are provided by commodity buyers (or their agents). In some VCs, buyers are motivated to provide services to ensure that they receive the right quantity and quality of produce at the right time. These services can be in the form of training, extension or assistance for critical operations, such as spraying of horticultural crops destined for export, where maximum pesticide residue levels are a critical factor for entering markets. Buyers can also assist with establishing traceability systems or obtaining the certification needed for certain markets (such as fair trade or organic) and can provide transport, grading and other post-harvest services. There is often no overt charge for these services, although the prices paid to farmers for their produce usually reflect the costs of service provision. Alternatively, services can be provided in-kind. Farmers will need to be able to judge whether it is more advantageous to utilize embedded services or look for outside service providers.
- *Seller-based services* are provided by the suppliers of inputs for small-scale farmers. Seed companies can advise on what seeds to use for given conditions, best practices for germination, optimal planting times, herbicide use, etc. Fertilizer companies may advise on optimal application methods or provide access to soil testing services. VC projects seek to create the optimal organizational conditions (e.g. organized farmers, lead farmers) to maximize the impact of services and create a critical mass of customers that will attract the attention of suppliers, which are usually interested only in larger producers.

Microenterprise and SME service provision. Farmers need to become more efficient to participate effectively in VCs, which open up opportunities for service provision from local microentrepreneurs and SMEs. Depending on the VC, these small-scale enterprises can provide field preparation, planting, spraying, ripping, ploughing, pruning and other services. Farmers can then focus on management and other core functions, outsourcing activities that could be provided more efficiently than by household labour. This creates additional income opportunities for youth, landless people and other rural poor in IFAD's target population.

Achieving market standards. To enter the fair trade cocoa market, for example, or to sell into a Global Good Agricultural Practices (GlobalGap) VC for the European Union market, farmers and their groups require expert services for preparing and achieving certification, which may not be available in their home countries. VC projects can help organize visits from expensive specialists, spreading the costs over many farmers and farmers' groups. However, it is very important to analyse carefully the costs and benefits of participating in VCs serving these markets to ensure that farmers are willing to make and capable of making the necessary investments and that entering the markets is the best strategy for improving incomes. For example, organic certification requires a conversion period of up to three years, during which yields may be depressed and little or no market premium enjoyed. GlobalGap certification, even when done via farmers' groups, requires significant fixed and working capital investments from farmers. Donor projects often subsidize these investments but farmers need to be sure that they can serve markets competitively before making major investment decisions, even with donor subsidies. In some cases, the quickest returns for most farmers may be obtained in lower-margin markets with less stringent requirements and farmers should maximize their returns in these markets before moving to riskier and difficult certified markets.

Annex 2: Common issues in quality enhancement/assurance

- Supply-driven projects with no analysis of potential market demand or competitiveness of proposed products.
- Weak links between the VC approach and the targeting strategy.
- Inclusion of too many VCs or a project design that is too complex.
- No mapping of key actors along the VC.
- No assessment of potential partners or service providers.
- No analysis of the policy or regulatory environment.
- Overemphasis of export markets versus local markets.
- No sustainable strategy for financing investments or technical services along the VC (e.g. over-reliance on matching grants).
- Too much reliance on non-expert PMU staff to steer VC interventions.

Annex 3: VC training programmes

Value Links. The five-day Introductory Training Workshop covers the 11 ValueLinks training modules developed by GIZ and is the “go-to” VC training course for managers and practitioners, although it does not focus on agriculture. <http://www.valuelinks.org/index.php/services/training>

ACDI/VOCA. Very practical agricultural VC orientation training courses are offered by the United States NGO Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance (ACDI/VOCA), drawing on its extensive field experience. www.acdivoca.org/site/ID/ourwork_valuechainstraining

Springfield Centre. Taking a “making markets work” approach to VC project development, these regularly held training courses are popular with donors, NGOs and foundations. <http://www.springfieldcentre.com/training>

AZMJ. The promoters of the well-known annual “Cracking the Nut” Conference offer VC training that focuses on rural development and food security. <http://www.crackingthenutconference.com/trainings.html>



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