OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

PRO-POOR VALUE CHAIN DEVELOPMENT

25 guiding questions for designing and implementing agroindustry projects

UNIDO
UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

IFAD
Enabling poor rural people to overcome poverty

DIIS
Danish Institute for International Studies

Practitioner's Guide

Pro-poor Value Chain Development

25 GUIDING QUESTIONS FOR DESIGNING AND IMPLEMENTING AGROINDUSTRY PROJECTS

UNIDO UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

IFAD Enabling poor rural people to overcome poverty

DIIS Danish Institute for International Studies

DISCLAIMER

This document has been prepared by Lone Riisgaard and Stefano Ponte of the Danish Institute of International Studies (DIIS) together with a team of experts at the Agribusiness Development Branch at UNIDO under the leadership of Frank Hartwich and Patrick Kormawa. For comments please contact: f.hartwich@unido.org Special thanks go to Thomas Elhaut and Laura Puletti of IFAD's Asia and the Pacific Division who have been supporting the project and guiding the development of the tool.

Reference: UNIDO (2011). Pro-poor Value Chain Development: 25 guiding questions for designing and implementing agroindustry projects. United Nations Industrial Development Organization (UNIDO). Vienna, Austria.

Table of contents

WHAT THIS GUIDE IS ABOUT

Governments and development agencies increasingly use value chain development as a key element in their development strategies. Frequently such strategies aim at improving the income of poor groups of the society through value addition. Pro-poor value chain initiatives often try to overcome entry barriers for poor agricultural producers and providers of inputs and services. Often they make use of lead firms to build up supplier networks among poor and marginalised farmers, helping them gain access to knowledge and production technologies.

However, those who help to build and strengthen agroindustrial value chains in developing countries can find their interventions are not very effective. While improvements work for some parts of the value chain, others remain underdeveloped and all together little is achieved. For example, any effort to enhance farm production may prove insufficient if challenges in agro-processing and marketing are not dealt with simultaneously. Further, value chain development initiatives may yield technical results translating into improved production and processing, but do not necessarily bring social benefits to poor and marginalised population groups.

What is value chain development?

A positive or desirable change in a value chain to extend or improve productive operations and generate social benefits: poverty reduction, income and employment generation, economic growth, environmental performance, gender equity and other development goals.

What is a value chain development intervention?

Concerted activity to drive value chain development of a certain kind. Value chain development interventions can focus on improving business operations at the level of producers, processors and other actors in the chain and/or the (contractual) relationships among them, flow of knowledge and information and innovation. Value chain development can also foster overall coordination in the chain; participation of selected beneficiaries in local, national or global value chains; reduction of entry barriers and a higher share of value addition for certain actors.

What is a value chain approach?

An approach to development which puts at the centre the interrelatedness of actors in the value chain who - separated by time and space - gradually add value to products and services as they pass from one link in the chain to the next.

How this guide was developed?

The guide builds on a review of common practices in value chain development projects in Asia and the Pacific region as well as on experience from six case studies of value chain development projects in Sri Lanka, Vietnam and Indonesia[1]. The guide moreover draws from a consultation of experts in agricultural value chain development orchestrated by UNIDO in Vienna, September 2010, and was tested during an interactive training workshop with programme managers from Asia in February 2011, in Kerala, India.

The 25 questions plus the many checklists, tools and lists of guiding questions have been developed on the basis of project analysis and design activities that the authors have engaged in during the last decade also making use of, and adapting the many existing tools on the market. All tools have been tested and practiced in the field.

[1] Henriksen, L.F. , Riisgaard, L., Ponte, S,. (2010): Agro-food Value Chain Interventions in Asia and the Pacific: A review and analysis of case studies. Vienna: UNIDO Working Paper. Available at www.unido.org

It is therefore crucial that value chain projects make use of a sound analysis that detects both technical and social development challenges, followed by a solid design process that targets opportunities in both these realms at the various levels of the value chain. The analysis and design process should lead to a mix of interventions necessary for value chain development; if their implementation cannot be achieved by one project or organization alone, partners must be found that complement the value chain development effort.

The aim of this practioner's guide is to assist programme designers and project managers working for governments, development agencies and the private sector alike, in designing and implementing projects for the development of agricultural and agro-industrial value chains. It addresses two challenges in particular:

a. Making transformation and value addition processes integral to value chain development, in addition to primary agricultural production and marketing; and
b. Overcoming difficulties of designing value chain development initiatives that focus on social benefits, especially poverty reduction and gender equity.

HOW THIS GUIDE HELPS IN DEVELOPING PRO-POOR VALUE CHAINS

This guide introduces 25 questions to help lead programme designers and managers of agricultural value chain projects to success. It aims to complement existing value chain development tools that focus less on bringing together technical and social dimensions.

The questions focus on problems and complications that often occur during the different phases of value chain selection and analysis, and design and implementation of related projects. The guide does not attempt to provide the user with all the information needed to develop a full-fledged project implementation plan. Rather, it offers recommendations on project management and organization for the analysis and design phases of a project, complementing in-depth planning and formulation.

Following the steps of project cycle management, the manual is structured in five sections: (1) selection/validation of the value chain; (2) functional value chain analysis; (3) social value chain analysis; (4) project design; and (5) implementation. Each section provides five key questions that draw attention to good practices. Under each question there is information regarding i) objectives, ii) the relevance of the question in practical situations, iii) important elements that need to be considered in answering the question, and iv) pitfalls that may occur when dealing with the question.

Users of the guide may find certain elements of the manual more useful than others and can focus on the particular questions of greatest concern to them. Figure 1 summarizes the main questions.

A value chain in a nutshell

Actors are connected along a chain producing, transforming and bringing goods and services to end-consumers through a sequenced set of activities. To function properly, value chains require some sort of coordination and depend on services such as transport infrastructure, electricity and water supplies, finance, management support and accounting services, knowledge providers, research laboratories and information services.

A segment is a vertical part of a value chain that relates to a certain function, e.g., primary production, first-level processing, second-level processing, or marketing.

Figure 1: Overview - 25 Strategic Questions in Pro-Poor Value Chain Development

1.Value Chain Selection & Validation	2.Functional Value Chain Analysis	3.Social Value Chain Analysis	4.Design of Value Chain Interventions	5.Implementation
1.1 Is value chain developing the right approach?	2.1 Is the nature and diversity of the end-product sufficiently understood?	3.1 Are rewards and risks adequately captured?	4.1 Were value chain development strategies identified in a sufficiently rigorous manner?	5.1 Is there sufficient flexibility to reorient the project?
1.2 Are appropriate selection criteria being used?	2.2 Which functions and actors are involved in generating the end-product?	3.2 Are poverty issues adequately covered?	4.2 Have the identified strategies been adequately evaluated?	5.2 Is stakeholder engagement maintained?
1.3 Has the value chain been selected based on evidence and methodologically?	2.3 Are the prevailing product flows and related business interactions sufficiently understood?	3.3 Are working conditions sufficiently examined?	4.3 Were practical action points defined?	5.3 Is trust being built among project partners and value chain actors?
1.4 In case of pre-selected value chains, has validation been carried out?	2.4 Is the information adequately visualised?	3.4 Is youth being considered in value development?	4.4 Are adequate competences built into the project?	5.4 Has a baseline been established to monitor chain development?
1.5 Have stakeholders participated in the selection/validation process?	2.5 Does the analysis build on existing data?	3.5 Are gender-based constraints adequately understood?	4.5 Have stakeholders participated in project design?	5.5 Does monitoring and evaluation focus on most relevant impacts of chain development?

Rarely are value chains selected on the basis of rational arguments alone. The analyst can only make sure that relevant information on best choices is made available and that, once made, decisions are validated.

1. VALUE CHAIN SELECTION AND VALIDATION

The starting point for a value chain project can be the selection of a particular value chain. If done rigorously, this involves collection of data on various dimensions of value chain development and choosing on the basis of a set of criteria. However, in most cases the value chain is pre-defined in terms of geographical area and product. While this should be of concern to development planners, it is also a reflection of the real world where rational choice is only part of policy decisions largely influenced by political calculations and multi-faceted interest groups.

Be that as it may, once a value chain is chosen, there is still a great deal of latitude for orienting interventions so as to enhance the probability of success and determine where the most development impact can be achieved, for example, through targeting the poor and addressing gender and environmental concerns. The probability of success depends on the type of interventions as well as the underlying framework conditions for value chain development. Impact moreover depends on the scope of activities, the number of people potentially affected, and existing and potential multiplier effects.

Figure 2 illustrates the different entry points for value chain selection or validation. Depending on the entry point, the programme planner will have some or all of the following tasks:

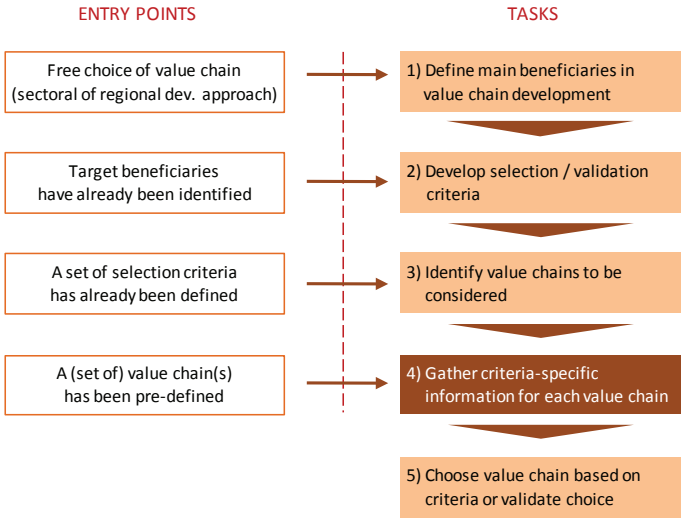
1. Define objectives and main beneficiaries of value chain development;
2. Develop selection and/or validation criteria;
3. Identify value chains to be considered on the basis of data collection; or
4. Validate the choice of a value chain based on an evaluation of its potential.

One task, however, is obligatory: the collection of criteria-based information providing empirical evidence for any choice and validation.

Value chain selection: A sufficient condition for value chain development?

The selection of a value chain should not be considered a "silver bullet" automatically leading to the development outcomes desired. No matter what the value chain development intervention, there are tricky decisions to be made. Success is more likely when there is sufficient information about the possible value chains under consideration and knowledge of potential development options.

Figure 2: Entry Points for Value Chain Selection and Validation



Source: The authors

The following five sections elaborate on five crucial questions that programme planners and project managers should attempt to answer in the process of value chain selection and validation: 1.1 Is value chain development the right approach? 1.2 Are appropriate selection criteria being used? 1.3.Has the value chain been selected based on evidence and methodologically? 1.4.In case of pre-selected value chains, has validation been carried out? 1.5 Have stakeholders participated in the selection/validation process?

Further Reading on Value Chain Selection/Validation

- GTZ (2007). Selecting a Value Chain for Promotion. Value Links Module 1. GTZ, Eschborn, Germany. Available at www.value-links.de
- Hamre, C. (2008). Selecting Pro-poor Value Chains: A Useable Framework. African Enterprise Partners, Toronto, Canada. Available at www.microlinks.org
- Herr, M. and M. Tapera (2009). Value Chain Development for Decent Work. A Guide for Development Practitioners. Government and Private Sector Initiatives. ILO, Geneva, Switzerland. Available at www.ilo.org
- USAID (undated): Selection of Industries in the Value Chain Framework. Briefing Paper. USAID, Washington, U.S.A. Available at www.microLINKS.org

1.1 IS VALUE CHAIN DEVELOPMENT THE RIGHT APPROACH?

This question challenges the argument that a full-fledged value chain development project is the best way to bring about development. It encourages development planners to re-assess whether certain development objectives could be better achieved via other, less complex approaches not focusing on the entire value chain. The question also aims at identifying situations where the value chain approach appears to be a good choice.

WHY THIS MAY BE RELEVANT

At times development projects aim at social issues that are difficult to address via commercial approaches. For example, a value chain project that supports farmers to produce and market a cash crop may be good for increasing incomes, but less effective in addressing household food security than a project where farmers secure their daily diets by producing a variety of staple crops on their land.

On the other hand, there may be situations where a value chain approach is indispensible. A project hoping to expand the tanning capacity in the leather industry to create new income and job opportunities serves as an example. If the project only supports pilot processing plants it will fail, because processors cannot assure supplies of primary materials and sale of larger quantities to new markets and buyers. Another example: a project engages in the development of industrial (green-house) tomato production facilities among smallholders. However, unless adequate processing facilities are set up and new marketing channels are opened, primary production cannot meet demand.

WHAT TO CONSIDER

It is important to think carefully about potential negative implications of using "commercially-oriented" value chain development approaches. Promoting competition in markets, for instance, may squeeze out smallholders and small-scale industries, mostly or exclusively benefitting

Why do governments, development agencies and other stakeholders take a value chain development approach?

Many governments tend to find the commodity and subsector focus the value chain appropriate, particularly if their experiences with other less integrated development approaches have been negative. Decisions may also come from development agencies, which may have preferencees about the approach that projects they support undertake. Lead-firms may also promote supply-chain development approaches that ensure support for sourcing primary materials. In Nepal, for example, USAID has made a strategic choice to connect small-holder farmers to markets in high-value agricultural value chains such as vegetables, fruits, spices, herbs, and livestock products. Main criteria for the choice included:

- Water-intensive and external input-dependent crop agriculture is inappropriate for growth and income sustainability in the context of small holder agriculture.
- Market opportunities emerged for diversifying and commercializing small holder farming.
- Quick outcome interventions are appropriate in the given political-economic context.
- Building on the achievements in existing value chain support programmes and scaling these up is more promising than engaging in new fields.

Source: Karkee, M. (2008). Nepal Economic Growth Assessment Agriculture. USAID. Katmandu, Nepal. Available at www.nepal.usaid.gov

How to find out if desired project outputs depend on the development of the entire value chain?

The interdependence between value chain development interventions can be depicted, for example by constructing "results chains" or "impact chains" that specify in detail the various cause and effect relationships of activities, outputs, outcomes and impacts of value chain-related development interventions (www.enterprise-development.org/page/rm).

bigger players. Likewise, building exclusively on low cost and low wages can lead to market integration but fails to impact poverty levels. Great attention needs to be paid to the conditions under which vulnerable groups of workers - especially migrant and women workers, casual and child labourers - participate in the value chain. Another risk to consider is that measures to improve productivity in agrifood products with low value addition can diminish profit margins for processors, since they will be obliged to compete through better quality at lower costs in order to remain in the market. A somewhat different effect to bear in mind is that in specialised (industrialized) production versus food security, small-scale cash crop monoculture production may negatively affect household and community food security. To find out if the value chain approach is the right one, consider investigating the following:

- **Scope of the activities required to induce further development of the value chain.** If the scope of required interventions is beyond the means and resources that the project and potential partners can mobilize it is better to refrain from value chain development, or at least wait till complementary resources are in sight.
- **Direct versus intended benefits.** If project efforts including "direct" support to beneficiaries (e.g. lead firms or other well-off actors in the chain) are too high in relation to the gains of the intended beneficiaries (e.g. small-scale farmers or processors) one should restrain from value chain development.
- **Desired development outcomes depend on the functioning of the entire value chain.** If one group of actors, region, or segment in the value chain cannot be improved without improvements in the other segments, a value chain approach should be considered. Though one agency or donor alone may not have sufficient leverage to address all segments, in combination and partnerships there should be enough resources to develop all the segments.

If the analysis suggests that value chain development may not be the most appropriate approach the analyst needs to look at others, such as local economic or territorial development (focusing on the development of a region with all its different sectors), enterprise development (development and upgrading of individual enterprises and training of entrepreneurs), market development (developing products, improving quality and targeting specific markets), or livelihoods (improving people's lives on the basis of their access to physical, financial, natural, human and social capital).

STUMBLING BLOCKS

Answering the question of whether value chain development is the right approach may require a substantial amount of information not usually available at the beginning of a project. The choice of the approach could possibly be postponed until a stage where more information on the value chain becomes available (e.g. through a value chain diagnostic study). However, often substantial information already exists on the conditions in a given value chain. Experience and discussions with well-informed stakeholders may complement this information and enable the analyst to determine at an early stage if the value chain approach is useful or necessary.

1.2 ARE APPROPRIATE SELECTION CRITERIA BEING USED?

This question is designed to ensure that the most relevant criteria are used in selecting the value chain and reflect technical and practical considerations as well as the intended development impact.

WHY THIS MAY BE RELEVANT

The point of departure for many value chain development initiatives is the perception that there is a development deficit or an opportunity. Often-used arguments are: there is a market or a promising product, there are abundant resources available, or new knowledge and technology should be used. For example, development planners may see markets for frozen vegetables as an opportunity, find technical options to generate energy from residues attractive, or focus on copying an irrigation system in a neighbouring country. What these three examples have in common is that analysis is still only partial and can cause value chain interventions to focus on certain segments of the value chain while neglecting others.

It is also commonplace for projects to choose value chains on the basis of purely practical or opportunistic considerations, for example in response to government priorities, donor funding or to continue an existing project. Often no considerations are made in such cases concerning the technical feasibility of the project and its likelihood of development success.

To overcome these problems, what is needed is a set of criteria that address various development constraints and opportunities simultaneously.

WHAT TO CONSIDER

Key criteria for selecting a value chain should build on the existing and potential demand and supply for value chain products. Unless buyers can absorb additional quantities or are willing to pay higher prices for better qualities, value chain development efforts that aim at the growth of agricultural and agribusiness sectors may be of limited positive

Value chain selection criteria

A. Criteria based on supply and demand

1. Market demand exists for a given or improved product.
2. There is potential to apply/adopt available/improved knowledge and technology.
3. Resources, capacities, infrastructure, and raw materials are available and can be used (more efficiently).
4. There are real or potential competitive advantages in the production/processing of a certain good.

B. Development of goal-based criteria

1. Can **poverty** be reduced in general and for selected vulnerable groups? What is the percentage of poor engaged in the chain? What are the barriers to entry in the chain?
2. Can additional **employment and income** be generated? Who is benefiting? Can work conditions be improved?
3. Can **economic growth** be promoted by expanding value addition? Who benefits from this?
4. Can productive enterprises develop (especially SMEs) and take part in local and global value chains? Who runs those enterprises, and who do they employ?
5. Are **cleaner production** and compliance with environmental safety standards possible? Can criteria of **environmental sustainability** be met?
6. Can **gender equity** be promoted? Do women receive rewards and reduce risks with respect to income, employment and food security through engaging in the chain?
7. Can objectives for specific **local development** be addressed, e.g. social inclusion of specific ethnic groups or protection of local natural resources?
8. Can foreign currency be earned through exports or import substitution? Who profits from ancillary public spending?

C. Strategic criteria

1. Government priorities
2. Availability of funding support
3. Opportunity for partnerships
4. Likelihood of development impact

Example: When stakeholder dominance leads to ambiguous choices.

A case study on an anthurium (an ornamental plant) value chain development project in Sri Lanka shows that too much emphasis on the "buy-in" of powerful stakeholders can lead to biased value chain selection. Despite the use of development goal-based selection criteria, including pro-poor and gender-specific objectives, the value chain was selected based on the interest of a powerful public sector stakeholder who simply sought continuation of a government intervention in the anthurium sector. The result was an intervention that turned out to be neither specifically pro-poor nor gender sensitive.

Source: Henriksen, L.F., Riisgaard, L., Ponte, S., (2010): Agro-food Value Chain Interventions in Asia and the Pacific: A review and analysis of case studies. Vienna: UNIDO Working Paper. Available at www.unido.org

effect. Meanwhile producers should be capable of increasing production, enhancing efficiency and lowering their costs; otherwise it will be difficult to extend the benefits they obtain from participating in the value chain. Increasing supply capacities also depends on the knowledge and technology used at the various levels of the value chain and their potential for improvement.

However, criteria based on the option of market growth, production increase and improved technology alone are not sufficient for the selection of a value chain. Value chain projects also need to prove they contribute to commonly accepted **development goals.** Goals related to pro-poor agro-industrial development are listed on the right. These objectives are also in line with internationally accepted development goals such as the Millennium Development Goals (MDGs): MDG 1: Eradicate Extreme Poverty and Hunger; MDG 3: Promote Gender Equality and Empower Women; and MDG 7: Ensure Environmental Protection. The analyst must assess to what extent chain development complies with these criteria.

Sometimes the major development goals do not reflect specific development conditions and local contexts, making it necessary to also define development goals on the basis of the **interests of potential beneficiaries** and **local development perspectives**. Here it is also important to **distinguish direct and intended beneficiaries**. Direct beneficiaries receive support through the project and contribute to a better functioning of the value chain. Often support to them is a means to reach the intended beneficiaries, those who should benefit from attaining a development goal. It is important to identify who among all the actors of the value chain are the intended beneficiaries, where they are located geographically, their functions in the value chain and their social profile.

Finally, there must also be **practical/ strategic reasoning** in the choice of the value chain. It would not make sense to engage in a value chain if the government opposes its development, or if other organisations are already cover all aspects of its development. The existence of opportunities for partnerships and collaboration can be another strategic factor to consider.

STUMBLING BLOCKS

The choice of criteria will be influenced by the mandates and priorities of the institutions involved and the stakeholders engaged. The challenge is to pick the right criteria satisfying all stakeholders. Agreement on criteria can be sought at specific stakeholder meetings, as long as these are not dominated by certain powerful stakeholders. At times, separate consultations with under-represented or less influential stakeholders offer a good way to identify interests and come up with an inclusive choice of criteria.

1.3 HAS THE VALUE CHAIN BEEN SELECTED BASED ON EVIDENCE AND METHODOLOGICALLY?

This question emphasizes the need for the choice of the value chain to be grounded in methodology and evidence. It is not enough to define relevant criteria for choice; compliance of a value chain with these criteria must be evident. This means collecting adequate information and combining the findings by applying an appropriate methodology.

WHY THIS MAY BE RELEVANT

While value chain developers and stakeholders may be able to agree on criteria for choosing the value chain, they often do not put sufficient effort into retrieving adequate information, which complies satisfactorily with the set criteria. Even though the information is usually not difficult to collect, analysts may not know where to look and how to bring it together using the right methodology.

WHAT TO CONSIDER

Collecting the necessary information should not be a lengthy or difficult process. Usually the analyst can draw from a wealth of **sector analyses, market studies and publications of statistical data**. Main sources of such publications include:

- Government strategies and policy documents;
- Documentations developed in the frame of projects of international development agencies;
- Statistical units of central banks and finance ministries, national census departments/bureaus and statistical institutes; and
- Internet forums for private sector and value chain development.

Information from secondary sources should be validated and double-checked with information gathered during **field visits and interviews.** Main sources of primary information include:

- Private sector actors in the various segments of the value chain, including

WEBSITES THAT CAN PROVIDE USEFUL INFORMATION for choosing value chains

Market databases

- The Trade Statistics at the International Trade Centre (ITC) at: www.intracen.org
- The Agricultural Market Access Database of the Centre for the Promotion of Imports from Developing Countries (CBI), at: www.cbi.nl/marketinfo/www.amad.org
- The Trade and International Markets Database of the United States Department of Agriculture's Economic Research Service, at: www.ers.usda.gov.

Trade Regulations

- The "Trade Knowledge Network" of the Global Research Partnerships for Sustainable Trade Policy, at: www.tradeknowledgenetwork.net
- The "Market Access Database" of the European Union, available at mkaccdb.eu.int, and the European Union Expanding Exports Helpdesk at: www.export-help.cec.eu.int
- The "Market Access for Goods" webpage of the World Trade Organization, at: www.wto.org.

There are also a number of commodity-specific websites dealing with global value chains of coffee, tea, cocoa, cotton, oilseeds and many others.

How to do your own simple rating

The table below illustrates generic rating. A value chain is chosen on the basis of six criteria of which two are compulsory; the other four criteria are given weights, for example on the basis of stakeholder opinions. (The weights applied here are random.) For each of the criteria information must be collected from either statistics or interviews. This information is transferred into rankings from 1-5 (here randomly chosen). The example suggests the choice of value chain 1 because it qualifies for both compulsory criteria, despite ranking lower in the rest of the criteria.

CRITERIA WITH INDICATORS AND THEIR WEIGHTS	Compliance ranked from 1-5	
	VALUE CHAIN 1	VALUE CHAIN 2
1. Demand/supply criteria		
Criteria 1.1 (compulsory)	Qualifies	Qualifies
Criteria 1.2 (compulsory)	Qualifies	No
2. Development criteria		
Criteria 2.1 (weight 25 %)	3	2
Criteria 2.2 (weight 25 %)	4	3
3. Strategic criteria		
Criteria 3.1 (weight 40 %)	3	5
Criteria 3.2 (weight 10 %)	5	4
Total score	0.69	0.73

The web-based Learning Resources of the International Centre for Development-oriented Research in Agriculture (ICRA) include a "Priority Setting" tool which explains a number of multi–criteria rating approaches. Available at www.icra-edu.org.

primary producers, processors, marketers and service providers;

- Chambers of commerce, trade and industry, and other business membership organizations;
- Specific value chain development platforms (if existing);
- Government ministries and departments (e.g. ministries of industry, trade, agriculture and finance);
- Local governments and authorities; and
- Development agencies and NGOs engaged in value chain development.

Information drawn from primary and secondary sources of data must ultimately be brought together to reach a conclusion on the best choice for a value chain. Two approaches are possible. In an "absolute approach" the chosen chain complies with minimum criteria; if it complies, it qualifies for further development interventions. In a "relative approach" the value chain ranking highest across a set of criteria is selected, usually starting from a short list of value chains that are likely to fulfil the chosen criteria.

The two approaches can be combined. For example, the existence of market and production potential can be considered an "absolute" precondition for value chain development, while a range of development goals which can be attained simultaneously provide for a "relative" ranking. For the latter a range of multiple criteria rating methods is available (see link in the box above). Multiple-criteria rating methods allow, to different degrees, the inclusion of quantitative and qualitative information and expert opinions. However, analysts should feel free to establish their own selection approach, using, e.g. an Excel spreadsheet which accommodates weights, ratings and quantitative information. A common approach is numeric ranking from 1 to 5, where 5 can represent maximum compliance with the criteria and 1 represents minimum compliance (see example above).

STUMBLING BLOCKS

The analyst should bear in mind that gathering information to choose a value chain is not the same as conducting a full-

fledged value chain analysis (which may come at a later stage). The idea here is to collect only the necessary information for the chosen criteria. This should be readily available from existing sources and validated through a limited number of interviews.

Choosing indicators for which information is available is one way of limiting work. However, one should not exclude the most important criteria. Further, for each of the compulsory criteria a threshold level needs to be defined, and this often proves difficult. For example, deciding if the production potential is high enough requires a lot of information on actual production and available resources; deciding if the market potential for a certain value chain product is high enough requires analysis of the potential to improve product quality and penetrate markets. The answer may not be a simple "yes" or "no" but can be rated, e.g. on a scale from 1 to 5; every value chain which does not rate 2, for example, could be excluded from the choice.

Finally, it is not easy to decide if a criterion is compulsory or not. Having too many can limit the portfolio of value chains to choose from, so it is often more appropriate to keep these to a minimum.

1.4 IN CASE OF PRE-SELECTED VALUE CHAINS, HAS VALIDATION BEEN CARRIED OUT?

Example: Building on former projects

Instead of designing a project from scratch, the International Fund for Agricultural Development (IFAD) partnered with an existing USAID programme engaged, among other things, in the development of Sri Lanka's rubber value chain. IFAD did not need to carry out a full-fledged value chain analysis but built its strategy on an existing analysis made by USAID. A validation exercise, however, confirmed that the development of the chain led to a number of specific development goals, particularly poverty reduction and income generation for small rubber producers, especially women. IFAD then designed the project with a particular orientation towards these goals, including the empowerment of poor farmers via access to credit, knowledge and technology.

Source: Henriksen et al. (2010).

This question relates to situations where the value chain is already chosen. Often it is opportune to validate (and justify) the choice that has been made and provide additional information that helps shape the project by pointing out how and where impact can be achieved.

WHY THIS MAY BE RELEVANT

Often an evidence-based approach to value chain selection is substituted by less rigorous methods. Sometimes the basis for a choice can be nothing more than the idea of an opportunity, e.g. to sell a product to a niche market or use a new technology. Under such opportunity-driven approaches, value chains may become selected upon the suggestion of interest groups and potential beneficiaries such as private companies, government ministries or even donors. In other cases the criterion of choice is the continuation of an ongoing project or its extension to other regions or areas of the value chain.

In all these cases, validation can be useful to confirm the choice or suggest alternatives. A second positive output of a validation is that it clarifies to what extent the intervention will aim at certain development goals and impact. The latter can be important for designing project interventions.

WHAT TO CONSIDER

In 1.2 an approach to data collection and aggregation has already been described, and 1.3 provides information on evidence-based methodology. These can also be applied to the validation of value chain choices.

People in charge of value chain development in governments, donors and development agencies may not like the idea of validation, arguing that the right choice has already been made. One can point out that validation is only to confirm the results and clarify how the choice contributes to certain development goals- crucial information for project planners who want to orient their projects toward attaining certain development goals and impacts.

STUMBLING BLOCKS

Problems may occur if the validation reveals substantial doubts about the choice of the value chain and whether positive development impacts will occur. In the worst case, a decision must be made NOT to engage any further in the development of the value chain.

1.5 HAVE STAKEHOLDERS PARTICIPATED IN THE SELECTION/VALIDATION PROCESS?

This question emphasizes the importance of engaging the various stakeholder groups in the selection or validation of the value chain.

WHY THIS MAY BE RELEVANT

Stakeholder participation is important not only to ensure that the right choices are made but also to create ownership among stakeholders and leverage their support for the initiative. However, often stakeholder participation is limited to certain influential players, typically the initiator of the chain development project, donors, government authorities and sometimes influential private sector companies. This may be enough to get the initiative off the ground but frequently does not provide sufficient basis for the continued collaboration required for project implementation. Indeed, after commencing with a small group of selected stakeholders, many times the initiative falls apart when additional stakeholders need to be brought on board.

WHAT TO CONSIDER

Stakeholder participation in value chain selection could take the form of consultative meetings. As opinions and the level of understanding may differ substantially among stakeholders, it can be useful for stakeholders to get together in a series of separate meetings targeting certain issues, as opposed to all of them at the same time.

How to identify stakeholders?

Stakeholders should include policy planners and agencies that represent interests across a number of value chains. Additional stakeholders to be included are those that can represent interests in and have an overview of the main segments of the value chain, including production, processing and commercialization. They should, however, have a sufficiently broad perspective on the set of value chains from which the choice is to be made. Stakeholders that represent a certain chain or have vested interests in a particular

Stakeholders in value chain development

The term "stakeholders" is commonly used in development but often means different things to different people. Here stakeholders include all people interested in the development of the value chain. These are, first of all, the private sector entities and individuals directly concerned with creating and delivering a product and engaged in the businesses of primary agricultural production, processing, and marketing.

Further, stakeholders in value chain development include many actors not directly engaged in production but rather the provision of private and public support such as finance, warehousing, transport, research, or advisory services.

Stakeholders may also include the regulators and government and development agencies that intervene, through regulations and development programmes, in the development of the value chain.

A list of stakeholders in value chain development can include:

- Farmers, farmers' organizations and their associations
- Processors (at different levels) and their associations
- Traders and exporters and their associations
- Transporters and middlemen
- Private advisory, business support and accounting service providers
- Chambers of commerce, investment and export promotion agencies and other parastatal bodies promoting value chain development
- Regulatory agencies such as bureaus of standards, food safety agencies and metrology institutes
- Private certification and quality control bodies
- Research institutions and universities
- Training and education institutions
- Bilateral and multilateral development agencies

chain will not contribute to objective decision-making; instead they bring bias to the choice of the value chain, one of the most common mistakes in value chain selection. Inviting biased actors to a stakeholders' meeting should be avoided.

How can stakeholders best contribute to the identification process?

Stakeholders' opinions are important with regard to both selection criteria and the degree to which value chains comply with such criteria. While such opinions can be identified in the course of stakeholder meetings, information can also be collected through interviews and fed into higher-level meetings as background information.

How should stakeholder meetings be organized?

Often these meetings are held all at once in an all-inclusive stakeholder roundtable meeting. Though this may be efficient with regard to planning time and allow stakeholders to get to know one another, such meetings also have limitations for different reasons:

- The most dominant stakeholders are likely to influence the process of choosing the value chain. The voices of less influential stakeholders may not be heard or taken into consideration sufficiently.
- Usually there will not be enough space to lay out rational arguments for choosing the chain and discussing them. Individuals may distort the discussions towards biased arguments.
- Multi-stakeholder meetings require facilitation by a skilled un-biased moderator, but often moderation is left to officials or parties with interests in a specific outcome.
- In an open voting process there may be little scope for consensus on the choice of a value chain. Voting by majority rule may leave certain actors unsatisfied.

Nonetheless, holding roundtable meetings is important to establish a dialogue between stakeholders and to develop mutual understanding and respect for their different positions and interests. Organizers of such meetings should plan them carefully and be realistic about what can be achieved. One may consider the following:

- **Present a value chain choice that participants discuss and agree upon:** The organizers of the meeting would present information from bilateral meetings with stakeholders as well as analysis of empirical and statistical data suggesting a final choice for a value chain. Participants can discuss the choice and ultimately agree or disagree. Preparation may include collecting stakeholders' opinions about appropriate selection criteria and gathering quantitative and qualitative data to rank value chains meeting these criteria. Alternatively a shortlist of more than one value chain options can be presented and discussed.
- **Discussion of value chain options to be further analyzed and agreed upon in subsequent stakeholder meetings:** Another choice is to have a series of increasingly focused stakeholder meetings in which, at the end, stands the choice of the value chain. Part of this process would be the collection of information on value chain choices that feed into these meetings.
- **Discussion of value chain options and voting for a final choice:** Most difficult to achieve in a single stakeholder meeting is choosing a value chain from a number of alternatives, taking on board expert knowledge and participants' opinions. Numeric rankings from all participants can be brought together in a cumulative average. To achieve this, a number of multi-criteria voting methods are available, such as the Analytic Hierarchy Process (AHP) and others. Their use requires experience as well as moderation skills.
- **Discussion of value chain options and validating a given choice:** When a value chain has already been chosen, stakeholder meetings can validate the choice. This can be a good opportunity

to bring stakeholders together, identify their interests, motivate them to participate in the project, and find out what they can contribute. A convincing presentation of the rationale for the choice of the value chain is crucial for such meetings. Opportunities should be explored for participants to guide the design and implementation of value chain development interventions.

STUMBLING BLOCKS

It is unlikely that the composition of stakeholders reflects all stakeholder interests in the various value chains to choose from. At best, participants should be chosen on the condition that they have a good overview of the situation in a broader set of value chains and not include value chain-specific stakeholders since they would be biased. Typical participants in such stakeholder meetings could include members of trade unions, chambers of commerce, cross-sectoral private sector associations, departments of government ministries, research organizations, development think tanks, and development agencies.

A thorough understanding of the value chain is enhanced through a functional analysis of processes in the various segments of the chain.

2. FUNCTIONAL VALUE CHAIN ANALYSIS

Interventions for value chain development can only be formulated based on a thorough understanding of the chain. Value chain developers may often focus on development goals such as income generation or poverty alleviation, neglecting the underlying technical processes that enable those development goals to be achieved. Value chains are characterized by activities of value addition and industrial transformation processes. To understand such activities and processes and the connection between them one needs to enter to some degree into the technicalities of conversion and transformation as well as in the organizational and economic details of interaction. The type of analysis required for such understanding is referred to here as "functional value chain analysis". Functional value chain analysis looks not only at all aspects of supplies, markets or processing, but also at the connections between them.

One problem in functional value chain analysis is that analysts can easily get caught up in the details of one or another aspect, losing sight of the whole picture. It is therefore important to assure the analysis covers the complete range of functional aspects of value chain development.

In the functional value chain analysis one would usually start with drawing a map of the value chain, i.e. a picture of how the industry functions. Figure 3 below shows the map of a generic value chain starting from the consumer and moving down to the producer. Figure 5 shows an example of a

The importance of detecting root causes in value chain development

A cocoa processor in Indonesia wanted to buy more cocoa beans from small-scale growers. An international development agency aiming at increased incomes for small-scale growers entered into a partnership with the processor. During the planning phase of the joint project a representative of the processor argued that farmers lack knowledge and technologies to produce larger volumes and better quality and urged the development agency to concentrate its efforts on training farmers. However, after two years of training, this argument was proven to be partly wrong. While knowledge and technologies have been available in the producer communities, what actually prevented farmers from producing more was the lack of finance to buy seeds and fertilizers as well as the lack of risk-minimizing forward contracts. A solid functional value chain analysis at the start would have revealed these constraints to value chain development.

TEN STEPS TO DRAW A VALUE CHAIN MAP

STEP 1: Collect information through desk research (existing studies, reports and statistics).

STEP 2: Define the nature of the main products of the value chain.

STEP 3: Define the various functions that occur in the value chain, such as input supply, production, assembly, processing, wholesale, export, retail, etc. Separate the functions graphically into segments, e.g. starting with input supply on the left and moving to retail on the right.

STEP 4: Specify types of actors and allocate them to the different functions. Use types of actors and not individual firms. Some actors can carry out more than one function.

STEP 5: Put arrows representing the flow of products from one actor to the next and include information on the type of contractual arrangements.

STEP 6: Specify end-markets and relocate actors and arrows accordingly. Define market channels such that end-markets are at the right end of the map.

STEP 7: Include generic categories of support services, e.g. financial services, transport, packaging, etc. Arrows can show which actors benefit from these services. Information can also be included on who the main providers of these services are.

STEP 8: Add data overlays when information is available, relevant and helpful for the chain analysis. Overlays can be represented for example by: N = Number of firms, V = Volume of product, or E = Number of people employed/engaged. Data can be collected from secondary sources, key informant interviews and/or surveys. Numerical data concerning scale (number of people and enterprises involved) should be segregated according to gender and concentration of poor.

STEP 9: Indicate where in the chain poor or marginalised people are concentrated.

STEP 10: Write a narrative explanation of the conditions in the chain in order to refer to important aspects not covered in the map.

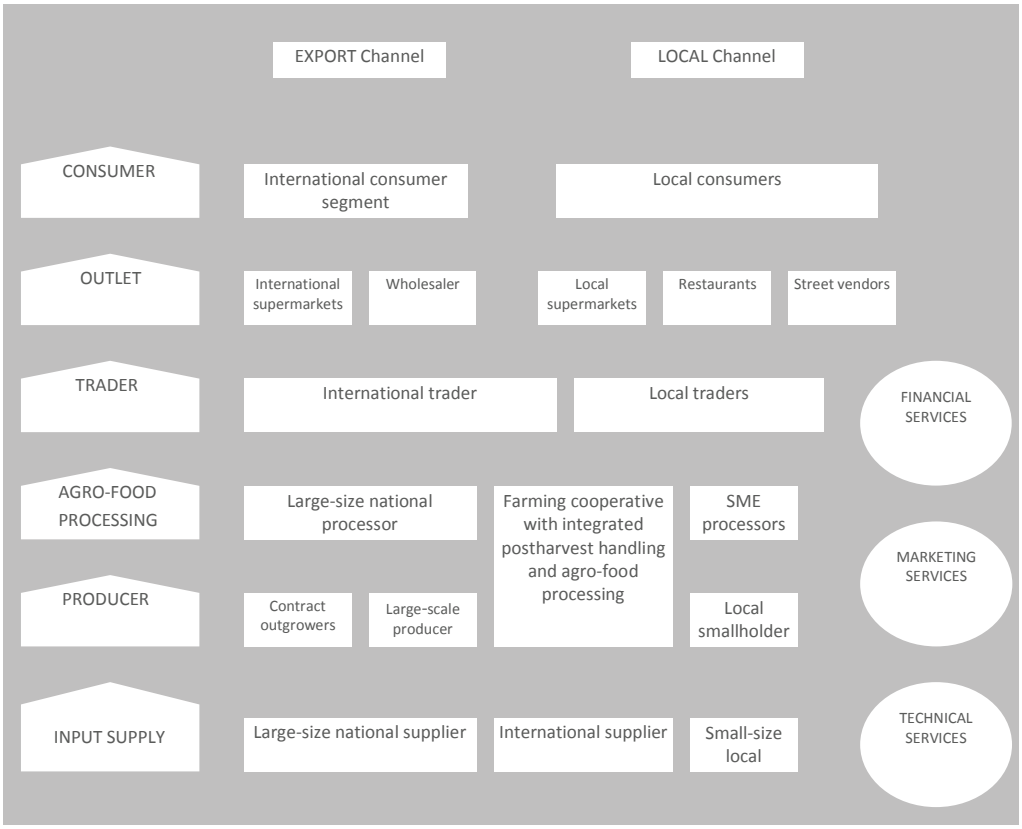
map of the cashew value chain in Tanzania with inverse logic: moving from the producer to the consumer.

Developing a value chain map is an iterative process. The map's level of detail depends on the ambitions of the analysis and of the value chain support programme that might follow. Reaching a certain degree of detail can become quite complicated and time-consuming. Most likely one will start to draw a map at an early stage with the limited information at hand. This helps identifying gaps for which additional information must be sought. At the end a version should be available that has been corrected and revised several times by different experts knowledgeable about certain aspects of the chain.

Bear in mind that there is no final map. As the value chain develops and becomes subject to market forces and development interventions, it keeps on changing. A continuous mapping exercise may be useful to monitor such changes. Value chain analysis needs to be updated and revised all the way through the project cycle as stakeholders and managers learn more about the value chain.

Many tools for value chain mapping and functional analysis are available and analysts can adapt these based on contextual requirements and their experience. Without attempting to summarize the tools available for functional value chain analysis, this section points out some important issues to be considered when conducting a value chain analysis that ultimately enables an integrated view of the value chain's functioning. It is structured around five questions: 2.1 Are the nature and diversity of the end-products sufficiently understood? 2.2 Which functions and actors are involved in generating the end-product? 2.3 Are the prevailing product flows and related business interactions sufficiently understood? 2.4 Is the information adequately visualised? 2.5 Does the analysis build on existing data?

Figure 3: Generic Value Chain Map



Further Reading on Functional Value Chain Analysis

- UNIDO (2011). Diagnostics for Industrial Value Chains: An Integrated Tool. UNIDO, Vienna, Austria. Available at: www.unido.org
- AsiaDHRRA (2008). Value Chain Analysis Report: Cambodia, Philippines, Vietnam. Asian Partnership for the Development of Human Resources in Rural Asia. Manila, Philippines. Available at: www.asiadhrra.org
- Bernet, T., Thiele, G. and Zschocke, T. (2006). Participatory Market Chain Approach – User Guide. International Potato Centre Lima, Peru. Available at: www.infoandina.org
- M4P (2008). Making Value Chains Work Better for the Poor: A Toolbook for Practitioners of Value Chain Analysis. Tool 3 Governance. Department for International Development (DFID). Available at: www.valuechains4poor.org
- New Zealand Business Council for Sustainable Development (2003). Business Guide to a Sustainable Supply Chain: A Practical Guide. Available at: www.nzbcsd.org.nz/supplychain
- USAID (no date). Value Chain Mapping Process. Micro Links Wiki. Available at: http://apps.develebridge.net
- Springer-Heinze, A.,(2007). ValueLinks: The Methodology of Value Chain Promotion. GTZ, Eschborn, Germany. Available at: www.value-links.de

2.1 ARE THE NATURE AND DIVERSITY OF THE END-PRODUCTS SUFFICIENTLY UNDERSTOOD?

Common functions in value chains

- Input supply
- Primary production
- Sourcing of supplies
- Processing, transformation and assembly (can be involved in various steps of transformation)
- Transport
- Packaging and handling
- Wholesale
- Export
- Retail

Supporting services:

- Business services such as consulting and accounting
- Quality and process certification
- Research and laboratory services
- Financial services

For each of these functions, several sub-functions can be defined.

The question focuses on a better understanding of the products that come out of the value chain.

WHY THIS MAY BE RELEVANT

A wooden chair is a different product than yoghurt; obviously there are different inputs, processes, technologies and knowledge engaged in the production of these two products. The end-product, or the product that after all transformation stages finally reaches the consumer, determines the shape of the value chain. Therefore, it is useful for any value chain analysis to address the nature and type of all products (there can also be a whole range of products) that the value chains generate.

WHAT TO CONSIDER

Two important features of products are:

- Product sophistication: the level to which knowledge and technology is used in its production; and
- Degree of transformation: the relation of value at purchasing level to value of raw material used.

For example, the cotton value chain reaches into a large number of end-products such as yarn, garments, and oils and cake from cotton seed that are less sophisticated and have a lower degree of transformation. If the focus is on a product with a higher degree of transformation, e.g. t-shirts, then the chain traces back to raw materials such as cotton, but also other materials like dye and plastic for packaging as well as cutting and sewing machinery.

Information about these two parameters can be gathered in interviews with product managers and technicians engaged in production, processing and quality issues.

STUMBLING BLOCKS

By defining the end-product the frontiers of the value chain are also determined. Here one

needs to be careful to avoid being too narrow or too broad. For example, considering fresh green beans as the main end-product of a value chain may be too narrow as most producers and processors in the value chain also cover other fresh and preserved vegetables. However, considering fruits, vegetable and ornamentals plants as end-products would broaden the scope to too many different players that have nothing in common.

The end-product can only provide an initial indication about value chain inputs and processes. Since the same end-products can be produced through various processes, further analysis is required (see 2.2) to understand how the chain functions.

There may be a wide range of different products that the analyst finds too difficult to cover. In this case the analyst should at least try to describe the nature of the most important products of the value chain.

The nature of the end-product in the Bihari banana value chain:

An analysis of the banana value chain in the Indian state of Bihar revealed that due to the perishable nature of the end-product, fresh bananas, in combination with missing infrastructure for transportation, bulking and processing, there is limited value addition in the commercialization of the product. Further transformation, e.g. towards processed banana chips and banana flour would change the nature of the end-product solving the problem of perishability and increasing the value added.

Source: Bihar Rural Livelihood Project (2007) NR International Limited. Available at www.brlp.in

2.2 WHICH FUNCTIONS AND ACTORS ARE INVOLVED IN GENERATING THE END-PRODUCT?

The question aims at a better understanding of the actors that are engaged in the value chain and the functions they fulfil.

WHY THIS MAY BE RELEVANT

A common mistake in value chain analysis is to focus only on one or a few groups of value chain actors, missing out on others who cover important functions in the chain (and could benefit from its development). Support to a limited number of actors in selected segments of the value chain may also jeopardize the overall success of a value chain development support programme.

WHAT TO CONSIDER

The making of each product involves a number of transformation processes carried out by different actors. Depending on the product, the functions that actors fulfil in the value chain can be very different. For example, it takes many steps to put a mechanical watch together and many firms engage in producing raw materials and components, assemble clockworks, and put together the final watch. Various actors have different functions in the watch value chain. On the contrary, the production of a plastic bucket can be performed by one company that mixes the raw material, polyethylene, puts it into moulds and assembles the bucket handle.

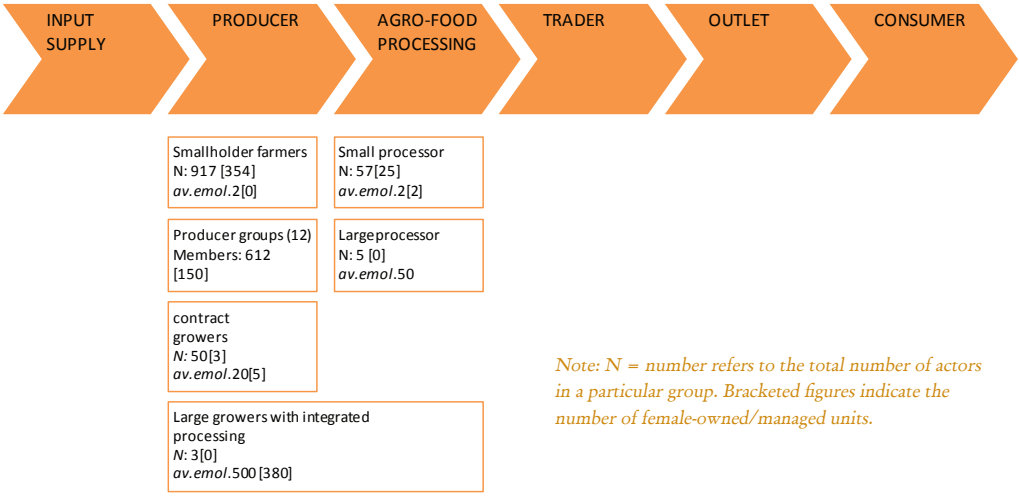
Value chain actors are the firms and individuals who assume different functions in the value chain, engaging directly in production, processing, trading and marketing. They usually become the owner of the product and/or take active market positions. One can define certain categories of actors in the cotton value chain- for example, primary producers, ginners, garment manufactures, and branders- and attribute different functions to them, including primary production, transport, primary processing, manufacturing, and retailing. Often certain actors can perform more than one function.

The figure below illustrates how the number of actors engaged in two segments of a value chain can be included in a value chain map. The figure does not include the number of actors engaged upstream in input supplies and downstream in trading and marketing. However, it still provides important information that can orient the design of the project. For example, one can make a decision to support poor smallholder farmers and small processors with special knowledge and technology packages that fit the size of their operations. Alternatively, packages can be propagated for larger production and processing units in which important economies of scale can be realized, contributing to the overall competitiveness of the chain.

STUMBLING BLOCKS

Analysts may find it difficult to identify all the various actors that supply intermediary products to main actors (processors) in the value chain. While it may be easier to identify the number of actors involved in functions such as processing or exporting (because the number is few or the government monitors activities), in other sectors such as informal trading, backyard processing or retailing, identifying the number of actors engaged is much more difficult. Nonetheless, the analyst may want to interview some of these actors and make assumptions about the total number based on the information retrieved.

Figure 4: Example on how to insert numerical data into a Value Chain Map



Note: N = number refers to the total number of actors in a particular group. Bracketed figures indicate the number of female-owned/managed units.

2.3 ARE THE PREVAILING PRODUCT FLOWS AND RELATED BUSINESS INTERACTIONS SUFFICIENTLY UNDERSTOOD?

Contractual arrangements in Vietnam's cashew value chain

In Vietnam, the establishment of contracts between cashewnut processing enterprises and cashewnut growers has been found to provide an effective link contributing to the modernization and improved functioning of the value chain. The 'outgrower' contracts developed for this purpose assure that processors are supplied with raw cashew nuts of the required quality and quantity. In return, farmers are assured their products are purchased and get paid in advance to be able to invest in production. There are also larger processors that have developed contracts for outsourcing part of the labor-intensive processing to smaller processing units, paying them advances to purchase iron bins for toasting and peeling machines. In addition, some larger processors have developed contractual relationships with international buyers for continuous delivery of containers of processed kernels.

Source: Southeast Asian Network for Agroforestry Education (2006). Cashew Nuts Supply Chains in Vietnam: A Case Study in Dak Nong and Binh Phuoc Provinces, Vietnam. Available at www.socialforestry.org.vn

This question emphasizes the importance of understanding how primary, semi-processed and final products are handed from one actor in the chain to the next and how this flow of products is influenced by the type of business relationships between those actors.

WHY THIS MAY BE RELEVANT

The product flow is the nervous system of the value chain. Products get from one actor to another on the basis of contractual arrangements that can be random and informal or formalized. The more formalized the contractual arrangements are, the more actors can reduce risks and engage in forward planning. If the contractual arrangements are not beneficial to both buyers and sellers, the flow of products and consequently the functioning of the value chain are placed in jeopardy. The study of product flow and the underlying contractual relationships is crucial in any value chain analysis.

WHAT TO CONSIDER

The flow of product towards end-markets establishes the main connection between the different actors in the value chain. A first important piece of information is identifying what types of actors deliver what kinds of products to whom. It is also important to find out what volumes and qualities are delivered, as well as the end-market(s) to which products are directed.

Having understood from whom to whom the product flows, it is then useful to look into the contractual relationships between the actors, be they verbal or written in nature. Contracts between value chain actors can typically include various elements such as those below:

- The quality and quantity of the products or services to be delivered on behalf of the supplier or service provider.
- The practices that need to be applied in the production and the inputs being

used on behalf of the supplier (e.g. for certification purposes).

- The date and form (packaging) of delivery of the products and services.
- The guarantee to purchase a certain (minimum) quality and quantity on the part of the buyer.
- Premiums to be paid in case of higher quality delivery.
- Date and location of payment, perhaps divided into various instalments. Payments can be advanced (to allow producers to invest) or delayed (to allow the buyer to process and sell).
- The provision of additional inputs as part of an advance, e.g. seeds, fertilizers and pesticides for farmers.
- The penalties that apply in case of non-compliance with the contract.
- The period of time for which the contract is valid.

The type of contractual arrangement that buyers and suppliers engage in also depends on the value chain. For example, in the ornamental plants industry buyers establish contracts with suppliers that determine the quantity and type of plant to be delivered way in advance. This allows growers to organize their production. In the fresh vegetable value chain, on the other hand, orders can change daily. Contracts could therefore be based on a framework agreement in which a supermarket or food-processing company agrees to purchase a minimum quantity of products, but will pay a premium for out-of-scope delivery. Buyers can also stipulate protocols for production and packaging to ensure stable quality and the characteristics of the products they purchase.

STUMBLING BLOCKS

A contractual arrangement is not necessarily shaped so as to allow optimal functioning of the value chain; it may instead be subject to the interest of the more powerful actors in the value chain. For example, outgrower contracts may stipulate farmer obligations in terms of quality and delivery, but be less specific about buyer obligations to purchase products at a certain price. Making contractual relationships less one-sided can be considered an important element in improving the functioning of the value chain. It can help reduce risks and improve the organization of businesses through the extension of the planning horizon for both sides, buyers and sellers.

2.4 IS THE INFORMATION ADEQUATELY VISUALIZED?

The question suggests that functional value chain analysis must engage in the understanding of how the chain is governed, meaning how power and dependency relationships between the actors in the various segments of the value chain determine its functioning.

WHY THIS MAY BE RELEVANT

Identifying dominant actors and whether they are buyers or suppliers is an important step in understanding how actors in the chain are making decisions (freely or dependently) and if they are able to reap benefits.

WHAT TO CONSIDER

Firms of a certain size and market share can influence the conditions under which business partners in the value chain operate. For example, such lead firms can set product specifications for suppliers, even detailed product blueprints prescribing the production process and the application of certain technological, environmental or labour standards, and how much is to be produced, including scheduling and logistics. The dominant actor could be an end-buyer or retailer in which case one would talk about a buyer-driven value chain. In other cases, a manufacturer or a supplier of primary materials "drives" the value chain, making it a supplier-driven value chain. However, there are also value chains where many firms operate in parallel and no dominant player exists.

Certain industries such as footwear, garments, fashion, and toys are commonly dominated by buyers, including wholesalers, distributors, or branded retailers. In these industries most value added is generated where buyers are closely linked to end-markets and have direct relationships with distributors and brand-building companies. In other industries the chain is dominated by firms capable of integrating several strands of technology into one product (airplanes, cars, ships), so their power comes from the superiority in advanced manufacturing and integration capabilities. Finally, there are processing industries where lead firms can be either branders or the large processors who developed their own distribution and marketing networks. The adjacent box provides questions the analyst wants to ask when identifying dominant actors and the type of governance that prevails in the value chain.

STUMBLING BLOCKS

Information on dominance and governance is usually not readily available from reports or statistics but requires a nuanced data collection and interviewing with key actors in the chain. While data on firm size and market share may only provide some proxies about actor dominance, it is through understanding the contractual relationships and the behaviour of business partners that one gets hold of the governance model practiced in the chain. Conducting this type of analysis requires a deeper understanding of the organization of value chains in general and experience with governance models in other chains. The analysist may need to reach back to the literature on value chain governance and particularly discuss the results with analysts of other value chains.

2.5 DOES THE ANALYSIS BUILD ON EXISTING DATA?

This question highlights the importance of using existing materials for value chain analysis.

WHY THIS MAY BE RELEVANT

While value chain analysis must be based on evidence from quantitative and qualitative data, often too much effort goes into drawing new value chain maps and writing yet another value chain analysis involving substantial data collection, interviews, development of statistics and data analysis already available elsewhere. In fact, most value chains around the world by now have already been subjected to some sort of analysis and it is important to access this type of information. Even so, value chain analyses can be incomplete or outdated and should be complemented with additional data and analysis.

WHAT TO CONSIDER

Certain information already at hand (see section 1.3) can provide a starting point when one is engaged in value chain selection. For both mapping and analysis analysts should consider moving from desk study of existing statistics and studies, to targeted collection of primary data that helps verify and complement existing information. Primary data collection can be achieved through interviews with value chain actors and key informants, as well as focus groups. Both quantitative and qualitative data are important to understand how the value chain functions, along with development opportunities and constraints. Aspects to consider when collecting data include:

- **Defining where the value chain ends:** Generally it is more advantageous to determine the borders of the value chain by defining an end-product (see section 2.1) than by choosing a geographical region. There may be geographical boundaries to agricultural production and processing (for example, certain crops may only grow in the highlands and processors may only operate close to urban centres with good connection to transport infrastructure) but such regions usually have many linkages with input suppliers, buyers, service providers and government agencies.
- **Sampling of chain actors:** It can be useful to pick certain representative actors in the value chain rather than attempting to collect information from them all. In the sampling one would need to consider different categories of actors, e.g. small, medium and large processors, and different localities where they operate (see example in the box). While statistically robust sampling may require visits to many actors, it is often possible to fall back on more practical methods. For example, one could stop interviewing a category of actors when an additional interview is not likely to elicit new information.
- **Interviews:** Conducting interviews and using questionnaires for value chain analysis is no different than any other type of research. Questionnaires can be helpful when many interviews of the same type are to be made. For exploration and working with key informants, interview guidelines and even unstructured interviews may be useful. For the latter it is useful to maintain records. Qualitative data should always be triangulated, meaning if a reference is made to some other party, its validity should be checked through interviews with said party. In addition to data on products and actors, interviews can thus be used to explore issues such as lack of interaction between chain actors, existing capacities, use of technology, information sharing, new market trends, and upcoming challenges and opportunities. Focus group interviews can generate ideas, identify potential conflicts and build consensus among various groups of stakeholders.
- **Working with key informants:** These individuals have special knowledge about the value chain and can reveal a whole set

Sampling of actors in a study of the Sri Lankan Rambutan Value chain

In a diagnostic of the Rambutan sub-sector, analysts at the International Centre for Underutilized Crops applied a sampling framework across regions and segments of the value chain. Segments with more actors featured more prominently in data collection.

Location	Kandy	Colombo	Malwana	Waraka-pola
Farmer	-	-	14	11
Con-sumer	50	50	-	-
Collector	-	.	1	2
Exporter	-	3	-	-
Exten-sion officers	-	-	1	1
Fertilizer seller	-	-	2	2
Fruit re-searcher	4	2	-	-

Source: Barry, I.M. (2006). A Value-Chain Analysis for Sri Lankan Rambutan Subsector. The International Centre for Underutilized Crops. Colombo, Sri Lanka. Available at www.icuc-iwmi.org

of information which would otherwise need to be collected from many different sources. Key informants can be found in governments, leading private sector firms, universities and consultancy firms and development projects. Making them part of the value chain analysis team is often an effective way to access their knowledge.

- **Be creative, look for opportunities:** Data collection should go beyond the existing situation of the value chain and open up opportunity for discussion and reflection about future innovative ways to develop the value chain. The identification of development champions, innovators and brokers, and understanding how they operate, can provide revealing insights for guiding the value chain development path.

STUMBLING BLOCKS

Value chains develop quickly and value chain documents can rapidly become outdated. New players enter the market, others drop out and novel end-markets might arise. A two-year-old value chain map may not be valid anymore. Rather than starting all over, the analyst needs to identify the changes and collect data on the new situation. Former studies may no longer be reliable and should be critically evaluated and brought up-to-date.

To understand the social dimensions in the value chain poverty and gender issues need to be addressed.

3. SOCIAL VALUE CHAIN ANALYSIS

While functional value chain analysis provides information regarding technical and business issues, social value chain analysis looks at the way the value chain and its possible development will affect value chain actors and society.

Value chain development is never neutral in its effect on society; usually there are winners and losers depending on engagement in production and processing and positive and negative effects on other sectors and on sustainability and natural resources. Hence, focusing on economic growth and competitiveness in value chain development is not enough; one also needs to find out how the various groups of the society are affected.

Evidence from global value chains analysis has shown that global players increasingly dominate their business partners upstream and downstream in the value chain, imposing specific rules and acting as gatekeepers while firms in developing countries face increased competition and pressure to innovate, provide higher quality products and respond to ever-rising and differentiating consumer standards. Under these conditions, participating in a value chain does not only bring benefits to producers and processors in developing countries, but may also come at some cost. The aim of social value chain analysis is to find out what these effects are.

Many tools and methods exist for this purpose and can be applied according to analysts' requirements and experience. While these tools will not be summarized here, this section draws attention to important issues that should be considered for a comprehensive view of the social effects of value chain development: 3.1 Are rewards and risks adequately captured? 3.2 Are poverty issues adequately covered? 3.3 Are working conditions sufficiently examined? 3.4 Is youth being considered in value chain development? 3.5 Are gender-based constraints adequately understood?

Further Reading on Social Value Chain Analysis

- Baan, E. and N. Janssen (2006). Using the Value Chain Approach for Pro-Poor Development: Experiences from SNV in Asia. SNV Netherlands Development Organization. The Hague, The Netherlands. Available at: www.snvworld.org
- Bolwig, S.; S. Ponte, A. du Toit, L. Riisgaard and N. Halberg. (2008). Integrating Poverty, Gender and Environmental Concerns into Value Chain Analysis: A Conceptual Framework and Lessons for Action Research. DIIS Working Paper 2008:16. Available at: www.diis.dk
- Coles, C. and J. Mitchell (2011). Gender and agricultural value chains: A review of current knowledge and practice and their policy implications. ESA Working Paper No. 11-05. Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations (FAO). Rome, Italy. Available at: www.fao.org
- Gammage, S. (2009). Gender and Pro-Poor Value Chain Analysis: Insights from the Gate Project Methodology and Case Studies. USAID. Washington D.C., U.S.A. Available at: www.usaid.org
- Mitchell, J.; J. Keane and C. Coles (2009). Trading up: How a Value Chain Approach Can Benefit the Rural Poor. COPLA Global: Overseas Development Institute. London, U.K. Available at: www.odi.org
- Riisgaard, L., S. Bolwig, F. Matose, S. Ponte, A. du Toit & N. Halberg (2008). A Strategic Framework and Toolbox for Action Research with Small Producers in Value Chains. DIIS Working Paper 2008:17. Available at: www.diis.dk
- Riisgaard, L., Fibla, A.M., and Ponte, S.(2010): Evaluation Study: Gender and Value Chain Development. The Evaluation Department of the Danish Foreign Ministry. Copenhagen, Denmark

3.1 ARE REWARDS AND RISKS ADEQUATELY CAPTURED?

This question asks if sufficient information has been gathered concerning rewards and risks for the various people engaged in and affected by development of the value chain.

WHY THIS MAY BE RELEVANT

Little attention has been paid to how participation in value chains exposes people to rewards and risks, an aspect often neglected by analysts who tend to focus on technical issues of production and marketing. Rewards and risks define the benefits that actors accrue from value chain development, not only those within the chain itself, but other groups in society. Often people only consider the benefits with regard to income, employment and poverty reduction of a few actors, but not of all parties affected, and more particularly, there can be indirect effects to consider. For example, people in another value chain may be positively affected by the availability of more services and technical capacity or negatively affected by labour shortages, or there may be negative effects on the environment, e.g., contamination from increased industrial activities.

WHAT TO CONSIDER

In general, all actors in the value chain should receive rewards without too much risk; otherwise the value chain may not function. Developing a value chain only to the benefit of one group may not work if other groups with important functions in the chain lose out.

When calculating rewards that businesses accrue when engaging in value chains one would examine sales, costs and profit. However, to assess rewards for households requires a different type of analysis taking into account not only additional incomes but improvements achieved in human, social and natural capital.

What are rewards?

Rewards are what people gain from engaging in a value chain. They include economic benefits as well as non-economic advantages such as improved livelihoods. From an economic point of view, rewards can be considered as a positive cost-benefit ratio (including monetary and non-monetary costs and benefits).

What rewards can result from value chains?

Rewards from participation in value chains accrue from the income and employment of value chain-related businesses and services. The outcome for each actor in the value chain that buys, sells or transforms products (some also transform) is a positive or negative margin. Rewards also relate to education and skills levels and resource accumulation

What risks exist in value chains?

Risks exist when there is a (higher) likelihood that a benefit will not materialize or that risk occurs. This can relate to monetary and non-monetary benefits, such as income or employment but also to impacts on the natural resource base and on people's livelihoods.

How to deal with risks?

- Review the potential risk scenarios
- Identify the categories of risk that could impact on actors in the value chain
- Rate the likelihood of each scenario
- Know the impact of each scenario
- Prioritize each scenario based on the impact on the poor and vulnerable
- Choose a path: eliminate, manage, mitigate, or live with each potential risk
- Establish cross-functional involvement to ensure all aspects are protected
- Test risk scenarios regularly to ensure that your plans remain effective

Various common risk scenarios exist in value chain development:

1. Value chain actors, particularly small farmers and resource-poor processors, may not be able to produce the quality and quantity of the products required by the main (international) buyers of the chain due to such factors as lack of education, lack of innovative capacities or too little time for learning and adjustment.

2. Value chain actors, particularly marginalised groups, may not have access to land, property, and financial resources to enter into production.

3. Farmers who switch from growing a mix of food staples to one particular cash crop catered to the value chain may risk becoming food insecure, especially if buyers stop purchasing from them or prices fall.

4. While less powerful and less developed actors may finally make it into the value chain, their rewards (profit margins and other benefits) are too low, tying up capital and labour that could be used for other activities.

5. Certain vulnerable groups, such as women, minorities and people from remote areas may be unable to obtain rewards from the chain due to limited capacities and access to resources, as well as social discrimination.

6. Actors who have been able to firmly engage in the value chain may be vulnerable to market shocks and abrupt changes in buyer policies, the appearance of strong competitors and changing trade regulations. In cases where they invested and tied up capital in production and processing, they may not be able to get out and suffer considerable losses. The outcome can be indebtedness and drifting deeper into poverty.

7. For certain groups, engaging in a particular productive activity can lead to changes in status and social ties. For example, a farmer who becomes a cereal miller and trader may lose backing from neighbouring farmers and be obliged to give people credit.

Another important point to consider is risk aversion. Engaging in new fields of production, processing and trade requires taking risks. While this may be possible for certain actors in the value chain, others who depend on their resources for survival (for example, because they live on less than a dollar per day) may be less inclined to invest their few resources in risky businesses and in the end, remain excluded from new income opportunities.

STUMBLING BLOCKS

Policy makers may find it very difficult to balance the various rewards and risk scenarios. Rushing into value chain development having considered rewards to be obtained by only one group of actors may be as erroneous as refraining from any development effort at all, because poor and vulnerable groups may be put at risk while a small group cashes in on major benefits. At the end it may be a matter of careful balancing, for which the analyst can provide important information on the rewards and risks that accrue for all the actors to be engaged in the value chain.

3.2 ARE POVERTY ISSUES ADEQUATELY COVERED?

This question encourages a more in-depth look at poverty issues in a value chain.

WHY THIS MAY BE RELEVANT

Effects on poverty are often neglected when planning value chain development interventions. The analysis should contribute to understanding how the development of the value chain contributes to reducing poverty among various groups of actors.

WHAT TO CONSIDER

A number of assumptions are often made about the effects of value chain development and it is important to verify if these also hold true with regard to poverty reduction. Such assumptions include:

1. The engagement of small farmers and resource-poor processors in value chains, e.g. by becoming suppliers to national and international processors and marketers, automatically generates greater income and benefits for them. Here the analyst may want to verify whether costs of production and risks of engagement are not too high for poor farmers and processors.
2. Small farmers are able to comply with standards and regulations. Compliance with standards and regulations may be too difficult for poor people to achieve. The investments to be made may ultimately be too great and the acquisition of additional knowledge and technology too demanding.
3. Poverty reduction potential lies only in the primary production segment of the value chain. Enable poor farmers to participate in the production of primary agricultural products– this is the objective of many value chain developers. The analyst, however, may also study if businesses and jobs created and sustained in the processing and transformation segments of the value chain can also be substantial. In fact, creating rural economies outside primary agricultural production is a first step to a positive transformation of the rural sector. Artisanal transformation of agricultural products can become an important source of income for rural households. Setting up small and medium processing enterprises is often the starting point of a growing diversification of the rural economy, providing jobs and income to households.

In essence, analysis of the poverty reduction dimension in a value chain requires consideration of rewards and risks to not only one group but all groups of actors that are and can become engaged in the value chain. Particularly, the analyst should look at the rewards and risks that accrue to poor people at three different levels: primary agricultural production, the various steps of processing and the provision of inputs and transport, marketing and other services (see Figure 5).

The development of a value chain is not a fixed package providing benefits to only one or another group. In fact, through intelligent design of contractual arrangements and value chain support measures, certain vulnerable groups may be able to obtain rewards from participating in the value chain.

STUMBLING BLOCKS

Again, policy makers may find it very difficult to balance the various rewards and risk scenarios that exist for the poor groups in the value chain. Analysts can influence these decisions by providing solid information on where positive effects for the poor could arise and vice versa. If rewards accrue only for the wealthier groups engaged in the value chain while the poor remain at very low income levels, there is evidence that value chain development is not pro-poor. However, interventions can be designed to make value chain development pro-poor. A general rule is that at least one vulnerable group in the value chain needs to receive sufficient rewards to alleviate their levels of poverty.

Figure 5: Tool to Investigate How the Value Chain Affects Poor People in the Value Chain

	Groups engaged in primary agricultural production	Groups engaged in various steps of processing	Groups engaged in provision of inputs, transport and other services
What are the attributes (race, gender, caste, ethnic group, language, skills, assets, location, etc.) of the poor who currently and potentially participate in the value chain? Are these attributes decisive for their participation? Could other poor groups also participate?			
What roles do the poor play in the value chain? Are they landless labourers, independent business operators or dependent workers? Do they provide family labour, or engage in home processing? Can these roles be changed?			
How variable and insecure is the income and employment of the poor? What further risks exist to losing income? What are the common contractual arrangements? Could the stability of work and income be improved?			
What are the financial constraints and risks the poor are exposed to? Do they have financial institutions that they can approach to get loans? Are the conditions of the loans allowing them to benefit?			
What alternatives exist? Can the poor easily engage in other profitable work? Can they easily exit from their engagement in the value chain?			
Who controls key productive resources e.g. land, water, access to employment? Do they form a recognisable social group? What is their composition?			
Will land use changes associated with chain participation result in displacement of local people?			
Can food security, status, credibility etc. be negatively affected?			

Source: Adapted from Bolwig et al. 2010

3.3 ARE WORKING CONDITIONS SUFFICIENTLY EXAMINED?

This question emphasizes that value chain development should also aim at improving the working conditions of the people employed in the value chain.

WHY THIS MAY BE RELEVANT

Agricultural value chains provide employment, be it to independent farmers or dependent labourers who work on farms, plantations, in processing and transformation plants and in the associated service sector. The creation of employment is a development goal in itself, and one of the challenges of value chain analysis is to get clarity on how many men and women are actually employed in a value chain and how many could find additional employment with further development of the chain.

However, sometimes accompanying the drive for more employment is the challenge that more people may become engaged in unsafe, unhealthy and underpaid work. This makes it necessary to look at prevailing working conditions in the various segments of the chain and how accelerated value chain development could affect these, both positively and negatively.

WHAT TO CONSIDER

Employment should come with certain qualities such as those specified in the standards of decent work of the International Labour Organization. In particular, analysts should ask the following questions:

- What characterises local employer – employee relationships?
- Who works for whom?
- In what activities or sectors is labour most commonly hired?
- What are the conditions of employment?
- Who is excluded from employment opportunities?
- Which employers would have incentives to improve working conditions?
- What is currently preventing them from taking action?

What are standards of decent work?

- Social Protection: Is the physical and psychological well-being of workers being maintained, e.g. through food security programmes? Are health risks mitigated? Is occupational safety and health at work promoted to prevent injury, disability, death and disease?
- Standards and rights at work: Are measures in place to prevent discrimination at work from superiors and colleagues? Is child labour ruled out? Do women and men work under the same conditions, e.g. equal pay, access to jobs, access to sanitation etc? Is social security coverage adequately applied in compliance with national legislation?
- Individual development: Does the employer provide opportunities for skills development, training, and career development in and outside the company?

Source: ILO, 2009.

There is more to improved working conditions than extra costs; they can also enhance companies' ability to compete and respond to market requirements. Poor working conditions, on the other hand, can hamper the performance of any business.

STUMBLING BLOCKS

Poor working conditions can result from lack of information about measures to improve them and the absence of regulatory agencies to enforce compliance with standards. While passing on information about improvement measures is easily achieved in value chain development projects, changing the performance of regulatory agencies and even national legislation is more challenging.

3.4 IS YOUTH BEING CONSIDERED IN VALUE CHAIN DEVELOPMENT?

How can youth participate in value chain development?

- Young people can become dynamic entrepreneurs.
- They can find jobs in the value chain.
- They can provide innovative solutions and new ideas.
- They can engage in hard and challenging work.
- Youth can bring about and flexibly adapt to change.

This question aims at making the engagement of youth an integral part of value chain development.

WHY THIS MAY BE RELEVANT

Value chain development should allow young people to find income and employment and build careers. The engagement of unemployed youth can be a main objective driving the development of value chains. This opens up prospects of integrating educational and youth-targeted strategies and activities in order to include young people in value chain development processes.

WHAT TO CONSIDER

The analyst may examine the type of barriers to entry into the value chain that exist for young people, such as lack of skills, motivation, and education or limited access to land and credit. Also it is important to find out whether there are already youth and entrepreneurship development programmes in place. Value chain interventions may be developed to improve the situation of young people and actively engage them in crucial businesses in the value chain through different means.

- Encouraging young girls and boys to participate in businesses and take leadership and management roles. This can be achieved through motivational seminars, group discussion, advertising in the media, and the organization of fairs and demonstration days.
- Supporting educational institutions (including schools, colleges and vocational centres) to develop curriculum and actively teach agricultural and business-related subjects
- Developing on-the-job training programmes in which skills and capacities are gradually upgraded through courses and visits to farms and businesses to monitor and showcase improvements
- Identifying capable young leaders and helping them with start-up packages that include access to equipment, training, linkages with buyers and business administration support
- Negotiating with micro-finance institutions to develop service packages specific to young entrepreneurs

STUMBLING BLOCKS

The analyst should bear in mind that it may not be easy to identify areas in the value chain to engage youth. They may quickly jump on opportunities, but if there is no immediate profit, lose interest and divert to other businesses. The analyst also needs to consider whether the risk profile of young people may render them particularly vulnerable to exploitative employment conditions, running into debt and taking business risks they are not able to assess properly.

3.5 ARE GENDER-BASED CONSTRAINTS ADEQUATELY UNDERSTOOD?

The question aims at making gender an integral part of the value chain analysis.

WHY THIS MAY BE RELEVANT

Gender-based constraints are restrictions on men's or women's access to resources that are based on their gender roles or responsibilities. They are often insufficiently understood when designing value chain projects.

WHAT TO CONSIDER

To systematically examine gender-based constraints one can look at different dimensions[3]:

- **Access to assets:** In order to be economically active and run a business one needs access to assets such as land, capital, information and extension services and education. However, with its social rules and institutions, society often denies women access to certain assets and in consequence they remain in the more marginal and less profitable business activities.
- **Social roles:** Belief systems determine responsibilities for men and women, their mobility and the activities they engage in. Beliefs can refer to men and women as economic actors, their role as association members, appropriate work for them to engage in and their rights. Often such roles can be shaped so that women have less time available and fewer rights to participate in certain activities. To illustrate, women may be limited to participating in education programmes and are under-represented in mixed gender producer associations and business groups.
- **Laws, policies and regulatory institutions:** As with social beliefs, laws, policies, and institutions give people certain roles. For example, gender affects rights to legal documents, land ownership and inheritance, representation in social groups, employment, and access to credit.

Why gendered value chain analysis is important: the case of fisheries in Vietnam

A programme to develop the fisheries sector in Vietnam assumed that the provision of loans and development of port facilities would automatically benefit local women – simply by providing a better working environment. However, a genderized value chain analysis revealed that the programme not only failed to impact positively on women, it even affected them negatively because larger boat owners with access to loans became more independent from women traders and ice sellers. Further, the modernization of the ports is likely to reduce demand for the type of services and businesses in which less-qualified women, in particular, currently engage in the niches of fish marketing and processing.

Source: Asian Development Bank (2001). Special Evaluation Study on Gender and Development. ADB. Manila, Philippines.

- **Risk profile:** Women are often more risk adverse than men due to their household responsibilities and the fact that they have fewer resources or alternative options to count on, such as access to land or finance.

The challenge for the analyst is to capture the gender-based constraints for women to participate in the value chain adequately. Figure 6 provides some useful guiding questions to be asked at the level of farmers and processors.

[3] Adapted from Rubin, D., Manfre C., and Barret, K. N. (2009): Handbook: Promoting Gender Equitable Opportunities in Agricultural Value Chains. USAID, Washington.

Figure 6: Guiding Questions to Identify Gender-based Constraints

	Producers level	Processors level
Access to assets	▪ How do men and women obtain land? ▪ How do they get information on new farming practices? ▪ How do they get information on prices?	▪ How do men/women raise the initial funds to purchase equipment and obtain businesses?
Social roles	▪ Are there aspects of production that constitute hardships for women? ▪ Are there aspects of production that discourage women to engage? ▪ Who (man or woman) makes decisions about the farm enterprise and crops to produce? ▪ Who (man or woman) negotiates sales and receives the income?	▪ Are men or women better suited to particular jobs? ▪ Are there differences in the supply or quality of the product that one receives from men or women? ▪ What kind of jobs do men and women engage in at the plant/factory? ▪ Who (man or woman) negotiates sales and receives the income?
Laws, policies, regulatory institutions	▪ Are there laws or policies that make it hard for women to run a farm as a business?	▪ Are there laws or policies that prohibit men or women from performing particular jobs in the business/ plant/factory?
Risk profile	▪ Do women maintain food security by cultivating staple crops?	▪ Do women provide more stable income than men due to their engagement in processing?

Results from a gender-based analysis in the dairy value chain

Condition(s) of inequality:

- Fewer women than men are members of the dairy producers association although women are the primary caretakers of the dairy cows.
- Fewer women have payment accounts with the local dairy processing plant because the accounts are based on association membership.
- Women do not always receive full payment for the milk they sell.
- The dairy association requires titled ownership to land, but women are rarely included as property owners on spousal property.

Gender-based constraint:

Women are constrained from full membership in the dairy association and thus do not receive full payment for the milk they supply because they are not registered landowners.

Consequences for the project:

- If the purpose is equal terms of participation in the chain, the project should design strategies and activities to overcome the constraints of participation for women, e.g. either by aiming to change the criteria of membership or by offsetting shared land titling schemes.
- In order to translate into effective economic advancement for women, however, activities may be necessary to facilitate women's equal participation or even leadership in associations in order to gain the necessary bargaining power that may lead to actual economic benefits.

Source: Rubin et al (2009: 90ff).

Developing value chains with a gender-indifferent approach runs the danger of contributing to further discrimination of women in the value chain. The analyst should contribute to an improved understanding of constraints to women's engagement in value chains so that interventions of value chain support can be designed to address these constraints, e.g. special women's education programmes or others that enable them to access land and credit and take their place in the business community.

STUMBLING BLOCKS

At first glance men and women may often seem to have equal opportunities to engage in the value chain. This is rarely the case. For a nuanced understanding of gender-based constraints one needs to explore the social roles and the many activities that women are engaged in. This requires empathy and exploratory interviews at the household, community, group and business level.

The design of a value chain development support project should be based on solid strategy development and planning and stakeholder participation.

4. DESIGN OF VALUE CHAIN INTERVENTIONS

Value chain analysis produces useful information to design projects and programmes supporting value chain development. This is similar to any other project design except that it focuses on various points and actors in the chain simultaneously. Strategies are usually developed through an iterative process and refined in negotiation between the beneficiaries and other stakeholders.

Intervening at one point in a value chain can have impacts for participants elsewhere since all of the various parts of a value chain are interconnected. For example, strengthening value chain actors downstream, towards the market, might be more effective than supporting primary producers upstream. Alternatively, to implement certain activities, others may be required first. This means that the sequencing of activities must be carefully considered and alternatives at hand to replace strategic activities in case they fail.

In the end, the design of a value chain intervention should reflect best options on how development constraints can be overcome. Some of the critical issues planners should take into account include the following: 4.1 Were value chain development strategies identified in a sufficiently rigorous manner? 4.2 Have the identified strategies been adequately evaluated? 4.3 Were practical action points defined? 4.4 Are adequate competences built into the project? 4.5 Have stakeholders participated in project design?

Further Reading on Design of Value Chain Development Interventions

- IFAD (2009): Sharing and Documenting Good Practices in Value Chain Development. Writeshop document, writeshop held November 2009, IFAD Asia and the Pacific Division
- Lusby, F., (2007): Value Chain Program Design: Promoting Market-Based Solutions for MSME and Industry Competitiveness. USAID, Washington
- Springer-Heinze, A., (2007): ValueLinks Manual – The Methodology of Value Chain Promotion. GTZ Eschborn. Available at www.valuelinks.org

4.1 WERE VALUE CHAIN DEVELOPMENT STRATEGIES IDENTIFIED IN A SUFFICIENTLY RIGOROUS MANNER?

How to conduct an efficient brainstorming session on possible value chain development options?

- Gather and group similar constraints (and/opportunities) and brainstorm solutions for each group individually.
- The constraints can be prioritized by using a simple voting system before brainstorming on solutions.
- Use cards for this exercise. Distribute cards and ask each participant to write down their ideas and suggestions on the cards. Collect these cards and pin them to a board; group the cards and ask participants to prioritize.
- Discuss the findings of the brainstorming session in order to clarify the proposals made and characterise each proposal according to pertinent issues.

Source: Adapted from Herr, M. and M. Tapera (2008): Value Chain Development for Decent Work. A Guide for Development Practitioners. International Labour Organization. Geneva, Switzerland. Available at www.ilo.org.

This question highlights the need for analysts and developers to carefully craft value chain development strategies.

WHY THIS MAY BE RELEVANT

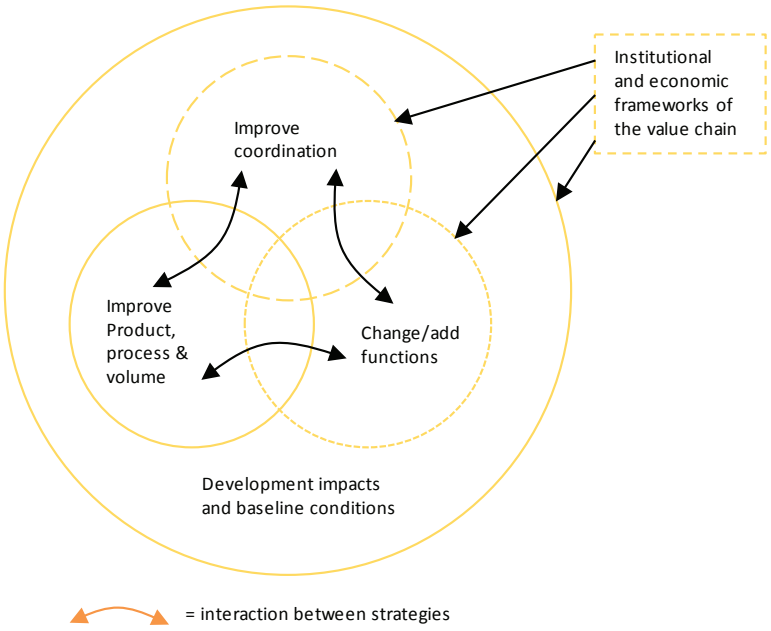
Value chain development strategies define what the value chain development project should do, and are developed through a rigorous screening of all available development options. In reality, however, these strategies are often developed without much creativity and methodological rigor, and at times are copied from projects in other regions and other sectors.

WHAT TO CONSIDER

There are many different approaches to design value chain development interventions. Generally the starting point is to identify constraints and opportunities, but from there an additional step is needed to arrive at solutions. This requires more brainstorming by the project team, key stakeholders and counterparts. The framework described below, illustrating three main strategies, can facilitate the design of value chain development interventions (see also Figure 7).

The three overlapping circles in Figure 8 show the possible types of value chain development strategies. The strategies are connected to different rewards and involve various levels of risks. The arrows between the circles illustrate possible interactions between the strategies. Combining the three can be mutually reinforcing: for example, increasing volume may provide cash for investing in equipment to raise quality. The circles in Figure 8 overlap to illustrate that a specific value chain development strategy may encompass several of the strategies listed. The large 'disc' underlying the three circles represents the possible broader development impacts of value chain development as well as the baseline conditions referring to different dimensions of poverty, gender, labour and the environment.

Figure 7: Framework of Value Chain Development Strategies



Source: Riisgaard et al. (2008): A Strategic Framework and Toolbox for Action Research with Small Producers in Value Chains. DIIS Working Paper 2008:17. Available at www.diis.dk.

DIMENSION 1. IMPROVE PROCESS, PRODUCT OR VOLUME

This type of strategy is about 'doing things better or bigger' through improvements in technology and management. They include:

- **Process improvement:** Efficiency in production processes can be increased and costs or negative externalities can be reduced. This includes delivering on schedule, proper invoicing, improving client management, reducing wastage, etc.
- **Product improvement:** Here the aim is to move into more 'sophisticated' products, increasing unit value by complying with buyer requirements for physical quality, certification, food safety standards, traceability, packaging etc.
- **Volume extension:** The object is to increase the amount of product sold through increases in yield or area in agricultural production, extension of processing capacities and expansion of markets. Increasing volume must not be a goal per se, but is useful if value addition is also generated and distributed to a higher number of actors across the chain (larger volumes can also be achieved by aggregating orders, e.g. by creating a common export desk serving farmer groups). Shifting production to bulk-commodity markets to gain from economies of scale and reduce risks can also be a strategy.

DIMENSION 2. CHANGE AND/OR ADD FUNCTIONS

Value chain actors can take on board new functions, for example by performing downstream activities such as grading, processing, bulking, transporting or advertising or by engaging in the provision of services, inputs or finance. Value chain actors can also engage in functional 'downgrading', e.g. dropping processing activities to specialize in production. For producer organizations, engaging in processing and marketing may increase their margins but often they are not

Contracts between value chain actors

'Contract' here is defined broadly as an agreement between two or more parties to perform, or refraining from performing, some specified act(s). A contract in this sense is therefore not necessarily limited to legally enforceable written agreements.

sufficiently prepared for this. New functions should only be entered into when these organizations can perform existing functions efficiently and bear the additional risks.

DIMENSION 3. IMPROVE VALUE CHAIN CO-ORDINATION

Small agricultural producers in developing countries are typically linked to agro-processors and buyers through market transactions. These transactions can adopt characteristics that tend to reduce rewards and/or increase risks for producers, often with negative ramifications along the entire chain. Value chain development can work towards improved forms of co-ordination. Vertical and horizontal contracting are examples of such opportunities:

- **Vertical contracting** between actors from different segments in the chain, e.g. between farmers and wholesalers or processors and retailer, etc. This means 'getting a better deal' through closer and longer-term business ties. It represents a move away from informal transactions to the use of contracts (oral or written). Sellers can 'learn from buyers' (about market requirements and compliance with quality specifications) and buyers can embed services in the contract with regard to the extension, credit, and equipment they provide (interlocking contracts). The benefits of such contracts include the reduction of price risks, access to price premiums, improved access to market information, inputs and finance or reduced marketing costs. But contracts also demand higher performance in relation to quality, volume, and certification, which is often difficult and costly for poor farmers and resource-poor processors.
- **Horizontal contracting** between actors from the same segment, between farmers, SMEs, co-ops, etc. These are agreements among value chain actors to co-operate regarding input provision, marketing (for example, bulking produce for sale, identification of buyers), certification, and crop insurance in order to reduce costs, increase revenues or mitigate risks. For producers, this is often a precondition to reach volume sizes requested by buyers; it can strengthen producers' bargaining power.

Contracting can enhance overall vertical and horizontal chain performance in situations where continuous supply of primary and processed materials in sufficient quality and quantity is of concern to buyers. However, value chain actors may also resist vertical and horizontal contracting because it threatens their position in the chain; for example, middlemen may want to prevent farmers from selling in bulk directly to wholesalers.

STUMBLING BLOCKS

Analysts may find that decision makers have preconceived opinions on how to develop the value chain, so it is particularly important to go back to the drawing board and identify and assess all possible strategies. Picturing the synergies generated from a combination of strategies is especially challenging.

4.2 HAVE THE IDENTIFIED STRATEGIES BEEN ADEQUATELY EVALUATED?

This question addresses the problem that the value chain development strategies developed are often not properly scrutinized against criteria of feasibility and likelihood of success.

WHY THIS MAY BE RELEVANT

Brainstorming and developing ideas for strategies does not mean that these will be easy to implement. Strategies have to be realistic. The best-bet solutions might not actually be feasible given existing context-related constraints, so second-best solutions may end up being a better choice. Submitting the strategies identified to a reality check is therefore important.

WHAT TO CONSIDER

Proposed strategies can be evaluated using the tool on the following page, which introduces a set of criteria for determining feasibility. Each criterion is accompanied by several questions. The users of the tool would need to summarize answers to the questions posed for each criterion and give one overall qualitative statement. Criteria can be ranked or scored to arrive at an overall degree of compliance. Such an evaluation exercise would most advantageously draw from the opinions of experts and stakeholders during interviews and guided discussions.

STUMBLING BLOCKS

It is important to distinguish the processes of (a) identifying constraints and opportunities, (b) developing a strategy, and (c) evaluating a strategy. The information base is basically the same for all, but used in different ways: (a) focus on creatively finding solutions, and (b) look at feasibility and likelihood of success.

Figure 8: Tool to Evaluate the Feasibility and Success of Value Chain Development Strategies

Criteria	Questions	Compliance with Criteria		
		Low	Medium	high
Ability to increase rewards	▪ What are the expected changes in forms of chain coordination? ▪ What are the expected changes in forms of value chain development (functional, process, product, volume, etc)? ▪ What are the expected changes in performance (quality, volume, stability and timing of delivery, production costs, and certification)? ▪ What are the expected changes in the economic/ business incentives of key actors? ▪ What are the expected changes in rewards (e.g. prices, incomes, salaries and their stability)?			
Ability to address priority issues (poverty, gender and environment)	▪ What benefits are expected from the strategy and to what extent will these benefits help address poverty, environment and/or gender issues? ▪ Who will benefit the most and who the least in terms of major socio-economic groups (gender, household size, size of production unit, ethnicity), geographical divisions (agro-ecological zone, fishing area, distance to buyers), and organizational systems (cooperative vs. farmer group vs. individual farmers)?			
Level of risks and potential negative effects	▪ What is the stability of new or modified business relationships ('contracts')? What would prevent either party from ending the relationship or changing its terms? ▪ What financial, environmental, health and other risks will the strategy expose the actors to, such as loss of income, assets or jobs, health risks, personal security and resource degradation? ▪ What social groups will be most exposed to these risks (the asset-poor, women, the landless, etc.)? Will the beneficiaries generally be able to bear these risks? Who will be most vulnerable to them? ▪ Are all members of the beneficiaries able to bear the (labour or monetary) costs associated with the value chain development strategy? Do they all possess the necessary assets? ▪ Will the strategy reduce incomes (or other livelihood elements) for some of the actors engaged? ▪ Will the strategy lead to the marginalisation or exclusion of certain groups (who and why)? Will it lead to the displacement of non-participants from agricultural or communal land?			
Feasibility	▪ How long will it take to achieve the desired changes? ▪ How much will it cost? ▪ What are the major risks of failure? ▪ How do the expected costs and risks compare to the expected benefits? ▪ Is it possible to mobilise the 'political' and financial resources needed to implement the strategy within the time frame of the research? ▪ Does the value chain development strategy go against the interests of other chain actors? Is it realistic to expect that the resistance anticipated as a result of such conflict of interests can be overcome? ▪ Will the value chain development strategy oppose local economic or political interests (of non-participants)? Is it realistic to expect that the resistance arising from such conflict of interests will be overcome? ▪ What individual and collective investments are required (land, equipment, labour, training, etc.)?			

4.3 WERE PRACTICAL ACTION POINTS DEFINED?

This question emphasizes the importance of boiling down a strategy to concrete activities.

WHY THIS MAY BE RELEVANT

Strategies need to phase over into practical action. While value chain projects are often good at laying out development strategies, coming up with a thoughtful implementation plan may be difficult. A strategy that cannot be implemented is of little use, so it's important to ensure that any strategy identified and positively evaluated can be transferred into practical action points.

WHAT TO CONSIDER

Identifying suitable action points involves asking questions such as:

- Where inside or outside the chain are the most appropriate actors for the project to work with?
- How can the behaviour of actors most likely be changed so that the value chain improves?
- Which types of rules and regulations in the value chain need to be changed, given the choice of strategy and the resources available?
- How can markets be accessed in a better way?
- How can sourcing of products be improved?
- How can finance of value chain actors be improved?
- What needs to be done to improve the quality of the products?
- What needs to be done to reduce costs in production, processing and marketing?
- What needs to be done to comply with quality and other standards and regulations?
- How long will options for intervention be available (e.g. policies can change)?

What is an action point?

A point of entry to the development of a value chain. Identifying these points makes it possible to define project activities clearly. Points can include:

- A specific chain actor (e.g., potential buyer)
- An organisational form (cooperative, producer group, contract farming scheme, knowledge exchange platform)
- A partner outside the value chain who can help put pressure on actors whose policies or practices the project wants to change, such as downstream chain actors, government agencies (e.g. the Forestry Department) or standard setting bodies
- A standard (that will be modified and/or certified) or a standard-setting body
- A regulatory framework (e.g. for the management of common pool resources)
- A market institution (system for group bulking and storing, for product grading, or for accessing price information; an auction; an interlocking contract– e.g. providing seasonal credit against a crop buying agreement)
- A new market for the existing product
- Passage of a new policy or regulation

Source: Bolwig, S.; S. Ponte, A. du Toit, L. Riisgaard and N. Halberg. (2008). Integrating Poverty, Gender and Environmental Concerns into Value Chain Analysis: A Conceptual Framework and Lessons for Action Research. DIIS Working Paper 2008:16. Available at www.diis.dk.

The action points will be reflected in the implementation plan, which is a representation of the project in a structured format. Such a plan would typically include the following information:

- Brief description of the activity, including its objectives
- Responsibilities for implementation
- Planned start and completion dates
- Activity-specific expenses

STUMBLING BLOCKS

Governments and development agencies and donors usually prescribe how a project should be developed, using logical frameworks, activity charts and other planning tools. Project designers should not let these formal tools get in the way of creative activity planning based on the options and technical and financial feasibility of the identified strategy.

4.4 ARE ADEQUATE COMPETENCES BUILT INTO THE PROJECT?

This question refers to the need for value chain projects to draw from interdisciplinary competences and human resources skilled enough to deal with the multidisciplinary tasks that value chain development requires.

WHY THIS MAY BE RELEVANT

Project managers and staff represent keys to success, so there must be assurance that qualified managerial and technical staff can be hired, especially those with expertise and experience in business development and the commodities involved.

WHAT TO CONSIDER

Skills drawing from experience in project design and implementation are already required during the process of deploying strategies into action. It is important to engage knowledgeable and creative minds from various disciplines relevant to value chain development. These skills continue to be important during the implementation phase.

The problem often arises that the manager and other staff hired for the project have expertise in only certain aspects of value chain development, so in other fields implementation may be inappropriate or substandard. For example, a project may have hired skilled staff in the field of primary production and marketing, but failed to get some processing and organizational development and finance specialists on board. Special emphasis should be on hiring multidisciplinary teams of experts whose skills match the anticipated project activities.

Another consideration is ensuring an adequate mix between professional staff and consultants. Working exclusively with consultants deters the development of project competence. Vice versa, if all the work is done by staff, important expertise from outside cannot be built into the projects.

Key skills required in value chain development:

- Primary agricultural production
- Processing technology
- Enterprise and business development
- Contractual arrangements and business linkages
- Marketing and trade

STUMBLING BLOCKS

Finding the right mix of people is a managerial task. However, the technical skills involved in overseeing functional aspects of the value chain must not be underestimated, and a manager without a broad view of the value chain may not be able to oversee the various skills required. It is therefore important that managers are sufficiently informed through a broad value chain diagnostic. Generalists should be part of the team.

From value chain analysis to design: a combination of expert-driven and participatory approaches

There are considerable advantages to mixing expert-driven with participatory approaches. One would start by carrying out a desk review of existing material and conducting interviews with key informants to develop a first solid understanding of the value chain (see chapter 2). The next step would be to engage with representatives from the different value chain actors via interviews and/or focus group discussions to refine the analysis and develop an appropriate strategy (see chapter 3 and 4).

When a good understanding of the value chain has been gained, a workshop (or series of workshops) can be held with selected value chain actors and relevant organizations to:

- refine the information;
- reflect upon the identified opportunities and constraints;
- define strategy options; and
- develop implementation activities.

This question focuses on the importance of engaging stakeholders at various points of the design of the value chain project.

WHY THIS MAY BE RELEVANT

Stakeholders may participate in the choice of the value chain, and certainly they are an important source of information during value chain analysis. But it is during the design phase that participation really becomes crucial. Participation is essential to ensure buy-in from stakeholders and to capture available competencies and capacities to identify implementation options. Stakeholder participation can also bring in capacities and knowledge which would otherwise need to be collected and brought into the project at higher costs. The interaction between stakeholders and experts can moreover lead to creative identification of development opportunities. Participatory forums can also facilitate the development of new linkages, and foster ownership of the strategies and activities to be implemented.

WHAT TO CONSIDER

How and to what degree one employs participatory processes to design interventions depends on the context of the project and the objectives to be achieved. This manual suggests an approach based on consultations during workshops with a fairly broad participation of stakeholders to discuss results from the functional and social analysis of the chain and validate recommendations for value chain development. Some issues to consider:

- Often value chain actors already receive support from various government and development agencies and they need to be considered when holding any value chain stakeholder meetings.
- Holding a single stakeholder consultation may only help influential actors in the value chain to raise their voice. A series of consultations that gradually take an increasingly local, regional and national focus may be more efficient in getting the feedback and buy-in of stakeholders at various levels.
- Most stakeholders feel project designers and managers also have their own interests. It is always advisable to engage a skilled moderator who handles stakeholder contributions from a neutral standpoint.
- One should pay considerable attention to how existing power structures in chains might influence the design process.

STUMBLING BLOCKS

Some stakeholders may hold back the process and are not interested in crafting a successful project. In this respect one can argue that it is neither necessary nor possible to include all stakeholders in the design process. It may be sufficient to cooperate with intended beneficiaries and a few key actors that possess the necessary leverage to achieve the desired impact.

Implementing value chain projects requires flexibility and stakeholder engagement.

5. IMPLEMENTATION

Implementing a value chain project is no different from implementing any other development project, albeit there may be more actors to deal with and more entry points to consider. Most importantly, implementation needs to adapt to the rapidly changing context of the value chain where new actors engage and others drop out, governments and development agents provide subsidies and support, new business opportunities arise and old ones become irrelevant, alliances are built and dissolved, and profit margins change based on market conditions and competition. In such a context, while following a general strategy, implementation needs to be reactive and draw from the latest information.

There are a number of critical issues analysts and value chain development planners should take into consideration when implementing a value chain development project: 5.1 Is there sufficient flexibility to reorient the project? 5.2 Is stakeholder engagement maintained? 5.3 Is trust being built among project partners and value chain actors? 5.4 Has a baseline been established to monitor chain development? 5.5 Does monitoring and evaluation focus on the most relevant impacts of chain development?

Further Reading on the Implementation of Value Chain Development Support Projects

- Bernet, T., Thiele, G. and Zschocke, T., (Eds.) (2006): Participatory Market Chain Approach (PMCA) – User Guide. International Potato Centre (CIP), Lima, Peru. Available at www.infoandina.org
- M4P. (undated): Making Value Chains Work Better for the Poor: A Tool Book for Practitioners of Value Chain Analysis. Available at www.markets4poor.org

The challenge of flexible project implementation

In the World Bank Horticulture and Livestock Program (HLP) in Afghanistan it was found that an unexpectedly large crop of grapes drove prices down to a point where the merchants participating in the project were not able to sell their products. Thanks to a creative search the project was able to identify new marketing opportunities through shipping grapes to India by air, benefiting from lower than expected airfreight rates. The project had the flexibility to divert resources towards testing markets in India and was able to channel a substantial amount of the Afghan crop to the Indian market, to the benefit of Afghan producers and merchants.

Source: Roots of Peace (2010). Value Chain Operations Manual - Case Study: Improving the Mir Bacha Kot Grape Value Chain. Available at: http://www.rootsofpeace.org

This question emphasizes that the success of value chain development support projects can be hindered by bureaucratic planning frameworks that do not allow for changes in project activities and partners.

WHY THIS MAY BE RELEVANT

The project implementation rules of governments and development agencies are often not flexible enough to deal with the dynamic nature of value chain development, so projects cannot react to changing market conditions and production contexts.

WHAT TO CONSIDER

Project implementers should adopt an adaptive planning mode which allows for a continuous verification of basic assumptions in the project strategy. If assumptions regarding project success do not hold true, then implementation strategies must be adjusted. An adaptive planning mode is closely aligned with a good monitoring and evaluation system that includes ongoing monitoring meetings with stakeholders and project staff to enable adjustment to important changes. Important causes of change in the project environment include:

- price shocks
- regulatory changes affecting the value chain (either domestically or in importing countries)
- new competitors
- new markets

Important causes of change related to internal project conditions include the following:

- strategic partners drop out;
- activities fail or are delayed and prevent other project activities from succeeding; or;
- attempts to introduce new technologies, business models or markets fail.

When much time has passed between the initial analysis and the launching of implementation, one may want to start by validating the existing value chain analysis and adjusting intervention strategies accordingly. Project managers should even have the flexibility to suggest pulling out of a value chain completely and reorienting resources towards others with more promising prospects for achieving the desired objectives. In the worst case scenario, it is better to abandon a project than continue implementing strategies that are no longer likely to lead to the desired impacts.

STUMBLING BLOCKS

Failures in implementing initial project designs are often due to partners who default on their commitments, for example, producers who do not deliver the required product or buyers who do not buy it. Projects can sometimes be better off not entering into partnerships with a single buyer.

5.2 IS STAKEHOLDER ENGAGEMENT MAINTAINED?

This question makes a case for continued engagement of stakeholders beyond their involvement in the initial phases.

WHY THIS MAY BE RELEVANT

Commonly, value chain projects include diverse actors such as primary producers, buyers, processors and service providers. Maintaining and extending the dialogue with such diverse partners is an important factor in project success. However, projects often consider the initial engagement of partners sufficient and underestimate the need for continuously informing them about the project's progress and engaging them in its implementation.

WHAT TO CONSIDER

Usually the dialogue with stakeholders in the private and public sector is initiated during the analysis and project design phases. Only some of these stakeholders will become actual project partners with specific roles and commitments. Maintaining and extending the dialogue and partners' adaptation to new roles is frequently not easy. Project partners that have been active in the initial consultations may become less active when it comes to implementation, particularly when they find out that certain commitments may bring benefits but also require substantial inputs on their side.

Continuous efforts to inform and maintain an ongoing dialogue with project partners and other stakeholders are necessary if stakeholders are to buy into the project, build trust and stay engaged. Important messages to be communicated, at times repeatedly, are:

- the progress that is made in the project;
- the benefits to be gained from their engagement in the project; and
- the role of partners, leaving no doubt as to what their duties are.

Setting goals that are easy to achieve in the initial phase is one way to help partners appreciate the project and stay engaged.

Means of communicating project advances to stakeholders:

- Stakeholder meetings
- Demonstration days
- Newsletters
- Advertisements in the media
- Project documentation

STUMBLING BLOCKS

Be they buyers, processors or primary producers, if value chain actors do not find the right conditions to engage in the value chain businesses, they will not be interested in participating in development interventions, regardless of prior commitments. In these situations the project may need to find new partners or change the strategies, or discover new means to incentivise existing partners. In any case, it would not make sense to force partners to comply with commitments they are not convinced will benefit them.

5.3 IS TRUST BEING BUILT AMONG PROJECT PARTNERS AND VALUE CHAIN ACTORS?

How to build trust among value chain actors

- Clear definition of roles and benefits for each project partner (and clear communication of those) at an initial stage is crucial to build trust and avoid raising unrealistic expectations.
- Private sector partners must be allowed to slowly grow into their role of being the drivers of change. They may most likely maintain their motivation through incentives such as business opportunities, invested prestige, learning, or career development they can directly associate with the project.
- The wider stakeholder environment (government officials, community organizations, associations and service providers) needs to be provided with updates on project progress.
- Value chain training courses for government and private sector representatives can be useful to create buy-in and facilitate dialogue.

This question emphasizes the importance of promoting more stable business relationships between actors in the value chain.

WHY THIS MAY BE RELEVANT

The diversity of actors engaged in a value chain, each with different roles, rationales and objectives, is often a source of distrust. Any project promoting value chain development also needs to deal with the challenge that partners, not only in the project but also in the value chain, might not trust each other.

WHAT TO CONSIDER

Lack of trust can affect both horizontal and vertical relationships in the value chain. Actors need to coordinate activities vertically between the different parts of the chain, e.g. related to purchases, sales or product quality, but they also fight one another for business margins.

Lack of trust between stakeholders with similar activities can also be a key issue. Actors often compete when selling or purchasing specific products and services. For example, marketing through farmers' groups can be undermined by side-selling or when some of the members sell sub-standard products, jeopardizing the quality of overall product delivery.

An effective way to minimize distrust is by reducing information asymmetries and uncertainty. For example, different partners can be brought together during stakeholder meetings where farmers meet processors, supermarkets and lead buyers and learn about each others' interests, rationales and behaviour. One can also organize reciprocal visits between actors in the chain. Once established, supplier-buyer relationships should be carefully monitored by the project or independent brokers.

Interaction is only constructive if the actors engage actively and treat each other with respect, and this frequently requires facilitation. A good facilitator should be capable of integrating and motivating

different actors to work towards a common end based on shared interests, and create an environment for interaction where:

- the style and content meets the requirements of the participants;
- there is a culture of tolerance allowing people to accept and learn from errors; and
- marginalised actors receive special attention.

Projects that promote value chain development have a particular responsibility to help build trust among various actors in the value chain. Because members do not have a commercial interest, the project team is in a good position to lead participatory processes and bring together actors who otherwise may mistrust each other.

STUMBLING BLOCKS

The task of building trust and setting up business links in a value chain is often underestimated. Chain actors need training in business planning, negotiation and establishment of contractual relationships.

A special challenge occurs in situations where trust has been lost in the past, due perhaps to the interruption of business relationships, government interference, the fraudulent behaviour of some individuals, or price drops. In some countries government involvement in commodity trade may have contributed to farmers' distrust in commercial relationships.

List of useful outcome indicators in value chain development projects

Outcome indicators

Indicators on functions and value addition:

- Which and how many functions are carried out by the actors in the chain?
- What is the degree of backward or forward integration?
- How much value is added by each of the actors?

Indicators on commercial relationships:

- Number and type of buyers
- Continuity of buyer-supplier relationships
- Average size of orders from buyers
- Use of written sales contracts (if relevant)
- Stability of the price received
- Knowledge about quality demands and other buyer requirements
- Degree of compliance with buyer demands (volume, quality, timing etc)
- Buyer 'satisfaction' with suppliers

Indicators on horizontal collaboration:

- Number of well-functioning producer or processor groups
- Participation of poor actors in these groups
- Degree of stability of groups
- Volume of products handled by the groups

Indicators on value chain development

- Status of value chain development (quality, process, standards compliance, volume, timing of supply, inter-chain, etc)
- Competences of main actors in the value chain in relation to the degree of development of the value chain development

This question is born out of the necessity for projects to build on a solid baseline so as to be able to monitor progress.

WHY THIS MAY BE RELEVANT

Value chain development is about promoting change in value chains. Projects need to account for the changes they have induced in the value chain, and this can only be achieved by knowing the initial situation. Nevertheless, value chain development projects sometimes start to operate without having established a baseline to gauge their progress. Defining baseline indicators is an important task because they define how project success will be measured.

WHAT TO CONSIDER

All projects must develop indicators in order to describe how it has affected each value chain development dimension, so a baseline should be established immediately after the project strategy has been selected. Setting up a baseline for later evaluation of project interventions involves both qualitative and quantitative indicators to assess impacts as well as the project's immediate outcomes. Since impacts will be much more difficult and expensive to measure and be attributed to the project, it is wise to select just a few impact indicators and concentrate on a larger set of outcome indicators.

A common mistake is that baseline data is only collected for one type of beneficiary, e.g. farmers. However, in value chain development there are usually more groups, such as SMEs, workers in processing plants and additional service provision agents. All these need to be considered as well.

Much of the information needed to establish a baseline and develop the outcome and impact indicators can emerge from the value chain analysis (see section 2. and 3.). For impact indicators also see section 5.5.

STUMBLING BLOCKS

While impact indicators aim at the economic and social benefits that target groups may acquire through the project, outcome indicators must be adjusted to the selected value chain development strategy. It requires a careful analysis of the strategy to come up with the right outcome indicators.

5.5 DOES MONITORING AND EVALUATION FOCUS ON THE MOST RELEVANT IMPACTS OF VALUE CHAIN DEVELOPMENT?

This question aims at the importance of applying monitoring and evaluation in a way that relates to the overall impacts on poverty and human development, beyond purely economic and sectoral considerations.

WHY THIS MAY BE RELEVANT

Information about the progress of the project is useful for both a) justifying project activities before donors and government and b) providing information to orient the project on how to do things better. However, since this information is often not collected adequately and repeatedly, value chain projects may have too little information to determine whether they are on the right track or need to adjust. Also, they may fail to provide governments and donors with robust information about whether development goals are achieved.

WHAT TO CONSIDER

Monitoring and evaluation in value chain development implies continuous monitoring of changes relevant to businesses in the value chain (through validation and adjustments of the existing value chain analysis) and constant verification of whether basic assumptions about value chain development strategies and expected outcomes and impacts hold true.

Any value chain monitoring and evaluation system should take on board the holistic view of the value chain emphasized throughout this manual. If there are diverse groups of direct and intended beneficiaries this can be particularly challenging. For example, a project may lead to increased income among small-scale farmers but at the same time, improved incomes for a larger group of rural women who now gain employment in a new processing plant. The latter is also a project success that needs to be reflected through an indicator in the monitoring and evaluation system.

List of useful impact indicators in value chain development projects

Income and employment:

- Monetary income (household level, local currency per year)
- Income 'in kind' (if relevant)
- Number of participants in value chain
- Number of people employed in value chain activities (or in directly related activities)

Poverty:

- Number of poor people participating in value chain
- Monetary income of the poor (household level, local currency per year)
- Income 'in kind' (if relevant) of the poor
- Income stability for the poor (qualitative, based on more detailed criteria)
- Food security for the poor (qualitative, based on more detailed criteria)

Gender equity:

- Number of female participants (absolute and relative to male)
- Women's control of monetary income from chain
- Gender division of labour in chain activities (type of work done by women)
- Number of women employed in value chain activities or in directly related activities (absolute and relative to number of men employed)

Environment:

- Quantity of natural resources (e.g. through volume, hectare, etc.)
- Quantified level of pollution or waste
- greenhouse gas emissions (if feasible)

Source: adapted from Riisgaard et al. (2008). A Strategic Framework and Toolbox for Action Research with Small Producers in Value Chains. DIIS Working Paper 2008:17. Available at www.diis.dk.

STUMBLING BLOCKS

Providing information on a broad set of outcome and impact indicators is a labour-intensive and costly exercise that project budgets may not take into consideration, making the challenge of performing meaningful monitoring and evaluation on a scarce budget commonplace. In this situation, analysts may need to reduce the amount of indicators but make sure to collect the necessary data on this limited set of fundamental indicators.

Printed in Austria - 2011

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P. O. Box 300, A-1400 Vienna, Austria
Telephone +43 1 26026-0, Fax +43 1 26926-69
E-mail: unido@unido.org, Internet: http://www.unido.org