

# IS Academy

## Human Security in Fragile States



# Value chain development in Fragile Settings

Sabine Hiller, Dorothea Hilhorst and Bart Weijs

occasional paper #14



WAGENINGEN UNIVERSITY  
WAGENINGEN UR



OCCASIONAL PAPER #14

# **Value chain development in Fragile Settings**

Sabine Hiller, Dorothea Hilhorst and Bart Weijs

2014



# Table of contents

	<b>Foreword</b>	5
	<b>Executive summary</b>	7
<b>1</b>	<b>Introduction</b>	11
<b>2</b>	<b>Value chains and development</b>	15
	2.1 Value chains	15
	2.2 Value chain development	16
	2.3 Value chain actors and organisation	17
	2.4 Value Chain Processes	19
	2.5 Institutional environment	20
	2.6 Conclusion	21
<b>3</b>	<b>Effects of conflict on value chains</b>	22
	3.1 Economy and conflict	22
	3.2 Value chain disturbance	23
	3.3 Effects of aid	24
	3.4 Relevance of the value chain approach in fragile states	25
<b>4</b>	<b>Actors and organisation of value chains in fragile settings</b>	27
	4.1 Lead actors	27
	4.2 Producer organisations and cooperatives: horizontal linkages	28
	4.3 Coordination of value chains and vertical linkages	29
	4.4 Conclusion	31
<b>5</b>	<b>Value chain processes in fragile settings</b>	32
	5.1 Access to inputs	32
	5.2 Market access	33
	5.3 Quality monitoring	34
	5.4 Infrastructure	35
	5.5 Conclusion	37
<b>6</b>	<b>Institutional environment in fragile settings</b>	38
	6.1 Business-enabling institutional environment	38
	6.2 Government roles in enabling value chains	39
	6.3 Formalising business	39
	6.4 License system	40
	6.5 Land rights	41
	6.6 Legal protection	42
	6.7 Value chain financing	42
	6.8 Insurance and risk	44
	6.9 Extension services and business service providers	45

6.10	Quality monitoring	46
6.11	Sector specific policies in the value chain case studies	47
6.12	Conclusion	47
<b>7</b>	<b>Feasibility of value chain development in fragile settings</b>	<b>48</b>
7.1	Sustainability of the chain	48
7.2	Biggest challenges	49
<b>8</b>	<b>Conclusions and recommendations</b>	<b>51</b>
	<b>References</b>	<b>54</b>
	<b>Annex: Case studies of value chains in fragile settings</b>	<b>57</b>
A.1	Saffron Production in Afghanistan	57
A.2	Coffee and Burundi Agribusiness Program in Burundi	60
A.3	Cotton value chain in Pakistan	64
A.4	Embroidered garments value chain Pakistan	68
A.5	Carnation value chain in the Palestine Territories	72
A.6	Value chain approach for pro-poor development in the livestock sector in Southern Sudan (now South Sudan)	75
A.7	Systematic support to Non-Timber Forest Products (NTFP) enterprise development	79
A.8	The value chain for grapes and raisins in Afghanistan	82

# Foreword

The IS Academy ‘human security in fragile states’ has sought to understand socio-economic recovery in fragile settings at the intersection of people’s strategies to rebuild their lives, institutional change and aid interventions. We have been particularly concerned with how economic life is affected by conditions of conflict and fragility: How do people continue to produce, process and trade under conditions of insecurity and institutional fragility? What happens to markets? And how can aid strengthen private sector development as part of post-conflict reconstruction?

Value chain development provides an excellent window on these issues. This report convincingly shows how economic life in fragile and conflict-affected settings does not come to a complete stand-still, even though insecurity, reduction of the formal sector, and in some cases a breakdown of trust affect the chains and may compromise their development. As soon as conditions minimally allow, people resume their production and marketing activities, building on a range of formal and informal institutions at different levels. The study argues that support to value chains in fragile and conflict-affected settings is feasible and identifies room for constructive engagement especially at the local and regional levels.

The IS Academy has been committed to generating knowledge that both advances scholarly understanding and feeds into policy concerns. This report is a good example of that. It synthesizes a wide range of literature, building on eight case studies across Africa, the Middle East and Asia, and makes this available to a broad readership. To readers interested in economic development in fragile settings it affords novel insights on economic life and the resilience of economic activity. Readers whose prime interest is in value chains, will learn about the specific conditions that affect value chain development in fragile and conflict-ridden settings. To both, it suggests ways forward in supporting value chain development in insecure environments.

Gemma van der Haar



# Executive summary

Private sector development in fragile states, and the value chain approach in particular, are receiving increasing attention in response to changing insights into the continuation of economic life during conflict and the negative side-effects of aid based on asset-transfer (relief goods). Value chains are seen to contribute potentially to building peace by linking actors and by providing employment opportunities for ex-combatants and refugees. This occasional paper explores value chain development in fragile settings by analysing existing literature and studying eight cases of value chain development in fragile contexts.

Chapter 2 outlines concepts and dimensions of the value chain approach and value chain development as it has evolved over the past decades. Value chains can be analysed in three ways: actors and organization, chain processes, and the institutional environment. This chapter finds that value chain development is far from a merely technocratic endeavour. Although organization, technology and surrounding institutions are important, these may have different faces. While they can work for the inclusion and advancement of small producers, they can also work towards exclusion, exploitation and creation of barriers to development.

Chapter 3 describes the effect of conflict on value chains. Existing value chains are interrupted and the institutional environment is hampered for a shorter or longer period. On the other hand, crises may also give rise to the reordering of societies and institutions, and the formation of alternative chains and networks. In general, the level of disruption of value chains depends on the force of the crisis combined with the pre-crisis state.

Chapter 4 analyses the dimension of **actors and organisation** in the context of fragile states. It cautions that expectations should not be overly high regarding the viability of value chains in conflict-affected countries. The large damage to value chains and especially the restricted opportunities to link to functioning markets make the (re) building of value chains difficult to perceive as a quick-fix solution. Many of the cases studied have not or have only embryonically established functioning linkages that enable them to develop into well-functioning value chains. In the cases where such linkages are emerging, they depend heavily on external facilitation by aid agencies.

Chapter 5 investigates how the dimension of **value chain processes** is affected by fragility. Inputs, markets and infrastructure are important prerequisites for successful and efficient value chains and our case studies show that all these features of chain processes are heavily affected in fragile states. These effects of conflict decrease the chances of producers getting a good price for their goods, of adding value, or becoming part of upgraded and global value chains.

Chapter 6 on the dimension of the **institutional environment**, in particular how this enables value chains in fragile states, shows that many of the chain actors rely on a variety of institutional arrangements, ranging from official institutions to social networks. The cases also show a large involvement of aid actors, for issues such as financial services, credit, savings and legal support. Formal financial institutions, government institutions for quality

monitoring or extension services are either lacking or ill-equipped to fulfil their tasks. However, many of the chains under study have adapted to these circumstances by making use of other institutional arrangements, building on kinship, social networks, and other social institutions.

Chapter 7 asks whether, considering all the challenges described, it is reasonable to assume that value chains will survive crises. The answer is yes: most chains presented in the case studies have existed for years and will continue to exist, even if only because of tradition or because alternative livelihood options are lacking. Most actors are positive about their future. When leaving behind the crisis, the institutional environment improves and challenges will be dealt with. With these changes, the opportunities for making higher margins increase, even though it may take a long time to improve the value added of the products; and the actors higher up in the chain will be the first to profit.

Chapter 8 highlights a number of **conclusions and recommendations**. Challenges surrounding value chains in fragile states are similar to those in developing countries, but tend to be exacerbated. At the same time, the cases under analysis have shown little evidence of collapse of chains and industries as a result of crisis or fragile conditions. Nevertheless, they are highly subject to conditions of insecurity, and the resulting value chains are often short, irregular and with less activity and value added.

Whereas literature on conflict and fragile states often describes a breakdown of **trust**, the case studies show a more varied picture. Some value chains remained grounded in effective relationships of trust and others show that where trust is indeed an issue, one has to be careful in attributing this to conflict. The concept of trust is thus not self-evident and should be unpacked to reveal a large variety of conditions that may have very different explanations.

The case studies underline the need to analyse value chains by taking into account all types of actors involved regardless of their status in relation to the state, the banking system or the registered private sector. The **intertwining of formal and informal** and the embeddedness of economic institutions and transactions are not typical for fragile states but may be more prominent in conditions of fragility. They should be better integrated into value chain analyses.

**External aid interventions** play significant roles in local value chains through, for instance, supplying inputs, forming credit and savings groups, and stimulating collective action through the formation of producer organisations. Interventions are never neutral, and always influence some chain actors more than others thus affecting the balance within the chain and even externally. At the same time, it should not be overlooked that many of the chains have survived conflict and crisis, often without any assistance from external development agencies.

## Recommendations

Experiences with value chains in fragile conditions show that while there are many challenges, effective support to value chains is feasible even under conditions of insecurity. From the case studies and the literature, the following recommendations for value chain development in conflict-affected states emerge:

- Conflict-affected states are diverse in their capabilities, the nature of fragility and the strength of civil society and economic actors. Value chain development has to be grounded in a strong contextual analysis and be tailored to these specific conditions.
- Value chain analysis must take into account the socially-embedded nature of economic life and the political economy of conflict-affected areas, in order to build on existing drivers and opportunities and in order to remain sensitive to power differentials and institutional impediments within and outside chains. These drivers and power differentials are dynamic and not static: the challenge is to facilitate inclusive economies through less exclusive socio-cultural institutions, building trust and relations over time.
- The market should be the central driver in the development of sustainable value chains. This involves market research and shifting to more attractive markets when necessary. For intervening NGOs, taking the market as starting point often entails a paradigm shift.
- As much as possible, value chain development should build on those institutions, actors and arrangements that are functioning locally – including existing value chains.
- Value chain development has a tendency to focus on international markets. However, in conflict-affected areas, it is also highly important to focus on internal and regional markets.
- Value chain development can be part of relief efforts by organizing the purchase and distribution of assets through value chains provided that they maintain the efficiency and effectiveness required of relief.
- The development of value chains in fragile settings may take a long time, especially where relationships of trust need to evolve and institutions need to be adapted. The timeframe and modality of interventions should be dictated by a needs analysis rather than by pre-defined project parameters.





## Introduction

This occasional paper explores value chain development in fragile settings by analysing existing literature and studying eight cases of value chain development in fragile contexts. Recent years have seen a rise in attention to economic development in fragile settings. Private sector development is increasingly taken up by peace-building approaches (Hoffmann 2014); a thriving private sector is considered essential for development and peace, because it provides livelihoods and growth, while providing the government with a steady source of revenue in the form of taxes. The G7+ and the New Deal have increased the push for private sector development in fragile states, and it is argued that special policies and instruments are required to deal with the distortions caused by conflict and the possibility of a return to violence. Fragile states generally score low on the World Bank Doing Business Index and are lagging behind in attaining the Millennium Development Goals (MDGs) – though there are also signs of progress (World Bank 2013). Value chain development is seen as a way to foster inclusive and sustainable economic development in these contexts by sustainably linking local producers and enterprises into national and international value chains (World Bank 2011, Dudwick and Srinivasan 2013).

In 2007, USAID funded Microlinks, the Value Chain Development in Conflict-Affected Environments Project aiming to increase understanding of how best to design and implement activities that accelerate the transition from conflict to sustainable economic growth in post-conflict areas, and develop conflict-sensitive approaches to value chain development (Günduz and Klein 2008). Grossmann et al. (2009) examined both positive and negative aspects of value chain development approaches when applied in conflict-affected areas. Webber (2010) emphasises the importance of linking to attractive markets, and Stoian et al. (2012) warn against assumptions on the part of intervention designers and an overemphasis on economic impact.

This paper takes stock of this growing body of literature. It also draws on a more in-depth examination of eight cases of value chains in countries that are regularly listed as fragile. We have selected cases that have been reported upon and where we could locate a coordinator or researcher willing to give us additional information in telephone interviews.

The eight value chains reviewed for this study consist of smallholder producers sometimes organized around women like in the saffron chain in Afghanistan case and the cotton chain in Pakistan. The carnation chain in the Palestine Territories consists of larger producers owning greenhouses. In most cases raw products are sold to the traders. In some cases

the farmer adds value to the product by processing the product. The women in Afghanistan process part of the crocus flowers into saffron by drying and cleaning. The honey farmers in the DR Congo process the greater part of the honey at home.

Table 1.1 Case studies

<i>Value Chain</i>	<i>Country</i>
Saffron	Afghanistan
Coffee	Burundi
Cotton	Pakistan
Embroidered garments	Pakistan
Carnations	Palestine Territories
Livestock	South Sudan
Non-Timber Forest Products (Honey)	DR Congo
Grapes	Afghanistan

Traders and middlemen collect the products from the farmers. In some cases the traders come to the farm gate, sometimes farmers have to transport products to the traders who pass by on the primary roads. In the livestock chain from Sudan, the pastoralists travel by foot to Kapoeta town where they sell the livestock to brokers just outside the town. Often, more than one trader is involved to get the products to the processor, packer or consumer: for instance in the grape chain in Afghanistan, where up to 14 traders are involved in supplying the outlet. In some cases the raw product is sold at local markets, like the grapes from Afghanistan. In other cases the product is sold to processing and/ or packing plants that add value to the product like the collection centre in Palestine that packs the carnations. Processed products are mostly exported. Sometimes part of the processing is done in more developed countries. For instance, the saffron from Afghanistan is only in demand when it is packed in bulk so that the foreign buyer can pack it and label it with their own country as origin. In the case of coffee from Burundi the beans are washed and dried in Burundi and roasted and packed in the importing country. The cotton chain in Pakistan is an example of a chain where higher value products leave the country as there is a very active textile and garment industry producing for large retailers and brands abroad. Each case is presented in depth in the Annex of this report.

Sabine Hiller of Hiller Impact Evaluation was commissioned by the IS Academy ‘Human Security in Fragile States’ to carry out this research. This is a programme for research and policy dialogue, initiated by the Netherlands Ministry of Foreign Affairs, Wageningen University and five major Dutch NGOs and coordinated by the Special Chair Humanitarian Aid and Reconstruction at Wageningen University. The IS Academy has so far produced three important insights that served as the starting points for this paper (Christoplos and Hilhorst 2009).

- Literature on state fragility tends to emphasise fragility: the combination of conditions that together can prevent a political, economic and social system (at regional, state or community level) from coping with external or internal stresses in a non-violent manner (Putzel and DiJohn, 2012: ii). In the case of this paper, in assuming that all problematic aspects in value chain development are typical of fragile states, there is the risk of juxtaposing these aspects with ideal-typical notions that defy realities in areas considered un-fragile or whose fragility is not problematical. This paper therefore starts by reviewing literature on value chain development that is not written in the framework of fragility.
- Literature on state fragility is hampered by false notions of the institutional landscape (including both formal laws and informal norms and values) for value chains. It is often assumed that the absence of a fully functioning state results in a governance void. Current insight reveals, however, that the poor development of state-monopolized institutions leads to situations where multiple normative systems prevail and hybrid or competing institutions evolve, that derive their legitimacy on different grounds. People develop their own ‘informal’ initiatives, fall back on traditional institutions, contesting political parties may drive competing institutions and the international aid system may provide for parallel systems. This institutional multiplicity may not add up to an enabling environment for value chains but needs to be taken into account. As we shall see throughout this paper, value chains in conflict-affected countries often rely on and are organised through this institutional multiplicity.
- Existing literature often focuses on external interventions. As a result, development is overly attributed to successful interventions at the expense of acknowledging local initiatives and processes. At the same time, interventions are poorly analysed beyond the project level. The unintended effects of the ensemble of interventions as a major formative element in many societies remain largely hidden. This paper will highlight some of these effects.

**Chapter 2** gives an overview of literature on value chain development. We will distinguish three features of value chains: the actors and organisation, the chain processes, and the institutional environment. **Chapter 3** introduces the effects of conflict and humanitarian crises on value chains. **Chapters 4, 5 and 6** discuss the three features of actors and organisation, chain processes, and the institutional environment for value chains in fragile states. **Chapter 7** goes into the feasibility of value chain development in fragile settings. Finally, **Chapter 8** provides the conclusions and recommendations on value chain development in fragile states.

#### Box: A Seminar on Value Chains Development in Fragile States

An early version of this paper was presented at the Ministry of Foreign Affairs in the Netherlands to an audience of policy makers, development practitioners and researchers.\* The discussion that followed centred on the role of NGOs, and the feasibility of value chain development in fragile settings.

The NGOs present underlined the importance of focusing on facilitation: assisting chain actors in interactions and mutual exchange, working towards institutionalised processes, in order to make them sustainable and independent; bringing people together, 'scouting opportunities'. NGOs should not push their own ideas, but listen to what people themselves bring to the table. The market has replaced groups of beneficiaries as the starting point, which focuses attention on demand, instead of supply. This is a paradigm shift, which requires rethinking of NGOs' roles: perhaps as broker, or as supplier of seed money, or as watchdog? Those present agree that the debate on the role of NGOs is crucial.

Main conclusions:

- Taking the market as a starting point requires a paradigm shift in the mindset of NGOs
- The local context is crucial, and a context analysis or market research is necessary in order to take the market as starting point
- It is important to investigate existing value chains, also in situations of conflict, and to make use of these
- The term 'fragile states' covers a very diverse set of situations, and fragility is not necessarily negative
- There are many opportunities in post-conflict and fragile settings
- There are also many similarities: issues such as lack of trust and distrust are not limited to fragile states
- Scaling up is important
- Value chain development also works the other way: smallholder farmers are also consumers with demand for certain products
- The value chain approach deserves more attention, and also more expertise: it is important to continue the debate

\* IS Academy Human Security in Fragile States, seminar 'Ketenontwikkeling (VCD, Value Chain Development) in fragiele staten', March 15, 2012, The Hague.

# 2

## Value chains and development

In this chapter, we highlight general literature on value chains and development, without focusing on specific conditions of conflict-affected countries. Most literature refers to ‘value chain development’. We want to stress, however, that the term ‘value chain’ exists with or without external development-oriented interventions. Value chain development constitutes a normative notion that is associated with development programming and interventions. The normative aspect concerns the objective to make economic chains more accessible to small producers to generate a better income for the poor and/or produce more added value to stimulate economic growth. We will outline the three features of value chains around which this report is organized: actors and organization, processes and institutional environment.

### 2.1 Value chains

The term value chain was coined in 1985 by Michael Porter: ‘a value chain depicts the many activities involved in getting products from the producer to the consumer. These activities occur in a sequence and are carried out by different participants, including farmers, traders, processors and retailers. Each link in the chain adds value to the product’ (Bijman and Ton 2008: 1). Parker (2008: 6) notes that ‘the value chain – so named because of the flow of a product from early stages through higher value-adding stages until it reaches the ultimate consumer – focuses on upgrading the products and processes used by the various participants within the chain so that the entire group of actors can compete successfully in profitable markets’. The concept of a value chain is helpful in understanding ‘the complexities of economic development, as it focuses on the networks and arrangements that bridge the entire chain of actors, directly and indirectly, involved in the production of a particular commodity or service’ (Helmsing and Vellema 2011: 4). A model of the value chain specifically for goods as given by Parker is presented in figure 1.

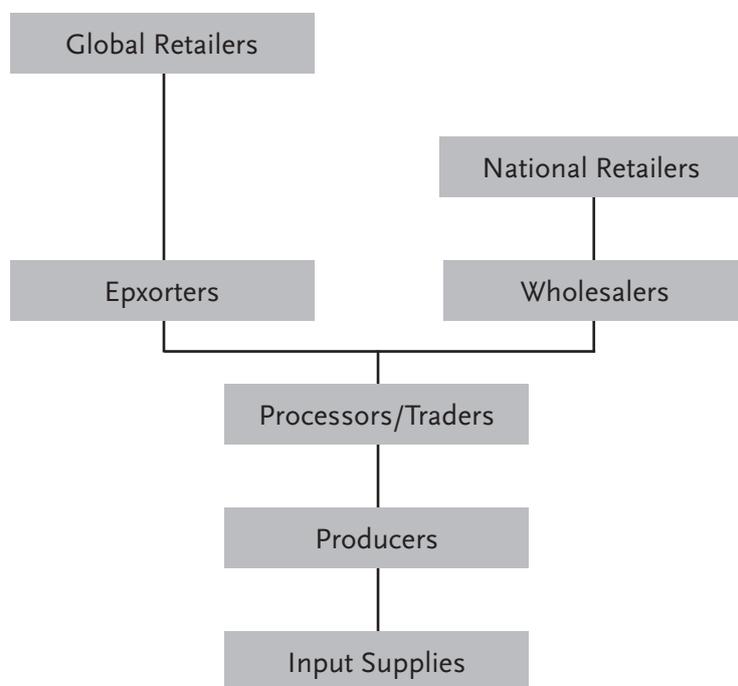
The schedule in Figure 1 presents the value chain in the narrow sense as those actors that actually handle the product. Da Silva and de Souza Filho (2007: 1) note that, ‘seen from a broader, systemic perspective, the chain concept includes also the ‘rules of the game’ – laws, regulations, policies and other institutional elements – as well as the support services, which form the environment where all activities take place’.

Historically, marketing activities evolve around spot markets, where buyers and sellers meet and products exchange hands. According to Altenburg (2006: 493) ‘simple spot market

transactions, where independent producers manufacture without knowing in advance who their customers will be and which product and process standards they expect them to comply with, are no longer the prevalent way of doing business'. Contracts, pre-selling arrangements, distant interaction and standards have taken over the role of the spot market. To guarantee quality and other standards, streamlined information flows and chain coordination are inevitable.

The value chain approach builds on, and is an alternative to, the sectoral approach. Economists have long been concerned with the ways in which individual sectors are organized and perform. However, a value chain can represent multiple sectors and vice versa. Grossmann et al. (2009: 8) note that 'while local and regional economic development is a location-specific development approach, value chain promotion focuses on upgrading strategic sub-sectors or value chains'.

Figure 1. Value Chain



## 2.2 Value chain development

All value chain actors seek to maximize their income and minimize their risks. Most of the literature on value chains concerns initiatives where value chains are subject to development interventions. Historically, development interventions often aimed to gain a better deal for small producers, for example by eliminating exploitative layers of middle men, or by by-passing 'loan sharks' with micro-credits for producers. Today, value chain development integrates economic development objectives with fair distribution of income objectives. Value chain development projects have become common among all bilateral and multilateral donor agencies (Altenburg 2006: 493). The importance of traders and processors for the development of the value chain is acknowledged and the focus has shifted to improving

linkages between actors in order to improve chain efficiency and a more equal distribution of income. In many cases, intermediaries or middlemen are encouraged to take on the role of bank in the chain (Helmsing and Vellema 2011: 40).

Value chain development is thus used to improve market-driven activities, while at the same time redistributing income in a chain. Value chain development programmes often focus on inclusive markets or pro-poor development. Programmes typically seek to target value chains that engage large numbers of poor people, in order to improve their position within the value chain and the benefits they receive from participation (Nourse et al. 2007: 11).

Relationships and trust are considered very important aspects in value chain development. Da Silva and de Souza Filho (2007: 1) state that 'when properly conducted, value chain analyses can also help to create a shared vision among chain participants regarding challenges and opportunities, thus facilitating the development of collaborative relationships.' Value chain analysis is used to identify the weak links in the chain. 'By revealing strengths and weaknesses, such analyses help chain stakeholders and policy-makers to delineate corrective measures and to unleash the development of areas and activities where the potential for growth is identified' (ibid). The most common elements of value chain projects are: organizing producer groups, providing advisory services, facilitating knowledge development, brokering and networking between actors in the chain, providing inputs, strengthening local capacity builders and carrying out advocacy at national and international levels.

### **2.3 Value chain actors and organisation**

Different links in the value chain are involved in producing a certain product for the final consumer. Value chain organisation refers to the vertical and horizontal linkages between the different actors involved in different activities in the chain like production (farmers), transport and bulking (traders), processing and exporting. How do farmers sell their product? Are traders paid up-front? How do processors know the demand of the final consumer? Do outlet stores and exporters have ways to communicate customer demand to their suppliers? Efficient value chain organisation leads to reduced transaction costs and upgraded chain processes, e.g. a better response to market demand. Trust and information flows are important aspects of improving the linkages between the different activities in the chain.

According to Parker (2008: 6), 'perhaps the most important concept of value chain programming is that the market is the central driver. Any value chain programme should begin with a market opportunity: a growing, profitable market, whether domestic or international, whether highly differentiated or less differentiated'. In reality, however, agricultural products especially are produced without knowing if there is a demand. Value chain promotion thus attempts to optimise the value chain in such a way that the demands of the end-consumers are fully met by harmonising value chain activities, and by improving quality and productivity along the value chain (Grossmann et al. 2009: 59).

Chain coordination refers to ‘the harmonization of the physical, financial and information flows and of property right exchanges along a chain’ (Da Silva and de Souza Filho 2007: 14). Promoting coordination of the value chain is geared to bringing down transaction costs, enhancing information flows and regulating relations between the different actors in the chain. Value chain development programmes often aim at organizing the small producers at the beginning of the chain and linking them to lead actors along the chain. This will increase the bargaining power of small-scale producers in the markets as well as facilitating collective learning and risk sharing (USAID 2010).

### **Lead actors**

Lead actors are powerful links in the chain that have the capacity to increase efficiency in the chain by increasing vertical linkages and facilitating information flows. As Nourse et al. (2007: 8) state, small enterprises can be linked to potential buyers which can provide access to quality inputs and even technical production assistance in return for sales contracts. The lead actor can be an end-buyer, a processor that controls certain technology or a better-resourced producer that is strategically positioned in the chain. Promoting chain coordination aims to bring about a reciprocal effect: linking farmers to lead firms that can help them to enhance their quality. The idea is that ‘support from lead firms may enhance the competitiveness of the whole chain’ (Altenburg 2006: 494). Global value chains sourcing from developing countries can offer the opportunity for small firms to connect to well-developed chains. Many important products like tea, coffee, and cocoa are sourced from developing countries. International sourcing food producers offer farmers training and inputs to increase quality and quantity in exchange for the possibility of buying their products. The central position of the lead actor creates the risk that value chain development only strengthens the lead firm’s bargaining power at the expense of its suppliers. To avoid value chains becoming exploitative, producer organisations may be seen as a countervailing power to the lead actor.

### **Producer organisations**

Transaction costs, i.e. costs for collecting information, travelling to purchase inputs, and to market the products, are often too high to make market participation beneficial for small producers. Traders and middlemen can play a role in bulking the products but are often accused of lowering the prices. Collective action is considered the obvious answer, as this increases farmers’ bargaining power, and allows them to share information and means to transport their products to market. Both formal and informal horizontal linkages between chain actors help reduce transaction costs as well as increase the efficiency and competitiveness of a chain (USAID 2010). In addition, lead actors often prefer to deal with an organisation, and can make their role in the chain conditional on the formation of a producer organisation.

Producer organisation is often considered the best way to increase horizontal linkages, for instance between farmers or traders, for collective action. They can increase the value generated throughout the chain by ensuring that the quality of products is in line with the standard demanded, and help producers negotiate a fair share of the total profit (Bijman and Ton 2008: 1). Bijman and Ton (2008: 2) note three ways to support producer organisations: ‘First, support of the producer organisation itself, by developing the capacities of leaders, members or managers and other types of organisational strengthening; improving the skills

needed to develop and lobby for favourable legislation; and improving negotiation skills to enter into and maintain partnerships (both vertical and horizontal). Second, development cooperation agencies can help producer organisations to set up market information systems in order to collect, assess and distribute the information producers need to improve their competitiveness. Third, they can help POs provide technical assistance to their members and help them comply with quality standards and certification requirements’.

Asymmetric information can lead to exploitation of the farmers with the least information, often in the form of a low price for their goods. Forward and backward linkages in value chains and formation of producer groups enable actors to better understand markets and consumer preferences (Ouma and Jagwe 2010: 11).

## **2.4 Value Chain Processes**

Value chain processes are the activities of the different chain actors. How do farmers grow their crops? Do traders transport goods by motorbike or lorry? What machinery is used by the processors? Value chain processes evolve around how activities can be conducted most efficiently. Capacity and knowledge are important aspects of value chain processes. Efficient value chain processes lead to increased value added. For example, when traders protect mangos during transport, the fruits will retain their quality and gain a better price with the wholesalers.

Parker (2008: 6) states that ‘the fundamental objective of value chain programming is to move poor individuals and households out of saturated, low-return activities and into higher-return, growing markets’. Giuliani and Pietrobelli (2005: 550) note that ‘firms from developing countries often compete by squeezing wages and profit margins rather than by improving productivity, wages, and profits. The key difference between the high and the low road to competitiveness is often explained by the different capabilities of firms to increase the value added of its products and processes’.

Value chain processes contain many elements that can each be subject to measures for improvement. These include:

### **Access to inputs**

The main inputs for value chains are often labour, seeds, fertilizer and pesticides. Lack of input quantity and quality heavily affects the possibilities for producers. Low input use can be caused by low availability of inputs on the market or the lack of money to buy the inputs. Comparative advantage can be generated both through low costs and through high quality inputs (Da Silva and de Souza Filho 2007: 15).

### **Access to technology**

Technology and capacity to innovate, like the use of improved seeds, are often critical to the ability to participate in established value chains. Technology is an important determinant of productivity and costs, as well as of product safety and quality. The ability to access technologies may be crucial in enhancing competitive qualities and overall performance.

### **Product quality**

Markets in the developed world require high quality products and it is therefore important that all actors in the chain are able to adhere to the quality standards relevant to their link in the chain. Supermarkets and multinational food companies play an important role in setting the standards. They tend to work with preferred suppliers that can offer them products of high volume and consistent quality (Bijman and Ton 2008: 2).

### **Consistency in supply (volumes and quality)**

High value outlets and processors need consistent quality and identical inputs. In most cases the buyers require pre-determined volumes of products. All these requirements are difficult to guarantee for small-scale producers especially when their production is vulnerable to external factors like drought. Helping small enterprises to increase their production and/or to establish business associations where they can aggregate and jointly market their products can be crucial in making production more stable (Nourse et al 2007: 9).

### **Demand for socially and environmentally sound products**

In developed markets, the demand for socially and environmentally sound products is a new challenge for value chains. According to Altenburg (2006: 493-494), 'the imposition of more stringent product and process standards (e.g. regarding hygiene, environmental or social characteristics, not only of products but also of processes) by consumers and governments puts additional strain on developing country producers and puts many of the weaker small-scale producers in danger, but also opens up certain new opportunities for product differentiation'.

## **2.5 Institutional environment**

The institutional environment of a value chain encompasses all actors outside, within and around the chain that can or could influence the value chain actors and activities. Value chain literature often distinguishes between the formal institutional environment, such as the government, banks and courts, and the informal institutional environment consisting of social norms and values, trust and relationships. In developing countries, the informal environment is often what dominates and determines market behaviour (e.g. Pain 2007). As we will later elaborate, the separation between formal and informal institutions is debatable in general and one of the impediments that may hamper the identification of (possible) actors in value chains in fragile conditions, as these are characterized by very fluid boundaries between the formal and informal. A business-enabling institutional environment can reduce costs and increase the value added. For example, the government can be involved in agricultural extension services, chambers of commerce can give actors a formal status, courts can enforce contracts and banks can provide credit.

Value chains are highly influenced by the institutional environment. This environment may enhance or impair the performance of the chain and its component parts.

### **Credit**

For farmers to be able to upgrade their production to adhere to the standards in value chains

they need to invest. Access to finance is thus crucial for the functioning of the value chain (Miller 2010, telephone interview). Note that financial services can also become mechanisms of exclusion, barring aspiring actors from entering a value chain. Micro-credit can be a solution but is often offered in combination with a certain value chain development project, excluding any producers that are not part of the defined value chain.

### **Role of the government**

Governments can play a direct role in establishing or fostering public and private sector strategies and policies of interest to a particular chain (Da Silva and de Souza Filho 2007: 14-15). Furthermore, taxation by the government can provide important revenues allowing the development of a business-enabling environment. That being said, in developing countries usually only large corporations pay taxes, as small enterprises lack official registration which in turn also complicates their access into larger, global, value chains (Altenburg 2007: 41).

### **Service providers**

Developing countries often lack service providers to provide training and other assistance in production and marketing. Development programmes often offer these services to the farmers temporarily. Commercialising services is a more sustainable way to institutionalise them and guarantee these services for the future.

## **2.6 Conclusion**

This chapter has briefly outlined concepts and dimensions of value chains and the tradition of value chain development that has evolved in recent decades. While dissecting the dimensions of actors and organization, chain processes and the institutional environment, it becomes clear that value chain development is far from a merely technocratic endeavour. Although organization, technology and surrounding institutions are important, these may have different faces. While they can work for the inclusion and advancement of small producers, they can also work towards exclusion, exploitation and creating barriers for development. Trust is considered a crucial element for value chain development. However, power relations may be just as important in determining the everyday realities and opportunities for value chain actors.

# 3

## Effects of conflict on value chains

Conflict has profound effects on societies and their economies; people flee, the flow of goods and inputs comes to a halt, markets are disrupted, production moves or stops and the trust that cements economic life may be severely eroded. Existing value chains are interrupted and the institutional environment is hampered for a shorter or longer period. On the other hand, crises may also give rise to the reordering of societies and institutions, and the formation of alternative chains and networks. A situation of protracted conflict and instability can also become institutionalised in people's lives. This may mean markets persist but there is low trust outside of social networks. In general, the level of disruption of value chains depends on the force of the crisis combined with the pre-crisis state.

### 3.1 Economy and conflict

In general terms, there are three different ways in which the economy and conflict affect each other: '(1) the economic dimension of conflict root causes and escalating factors; (2) the economic resources feeding a conflict; and (3) the adverse effects of conflicts on the economy' (Grossmann et al. 2009: 11). How these work out in specific conflicts and economies varies considerably.

Contrary to common belief, producers do not stop producing and markets do not disappear or fully collapse during a crisis. As one of the background papers to the World Development Report 2011 argues, 'the private sector continues to operate even during the most violent situations' (Porter Peschka 2011: 3). Market actors wait as long as possible to halt their activity and start or resume their activities as soon as the situation allows. 'While the negative impacts of crises weakens overall economic activity, markets and the private sector are more resilient and remain active during a crisis and afterwards' (Nourse et al. 2007: 19). In countries where people have no savings they have no other choice but to participate in the market for daily up-keep. Poor households, as a coping strategy, continue to engage with markets and the private sector for trade and services. During the Sudanese conflict, for example, North and South Sudan continued to trade, which was rapidly intensified when the peace agreement was signed (ibid.).

These two faces of economy during conflict, where on the one hand economic activity feeds conflict, and on the other hand economic activity continues as normally as possible to enable survival, are deeply intertwined, and most activities are multi-faceted. We cannot neatly

distinguish 'good' from 'bad' economic practices and we need to study everyday practices to understand how these logics are renegotiated in their local context and work upon each other (Hilhorst 2007).

### **3.2 Value chain disturbance**

Depending on the nature of the conflict, value chains can be affected in different ways. De Vries and Specker (2009: 36) mention illegal checkpoints: 'In a post-conflict setting the chain will be influenced at various points. For example, illegal checkpoints forcing farmers to pay 'taxes' will force them to raise their prices, thus shrinking the direct market for their goods, as local brokers, too, are usually just small-scale operators'. According to Miller (2010 telephone interview) conflict affects the value chain by the large negative effect on the business environment, the lack of regulation and, in case of prolonged conflict, a lack of educated people which all affects the long-term competitiveness of a chain. Duggleby et al. (2008: 11) describe the effect of war-induced disruptions in DR Congo which led to the deterioration of infrastructure and market linkages, almost completely severing rural-urban relations and rendering cities completely dependent on imported goods. In Angola, coffee production, once having been the number one export commodity of the country, came to a standstill altogether during the 27 years of civil war. Inputs were increasingly hard to obtain, transportation of the product became too dangerous and the market collapsed. Furthermore, for smallholders the long production process became too risky, as they turned to produce staple crops in order to feed the household during the war (van Dijkhorst 2011). An example of the effect of the collapse of one chain actor on the whole chain comes from Burundi. Wodon et al. (2008: 48) note that 'most food crops are consumed with little or no processing. Industrial processing of food crops is almost totally non-existent at present following the total breakdown of the agro-processing sector during the conflict and the continuing absence of demand for processed products as local purchasing power is limited'.

The case studies that we have reviewed for this report confirm the devastating impact that conflict can have on value chains. Due to the conflict, Burundi's coffee sector is now lagging behind the coffee sector in the neighbouring countries. Privatisation in the country had started in the 1980s or 1990s, and Burundi is said to have lost 15 years in the development of the coffee sector due to the conflict. During the 1990s, the embargo on products from Burundi also killed many business ventures and slowed down innovation in other sectors. Burundi is now catching up but still has a long way to go. The carnation chain in Palestine is badly affected by the crisis as the regular border closing with Israel makes it difficult to transport inputs into the country and transport the perishable flowers out of the country, leading to large losses. The trade in livestock in South Sudan became more difficult due to corruption, political instability and ethnic tensions that make it difficult to move with the livestock to find traders. The grape chain in Afghanistan shows how the conflict caused the breakdown of trust and social networks and led to high risk aversion. People do not want to collaborate and do not trust their neighbours; this makes it very difficult to improve the linkages in the chain that are needed to improve quality. The grape value chain is further hampered by corruption, lack of education, the security situation and the presence of land mines.

## **Risk**

Risk increases for all actors during and after crisis, increasing transaction costs. Businesses that are mobile, such as international companies, will usually move to places with lower transaction costs. This does not only hold for product chains, but especially for services to the chain. As Grossmann et al. (2009: 72) mention: 'At the intermediate and micro levels, financial intermediaries and their service providers may be directly or indirectly affected by violence, for example due to declining business activities and eroding loan repayment discipline. Usually they will withdraw their services from conflict-affected regions. As a result, people's access to financial services becomes even more restricted'.

## **Trust**

In conflict-affected areas, trust among key stakeholders in a chain can be negatively influenced by on-going political processes. 'Conflict damages trust, and trust is one of the principle risk-mitigation factors that enable healthy economic relationships' (Channell 2010, p.2). Socio-economic networks are broken, or reshuffled, by displacement processes. On the other hand, a shared exposure to violence may also increase levels of trust within a community (Besley and Persson 2012). It can also be seen that due to migration and displacement new networks and relationships of trust emerge that prove beneficial to local economic development. Migrants are able to make effective rural-urban linkages that did not exist in pre-conflict years, and as such expand the possibilities of reaching new markets.

## **3.3 Effects of aid**

Aid given for post-conflict recovery should take into account the effect on existing markets and value chains. While 'individuals and NGOs may donate food and shelter, businesses do not stop providing products and services to meet basic needs and support reconstruction'. (Nourse et al. 2007: 28)

As a result, aid may effectively compete with the private sector. Humanitarian agencies often only seek to provide relief during immediate phases of crises and post-crisis, at the expense of longer term development (Hilhorst 2007, Nourse 2007). This strategy is understandable considering populations' critical need for assistance after crises. Nonetheless, if these efforts ignore market dynamics there may be immediate negative effects: if markets are flooded with low-priced commodities, wasteful parallel distribution systems are created, small enterprises run by the poor are excluded, and investments may be encouraged in sectors that are not viable in the long run. This negative effect has been well illustrated by Anderson (1999: 42-43) who highlighted how relief aid, instead of being procured locally, was imported, and as such contributed to a distorted local market, undermining production and trade. Assumptions of aid agencies that overlook the private sector during the conflict trail on in the post-conflict period when reconstruction tends to overly rely on international suppliers and NGOs, bypassing local business (Hilhorst 2007, Haider 2009).

Paterson (2006: 1) adds that 'the legacy of more than two decades of conflict in Afghanistan has had a destructive impact upon economic institutions, businesses and the infrastructure on which the private sector relies. However, there is a persisting misconception that the

conflict and Taliban period left the Afghan economy as a 'blank slate'. The conflict years did not damage all business interests; instead, they created opportunities for production of and trade in some commodities, as they closed opportunities for others. Afghanistan's shifting geopolitical relations with its neighbours in the region have also affected trading relationships and import/export routes for commodities'.

There have been initiatives to improve the effects of aid by using the private sector to improve delivery of food, clothing, and shelter to meet immediate human needs. These 'market-integrated relief' efforts reduce or avoid market distortion and strengthen the local private sector's capacity. There are also increasing examples of humanitarian programmes that develop new initiatives or adapt on-going market development programmes. The 'Purchasing 4 Progress' project by the WFP (2010) in DR Congo is an example where the project combined emergency aid with the development of value chains to distribute food from producers to consumers within the country.

### **3.4 Relevance of the value chain approach in fragile states**

In response to changing insights into the continuation of economic life during conflict and recognizing the negative side-effects of aid based on asset-transfer (relief goods), the value chain approach or market development is receiving increasing attention from donors. Value chains can enable moving food from areas with food surplus to areas with food shortages. Importantly, value chains are accorded potential in peace building, adding another objective to value chain development. Value chains, in the eyes of donors can contribute to paving the way for peace building by linking actors, and stabilizing post-conflict countries by providing employment opportunities for ex-combatants and refugees (Grossmann et al. 2009).

#### **Post-conflict stability**

According to Grossmann et al. (2009: 59) 'the small-scale agriculture sector is not only important for general food security and poverty reduction but often also for post-conflict stabilisation, providing income and employment for returning refugees and demobilised soldiers. When ex-combatants return home after a crisis it is important that there are job opportunities and that food is available to prevent them from taking up their weapons'. Value chain development, according to these authors, 'with its multiple intervention points and the focus on the interaction and interdependence of many stakeholders, lends itself to conflict-sensitive and conflict-relevant development' (ibid.). Channell (2010: 5) notes a possibility to support the inclusion of women in post-conflict economic recovery interventions, as it is said that traditional power structures are in flux after conflict which creates greater opportunity for women to be included in businesses. Parker (2008: 33), however, cautions about an overly optimistic role of value chain development as a tool for reconciliation, stating that interventions geared towards health, education and infrastructure for instance are more likely to cross conflict fault lines. The challenge is to make value chains more inclusive and to facilitate broader participation in market development.

#### **Transition from relief to development**

According to Nourse et al. (2007: 6) 'market development approaches can be used in

times of on-going instability and, if incorporated soon after a crisis, have the potential to both smooth the transition from relief to development programming and even improve the performance of relief programs'. These authors claim that aid practitioners tend to wait for too long, until they consider the conditions right to allow market development programmes to be implemented. 'They wait until most or all conditions are mitigated and relief programs are finished before considering market development activities. This wait can take anywhere from one to two years following disasters and three to five years following conflict' (ibid.). Often, in post-conflict recovery attention is given to ensuring food security and attention to market development comes in as an added objective. However, as seen in Angola, the momentum for necessary marketing and transportation support can be lost when donor funding dries up and organisations withdraw (van Dijkhorst 2011). Value chain development can start together with emergency aid and as such contribute to the conditions necessary for economic development.

The next three chapters will explore some characteristics of value chains and experiences with value chain development in conflict-affected states.

# 4

## Actors and organisation of value chains in fragile settings

Chapter 2 elaborated how value chain development focuses on the effectiveness of lead actors, the organization of small producers and the vertical relations between activities in the chain. This chapter analyses the chain actors and organisation in the context of fragile states.

### 4.1 Lead actors

The actor capable of improving the effectiveness of the chain is called the chain coordinator or in case of an internal actor, the lead firm. These lead actors are considered particularly important in a conflict-affected environment because they provide leadership for innovation and trust building. According to Parker (2008: 3), their participation sends an important message to others: the incentives in the marketplace are strong enough to merit engagement and innovation, while the risks are manageable.

In a number of the reviewed cases for this report, a lead actor can be identified, although their impact on linking the value chain is invariably small. The Palestine carnation chain has the most obvious lead actor, in the form of a cooperative that collects the flowers and arranges transport and export, linking the producers to the consumer. One of the saffron chains in Afghanistan works with a processing plant that offers some services to the growers. In the Burundi coffee chain, the washing stations are the most likely lead actors. As the cherries they buy determine the quality of their coffee, they realize they can play an important role in improving the quality of the cherries. However, extension services from the washing stations are still very rare. In the Pakistan embroidered garments chain the large buyers provide feedback to women sales agents on design and required quality. However, only a small share of all embroidered garments are sold via the women sales agents and buying houses. In DR Congo there are two newly established processing plants for honey which aim to improve honey quality by educating farmers on the production of better beehives, but most producers process their honey at home.

The other value chains are not organized as such and have no lead actor that links the different parts. Where linkages emerge, this is facilitated by external actors (NGOs). The cotton producers in Pakistan function as individuals rather than as chains. NGOs (which were present in large numbers after the 2005 earthquake and 2010 floods) have tried to establish

some linkages between the different actors. Transactions in the livestock chain in South Sudan are mostly informal and between small actors, with an INGO painstakingly trying to build more horizontal and vertical linkages. The grape chain in Afghanistan has no obvious lead firm, and all trade is at arm's length. NGOs are trying to improve the quality of the grapes throughout the chain by helping the different actors.

## **4.2 Producer organisations and cooperatives: horizontal linkages**

As stated in Chapter 2, many initiatives for value chain development focus on strengthening horizontal linkages between producers. When farmers work together they have more bargaining power, they have more knowledge, have better access to business services and inputs and are more attractive for other actors in the chain as they can offer larger quantities and transaction costs are reduced.

Although fragile states do not necessarily have equally fragile civil societies, in many conflict-affected countries civil society is rather weak. The WFP (2010: 2) gives the example of the DR Congo where only few farmer organizations exist, but are considered to lack market capacity as they are unable to aggregate commodities from members, suffer from transportation constraints due to bad infrastructure and furthermore lack warehouse and cleaning facilities and access to credit. This example from the DR Congo underlines the integrated nature of the different dimensions of value chains. Even though producer organizations in this example increase the horizontal linkages between producers, they cannot overcome their market access problems. Nonetheless, producer organizations are often seen as the 'silver bullet' of value chain development

From among our cases, the carnation chain in the Palestine Territories has the most advanced cooperative. Farmers bring their carnations to the cooperative. The final price is determined when the exporting company sells the flowers at an auction. The flower growers are then paid by the cooperative. In the Afghan saffron chain two women producer organisation started cooperating to process the saffron together and market the product for the group as a whole to get a better price. It was important in this case to involve the men as well, as they were needed for the formal arrangements. Our other case from Afghanistan, the grape chain, includes some nominal farmer associations, but they do not pool their product for processing or selling. The grape chain project aimed to get farmers to bundle their production and resources. However, they were not able to find farmers who were interested in grouping together with other farmers. The project attributed the failure to Afghan culture and the legacy of the Taliban, although this does not explain why there are also successful cases of producer collaboration in other parts of Afghanistan (Ritchie 2012). In South Sudan, cooperatives are few and in a very premature state; there are little examples of transactions through cooperatives. In the DRC honey chain the Association for the Advancement of Women and the Girls in Kisantu (APFPK) buy and sell raw honey and processed products like honey wine.

All these cases concern NGO-facilitated cooperatives. Only in the case of the cotton chain in Pakistan did the government play a role in starting farmer groups in 2003 which maintain a service centre and provide inputs.

### 4.3 Coordination of value chains and vertical linkages

During conflict, linkages in value chains are often altered and become more or less ineffective due to a combination of restricting opportunities and erosion of trust. Resulting chains are often inefficient and short, mainly concerning unprocessed products for low-value markets with low value added and an unequal distribution of income in the chain. After reviewing a large number of value chains in fragile states for USAID, Parker (2008: 2) concluded that ‘in conflict environments, linkages are often fragile or non-existent. This is true for vertical linkages—required to link the poor to markets—as well as horizontal linkages, which allow cooperation between businesses facing similar opportunities or challenges’. According to this author, multi-function associations can provide a forum to enhance vertical relationships for value chains. She gives the example of a Kosovo dairy chain, which early in the project created an association that included both milk producers and milk processors to jointly look at markets, competition, requirements for upgrading the produce, and policy issues (Parker 2008: 39). As already noted in Chapter 2, spot markets were replaced through contracts, pre-selling arrangements, distant interaction and standards, in which the flow of information and chain coordination is essential. McMahon (2008: 39) claims the value chain approach worked to rebuild markets in Afghanistan, through ‘bringing buyers and sellers together to identify end market needs, facilitating sales transactions and relationships and assisting chain participants individually and collectively in upgrading to meet market demand through substantial material and technical assistance’.

#### **Inequality in the chain**

In many cases the actors at the top end of the chain get organised much faster than the farmers at the bottom of the chain and even benefit from the situation, leading to unequal distribution of income and opportunities. According to Grossmann et al. (2009: 63) ‘multinational companies suffer relatively little as a result of conflicts, and they find it easier to stop or relocate their operations’. A study by Lister et al. (2004: 24) on grapes in Afghanistan showed that ‘the farmers benefit least from higher value and specialist products, and this reduces their incentive to produce higher-value goods’. Wodon et al. (2008: 48) describe how in Burundi a small group of traders organized in networks, dominated the local markets and controlled important storage facilities.

#### **Information asymmetries**

Inequalities in value chains are exacerbated by information asymmetries. The WFP (2010: 2) notes that in DR Congo ‘restricted access to markets constrains farmers’ understanding of marketing and access to market information and therefore puts them at a disadvantage relative to traders when negotiating commodity prices’. Information is important for value chain improvement. Efficient vertical linkages facilitate information flows from the top to the bottom of the value chain containing product requirements and price information. It is important to improve the vertical linkages in a chain to increase effectiveness. However, according to Grossmann et al. (2009: 59) these activities should be undertaken with care as ‘negotiations between value chain actors can also cause or trigger conflicts, especially when powerful or privileged business people stand to lose their advantage through the optimising of a value chain’. Our interview on the saffron chain in Afghanistan showed that the middlemen and larger traders are the main beneficiaries in the chain. They buy the saffron

from farmers and smaller traders at a fraction of the price they are paid by their customers. The middlemen are the main source of information for the farmer and they have a vested interest in continuing information asymmetries.

The case of the cotton chain in Pakistan shows that little to no information flows through the chain. Cotton is sold through spot markets, reducing the incentives to communicate product requirements to the delivering actors. There are no information systems in place so farmers depend on neighbours and extension services to get an idea of the right price. In the embroidered garment chain in Pakistan, most transactions are traditionally conducted by male family members who are not conversant in embroidery. Therefore women do not get the information regarding the demand of the end consumer. This situation improved by the establishment of women sales agents and the buying house system who distribute information on their demand to producer groups and individual producers.

In the livestock sector in South Sudan access to information in general is heavily affected by the isolated lifestyle of pastoralists; most of them are not formally educated or trained. However, the pastoralists have quite a good idea of the price of a goat, sheep, bull or cow. They are aware that the traders make a profit by selling their livestock, but the pastoralists prefer not to travel to the market themselves and bargain in Arabic. In the DR Congo market information systems are practically non-existent. Only few farmers have cell phones in those areas with coverage. In the Afghan grape chain there is a lack of price information increasing with the distance from the market; cell phones are penetrating the market but coverage is still low. Lack of price information is one of the issues most mentioned by farmers as a bottleneck, and they distrust the traders regarding the price they get for their produce.

The Burundi coffee chain, on the other hand, is a very transparent system; the government sets a minimum price for coffee cherries and the farmers are paid a premium for higher quality coffee. The auction system for washed coffee is also very transparent as all traders know the going rates. The carnations from the Palestine carnation chain are sold via the auction in the Netherlands which is very transparent. Each producer can see the price paid for their product.

As noted in chapter 2, nowadays many spot markets have been replaced by contracts, pre-selling arrangements, distant interaction and standards, in which the flow of information and chain coordination is essential. However, our cases in fragile states show that there is little flow of information and/or coordination. It appears that in these fragile contexts, spot markets are still relied upon by chain actors.

### **Trust**

Parker (2008: 18) in his review of value chains in fragile states finds that trust is the most important factor in re-establishing linkages: 'the word 'trust' appeared in nearly every case study, describing the all-too-scarce ingredient needed to link value chain participants together to achieve a common business outcome. Trust issues emerged horizontally among value chain participants who historically had played the role of competitors for a limited market share. Lack of trust also emerged in vertical relationships (up and down the value chain) based upon bad experiences in previous contracts or transactions, or reinforced by

differences in geography, ethnicity, power or other conflict factors'. Trust has a direct relation to transaction costs as it is more difficult to find reliable buyers or suppliers and to enforce made agreements.

Our case studies give a more varied picture. Although trust issues played a major role in the grape chain in Afghanistan, it was emphasized in the case of South Sudan that value chains depend on the high levels of trust among kinship networks and on the role of social control. In the embroidered garment chain in Pakistan women sales agents were appointed to improve communication between the larger buyers and the rural embroiderers. However, these women were based in urban areas and the distance between them and the rural embroiderers was too large to generate trust. Therefore, they were replaced by female representatives from the rural areas that were more effective in working with the producers.

#### **4.4 Conclusion**

The previous chapter emphasized the importance of recognizing that economic life continues during conflict and can be built upon during reconstruction. While this is important, the current chapter especially cautions that expectations should not be overly high regarding the viability of value chains in conflict-affected countries. The large damage to value chains, even if they existed before the conflict, and especially the restricted opportunities to link to functioning markets make the (re) building of value chains difficult to perceive as a quick fix solution boxed into a project timeframe of six months to three years. Many cases have not, or have only embryonically, established functioning linkages that enable them to develop into well-functioning value chains. In those cases where such linkages are emerging they depend heavily on external facilitation by aid agencies. On the other hand, we also find diversity in the case studies. Two cases stand out. The Palestinian flower chain is very well linked, and the washing stations of the Burundian coffee chain are developing into promising lead actors.

Whereas the concept of trust is often approached in literature on conflict and fragile states as subject to breakdown during crisis, our case studies show a more varied picture. Some value chains remained grounded in effective relationships of trust, for example in the case of South Sudan where the value chain was largely organized by using kinship networks. The Pakistan case shows that where trust is indeed an issue, we have to be careful to attribute this to the conflict. In this case, initial mistrust of women agents was related to urban-rural relations rather than to a conflict-related erosion of trust. Trust is thus not self-evident. It is being used in value chain studies as a container concept that should be unpacked to reveal a large variety of conditions that may have very different explanations.

# 5

## Value chain processes in fragile settings

This chapter will investigate how value chain processes are affected by fragility. Chain processes here are understood as the activities the different links in a chain undertake and the elements that are essential for the chain actors to perform their activities and add value. The chapter highlights some of the elements affecting chain processes, illustrated by examples from the case studies of the different value chains in fragile states.

### 5.1 Access to inputs

Availability of inputs is an important factor in determining the potential success of a value chain. Low input usage leads to lower yield and less quality. In conflict-affected areas formal markets for inputs can be disrupted or credit in the form of input supplies has become too risky.

Inputs, such as improved seed varieties, chemical fertilizers, herbicides and pesticides are often considered a pre-requisite for value chain development. Inputs are often more difficult to obtain in fragile states. Miller (2008: 1) gives the example of South Sudan where 'both agricultural input and product markets are undeveloped. No effective investment can be made in scaling up production, however, without first strengthening markets. The period of civil disorder has largely destroyed the traditional market linkages and channels – including the complex set of social and economic relationships between intermediaries necessary for markets to work'.

On the other hand, local seed markets do not completely stop functioning during crisis, but in fact might take different forms. As Sperling and McGuire (2010: 197) point out, local farmers tend to also procure seeds from a range of different actors such as neighbours, family and informal markets. Furthermore, improved seed varieties are not always better than the varieties farmers rely on during crisis. Sperling and McGuire (2010: 198) note that very often improved varieties do not respond well to the low-input conditions that they are used in, and local varieties in comparison give better results.

Wodon et al. (2008: 47) note that in Burundi 'the withdrawal of the government from the fertilizer sector has led to a fall in the use of fertilizer on all crops, including food crops. Adjusting for inflation, the price of fertilizer has roughly doubled during the past 10 years'. Although the withdrawal of the government was not a result of the crisis, the fact that

commercial parties could not effectively take over the supplier role can be seen as a result of the crisis.

The cases show that there is often a lack of (formal markets for) inputs and/or that traditionally the crop is grown extensively without the use of large quantities of inputs. In Afghanistan there is a lack of bulbs for the saffron production. Bulbs are smuggled from Iran and some bulbs are now being reproduced in Afghanistan. Inputs are a problem in the Palestine carnation chain. All inputs and, due to patent systems, even the cuttings come from Israel, affecting the chain when the borders are closed. In Afghanistan the grape chain is affected by a lack of young plants to replace old and diseased plants. The few suppliers of pesticides and fertilizer have to cope with great mistrust by the farmers which makes it difficult to convince them of the benefits for production. The pastoralists in the livestock chain in South Sudan hardly use inputs. The livestock is not kept for commercial purposes but as a way of life intertwined with the local culture, making the use of inputs less common.

In Burundi the state historically provided inputs. Now that the markets are being privatised the privately owned washing station provides inputs to the farmers on credit. The government brings inputs in bulk into the country and distributes them through government or private channels. In Pakistan the inputs for cotton production are widely available on the market. Since the privatisation in the 1970s and 1980s there is a much better match between input supply and demand which led to higher yields. In DR Congo the tools needed for honey collection and production, like smokers and outfits, are available on the market. The bee colonies are collected from the wild. The women embroiderers in Pakistan can get their inputs via women sales agents, input supply shops or the buying houses. The women in the remote areas are still dependent on the traders who place orders and provide the inputs. As it was difficult for women to visit input supply shops, the inputs are now also being distributed through beauty shops. This last point shows the existence and importance of informal institutional arrangements for access to inputs. Even if the more formal input structures have disappeared, producers are sometimes able to find alternative ways to procure the necessary inputs.

## **5.2 Market access**

Smallholders have difficulty becoming part of upgraded value chains, often because few upgraded value chains exist in fragile states or because the farmers do not have access to these chains. Conflict increases the likelihood of this problem, even if food deficiencies exist in nearby regions. Miller (2008: 1) studied market access in South Sudan, and states that 'as a result of the underdeveloped marketing arrangements post-harvest losses at the farm level and within markets are very high, as are food prices'.

The cases in this report show that most farmers deal with traders who buy their products individually. In the Afghanistan saffron chain, middlemen visit the farmers before the harvest and make a deal to buy all their different products. For farmers this can be challenging as they get their money in advance and need to fulfil their obligations at the end of the harvest. In the coffee chain in Burundi farmers sell their coffee cherries to the local washing station

at a distance of 5-10 kilometres or to rural collectors who collect the coffee and sell it to the same washing station. The farmers have a guaranteed market for their product, but due to perishability they have to sell their product within six hours after harvesting and thus have no other choice but to sell to the nearest washing station. In Pakistan, farmers sell their cotton seed either directly to the ginning factories or to middlemen, who then collect the cotton and sell it in bulk to the ginning factories. Middlemen either collect the cotton from the farms or the cotton is sold to them on open markets. There are no contracts within this chain. In the embroidered garment chain in Pakistan traditionally local sales agents purchase embroidered handicrafts and fabric for clothing on order from male relatives to sell to shopkeepers in low-value, local markets.

Beekeepers in DR Congo have two opportunities to sell their product. The first is through direct linkages with buyers in the city of Kinshasa (hotels, supermarkets, retailers or consumers). Either the beekeepers travel to Kinshasa to sell the honey there or the buyers from Kinshasa come to the villages to buy the honey. Alternatively, the beekeepers can sell their honey to middlemen who transport the honey to Kinshasa. In Afghanistan, the smallholder farmers sell most of their grapes to traders at the farm gate, some sell on their own local market and only a few sell at the district level or export. The farmers sometimes receive a down payment from the traders and receive the final payment after the trader has sold their product leaving the risk with the farmer. If no pre-harvest arrangements are made, the farmer loads his produce on a donkey cart and brings it to nearest road hoping a trader will come by to buy his crops.

In the embroidered garment chain in Pakistan an additional link through women sales agents was added to the chain to improve communication flows from high value retailers to the women embroiderers. The women sales agents were supposed to overcome the monopolistic and dysfunctional male role in the chain. Women sales agents (both local and town based) provided market access to buying houses. The emerging overall picture is one of value chains that operate, yet in ways that are not well developed and often at the expense of producers, who are highly dependent of middlemen.

### **5.3 Quality monitoring**

In most of the cases studied, quality control is done on the basis of expertise and intuition of the actors within the chain and there are no formalised quality systems. Often, quality control is only happening post-harvest, when traders and middlemen test the quality of the product to determine the price.

In Afghanistan, the middlemen test the saffron based on colour and aroma. In DR Congo the quality of the honey is determined in the processing stage. As the processing is mostly done at home there is no quality control and quality varies a lot. There are no quality systems operating in the grape value chain in Afghanistan. Testing facilities for certifying raisins against international grades and standards are extremely limited and some required tests are not available at all. In South Sudan there is no effective body to regulate food quality. Public health officers and animal health officers are important actors in improving livestock and

milk quality and safety, but there are too little resources to support them. SNV helped the government to establish a quality control system in slaughter houses and to provide animal inspectors at livestock markets, but these systems have only recently been put in place.

In Burundi, awareness of quality is increasing; during collection at the washing station the green cherries are skimmed out stimulating farmers to collect only ripe cherries. An NGO active in Burundi has implemented quality systems in 13 washing stations which have increased the quality of the coffee. The washing stations without quality systems offer lower quality washed coffee. In the cotton chain in Pakistan the quality is graded at each transaction in the chain. However, general quality is low due to bad picking, storage and processing techniques. The Pakistan Cotton Standard Institute is supposed to maintain a certain standard in the chain, but they have low impact on the chain. Quality in the Pakistani embroidered garment chain is controlled by the women sales agents and the buying houses: both manage orders and quality and receive feedback from the buyers. The biggest quality issue is cleanliness. The women embroiderers were trained to work in a clean area and to prevent the garments getting dirty during storage. Quality in the Palestine carnation chain is high: the flowers are graded when they are brought to the cooperative. The exporting party performs quality checks too. The final grading is done during auction.

## 5.4 Infrastructure

Infrastructure is crucial for processing products and transporting them through the country or abroad. Bad roads make it difficult or impossible to transport perishable crops. Without electricity, crops cannot be kept in cold storage and machinery cannot be used to add value to products.

### Effects of crisis on infrastructure

The WFP (2010: 2) indicates that in DR Congo, conflict has contributed to a deterioration of the transportation infrastructure which is considered the key barrier to market development. Basdevant (2009: 6) describes how conflict and displacement in Burundi affected infrastructure, as land, equipment and infrastructure were no longer maintained. Kawasimi and White (2010: 23) describe the situation in the Palestine territories, 'Palestinian firms are unable to commit to fixed delivery schedules, which effectively preclude them from entering most high value markets where just in time delivery is essential'. Bad infrastructure increases the price of the end-product. Higher fuel and freight costs affect competitiveness, and there is increased risk of damage to the product (Parker 2008: 17). According to Wodon et al. (2008: 50), in Burundi, 'most food crops are characterized by low value to weight ratios, making it unprofitable to transport them over large distances because transport costs quickly eat into profit margins. Producers therefore must sell their output in the immediate area where demand may be weak and unpredictable. The lack of long-term storage facilities for food crops combined in some cases with their perishability means that many farmers are forced to sell during the post-harvest period when prices are at their lowest'. To illustrate the extent of increased costs due to bad infrastructure, in the West African banana value chain, transportation costs make up 57% of the total marketing costs of traders due to poor road conditions (Ouma and Jagwe 2010: 9).

Our case studies show that transportation is not an issue in every context either because the roads have been relatively well maintained, or because the product in the chain does not lose its value in case of bad infrastructure. Afghanistan, however, has always had a problem with underdeveloped roads. Dry river beds are sometimes used as an alternative to roads as these have fewer holes. However, saffron (like opium) is resistant to long and harsh transport and is not affected by the state of the roads. The Taliban are not interested in saffron and the transport is not hindered. In Burundi, asphalt roads are available in all coffee growing areas, trucks are readily available and there are no safety problems on the roads. The real problem is the transport of the fully washed coffee to the overseas buyers. Green coffee loses its quality over a six month period. As it takes up to 3 months to ship the coffee from Burundi, the customers are now arranging their own transport. In Pakistan, the road network is well developed and transportation is safe in most of the country. For the embroidered garment chain in Pakistan, transport is not an issue anyway, as garments are not perishable. In South Sudan transporting goods is possible, but security and the state of the roads are limiting factors. Almost all roads in the country are unpaved, so especially during the rainy season, areas can be inaccessible. In the Southwest of DR Congo (Bandundu and Bas-Congo) the roads are relatively good due to heavy investment by USAID. Products can be transported to market without too many problems.

### **Transaction costs**

Additionally, transaction costs for traders and transporters increase when the security situation deteriorates as more time is needed to access the best ways to transport goods and control the reliability of involved actors. Parker (2008: 17) stated that 'border crossings introduced multi-day delays and other burdens. These barriers to transit reflected poor policies and regulations, and in some cases, security concerns'.

In Palestine, border crossings are the biggest issue in the development of value chains and cause high transaction costs due to closure of the Gaza Strip and the hundreds of checkpoints separating the remaining West Bank from East Jerusalem (Kawasimi and White 2010: 22). This is illustrated in the Palestine carnation chain where crossing the Gaza – Israel border is the biggest problem in transportation and the chain as a whole. Without any notice, the border can be closed for several hours to weeks. When the border crossing takes too long, the flowers can no longer be sold. Additionally all products have to be offloaded at the border for security which reduces the quality of the flowers. The grape chain in Afghanistan is hindered by security issues throughout the country. Rebels attack the population, government and international peacekeeping forces. The police are widely seen as incompetent and corrupt. It is very difficult to transport goods when having to cope with illegal taxation, banditry and bad quality roads.

### **Electricity**

Availability of electricity increases the storage life of products, the use of machinery in the production process and of computers to collect information. According to the WFP (2010, p.2) the lack of electricity for basic drying, cleaning, and processing equipment reduces farmers' ability to add value to commodities. Wodon et al. (2008: 51) describe the electricity system in Burundi, where 'the rural power grid has limited coverage, restricting the ability

of food processors to locate facilities within production zones and urban power grids are unreliable leading to frequent disruptions affecting processing facilities located in urban areas'. Parto et al. (2007: 20) describe how energy continues to present major challenges for rural value-adding production in Afghanistan as smallholders are unable to finance generators necessary for production purposes.

The case study on the Pakistan cotton chain shows that electricity poses a major problem for the chain: if a power cut occurs during processing, production comes to a halt and textiles are spoiled. The cotton can be harvested for only four to five months. If a power cut occurs during this time the picked cotton cannot be processed and prices go down rapidly. Alternatively, electricity is not an issue in the embroidered garment chain in Pakistan as everything is produced manually. Electricity is lacking in Afghanistan outside Kandahar and Kabul. Without cooling, the grapes deteriorate fast. If a cooled supply chain could be set up the grapes could be sold to Pakistan, where there is a large demand for grapes and prices are high.

## **5.5 Conclusion**

While stressing the importance of access to inputs, markets and infrastructure as prerequisites for successful and efficient value chains, our case studies show that all these features of chain processes are heavily affected in fragile states. Input use is low, inputs are unavailable, or only available through informal institutional arrangements. Selling produce is still often done through incidental transactions on spot markets, with producers being highly dependent on middlemen. Bad and unsafe roads, high transaction costs and lack of electricity in these contexts decreases the quality and increases the costs on goods that flow along these chains. The effects of conflict decrease the chances of producers getting a good price for their goods and adding value as well as decreasing the chances of becoming part of upgraded and global value chains.

# 6

## Institutional environment in fragile settings

This chapter analyses the different elements of the formal and informal institutional arrangements of value chains, and the specificities of a fragile context.

### 6.1 Business-enabling institutional environment

Value chain development requires a business-enabling institutional environment. Governments have an important role in creating rules, regulations and institutions that are necessary for value chains to develop. There are, however, also other ways in which the environment of value chains is regulated.

Attention paid to creating a business-enabling environment in post-conflict recovery processes is increasing (Parker 2008: 2). Grossmann et al. (2009: 7) note that 'policy advice and capacity development particularly for government institutions (is necessary) in order to improve conditions for private sector growth'. Paterson (2006: 1) studied the environment for value chain development in Afghanistan and states that the 'government has an important role in encouraging domestic producers and exporters, in gathering revenue from industry and trade, issuing licences, monitoring business practices and ensuring that imported products meet basic standards'. Kaplan (2008: 5) describes the effect of conflict on the institutional environment and transaction costs: 'Political fragmentation directly impinges on the ability of (post-crisis) countries to foster the positive institutional environment necessary to encourage productive economic, political, and social behaviour. It undermines the usefulness of traditional, informal institutional systems and squanders built-up social capital while disabling attempts to construct robust formal governing bodies. The net result is societies with low levels of interpersonal trust and extraordinarily high transaction costs'.

In the sections 6.3 to 6.12, different aspects of a business-enabling environment are considered in more detail, like trust, financing, the legal system and sector specific policies.

## 6.2 Government roles in enabling value chains

Governments can stimulate the establishment of institutions and coordination of these institutions. Parto et al. (2007: 20) find that in Afghanistan 'local institutions such as local government offices, chambers of commerce and development aid agencies ...need to collaborate on developing monitoring mechanisms to gauge how certain businesses succeed and maintain their markets, while others fail. Such collaboration is also needed to provide assistance when necessary, and to diffuse learning'. McMahon (2008: 5) describes the situation in Afghanistan: 'The central government has never been able to extend its reach much beyond Kabul and the larger cities to provide services such as infrastructure, education and security. The warlords have traditionally filled this vacuum (often with the tacit agreement of the central government), thereby winning the gratitude and the allegiance of the population'. Paterson (2006: 1) adds that 'government regulation of markets is bureaucratic, confused, contains many inappropriate and overlapping functions shared by different ministries and hence is often used as a means of rent-seeking by officials. Where regulation is really needed, such as in the sphere of basic standards and gathering public revenue, there is no capacity to enforce rules and regulations even when they exist'.

### **Bureaucracy and taxation**

Taxation is important for collecting revenues for the government so that it can develop a business-enabling environment. However, taxation in practice is often a hindrance to business development. The WFP 2010: 3) describes how in DR Congo 'government policies have hampered agriculture and trade development through administrative delays, bureaucratic hindrances, and continuous harassment in the form of 'tracasserie' (illegal taxes and fees on every transaction at every stage/point in the supply chain or for any required formal registration or document)'. Ouma and Jagwe (2010: 9) describe how in Burundi 'there are several tax revenue collection points between Cibitoke and Bujumbura', therefore 'most of the traders in Cibitoke incur high taxation costs, comprising 30% of total costs'. Wodon et al. (2008: 51) add that 'Burundi's unfavourable business environment undermines the profitability by raising the cost of doing business and jeopardizing the ability of entrepreneurs to capture returns from their investments'.

## 6.3 Formalising business

Parto et al. (2007: 21) describe the lack of formalising rural business activity in Afghanistan: 'There is no system of registration for businesses in rural areas in Afghanistan. Many rural small and medium enterprises (SMEs) opt not to expand formally because they fear being 'noticed' and coerced by various corrupt elements'.

Entrepreneurs often operate in the informal sector, where they (partially) operate 'outside of a judicial framework, pay no taxes and ignore rules and regulations. This is the default position of any entrepreneur when there is no government to regulate his or her business' (De Vries and Specker 2009: 46, quoting Prahalad 2006). The 'informal sector' is no anarchic free-for-all; people adhere to common laws (and common sense), trust and basic decency when dealing with each other. Little (2005: 1) describes the informal trade in Somalia: 'Trans-border

trade in the Horn of Africa represents a particularly important and challenging unofficial sector activity. On the one hand, it epitomizes the essence of informal or 'shadow' trade, operating along remote borders in a vast region where government presence is particularly weak or, in some cases (Somalia), absent. In many instances it represents the only type of exchange in the area, since extremely poor regional infrastructure and communications impede official trade between neighbouring states. Illustrative of this reality, is the fact that official annual exports of cattle from Ethiopia, the most populous country in the region, are less than 2,000, when in fact more than 25 times this amount are unofficially exported across borders (see Teka et al. 1999). For some commodities, like livestock and grain, unofficial exports to neighbouring countries can exceed officially licensed trade by a factor of 30 or more'.

From the case studies it follows that most of the chains are informal, but the distinction between formal and informal is ambiguous. Are all spot market transactions informal? Are only transactions using a contract formal, and do contracts make a transaction formal if they are not registered anywhere? Most transactions are informal in the sense that they are not registered and thus the actors are not protected by law. Exceptions are the coffee chain in Burundi and the carnation chain in Palestine where the chain is well defined and transparent.

In Burundi, Sanitary and Phyto-Sanitary (SPS) certification is necessary for export but in practice this certificate is not taken seriously and is given without any control. In the Afghan saffron chain, most of the exported saffron is carried in suitcases by people booking a regular plane ticket. Often the product is packed in other countries, which indicates the packing country as the country of origin. Traders get more money for these batches than from official product streams where the product is labelled as Afghan. In Pakistan, the cotton chain is informal up until the exporting manufacturing industry. To be able to export and to do business with large retailers and brands, registration and licenses are necessary. In the embroidered garment chain women from the diaspora also do a considerable amount of suitcase export. In DR Congo the fact that honey producers are not formally registered is an important impediment for accessing legal protection, credit and export.

The cases show that actors rely on both formal and informal institutions and trade, often in different parts of the value chain. The realization that both of these forms of institutions are used, and have proven sustainable over the years, shows their importance for upholding value chains. Especially in fragile contexts the importance of the informal institutional arrangements through which value chains function needs to be further taken into account.

## **6.4 License system**

During crises, licenses are either no longer monitored or licenses are distributed through informal channels. Small producers and traders often do not have the necessary capacity to get licenses. This may be disadvantageous, for example, when it excludes them from export. The lack of registration is particularly problematic for the state. Without registration of business activities it is difficult to develop appropriate policies. Additionally, taxes can be collected only from formally registered companies. This means that the more the economy is

informal, the lower the taxes the government can collect. On the other hand, this may also be an incentive for businesses to evade registration and licences.

In many of the cases, obtaining licenses proved difficult, and often had to be circumvented by chain actors. In the saffron chain in Afghanistan, licenses are necessary for export, but only the top of the chain can get these. To avoid the licenses, exporters use suitcases and passenger transport. Exporting from the Palestine Territories is difficult for individuals and most of the flowers are exported through Israeli exporting companies. In South Sudan, a certificate of export is needed which is issued at border points/exit points. Only a very small amount of cattle is exported, and yet formal export procedures are not followed. In DR Congo a license is required for export. The state is in charge of issuing licenses but little honey is exported as there is very small demand for low quality honey. At the moment some Congolese honey is sold in Angola but this is exported without licenses. It is impossible to get export licenses as long as most actors in the chain are not formally registered.

Only in Pakistan and Burundi obtaining licenses was not considered problematic or a constraint in the value chains. In the cotton chain in Pakistan, from the ginning factory upwards licenses are necessary for all business activities. There are many actors in this chain indicating that it is not difficult to get production or export licenses. In the embroidered garment chain in Pakistan, the formal exporters need licenses and the women sales agents or retail shop need licenses before they can attend an exhibition. Getting licenses has never come up as an issue during the project. In the Burundi coffee chain, licenses are necessary to export coffee. Considering the high number of exporters getting a licence, the assumption is that it is not a problem.

## **6.5 Land rights**

Land rights can become subject to dispute during crises and are often not institutionalised in fragile states. IFDC (2010) described the situation in Kivu, DR Congo, where traditional land tenure arrangements mean that smallholders use plots that are officially owned by traditional leaders and large private owners, leading to land insecurity and hesitation on the part of users to invest in the land. In case of conflict, land rights can become insecure leading to the risk of losing production.

In the case of the saffron chain in Afghanistan land rights are a problem as women are the main producers of saffron while they depend on their male relatives for land and the right to use the land for saffron production. In other regions of Afghanistan land is a problem as warlords introduced a feudal system where farmers have to give part of their produce to the warlords and grow opium for them. Land in South Sudan is communally owned, and this actually fits the lifestyle of the pastoralists raising livestock.

## 6.6 Legal protection

Legal protection through court systems are an important mechanism to reduce the risk for trade actors in developed countries. However these formal systems are seldom in place in fragile states. In addition, often only a few transactions are formal, reducing the potential use of the legal system. Traditional local courts and village elders fulfil important legal functions as our cases in Afghanistan and South Sudan show.

In the Afghanistan saffron chain there is no official system in place to protect actors in the value chain. In case of a serious complaint people can go to a village elder. Disputes are settled through village elders. If courts would be available to small farmers they would probably not be trusted enough to be used. Also in South Sudan, traditional leaders are important in solving (tribal) disputes.

In Burundi there are courts, a coffee growers' confederation, and unions to protect coffee chain actors' rights. If growers have issues with government or private bodies they can take them to the federation. The federation will go to court if necessary. Not every grower is part of the union. In the Palestine Territories there are no courts or forms of justice in place. However there is no evidence that this has led to any problems in the carnation chain. The whole chain depends on the borders, and the actors strive for open borders together.

In Pakistan, courts and justice are available, but as there are no contracts it is difficult for actors in the cotton chain to go to court. There are certainly disputes, for instance between ginning and spinning factories on quality and payment, but these cases do not go to court. The embroidered garment chain in Pakistan shows that there are many complaints from women who do not receive the promised money for the garments they produced or buyers who provided inputs but never were provided with embroidered garments. However there is no possibility to take these problems to court or to another independent agent. In DR Congo, beekeepers and other chain actors are not sufficiently organized to access formal institutions. Part of the project in DR Congo focuses on improving the access of actors in the Non-Timber Forest Products chains to forms of justice.

There are thus multiple legal arrangements ranging from formal courts to traditional courts and institutions at the village level. Even when formal courts are in place, chain actors do not necessarily make use of them, sometimes due to the informal nature of the trade that takes place.

## 6.7 Value chain financing

Chain actors need credit to buy inputs for their production and to invest in upgrading. Crisis increases risk and reduces the options to get credit. Especially for actors at the bottom of the chain, credit is hard to find. If micro-credit institutions are available they can sometimes offer help.

One of the problems associated with financial institutions in post-conflict settings is the issue of freeriding which involves misusing a situation of collective action and trust to gain personal benefit. Additionally, Grossmann et al. (2009: 74) state that 'after years of exposure to violence and corruption, people tend to commit more crimes themselves. This attitude can seriously affect financial institutions, either at the client level (fraud and delinquency) or amongst the managers and staff members (fraud and mismanagement)'. But a more important issue is probably the decreased payback rates as chains have become less reliable.

### **Grants or credit?**

In value chain development, subsidies are usually avoided, as they interfere with optimal cost-benefit relations. Hammond (2008: 5) states that micro-finance is inappropriate for groups with little or no access to productive assets as they cannot be expected to earn enough to repay their loans. 'In these cases it would be better to give a start-up grant so that people have the opportunity to kick-start their enterprises with capital to purchase assets and/or inputs'. Nourse et al. (2007: 23) note that 'the limited assets of small enterprises, combined with the higher costs of doing business in crisis environments, may require a greater use of subsidies. Practitioners use matching grants, direct payments, and other means to subsidize key services that will develop markets'. Value chain financing is an important requisite for development, but when risk is high, financing is needed more but less available. In Afghanistan, for example, machinery and production plants in the raisin industry are in a state of disrepair. People do not dare to make investments due to the unstable security situation and the difficulties in reaching the export market.

Available financial institutions, access to credit and actual usage of financial services varies in the countries represented in the cases. In Afghanistan there are no active banking systems. There are some micro- or meso-credit institutions, but with a pay-back time of 6-8 months these are not suitable for saffron growers. Saffron needs two to three years before it can be harvested. In South Sudan, there are hardly any financial systems in place either.

Banks and financial institutions exist in DR Congo, but their requirements are not feasible for small farmers. The largest impediment is that the farmers do not operate in the formal market. In the coffee chain in Burundi the coffee washing stations need credit most. In the past, the government guaranteed the washing stations so they could get credit. Due to the privatisation, the government bank guarantee no longer exists, so it has become more difficult to get, or give out, credit. The coffee growers have access to banking through the small branches of the '*Banque Populaire du Burundi*'. However, not all farmers make use of the banks. In the Palestine Territories there are banks offering deposit and savings accounts. It is difficult for the carnation chain to get credit due to the high risk. If the borders close, the farmers lose all their income and cannot repay their loan.

In Pakistan banks are available to all chain actors. Some years ago the government ruled that all banks have to offer credit to smallholders. Banks have mobile credit officers that travel to the villages. This way all farmers have access to formal credit.

### **Embedded credit**

Embedded credit is credit provided by chain actors within the chain. Parker (2008: 22)

shows that 'at the producer function embedded credit is significantly more common than microfinance, even when microfinance is available. There are three benefits that embedded credit provides: (1) appropriateness, both in terms of size and form (some may be 'in kind' as fertilizer or seed); (2) timeliness, both in terms of credit delivery arrival and in terms of repayment; and (3) accessibility, in that it is available to participants without additional requirements (such as savings accounts or group participation) or at locations where value chain participants gather naturally'. However, embedded credit limits the bargaining power of actors when selling their product to the trader who gave them credit: cash now, often means receiving a lower price later.

In the cases in Afghanistan, farmers sometimes get a down payment from the traders to buy inputs. Shopkeepers could provide credit in kind through allowing pre-purchase supply of goods but this is not common in the saffron chain. However, the fact that the farmers are paid for their products upfront can be a large burden as production has to live up to expectations.

### **Savings**

Once farmers have accumulated assets and start earning an income, they will have a need for saving facilities. Hammond (2008: 5) states that 'we need to pay more attention to savings as an asset-building product. Informal community savings and lending schemes are common; the challenge is to build on that system and eventually bring them into the formal financial sector when the country situation stabilizes'. Savings are often informally organized and related to credit systems like rotating saving and credit associations among a group of people or self help groups. In the saffron chain in Afghanistan, actors prefer to directly spend their money or invest in their business activity. Farmers buy land when they earn a lot of money as a means of savings. In Pakistan saving is not common; the government is trying to stimulate saving funds in the producer groups.

## **6.8 Insurance and risk**

If production outcomes are unsure, the risks in terms of time and money are high. If the risk becomes too high, chain actors reduce or stop investing in their production which can lead to the collapse of the value chain. Insurances are a way to cope with risk which improves the investment climate. However, due to freeriding, insurances are difficult to develop even in non-fragile states. Benefits will probably not outweigh costs considering the higher monitoring and control costs in fragile states.

The case studies showed little evidence of insurance being in place, indicating the high risk of doing business. In the Burundi coffee chain the rotating savings and credit associations are mentioned as a possible informal system of insurance. However they are not common in Burundi. In the Pakistan cotton chain there are some insurances for production plants to protect against the loss of product and machinery as a result of fire. In South Sudan the clans and villages provide social safety nets. Land and livestock are the best ways to mitigate risk as mentioned in the two cases from Afghanistan.

## 6.9 Extension services and business service providers

Due to displacement processes and a reduced access to information channels, value chain actors may have limited opportunity to effectively produce, trade and to link to high-value value chains. Extension services or business service providers are often not available, lack resources or do not have the capacity to help chain actors.

### **The importance of support systems**

Support systems are important for the development of efficient value chains. According to Parker (2008: 2), financial, business and technical support services are often underdeveloped in conflict-affected environments, yet are necessary to successfully upgrade products or services. According to Kawasimi and White (2010: 25) 'many micro, small and medium enterprises lack business management skills and strategies for running a business under difficult conditions'. So not only are skills and business services often underdeveloped in fragile states, but fragile states contexts require additional skills and services to cope with the challenging conditions. Wodon et al. (2008: 55) give the example of Burundi where 'an effective extension service is needed not only to ensure transmission of knowledge and technology from the research system to farmers, but also to ensure that the needs of farmers and consumers are effectively channelled back to researchers'. Service providers are also necessary for development bodies' information needs in order to intervene and/or effectively contribute to value chains. National research institutes can play an important role in extension by providing the necessary knowledge on production and processing. Wodon et al. (2008: 55) state, based on their research in Burundi, that when rebuilding the research system 'priority needs include not only rebuilding physical facilities, but also developing a cadre of trained researchers. Also important will be to ensure that food crop research remains demand driven, with demand defined not only in terms of the preferences of food crop producers, but also in terms of food crop marketers and final consumers'.

The grape farmers in Afghanistan lack inputs, knowledge and skills to make necessary improvements in their production. The vines grow along the ground instead of being trellised which makes picking the grapes more difficult and decreases exposure to the sun. Pesticides and fertilizers are not used as they are difficult to obtain. Business skills and higher-level technical knowledge are lacking.

### **Capacity development**

Stimulating the (re-) establishment of business service providers can be an important step towards more efficient value chains. Based on his study of different value chains Parker (2008: 2) concludes that there are 'three possible ways to source essential support services: i) work closely with other post-conflict implementers who may be working to reconstruct other parts of the institutional infrastructure, such as finance and banking, agriculture and extension services, or the education system; ii) encourage local providers of similar services to expand into those services needed by the target value chain; or iii) create the service within the value chain.'

In the Afghan saffron chain, collectors and processors offer some services to the growers. NGOs are also involved in training and input supply to farmers. Although government

extension services exist in Burundi, they are unable to effectively improve the coffee chain and there is a lack of other service providers in the chain. Individual regions or companies are starting services especially now they are realizing the importance of the raw cherries for their income. INTERCAFE Burundi is developing materials and training on market promotion and field extension services. In the cotton chain in Pakistan there are no commercial service providers, but there are a lot of government extension services. Some years ago the cotton was threatened by a pest. Ever since, the government has been training farmers on integrated pest management (IPM) and increased production. In the Pakistani embroidered garment chain there are no actors inside or outside the chain who offer training or capacity development. MEDA and ECDI's project is developing the capacity of women sales agents to access markets and to provide business services to women embroiderers. In the Palestine Territories the Ministry of Agriculture traditionally offered information and training to flower growers, yet with Hamas currently in government, attention to agriculture and economic development in general has diminished. An active NGO which offers extension services is PARC. The cooperative could also have a role in training and extension, but focuses on transport and collection issues. Many of the flower farmers are trained by Israeli flower growers on how to cope with pests and diseases. The livestock sector in South Sudan is serviced by the Community Animal Health Workers who distribute animal vaccines provided through the state government by FAO. Other organisations like SNV are involved in capacity development of existing cooperatives, training women's milk groups and butchers. In DR Congo there are different organisations involved in stimulating the honey chain including the European Union which supports an agroforestry project in DR Congo. There are no service providers in the grape chain in Afghanistan. The RAMP project trained farmers on grape production and developed capacity in the Ministry of Agriculture on grape production but extension services are still in the very early stages. The project also tried to help importers and distributors of pesticides and fertilizers to extend their distribution systems into the rural areas.

## 6.10 Quality monitoring

Quality systems and production standards are part of upgraded value chains. Institutions are needed for objective standardisation and quality control. Putting these systems into place is difficult in fragile states. This means that farmers are seldom rewarded for quality.

Few governments in the case studies are involved in quality monitoring or have specific institutions in place overseeing the entire procedure. In Burundi, OCIBU, originally a government body, was responsible for regulation, development and coordination of the coffee industry and to grade all the coffee before it was auctioned. Now, more effective systems are in place in some of the washing stations. In Pakistan a pest warning and quality control department was established by the government, but this focuses mainly on pest control. In South Sudan public health officers and animal health officers are important factors in the livestock quality system, though their services are not (yet) reliable due to improper organization at county level. In the DR Congo honey chain one of the remarks made is that government involvement is necessary to set up laboratories and to perform regular quality checks to increase the consistent quality of the honey. In Afghanistan too, there is a lack of testing facilities for grapes, which is necessary for export.

## **6.11 Sector specific policies in the value chain case studies**

In Afghanistan the government does not intervene in the saffron sector. Some coordination of the value chain can be expected from the quite recently established National Saffron Coordination and Support Committee. In the Palestine Territories, Hamas is officially only focused on political and ideological issues. However, informally there have been contacts between the flower sector and Hamas to show the importance of the flower sector for overall development of Gaza. In the honey chain in DR Congo there are no specific government policies regarding the chain.

In Pakistan the government recognizes the importance of the cotton industry and supports an extensive agricultural extension system. However, the focus has been on production quantity and pest control rather than product quality. This is now changing which will hopefully lead to higher quality cotton. In the embroidered garment chain there are no policies specific for the sector. There are some general programs such as export promotion and handicraft fairs that have benefited the chain. The South Sudanese government is increasingly aware of the potential of the livestock sector and is developing policies to improve the sector, such as providing the animal health extension services.

In Burundi the government is decreasing its involvement in the chain. In the past the government formed a lot of institutions to stimulate and coordinate coffee production which were not all effective. In the early 1990s the government took the initial tentative steps toward liberalization which were supposed to stimulate the coffee sector. However, the liberalization process is slow.

## **6.12 Conclusion**

The information drawn from the cases regarding the business-enabling environment for value chains in fragile states shows that many of the chain actors rely on a variety of institutional arrangements, ranging from official institutions to social networks. They also show a large involvement of aid actors, for issues such as financial services, credit, savings and legal support.

In fragile states, formal financial institutions are either lacking or not fully equipped to deal with the task of supporting smallholders to increase their produce, quality, and access and position in markets. Furthermore, government institutions for quality monitoring or extension services are often ill-equipped to fulfil most, or indeed any of these tasks. However, many of the chains have adapted to these circumstances by making use of other institutional arrangements, building on kinship, social networks, social institutions and others. Socio-cultural institutions form part of the business environment and determine entry and scope of participation in the value chain. The case studies underline the need to analyse value chains by taking into account all types of actors that play a role, regardless of their status in relation to the state, the banking system or the registered private sector.

# 7

## Feasibility of value chain development in fragile settings

The question arises if, considering all the challenges mentioned above, it is reasonable to assume that value chains will survive crises. The answer is yes. Most chains presented in the case studies have existed for years and will continue to exist, even if only because of tradition or because alternative livelihood options are lacking. As section 7.1 shows, most actors are positive about their future. When leaving the crisis behind, the institutional environment improves and challenges are dealt with. With these changes the opportunities for making higher margins increase. Even though it will probably take a long time to improve the value added of the products and the actors higher up in the chain will be the first to profit, most interviewees were optimistic about the future of the chains.

### 7.1 Sustainability of the chain

The case studies show that most chains are expected to develop further in the coming years. Many chains have existed for years and are expected to withstand further disruptions. If governance and infrastructure improve the chains can increase production and quality, and as such sell more products for a better price. Many chains also indicated increasing export opportunities.

The case studies show that the saffron chain in Afghanistan evolved without outside help, and thus it can be expected that this chain will be sustainable. The challenge is to make the chain less exclusive and to facilitate more organisation and value addition at the bottom of the chain, with a larger share of the profits for the producers. Higher up the processing ladder, there are issues of governance, infrastructure and quality control. The grape chain in Afghanistan could increase the value added if facilities made it possible to cool the grapes before exporting. The coffee sector in Burundi expects to flourish in the coming years now that quality is improving and demand is therefore increasing too. With training and better quality control, the Burundi coffee chain actors expect to be able to deliver one of the best coffees of the world.

As is shown in the case studies, agriculture is the most important industry in Pakistan and cotton is the most important crop for export, and for the Pakistani garment industry. All actors in the chain make enough money to continue business. The embroidered garment

industry has existed for generations and many rural women have high quality embroidery techniques. At this moment the quality of the end product is still low, but women continue embroidering to earn some cash. If information flows are improved from the retailers to the embroiderers, more value can be generated in the chain. The South Sudan livestock chain existed during the years of war and before any NGO or government involvement, and is expected to continue in the coming years, even if aid ceases. Government and NGO involvement is high at the moment and can improve the chain. In DR Congo demand for honey is high, both as a medicine and for food. The challenge is to help beekeepers to produce higher quality honey to increase their income.

The carnation chain in the Palestine Territories faces large risks in terms of its future and sustainability. Closed borders have caused large losses for the sector. In 2006 and 2008 external funding was needed to stay in production. If the borders would be open, this chain has the potential to be self-sustaining.

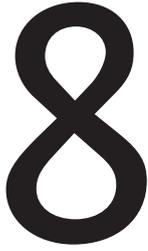
## **7.2 Biggest challenges**

Table 1 shows the main challenges facing each value chain, according to the interviewees, and these challenges are probably applicable in differing degrees to all cases. The issue mentioned most often is improving quality in the chain to such a degree that the product meets export requirements. Increasing vertical linkages through collective action is mentioned in three interviews as an important challenge to improve the chain. Access to credit is also considered as a very important precondition for improving the value chain. Furthermore, education and skills training in order to improve production, either through improved farming or through improved processing techniques, is considered essential in two chains. Corruption and security issues and improving roads and access to electricity are also mentioned twice.

On the one hand the major challenges that were identified focus on improving internal conditions of value chains by increasing the quality of the product as well as the 'quality' of the actors through collective action, education, and skills training. On the other hand, outside factors are described as challenges, such as infrastructure, financial services and security. These outside factors are potentially more difficult to change in fragile contexts and depend strongly on the political processes at play in the different countries.

Table 7.1. Main challenges facing the value chains

Challenge	Afghanistan saffron	Burundi coffee	Pakistan cotton	Pakistan garments	Palestine carnations	South Sudan Livestock	DR Congo honey	Afghanistan Grapes
Export quality	x		x	x				
Collective action	x						x	x
Credit	x			x			x	
Education		x						x
Production skills			x					
Disease/ pest						x		
Corruption/ security						x		x
Roads/ electricity						x		x
Sustainable resource use							x	
Inputs							x	
Processing industry							x	
Gender equality	x							
Social trust								x
Privatisation process		x						
Chain communication			x					
Open borders					x			
Theft						x		
Drought						x		



## Conclusions and recommendations

In value chain development, intervening actors attempt to optimise the value chain in such a way that the demands of the end consumers are fully met by harmonising value chain activities. The market is the central driver. The extent to which the chain actors are able to harmonize their activities is determined by the chain coordination, individual actors' performance, and the institutional environment. Value chain development is far from a merely technocratic endeavour. Although organization, technology and surrounding institutions are important, these may have different faces. While they can work for the inclusion and advancement of small producers, they can also work towards exclusion, exploitation and create barriers to development.

Challenges surrounding value chains in fragile states are similar to those in developing countries, but tend to be exacerbated by instability, a lack of formal institutions and a situation of risk. These challenges are for instance the deterioration of physical infrastructure, missed-out developments, lack of electricity, no market information systems or functional government institutions, and exclusive social institutions and networks.

At the same time, the cases we have analysed have shown little evidence of the collapse of chains and industries as a result of crisis or fragile conditions. During the crisis itself some production stopped, but this was started again as soon as the security situation allowed for it. However, crisis often led to a stand-still in development of the chain, and production of low-value products. The saffron chain in Afghanistan, the cotton and the embroidered garment chain in Pakistan, and the honey chain in DR Congo showed general problems facing developing countries which are probably exacerbated by, but not caused by, the post-crisis situation.

Although value chains may continue during crisis, they are highly subject to conditions of insecurity and the resulting value chains are often short, irregular and with less activity and value added. In conditions of insecurity, there is a greater risk that producers will not be able to sell the products they are producing. Farmers might have to flee their land before harvest, processors might lose their processing plant to conflict actors, traders might face high illegal taxation. Due to the increased risk, transaction costs are high and incentives are low for continuing production. International actors that are part of value chains (buyers, insurance providers) may withdraw from areas they consider insecure. Depending on the power balance of different groups involved in the chain, value chains can completely collapse during crisis.

One of the major assumptions on value chains, and especially value chains in fragile states is the centrality of trust in value chain development. It is seen as the main factor determining successful vertical and horizontal linkages that enable information flows, value adding, bargaining power, higher quality and larger profits on products. Publications on value chains in fragile states often conclude that trust has eroded in these societies. Our case studies do not fully corroborate this.

Internal to the chain, trust refers to relations among actors. In this paper, we have distinguished the domains of actors and organisations, chain processes and the institutional environment. In fragile states it is often assumed that trust has been destroyed due to political unrest and conflict. In many cases, networks indeed erode because of displacement processes. At the same time, trust tends to be concentrated in exclusive social networks. New relationships, networks and trust can also emerge out of displacement. External to the chain, trust is seen as the reliability of institutions. The government is especially accorded a role in the latter, where the rule of law should guarantee entitlements to land and other resources and enable the implementation of contracts. In our case studies, we found that value chain actors may find ways around institutional problems, for example by relying on kinship relations in order to govern disputes within the chain. Trust is indeed an important factor, but it tends to be used as a 'container' concept. In reality, 'lack of trust' or 'low levels of trust' may hide a diversity of conditions, which may partly be resolved by alternative strategies.

Actors in value chains in fragile conditions bring out the fluid boundaries between the formal and informal. Underlying business contracts may be social networks or kinship relations. Many institutional arrangements are made that move between the formal and informal in order to obtain credit, inputs and supplies, and conduct trade. Banks may provide products to enterprises in the informal sector. By stressing banking, government and other institutions in the formal business enabling environment, important and essential elements of value chains in fragile states can be overlooked. The intertwining of formal and informal and the embeddedness of economic institutions and transactions are not typical for fragile states but may be more prominent in these fragile conditions. They should be better integrated into value chain analyses.

One of the characteristics of fragile states is the often high density of short-term aid interventions and the relatively high proportion of aid interventions in the form of projects (in contrast to, for instance, budget support). External aid interventions play significant roles in local value chains through, for instance, supplying inputs, forming credit and savings groups, and stimulating collective action through the formation of producer organisations. At the same time, it should not be overlooked that many of the chains have survived conflict and crisis, often without any assistance from external development agencies. Local networks and initiatives have played significant roles in supporting and performing duties which allowed chain actors to continue their activities.

Value chain development is considered crucial for economic rehabilitation. Experiences with value chains in fragile conditions show that while there are many challenges, support to value chains is feasible even under conditions of insecurity. From the case studies and the literature, the following recommendations for value chain development in conflict-affected states emerged:

- Conflict-affected states are diverse in their capabilities, the nature of fragility and the strength of civil society and economic actors. Value chain development has to be grounded in a strong contextual analysis and be tailored to these specific conditions.
- As much as possible, value chain development should build on those institutions, actors and arrangements that are functioning locally – including existing value chains.
- Value chain analysis must take into account the socially embedded nature of economic life and the political economy of conflict-affected areas in order to build on existing drivers and opportunities and in order to remain sensitive to power differentials and institutional impediments within and outside chains. These drivers and power differentials are dynamic and not static: the challenge is to facilitate inclusive economies through less exclusive socio-cultural institutions, building trust and relations over time.
- The market should be the central driver in the development of sustainable value chains. This involves market research and shifting to more attractive markets when necessary. For intervening NGOs taking the market as starting point often entails a paradigm shift.
- Value chain development has a tendency to focus on international markets. However, in conflict-affected areas, it is also highly important to focus on internal and regional markets (for example import substitution through growth of local industries).
- Value chain development can be part of relief efforts by organizing the purchase and distribution of assets through value chains, provided that they maintain the efficiency and effectiveness required of relief.
- The development of value chains in conflict-affected conditions may take a long time, especially where relationships of trust need to evolve and institutions need to be adapted. The timeframe and modality of interventions should be dictated by a needs analysis rather than by pre-defined project parameters. Value chain development takes time.

# References

- Anderson, M. (1999). *Do No Harm: How Aid Can Support Peace – or War*. Lynne Rienner Publishers: Boulder and London
- Altenburg, T. (2006). Introduction to the Special Issue: Shaping Value Chains for Development. In: *The European Journal of Development Research* 18 (4): 493-497
- Altenburg, T. (2007). *Donor Approaches to Supporting Pro-Poor Value Chains*. Paper prepared for the Donor Committee for Enterprise Development. German Development Institute
- Basdevant, O. (2009). *How Can Burundi Raise its Growth Rate? The Impact of Civil Conflicts and State Intervention on Burundi's Growth Performance*. IMF Working Paper 9 (11): 1-18. Available at SSRN: [ssrn.com/abstract=1356438](http://ssrn.com/abstract=1356438)
- Besley, T. and T. Persson. *Institutions, Violence and Growth in Fragile States*. Paper for the IGC Oxford Workshop on Fragile States
- Bijman, J. and G. Ton. (2008). Producer Organisations and Value Chains. Capacity.org 34: 4-6. On: [www.capacity.org/capacity/opencms/en/journal/issues/producer-organisations-and-value-chains.html](http://www.capacity.org/capacity/opencms/en/journal/issues/producer-organisations-and-value-chains.html)
- Channell, W. (2010). *Business Environment Reform in Conflict-Affected Contexts*. Strengthening the Economic Dimensions of Peacebuilding Practice Note 2. International Alert
- Christoplos, I. and D. Hilhorst (2009). *Human security and capacity in fragile states; A scoping paper*. Disaster Studies Occasional Paper 1. Wageningen University: Wageningen
- DFID (2005). *Reducing Poverty by Tackling Social Exclusion*. A DFID Policy Paper. DFID: London
- Dijkhorst, H. van (2011). *Rural Realities between Crisis and Normality: Livelihood strategies in Angola, 1975-2008*. PhD thesis. Wageningen University: Wageningen
- Dudwick, N. and R. Srinivasan (2013). *Creating Jobs in Africa 's Fragile States*. Washington, D.C.
- Duggleby, T., M. Beauvy and C. Degnan (2008). *Cross-Sectoral Youth Project: Rapid Assessment for Project Design*. Education Development Center: Newton
- Giuliani E., C. Pietrobelli and R. Rabellotti (2005). Upgrading in Global Value Chains: Lessons from Latin American Clusters. In: *World Development* 33 (4): 549-573
- Günduz, C. and D. Klein. (2008). *Conflict-Sensitive Approaches to Value Chain Development*. USAID
- Grossmann H., D. Bagwitz, R. Elges, G. Kruk, R. Lange (2009). *Sustainable Economic Development in Conflict-Affected Environments: A Guidebook*. GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit)
- Haider H. (2009). *Long-term Job Creation in Fragile States*. Helpdesk Research Report
- Hammond, L. (2008). *Protecting Livelihoods in Conflict and Fragile States*. Proceedings Speakers Corner, UNAID
- Helmsing, B., and S. Vellema (2011). *Value Chains Governance and Inclusive Endogenous Development: Towards a knowledge Agenda*. Development Policy Review Network, Report 26
- Hilhorst, D. (2007). *Saving Lives or Saving Societies? Realities of Relief and Reconstruction. Inaugural Lecture*. Wageningen: Wageningen University.
- Hoffmann, A. (2014). *Policy Review: International and Dutch policies in the field of socio-economic development in fragile settings*. IS Academy Occasional Paper 10. Wageningen

- University: Wageningen.
- IFDC (2010). Democratic Republic of DR Congo On: [www.ifdc.org/Nations/Democratic\\_Republic\\_of\\_DR\\_Congo](http://www.ifdc.org/Nations/Democratic_Republic_of_DR_Congo)
- Kaplan, S. (2008). *Fixing fragile States*. In: Policy Review 152. Hoover Institution, Stanford University
- Kawasimi, H., S. White (2010). *Towards a Policy Framework for the Development of Micro, Small and Medium-sized Enterprises in the Occupied Palestine Territory*. Assessment Report, Ministry of National (Palestine) Economy and the International Labour Organisation
- Lister, S., T. Brown and Z. Karaev (2004). *Understanding Markets in Afghanistan: A Case Study of the Raisin Market*. Afghanistan Research and Evaluation Unit
- Little, P. (2005). *Unofficial Trade When States are Weak The Case of Cross-Border Commerce in the Horn of Africa*. Research Paper 2005 (13), proceedings EGDI–WIDER Conference on Unlocking Human Potential – Linking the Informal and Formal Sectors in Helsinki, 17-18 September 2004.
- McMahon, A. (2008). On USAID's Rebuilding Agricultural Markets Program (RAMP) and Accelerating Sustainable Agriculture Program (ASAP) projects in Afghanistan
- Miller C. (2008). South Sudan Agricultural Market Investment Innovative Use of a PPP to Build Institutional Capacity Rapidly. FAO: Rome
- Nordstrom, C. (2004). *Shadows of War. Violence, Power and International Profiteering in the Twenty-First Century*. California University Press, Berkeley/Los Angeles
- Nourse T., G. Tracy, A. Snelgrove, D. Rinck, M. McVay. (2007). Market Development in Crisis-Affected Environments; Emerging Lessons for Achieving Pro-poor Economic Reconstruction, SEEP Network Market Development Working Group
- Ouma, E. and J. Jagwe (2010). Banana Value Chains in Central Africa: Constraints and Opportunities, proceedings Joint 3rd African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference, Cape Town, South Africa, September 19-23, 2010.
- Pain, A. and F. Klijn (2007). *Finding the Money: Informal Credit Practices in Rural Afghanistan*. Afghanistan Research and Evaluation Unit
- Parker J. (2008). *A synthesis of practical lessons from value chain projects in conflict-affected environments, report value chain development in conflict affected environments project*. MicroLINK USAID
- Parto, S., A. Paterson, A. Karimi (2007). *The operating environment for small and median enterprises in rural Afghanistan: enabling or disabling?* Background paper to the Enabling Environment Conference: Effective Private Sector Contribution to Development in Afghanistan
- Paterson, A. (2006). *Going to market: Trade and traders in 6 Afghan sectors*. Synthesis paper series, Afghan Research and Evaluation Unit
- Porter, M.E. (1985). *Competitive advantage: Creating and sustaining superior performance*. Free Press: New York
- Porter Peschka, M. (2011). *The role of the private sector in fragile and conflict-affected states*. World Development Report 2011 Background Paper. World Bank, Washington D.C.
- Putzel, J. and J. Di John (2012). *Meeting the challenges of crisis states*. Research Centre Report, London: London School of Economics.
- Ritchie, H. (2012). *A women's food processing business in Afghanistan: A quiet revolution through the vehicle of enterprise*. IS Academy Research Brief #2. Wageningen University:

- Wageningen.
- Silva, C.A. Da and H. M. de Souza Filho (2007). *Guidelines for rapid appraisals of agrifood chain performance in developing countries*. Agricultural Management, Marketing and Finance Occasional Paper. Rome: FAO
- Sperling, L. and S. McGuire (2010). Persistent Myths about Emergency Seed Aid. In: *Food Policy* 35: 195-201
- Stoian, D., J. Donovan, J. Fisk and M.F. Muldoon (2012). Value chain development for rural poverty reduction: A reality check and a warning. In: *Enterprise Development and Microfinance* 23(1): 54-69
- Sudan Tribune (2010). Quote from Dr. Samson Kwaje in the Sudan Tribune, June 2010, On: [www.sudantribune.com/spip.php?article35505](http://www.sudantribune.com/spip.php?article35505)
- Teka, T., A. Azeze and A. Gebremariam (1999). *Cross-border Livestock Trade and Food Security in Southern and Southeastern Borderlands of Ethiopia*. OSSREA Development Research Report Series 1. Addis Abeba: Organization for Social Science Research in Eastern and Southern Africa
- USAID (2010). microLINKS WIKI. On: [www.microlinks.org/good-practice-center/value-chain-wiki/horizontal-linkages-overview](http://www.microlinks.org/good-practice-center/value-chain-wiki/horizontal-linkages-overview), accessed 17/2/2015
- Vries, H. de and L. Specker (2009). *Early Economic Recovery in Fragile States Priority Areas and Operational Challenges*. The Hague: Clingendael Institute
- Webber, C. (2010). *Building Competitiveness in Africa's Agriculture: A guide to value chain concepts and applications*. Washington DC: The World Bank
- WFP (2010). *Democratic Republic of DR Congo*. P4P Country Programme Profile, WFP
- Wodon, Q., M. Morris, V. Glaesener, J.P. Zoyem, P. Larbouret, M. Moens, E. Dianga, B. Mdaye, Ba and A. Kavalec (2008). *Agricultural Recovery: Food Security and Beyond*. MPRA Paper 15410
- World Bank (2011). *World Development Report 2011 Conflict, Security and Development*. Washington DC: World Bank.
- World Bank (2013). *Stop Conflict, Reduce Fragility, and End Poverty: Doing Things Differently in Fragile and Conflict-affected Situations*. Washington, DC: World Bank.

# ANNEX

## Case studies of value chains in fragile settings

### A.1 Saffron Production in Afghanistan

Dr. Saeed Parto (APPRO, University Maastricht)

*Location study: Herat, Afghanistan*

*When studied: 2009-2010*

#### 1. Which actors participate in the chain?

Input suppliers, women growers, actors involved in processing (home or processing unit), packaging in bulk or in small packages, transport, export, repackaging and labelling and sales to Western consumer. NGO's play a role in the input supply by smuggling bulbs from Iran, distributing inputs to women growers directly or facilitating input suppliers with products. The Danish Committee for Aid to Afghan Refugees (DACAAR) is one of the NGOs active in Afghanistan in the saffron chain aiming to include women.

#### 2. How do actors get their inputs (land, water, seeds, fertilizer etc.); through markets?

Women do not hold land titles and depend on their male relative to decide if they can or cannot use land for saffron production. Bulbs come from Iran, but through reproduction Afghanistan now also has an own bulb supply. A small segment of growers sell bulbs. Few other inputs are necessary as the crocus grows on poor soils. Irrigation is necessary only twice a year.

#### 3. Which service providers offer services to this chain?

Collectors and processors offer some services to the growers. NGO's are also involved in training and input supply to farmers.

#### 4. Which systems in place to prevent certain pests?

There are little pests in saffron production apart from occasional moulding.

#### 5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?

Middlemen in agricultural products know which products farmers grow and make deals to buy their products just before harvesting or even earlier. For farmers, the latter can be tough as they get their money in advance and need to fulfil their obligations at the end of the harvest. During the project period, two women producer organisation were established to process the saffron. This will lead to more income for the women growers. The marketing is done for the group as a whole by involved men.

#### 6. Do all actors have access to information or do information asymmetries exist?

The established traders are reluctant to cooperate with the small producers. At this moment the main beneficiaries of saffron production are the middlemen and larger traders who purchase the saffron in bulk from the growers at a fraction of the price paid by the retail customer. The middlemen are the main source of information to the farmer, while the middlemen benefit most if information asymmetries exist.

**7. Is it possible to transport goods or are the roads in a bad state? Do road blocks hinder transport?**

Afghanistan has always had a problem with underdeveloped roads. Dry river beds are sometimes used as an alternative to roads as these have less holes. However saffron (and opium) are resistant to long and harsh transport and are not bothered by the state of the roads. The Taliban is not interested in saffron and the transports are not hindered.

**8. Are products sold through formal or informal markets; are sellers protected on informal markets?**

A large part of the saffron chain is informal and therefore difficult to regulate. Saffron is shipped in bulk to other countries where it is packed and sold as a non-Afghan product. The exporters do not stimulate policies to pack saffron in Afghanistan as their margins are higher for unpacked saffron. There is no taxation in Afghanistan for agricultural crops, so traders can move freely.

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

There is no official system in place to protect actors in the value chain. In case of a very drastic complaint people can go to a village elder.

**10. Which systems are in place for savings and credit?**

There are no active banking systems in Afghanistan. There are some micro or meso credit institution but with a pay-back time of 6-8 months these are not suitable for saffron growers as they need two to three years before they can harvest saffron. Also actors higher up in the value chain do not rely on banks and prefer to directly spend their money or invest in their business activity. Farmers buy inputs or land when they earn a lot of money.

**11. Which systems are in place to cope with risk (insurance)?**

There are no systems in place. Saving is the only way to cope with risk for all actors in the chain.

**12. At which moments in the chain are quality systems in place and who is responsible?**

There are some systems in place, but these are not sufficient. The middleman tests the saffron based on colour and aroma when the saffron is collected. Due to the informal character of the chain no further tests are done



**13. Which standards apply to this chain and who is responsible?**

There are no standards in this chain except for some informal quality requirements. It is

possible that some machinery used in the chain, for instance the drying machine, is certified.

**14. If the chain is involved in export are export licenses necessary and who can get these?**

Export licenses are necessary to formally export products, but only the top of the chain can get these. To avoid the licenses, exporters use suitcases and passenger transport. However, many of the smaller traders do not export but sell the saffron in Afghanistan itself.

**15. Are any government policies in place to stimulate this value chain?**

One of the activities undertaken by the NGO's was to prioritize saffron production as a viable and profitable crop in national strategies to strengthen licit agricultural production in Afghanistan. However, the government is too occupied with other issues to intervene in the saffron sector. Some coordination of the value chain can be expected from the recently established National Saffron Coordination and Support Committee.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

Considering this value chain has evolved without outside help, it is assumed that this chain will sustain. Especially if, with the availability of affordable processing units, the quality of the produced saffron improves and can compete with other countries. Due to hard work of the NGOs only 'good' problems, higher in the processing ladder, exist like issues of governance, infrastructure and quality control. If DACAAR would stop their assistance to the value chain the chain might suffer, but it will also survive without help.

**17. What are the main bottlenecks in this chain?**

Access to international markets for processed products is the main challenge for this chain. If the product can be processed in Afghanistan, the value increases and the value chain can make more money. Furthermore, governance issues need to be dealt with; at the moment women do most of the work in growing and processing, but they need men to sell the product. Women benefit if they can market their own product and receive the revenue. More work could and should be done to promote the formation of women's associations through awareness raising and increasing the availability of start up funds.



**18. What can future projects on value chain development in fragile states learn from this chain?**

The most interesting in this chain is that whatever efforts are undertaken to increase the efficiency in the chain, the existing governance structures are the most important. Issues of gender, ethnicity and power relations are the most determining for the outcome of the chain and thus need the most attention in any value chain project.

- For more information see: Parto, S. and R. Mihran (2010) *Value Chain Governance and Gender: Saffron Production in Afghanistan*, Afghanistan Public Policy Research Organisation (APPRO).
- Pictures by DACAAR

## **A.2 Coffee and Burundi Agribusiness Program in Burundi**

Professor Daniel C. Clay (Institute of International Agriculture at Michigan state University)

*Project implementers: USAID and the Institute of International Agriculture*

*When: 2007 - ongoing*

The coffee sector in Burundi is going through large-scale privatisation at the moment. The government is trying to sell their coffee washing stations. At the moment about half of the washing stations are still government owned. The other half has recently come in the hands of private actors. In this case description we focus on fully washed coffee. Fully washed coffee is of higher quality and represents about 80% of total coffee production in Burundi.

### **1. Which actors participate in the chain?**

The chain consists of small coffee growers, washing stations, drying mills, exporters, coffee roasters, and supermarkets. Most of the fully washed coffee is sold through the auction. Part of the coffee of the private washing stations is, however, sold on contract base. Contracts are common for higher quality coffee.

### **2. How do actors get their inputs (land, water, seeds, fertilizer etc.); through markets?**

Historically the state provided inputs through the Sociétés de Gestion des Stations de Lavage (SOGESTALs). As the government collected the revenues from the coffee, they also provided the farmers with inputs. Now that the markets are being privatised, the privately owned washing stations provide inputs to the farmers on credit. The necessary inputs are also available on the market, but it is not common for farmers to buy their own inputs. The government brings inputs in bulk into the country and distributes them through government or private channels. Although inputs are readily available coffee yields are low due to a low use of inputs. Farmers use too little fertilizer because they often lack cash to buy them.

### **3. Which service providers can offer services to this chain?**

There is a lack of effective service providers in the coffee chain. Government extension services exist, but they are not very effective in improving the coffee sector. Individual regions or companies are starting services, especially now that they are realizing the importance of the raw cherries for their income. INTERCAFE Burundi is developing materials and training on market promotion and field extension services. The BAP project has also provided extension to washing stations which proved to be effective, but the BAP project cannot reach all stations. The BAP project also recruited and trained nine new community development agents who were placed in communities in the provinces to support the farmers.

### **4. Which systems in place to prevent certain pests?**

Most pests are under control with the pesticides the government distributes. The cause and solution to 'potato taste' is however unknown and forms a threat to farmers in Burundi and other countries in East Africa.

### **5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?**

The washing station is the market for the coffee cherry growers. In most cases the farmers

travel to the stations over a distance of 5 to 10 kilometres within six hours after plucking. Alternatively in some areas, rural collectors are active who pay slightly less than the washing stations, but save the hassle of travelling to the station.

**6. Do all actors have access to information or do information asymmetries exist?**

The government sets a minimum price for the coffee cherries. Privately owned washing stations often pay more for higher quality coffee. The farmers have little choice in selecting their buyer as the cherries are highly perishable. In most cases the cherries are therefore sold to the closest washing station. The auction system also functions as a transparent system for selling the fully washed beans.

**7. Is it possible to transport goods or are the roads in a bad state? Do road blocks hinder transport?**

Asphalt roads are available in all coffee growing areas. The washing stations are located between 1-20 kilometres from an asphalt road, trucks are readily available and there are no safety problems on the roads. The real problem is the transport of the fully washed coffee to the overseas buyers. Green coffee loses its quality over a six month period; three months is too long for most buyers and therefore they now arrange their own transport.

**8. Are products sold through formal or informal markets and are sellers protected in informal markets?**

All coffee in Burundi is sold through official markets. However, in years when the coffee price in Rwanda is higher, coffee is illegally transported and sold there. This year the price in Burundi was higher than in Rwanda and there was no need to take the coffee there. However, in 2008 there was a big problem with coffee being sold and processed in Rwanda.

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

There are courts, coffee growers' confederation and unions in place in Burundi. If growers have issues with government or private bodies they can take them to the federation. The Federation will go to court if necessary. Not every grower is part of a union.

**10. Which systems are in place for savings and credit?**

Large transitions are taking place in the banking system. In the past, banks provided credit to washing station to pay for cherries. The washing stations repaid the loans when the green beans when sold. If the revenues were lower than expected, the government re-paid part of the loan. This government guarantee helped the washing stations to get credit. Due to the privatisation, the government bank guarantee no longer exists, so it has become more difficult to get, or give out, credit. The coffee growers have access to banking through the small branches of the 'Banque Populaire du Burundi', however not all farmers make use of the banks.

**11. Which systems are in place to cope with risk (insurance)?**

There are little to no insurance systems in place. There might be informal systems for credit or insurance like the 'Rotating Savings and Credit Association' (ROSCA), but these are much less common or developed than in, for instance, Ethiopia.

**12. At which moments in the chain are quality systems in place and who is responsible?**

Quality control is becoming more and more important to guarantee quality throughout the chain. Quality starts at harvest; well trained farmers will only harvest perfectly ripe cherries. Green cherries get skimmed out during collection at the washing station using floatation tanks. After the drying process the cherries are graded. Webcore has implemented quality systems in 13 washing stations. Smaller washing stations have less quality systems in place and offer lower quality fully washed coffee.

**13. Which standards apply to this chain and who is responsible?**

OCIBU, originally a government body, is responsible for regulation, development and coordination of the coffee industry and graded all the coffee before it was auctioned. Sanitary and Phyto-Sanitary (SPS) certification is necessary for export, but in practice this certificate is not taken seriously and given without any checks. As the coffee is roasted after export no SPS problems have ever arisen.

**14. If the chain is involved in export, are export licenses necessary and who can get these?**

Export licenses are necessary to be able to export coffee. Considering the high number of exporters, getting a licence is not a problem.

**15. Are any government policies in place to stimulate this value chain?**

Initial tentative steps toward liberalization occurred in the early 1990s, although some might argue that the government is dragging its feet, because they don't want to privatize. The government provided a lot of services through different institutions to maintain the coffee sector. However, these institutions did little and are now said to resist change.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

There is an increasing interest in Burundi coffee as a result of the increasing quality due to privatization of the coffee industry. The agro-ecologic climate in Burundi is perfect for growing coffee and due to some old coffee varieties, Burundi can produce very high quality coffee. With training and better quality control the Burundi coffee can become one of the best coffees of the world.

**17. What are the main challenges in this chain?**

In all the neighbouring countries privatisation started in the 1980s or 1990s. Burundi has lost 15 years in the privatisation process due to the conflict. During the 1990s the embargo on products from Burundi killed many business ventures and slowed down innovation in other sectors like coffee. Burundi is now catching-up but still has a long way to go.

Another challenge is management capacity to run washing stations. Especially traceability systems are a nightmare for the management of washing stations. Better management in the washing stations leads to higher quality coffee. There are few trained managers available in the country. The coffee sector would benefit if universities or private training institutes were allowed to train managers. Rwanda coped with the same problem but hired trained managers from Kenya. Burundi cannot do this as the managers of the washing station have to be Francophone.

**18. What can future projects on value chain development in fragile states learn from this chain?**

Coffee is a product with a high comparative advantage for poor smallholder farmers. Smallholders live in the areas that are the least interesting for large scale mechanised agriculture. However, these tropical highlands are extremely suitable for growing coffee. Coffee is a crop that needs a lots of attention which smallholders can give and consumers are very interested in buying smallholder coffee. Coffee is a real opportunity as it is one of the few value chains that is most inclusive for marginalised groups.

- *For more information see [www.iaa.msu.edu/project\\_bap.html](http://www.iaa.msu.edu/project_bap.html)*

## A.3 Cotton value chain in Pakistan

Ali Ghulam (CABI)

*Project implementers: CABI*

*When: January 2008 - ongoing*

### 1. Which actors participate in the chain and is value added by any actor?

The chain consists of input suppliers, cotton farmers, middlemen (only for smallholders), and ginning factories who separate the cotton fibres from the seeds. The cotton is either directly exported or sold to spinning factories to make strings out of the cotton. The cotton thread is then exported or sold to the textile industry which weaves cloth and colours it. The garment industry uses the coloured textiles to produce cloths. Cloths are sold internally or are exported by export companies or large retailers buy the cloths to sell abroad. Women are in charge of picking the cotton.

### 2. How do actors get their inputs (land, water, seeds, fertilizer, etc.); through markets?

Seeds, fertilizer and pesticides are widely available on the market. The shops provide credit to the smallholder farmers. Some middlemen also offer credit. Larger farmers can buy their inputs without credit. Since the green revolution in the 1970s-1980s, the input market has privatized. This has led to a better match between input supply and demand which increased the yields substantially.



*Selling and buying cooton by farmter and middle man.*

### 3. Which service providers can offer services to this chain?

There are no commercial service providers, but there are a lot of government extension services for the farmers. Some years ago the cotton was threatened by a pest. Since then the government is training farmers on Integrated Pest Management (IPM) and increased production. Some years ago most extension was subsidized by the EU, but now the government has taken over. CABI is a development and research organisation and is active in capacity development at national level. CABI developed Farmer Field Schools (FFS) to train farmers on better production practices and organised training-of-trainers for this purpose.

As a result of the earthquake in 2005 and the floods in 2010, NGO's are active in the affected areas to help farmers with inputs and occasional training. In some cases pesticide and fertilizer companies offer some services, but these focus around their own products.

Other actors in the chain cannot rely on service providers. There is an Association of Cotton Ginners (ACG), but they do not offer any extension services.

### 4. Which systems are in place to prevent certain pests?

The government provides agricultural extension staff, specialized on pests. A pest warning and quality control department was established by the government. The training in the last years on pest controls has resulted in a huge reduction in pesticide use. The government

banned 40-50 pesticides. CABI contributes to the government policies on this issue with regard to the use of biological control.

**5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?**

Farmers sell their cotton seed directly to the ginning factories or sell their cotton to middlemen. The middlemen collect the cotton and sell in bulk to the ginning factories. Middlemen either collect the cotton from the farms or the cotton is sold to them on open markets. There are no contracts within this chain. Some middlemen offer credit to the farmers, most farmers will then sell their cotton to the middlemen that gave credit. The government started some farmer groups in 2003 which maintain a service centre and provide inputs. The progress is very slow but potential results are promising.

**6. Do all actors have access to information or do information asymmetries exist?**

Farmers are often illiterate and there are no market information systems. They get information from their neighbours and from agricultural extension services. Little to no information flows through the chain. Contracts do not exist, reducing the incentives of actors higher in the chain to communicate product requirements to their suppliers.

Farmers do not know which price the ginning factories are paid by the spinning factories. They do have an idea from their neighbours which rates the ginning factories and the middlemen pay. The price is determined when the product is sold based on the quality.

**7. Is it possible to transport goods or are the roads in bad state? Do road blocks hinder transport, and is electricity available?**

The road network is in good shape. Transportation is safe in most of the country. However, electricity is a huge issue. If a power cut occurs during processing the production process comes to a halt and textiles are spoiled. The cotton can be harvested for only 4-5 months. If a power cut occurs during this time, the picked cotton cannot be processed and prices go down rapidly.

**8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

The cotton value chain is informal. The official transactions are between the garment industry and the large retailers or brands in the West. As the quality of the products cannot be determined before the products are ready, contracts are not used. When the ginning factories have some cotton, they invite different spinning factories to check the quality and offer a price. There are many factories so there is good competition on the market.



*Proper practice of feeding conveyer.*

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

Courts and justice are available, but as there are no contracts it is difficult to go to court.

There are certainly disputes, for instance between ginning and spinning factories on quality and payment, but these cases do not go to court.

**10. Which systems are in place for savings and credit?**

Banks are available to all chain actors. Some years ago the government obliged all banks to offer credit to smallholders. Banks have mobile credit officers that travel to the villages. This way all farmers have access to formal credit. Saving is not common; the government is trying to stimulate saving funds in the producer groups.

**11. Which systems are in place to cope with risk (insurance)?**

There are no insurance systems for farmers. There are systems for factories to insure their machinery or production against fire for instance.

**12. At which moments in the chain are quality systems in place and who is responsible?**

Most cotton produced in Pakistan has a low quality. Cotton picking and storage is the greatest challenge in this chain. Women pick the cotton early in the morning when the cotton is covered in dew, as the money they received is based on the weight of the cotton. This is also an incentive to pick trash to get the weight up. There are no quality systems in place. However quality is graded at every transaction in the chain and the price is determined accordingly. Improved quality of cotton would benefit everyone in the chain. CABI developed management tools to increase quality. These will be used in the Farmer Field Schools as a self-assessment mechanism to show farmers the benefit of better production methods.

**13. Which standards apply to this chain and who is responsible?**

The Pakistan Cotton Standard Institute (PCSI) aims to maintain a certain standard of cotton fibre. They are supposed to train value chain actors to reach this quality and help them maintain the quality. However, the institute is part of the Ministry of Industry instead of the Ministry of Agriculture, which might explain their low impact.

**14. Are export or other licenses necessary and who can get these? Which other transaction costs are made in the chain?**

From the ginning factory upwards into the chain, licenses are necessary for all business activities. There are many actors in this chain indicating that it is not difficult to get production or export licenses.

**15. Are any government policies in place to stimulate this value chain?**

The government recognizes the importance of the cotton industry and supports an extensive agricultural extension system. However, their focus has been on production quantity and pest control instead of product quality. This is now changing which will hopefully lead to higher quality cotton.

**16. Will this chain survive in the coming years, even if possible aid has stopped? Please explain.**

Agriculture is the most important industry for Pakistan and cotton is the most important crop for export and for the Pakistani garment industry. All actors in the chain make enough money to continue business.

**17. What are the main challenges in this chain? Please explain why.**

Improving the quality of the cotton is the largest challenge in this chain due to a lack of skills in picking and ginning. There is a large gap in the necessary and the available knowledge and skills throughout the chain. Technology and finance is available but without the right knowledge and skills quality will not increase. Trade bodies linking the different cotton producing processes would help to improve communication and efficiency. Forging links with foreign firms could help with all strands of the cotton industry, including marketing, research and development and technological innovation.

**18. What can future projects on value chain development in fragile states learn from this chain?**

Due to a pest in cotton the government extension system for cotton was intensified offering opportunities to train the farmers on production issues regarding quality. Producer groups are a promising mechanism to increase the capacity and skills of farmers to increase the quality of their production. Farmer Field School groups who registered as farm groups got higher prices than when they were selling as individuals. Branding of cotton goods could also be an opportunity to tap into the demand for branded products.

- For more information see: [www.cabi.org/default.aspx?site=170&page=1017&pid=1476](http://www.cabi.org/default.aspx?site=170&page=1017&pid=1476)
- Pictures by Ali Ghulam (CABI)

## A.4 Embroidered garments value chain Pakistan

Linda Jones independent consultant, previously Technical Director for MEDA and Alex Snelgrove (MEDA)

*Project implementers: MEDA and ECDI (Entrepreneurship and Community Development Pakistan)*

*Project date: 2004-2007 and later*

### 1. Which actors participate in the chain?

Women embroiders, male relatives, local sales agents, shopkeepers, exporters, and wholesalers. During the project, women sales agents were developed to improve information flows between the women embroiders and the actors higher in the chain. The women sales agents were based in urban areas and the distance between them and the rural embroiders was too large to generate trust. Therefore, female representatives from the rural areas were appointed to link the embroiders to the sales agents. This model works very well. There is now a high level of trust at the beginning of the chain. When the project started there was one buying house, which is a combination of a showroom for exporters and a retail outlet. MEDA helped the start of more buying houses to stimulate export.

A rough estimate of 100,000 women in Pakistan are involved in embroidery. The project reached about 9,000 women directly through 100 established women sales agents and buying houses. The overall impact is unknown as also women outside the project started women's groups for marketing their garments.



*Pakistani women receive business development services.*

### 2. How do actors get their inputs (land, water, seeds, fertilizer etc.); through markets?

The women embroiders can get their inputs through women sales agents, local and town/city input supply shops or buying houses. Initially some women were totally dependent on traders who placed orders and provided the input supplies as these women could not travel to purchase inputs. Women do visit beauty shops and these started providing inputs supply. Often the garments are pre-ordered. In that case the women get the necessary inputs and information on the design from the purchase agents through the women sales agents and the rural representatives.

### 3. Which service providers can offer services to this chain?

Large buyers provide feedback to women sales agents on design and quality, buying houses and sales agents provide order management. There are no actors in- or outside the chain who offer training or capacity development. MEDA and ECDI's project is developing the capacity of women sales agents to access markets and to provide business services to women embroiders. As a result, the embroiders are learning about the materials, designs, and quality demands of affluent urban consumers, and both embroiders and sales agents are increasing sales and profits. In addition, class of designers, called 'Tracer

designers' also had capacity built in order to offer improved designs. The women did not have to be trained on embroidery because these skills are very well developed. However women were known to change colour within one garments if their thread finished and the quality reduced when time was short. Women were trained of delivering on delivering high quality products.

#### **4. Which systems in place to prevent certain pests?**

Not applicable.

#### **5. How do farmers reach the market (e.g. producer organization, farm gate traders, travel to wholesale markets)?**

Traditionally, local sales agents purchased embroidered handicrafts and fabric for clothing on order from male relatives and sell to shopkeepers in low-value, local markets. The project developed a system of women sales agents to work in parallel and overcome the monopolistic and dysfunctional male role. Women sales agents (both local and town based) provided market access as did buying houses that usually represent a number of sales agents but generally on a non exclusive basis.

#### **6. Do all actors have access to information or do information asymmetries exist?**

Traditionally, most transactions are conducted by male family members who are not conversant in embroidery. Therefore, women do not get information regarding the demand of the end consumers, which they could easily produce. This changed with the women sales agents and buying house system, where market information does flow to producer groups and individual producers now. When information on prices came to the women they wanted to get more money. The project educated the women on the costs of transporting the garments so they understood why they got only €10 for garments which sold for €100 in Europe. The women were trained on calculating a good return on labour so they could give more accurate prices when a purchasing agents came with an order.

#### **7. Is it possible to transport goods or are the roads in bad state? Do road blocks hinder transport, and is electricity available?**

Transport is not an issue. Garments are not perishable so it is not a problem transporting them. Trains are also used for transport. Electricity is not an issue in this chain as everything is produced manually.

#### **8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

Low in the chain all contacts are informal. Higher up, more formal agreements are made.

#### **9. Can chain actors turn to courts or other forms of justice in case of dispute?**

There are many complaints from women who do not receive the promised money for the garments they produced, or from buyers who provided inputs but never were provided with embroidered garments. However, there are no possibilities to takes these problems to any court or other independent agents. Probably there are courts for the formal players as the buying houses, but it is unknown whether they use these?

**10. Which systems are in place for savings and credit?**

Most of the non family credit occurs within the chain (input supply credit, buyer credit). There are some Micro-Finance Institutions (MFIs) who give loans and saving products and there are some informal merry go rounds. Sales agents often do not take credit as their needs are not that substantial that they want credit against the interest rates required. The MFIs copied the Grameen banking system, proven successful in Bangladesh, without adapting it to the needs in Pakistan. Therefore the services are not demand driven; there are rural branches, but their reach is not very far. MFI's do have savings options. Those higher up in the chain may access formal banks.

**11. Which systems in place to cope with risk (insurance)?**

No formal systems are in place, only informal arrangements.

**12. At which moments in the chain are quality systems in place and who is responsible?**

There are two moments for quality control; the women sales agents and the buying houses. Both manage orders and quality, and receive feedback from their buyers. Cleanliness is an important issue; there is lot of dust in the rural areas. Women were trained during the project period on working in a clean area and how to protect the garments from getting dirty during storage. In many cases the women sales agents have to wash and iron the garments before they can be sold.

**13. Which standards apply to this chain and who is responsible?**

There are no formal standards in this chain. Informal standards are based on quality of fabrics, skill of embroidery, and attention to colour and designs that are in demand. The market-demand is the standard.

**14. If the chain is involved in export, are export licenses necessary and who can get these or other licenses?**

A lot of export is suitcase export; women from the diaspora who purchase products when visiting Pakistan and take the products to Canada or elsewhere. Informal export is more common than formal export. The formal exporters need licenses. The women sales agents or retail-shop needs a license before they can attend a exhibition. Getting licenses has never come up as an issue during the project.

**15. Are any government policies in place to stimulate this value chain?**

Not specifically. There are some general programs such as export promotion and handicraft fairs that have benefited the program. Nothing specific for this value chain.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

Embroidery has existed in Pakistan for decennia. The quality of the embroidery of rural women is excellent, but products were generally sold into low-value traditional markets. The project helped women to produce for a higher value market by establishing women sales agents. These provide sustainability in terms of market access, order management, feedback on designs and quality. It is still thriving although the project finished in 2007.

### **17. What are the main challenges in this chain?**

The chain faced many challenges. The embroidered products of these women were rarely of a suitable design or made with inputs of the quality demanded by high-value markets. For example, contemporary Pakistani women favour border designs, tone on tone colours, and westernized motifs. Rural women usually embroider all over the fabric in bright colours and with traditional motifs. For the women reached by the project these challenges have been solved by improved information flows through the women sales agents. The challenges that remain for these groups are the need to get capital, especially for the women sales agents who have to supply inputs and access to export markets.

### **18. What can future projects on value chain development in fragile states learn from this chain?**

It is possible to leverage local networks that can weather all kinds of crises. For example, if we had chosen to focus on export markets then the financial crises and the reduced trade with Pakistan would have possibly led to failure of the chain. We were very organic in how we worked, allowing niches and chains to develop and providing support across these. We worked with local networks that must continue even in times of upheaval. A similar project by colleagues in Afghanistan has taken this learning to refugee camps and urban slums, and the chains can survive in more difficult circumstances, even when camps are vacated.

- For more information see: Jones, L., A. Snelgrove (2006). *From Behind the Veil: Industry-Level Methodologies and the Implications for Disadvantaged Communities, the Case of Sequestered Women in Pakistan*. In: *Small Enterprise Development Journal* 17 (2): 47-54. ITDG Publishing.
- Pictures by MEDA

## A.5 Carnation value chain in the Palestine Territories

Cees van Rij (Agriterra)

*Study location: Gaza Strip*

*Studied in: 2008*

### 1. Which actors participate in the chain?

Carnation growers (using greenhouses), the cooperation, transporting companies, Israeli transporter (Agrexco), and the Netherlands auction. Other actors are NGOs, the Dutch embassy, suppliers of cuttings, and chemical and fertilizer industries.

### 2. How do actors get their inputs (land, water, seeds, fertilizer etc.); through markets?

Gaza has high quality land suitable for cultivation of high value vegetables and flowers. However all inputs are imported from Israel. Due to a patent system carnation cuttings have to be imported. Fertilizer and chemicals are also imported. Some inputs might also illegally come from Egypt.

### 3. Which service providers can offer services to this chain?

The Palestine Ministry of Agriculture offered information and training to flower growers. However, now that Hamas has taken over the government, attention has focused mainly on the political and ideological situation. Attention for agriculture and economic development in general has dropped considerably and there is no government assistance for the flower farmers. An active NGO who offers extension is PARC. The cooperative could also have a role in training and extension, but focuses on transport and collection issues. Many of the flower farmers are well trained by Israeli flower growers and know very well how to cope with pests and diseases. Extension is less necessary in this chain.



### 4. Which systems are in place to prevent certain pests?

No, there are no systems in place to prevent pests.

### 5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?

Farmers bring their carnations to the cooperative. They are paid by the cooperative. The final price is determined after auction when Agrexco sells the flowers.

### 6. Do all actors have access to information or do information asymmetries exist?

Due to the transparent auction system the information is available to all chain actors. Most farmers have, or have access to, computers and can get the auction prices through internet. As there is a formal system of cost reduction, the farmers can calculate how much they should get for their flowers.

**7. Is it possible to transport goods, or are the roads in a bad state? Do road blocks hinder transport?**

Crossing the Gaza-Israel border is the biggest problem in transportation and the chain as a whole. The cooperative transports the flowers to the border. Once the flowers have passed the border, Agrexco transports them through Israel to the auction in the Netherlands. Without any notice the border can however close for some hours to weeks. When the border crossing takes too long the flowers can no longer be sold. The auction anticipates on flowers from Gaza, but the cooperative can give no guarantees that the flowers will be delivered. Licenses are necessary to export flowers, levies need to be paid, all products have to be off-loaded at the border for security checks and the whole load is scanned. This all takes time and reduces the quality of the flowers. Once Agrexco has the flowers, transport to the Netherlands is arranged very efficiently.

**8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

Products are sold through formal markets; the cooperative and Agrexco.

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

There are no courts or forms of justice in place. However there is no evidence that this has led to any problems. As the whole chain depends on the borders the actors strive together for open borders. Agrexco is the lead firm in this chain but as they too depend on the flowers from Gaza they benefit from maintaining a good relationship with the cooperative.

**10. Which systems are in place for savings and credit?**

There are banks in Gaza offering deposit account and savings. However, as the flower industry has been under stress the last years, credit is what is most needed. There are some MFIs active, but it is very difficult to get credit due to the high risk. If the borders close the farmers lose all their income and cannot repay their loan.

**11. Which systems are in place to cope with risk (insurance)?**

There are no insurance systems in place. The risks are too high for anyone to offer insurance.

**12. At which moments in the chain are quality systems in place and who is responsible?**

When the flowers are brought to the cooperative they are graded. When Agrexco receives the flowers they are also checked for quality. At the auction the price depends on the quality of the flowers.

**13. Which standards apply to this chain and who is responsible?**

There are no standards from the Gaza government. However, there are probably standards from the auction to which the farmers have to adhere.

**14. If the chain is involved in export, are export licenses necessary and who can get these?**

It is difficult and expensive to export flowers. 75% of



all flowers are exported through the cooperative. Only farmers who can bulk large amounts can do this themselves. In the past the possibilities of alternative routes through Egypt were considered, but these did not work out. Aside from Agrexco, Flowerdirect is a large name in exporting flowers from Israel, but the cooperative prefers Agrexco.

**15. Are any government policies in place to stimulate this value chain?**

Formally Hamas is only focussed on political and ideological issues. However, informally there have been contacts between the flower sector and Hamas to show the importance of the flower sector for overall development of Gaza. Issues regarding Israel are especially difficult.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

The chain is self-sustaining, however, external factors make it difficult for the producers to bring enough produce to markets. In 2006 and 2008 additional funding was necessary to keep the carnation producers in business. This chain is very effective in producing flowers because of the agro-climate and the knowledge level of the producers. If all actors work together to open the borders for agricultural products the flower industry will flourish again. However, it is now the result of diplomatic action, especially from the Dutch embassy, that the flowers can be transported.

**17. What are the main bottlenecks in this chain?**

Transport of inputs and export from Israel to Gaza and vice versa is the biggest bottleneck for this value chain. If products cannot be sold within a certain time the farmers lose their income and inputs are necessary to be able to produce.

**18. What can future projects on value chain development in fragile states learn from this chain?**

There are three very important aspects to this chain which make it an example for other chains. Firstly transparency; due to the auction system the chain is very transparent which is especially important in a fragile environment where trust is often low. Secondly, shared economic interest; in this chain actors from different sides of the conflict work together because they have the same economic interest, facilitating reconsolidation in the long-run. Thirdly, the entrepreneurial style of the chain is very effective. Where NGO steered firms often have a different motivation, the motivation of this chain is extremely flexible. If problems arise solutions are always found to make this chain a success.

- For more information see: Van Rij, C. 2008, *The role of business partnerships in conflict and post conflict economic reconstruction*, Nyenrode MBA thesis.
- Picture 1 from [www.pastorbobcornwall.blogspot.com](http://www.pastorbobcornwall.blogspot.com)
- Picture 2 from Abed Rahim Khatib/European Pressphoto Agency

## A.6 Value chain approach for pro-poor development in the livestock sector in Southern Sudan (now South Sudan)

Lieke Willemsen (Wageningen University)

*Study location: Greater Kapoeta area*

*Studied in: 2010*

### 1. Which actors participate in the chain?

(Agro)-pastoralists, community animal health workers (CAHWs), animal drugs stores, brokers, traders, transporters, veterinarians, butchers, milk collectors, dairy processors, selling points (small shops), and consumers.

Women groups were initiated and/or supported by international NGOs. At the moment they are still being formed and trained, but in the future they can hopefully engage in input provision (animal drugs including information about their usage) and collecting or processing milk.

### 2. How do actors get their inputs (land, water, seeds, fertilizer etc.); through markets?

Actors get their inputs not only through markets. The (agro)-pastoralists producers are seldom involved in the cash economy and make little to no use of inputs. Inputs that are used are acquired through exchange of products (barter). Pastoralists do not keep livestock for commercial purposes; keeping livestock is highly intertwined with the local culture and is seen as a way of life rather than an occupation. Perhaps the most valuable input is labour; herding and protecting the animals from raids is the job of boys and young unmarried men (from 10 years onwards), milking, collection and selling of the milk is done by the women, but this only happens during the rainy season when there is enough pasture around the village. During the dry season the livestock is brought to cattle camps at a days to weeks walk from the Toposa villages. Other inputs needed by the producers are vaccines, animal drugs and the services of Community Animal Health Workers (CAHW). Animal vaccines are provided through the state government by FAO for free. Natural resources like land and water are communal and for free. Seeds and fertilizer are not used. Actors at the bottom of the value chain mostly get their inputs through markets.



### 3. Which service providers can offer services to this chain?

The following actors provide services to the chain:

- GKCD: capacity development of the cooperative union and the three existing cooperatives
- Entrepreneurs: small shops selling animal drugs and other products around market places
- SNV and other NGOs: training CAHW, women milk groups, cooperatives, butchers, entrepreneurial
- groups and providing inputs
- Government: planning, law and policy making, implementation, collecting revenues, maintaining the law, facilitating economic development, ensuring and promoting public and veterinary health.

#### **4. Which systems are in place to prevent certain pests?**

The government employed veterinary officers at the borders with Uganda and Kenya in order to prevent sick animals to cross the border with Southern Sudan. Together with FAO and other NGOs there are vaccination programmes to prevent endemic and/or zoonotic diseases.

#### **5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?**

Pastoralists travel by foot from their village or the cattle camps to Kapoeta town. Usually they do not sell at the market place itself but about 1 km before, where brokers and pastoralists find each other and transactions are made on the spot. Cooperatives are still very premature and there are few examples of transactions through cooperatives.

#### **6. Do all actors have access to information or do information asymmetries exist?**

Information asymmetries do exist, but in terms of prices producers do have quite a good sense of the amount of money they can get for a goat, sheep, bull or a cow. They are aware that brokers make a profit by buying and selling their livestock. They prefer, however, to sell to traders than to sell directly at the market as they do not speak the language at the market (Arabic) and they are satisfied with the price they receive. Access to information in general is heavily affected by the isolated lifestyle of pastoralists; most of them are not formally educated or trained. This is slowly changing since children are sent to schools (system is somehow working since the end of the war, 2005).

#### **7. Is it possible to transport goods, are the roads in bad state? Do road blocks hinder transport?**

Transporting goods is possible, but security and the state of the road are definitely limiting factors. Almost all roads in the country are unpaved, so especially during the rainy season roads can be inaccessible.

#### **8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

Products are both sold through formal and informal markets. Sellers are not protected on informal markets. But, family networks are extremely important and the role of social control must not be underestimated.

#### **9. Can chain actors turn to courts or other forms of justice in case of dispute?**

The pastoralist society is very informal. Traditional leaders are important in solving (tribal) disputes.

#### **10. Which systems are in place for savings and credit?**

There are hardly any systems in place for savings and credit. SNV is mobilizing external resources for their own activities and a small amount is available for small enterprises in the livestock sector.

#### **11. Which systems are in place to cope with risk (insurance)?**

There are hardly any insurance systems, especially for pastoralists there is no access to such services. Though within clans and villages there are safety nets.

**12. At which moments in the chain are quality systems in place and who is responsible?**

Public health officers and animal health officers are important factors in the quality systems, though their services are not (yet) reliable due to improper organization on county level. The main issues are that salaries are not paid, lack of transport and a very wide area to cover. SNV helped the government with information on the livestock value chain contributing to the establishment of quality control systems including meat inspection at slaughter houses, animal health inspectors at livestock markets, etc. The government has only just started this process.

Land O Lakes supported women groups as part of their cooperatives development projects with training in hygiene (including milk quality testing), milk collection (for example, showing the benefits of collecting the milk early in the morning) and in how to manage a milk collection centre (small houses were built with a fridge inside for storing the milk). Late 2010, SNV and FARM Africa started a new programme targeting food security issues in Greater Kapoeta. As part of this programme, there are financial means available to support women's enterprise groups (training and micro-finance).

**13. Which standards apply to this chain and who is responsible?**

In Southern Sudan there is no effective body which regulates food quality standards. Policies are made by the government on national level and implemented on the state level. But due to lack of human and financial resources, maintaining the law is hardly possible.

**14. If the chain is involved in export are export licenses necessary and who can get these?**

So far there are no formal export licenses from Southern Sudan. However, if you take any goods out of Southern Sudan, you need a certificate of export, these are issued at the border points/ exit points. Note that this is Government of Sudan (GoS) policy, and not Government of Southern Sudan (GoSS) policy. At this moment, very small part of the cattle from Southern Sudan is traded in markets



in neighbouring Uganda and Ethiopia by pastoralists from the border regions, but formal export procedures are not followed. In the case of Southern Sudan trading of cattle for money is a rather new concept (at least to the Toposa community in Eastern Equatoria). The non-entrepreneurial culture is a big bottleneck for commercial exploitation. Besides, quality standards of Uganda and Ethiopia are far higher than from Sudan and prices are lower, making the export of cattle from Sudan not very lucrative.

**15. Are any government policies in place to stimulate this value chain?**

Yes, it seems that the government on national level (GoSS) is increasingly aware of the potential of the livestock sector. SNV research has contributed to academic knowledge which can be used for informed decision making, strategic planning and policy making.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

The chain was there during the years of war and before any NGO or government involvement

and so it will survive in the coming years, even if aid has stopped. By training LCB, knowledge stays within the chain for the future. However, staff turnover is high at most institutions and internal learning systems are seldom in place. The facilitation of chain development for pro-poor development can be the task of NGOs.

**17. What are the main bottlenecks in this chain?**

The main risk are 1) cattle theft, sometimes for dowry. 2) Livestock diseases, due to lack of proper vaccination programs/ animal health policies, 3) droughts and climate change 4) corruption 5) political instability 6) infrastructure problems and 7) ethnic tensions.

**18. What can future projects on value chain development in fragile states learn from this chain?**

- fragile state situations are very specific, there is no 'one size fits all'
- government needs to be willing to cooperate with the NGO/organization
- understanding of the local situation and culture is crucial
- stepping in as soon as possible (after a peace agreement) is most effective.
- operating in fragile states is far more expensive compared to other developing countries.

- *For more information see: MSc thesis by Lieke Willemsen*
- *Pictures by Lieke Willemsen*

## **A.7 Systematic support to Non-Timber Forest Products (NTFP) enterprise development**

Useni Marcel (FAO)

*Who: FAO, CIFOR, ICRAF and SNV*

*Where: Kinshasa, Equateur and Bas-DR Congo provinces in the Democratic Republic of DR Congo*

*When: 2007-2010*

NTFPs are nuts, leaves, fruits, barks, fuel wood, rattan, bush meat and more. They are essential for the livelihood of forest dependent people and they have social, cultural and spiritual importance. In the DR Congo most people depend on NTFPs for their livelihood. This case description focuses on honey production.

### **1. Which actors participate in the chain?**

The chain consists of producers who keep bees in artificial hives (78%) or collect honey from wild beehives in the forest (22%). Farmers with artificial beehives have an average of 7 hives and collect 10 litres of honey per hive. Households who collect honey from the forest, collect about 8 litres from each hive. Most of the honey is processed at the household level with traditional methods. There are two organisations who use more advanced techniques for processing the honey; the 'Centre d'Appui au Développement Intégral de Mbankana' (CADIM) and the 'Armée du salut'. The by-products like wax are not exploited by the industry but only at household level. Traders buy and sell honey, wholesalers bundle the production and retailers sell the product nationally. The consumers of the honey are divided in 5 categories: the producing households and their friends, low income households who buy the honey for the health benefits, households who buy the honey for cooking, hotels and restaurants, and traditional healers and practitioners.

### **2. How do actors get their inputs (land, water, seeds, fertilizer etc.); are inputs available on the market?**

Some inputs are bought on the markets like smokers, outfits, boards necessary for the construction of beehives, and other inputs are collected in the environment like bee colonies.

### **3. Which service providers can offer services to this chain?**

The five main institutions supporting honey production are:

1. CADIM for strengthening capacities of beekeepers
2. The European Union supports beekeeping as part of their support of agro forestry.
3. 'Armée du salut' who develop production techniques for artificial honey hives
4. the Family Development Centre who manufacture equipment and materials for the beekeepers
5. the Association for the Advancement of Women and the Girls in Kisantu (APFPFK) who buy and sell raw honey and processed products like honey wine.

### **4. Which systems are in place to prevent certain pests?**

Farmers have to control their hives regularly for ants, but this is not organized at a higher level.

**5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?**

Beekeepers have two opportunities to sell their product. The first way is the direct link to buyers in the city of Kinshasa (hotels, supermarkets, retailers or consumers). Either the beekeepers travel to Kinshasa to sell the honey there or the buyers from Kinshasa come to the villages to buy the honey. If there are no direct links between the beekeepers and the Kinshasa market, the beekeepers can sell their honey to the villagers or to middlemen who transport the honey to Kinshasa.

**6. Do all actors have access to information or do information asymmetries exist?**

Only a few of the beekeepers have access to information by cellphones in those areas with coverage. DR Congo is far behind, in comparison with Cameroon for instance, in establishing market information systems. Luisteren Fonetisch lezen



**7. Is it possible to transport goods or are the roads in a bad state? Do road blocks hinder transport; is electricity available for the processing of goods?**

In the Southwest of DR Congo (Bandundu and DR Congo-Bas) the roads are relatively good due to heavy investment of USAID. Products can be transported to the market without too much problem. However, it is very difficult to get products out of the l'Equateur province which has suffered a lot from the conflicts.

**8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

The NTFPs are marketed mostly in the informal sector. The government collects little data on business activities.

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

Beekeepers and other chain actors in the NTFPs chains are not sufficiently organized to access formal institutions. Part of the project in DR Congo focuses on improving the access of actors in the NTFPs chains to forms of justice.

**10. Which systems are in place for savings and credit?**

Banks and financial institutions exist in DR Congo, but their requirements are not feasible for small farmers. The largest impediment is that the farmers do not operate in the formal market. This is one of the reasons why it is important to formalize the chain by registering the chain actors and provide them with legal documents.

**11. Which systems are in place to cope with risk (insurance)?**

Nothing to report in this regard.

**12. At which moments in the chain are quality systems in place and who is responsible?**

Quality systems are most important in the processing stage. It is important to bring good quality products to the market to attract clients. The processors take the responsibility, but

it should be the government who set up laboratories and perform regular quality checks to increase the constant quality of the honey.

**13. Which standards apply to this chain and who is responsible?**

Standards are not yet institutionalised in the DR Congo.

**14. If the chain is involved in export are export licenses necessary and who can get these; are other licenses necessary in the chain?**

Yes, if the sector is involved in exports, a license is required and the state is in charge of issuing the licenses. However, exporters must know the standards of consumers in countries where the products are exported. As the exporters are not formally registered, the exporters will not be able to get formal exporting licenses. At the moment some DR Congolese honey is sold in Angola but this is exported without licenses.

**15. Are any government policies in place to stimulate this value chain?**

No, not yet

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

Yes, the industry will continue locally as demand is strong. In the DRC honey is both regarded as food and as medicine (honey is an antidote). The challenge here is to help beekeepers to produce higher quality honey to increase their income.

**17. What are the main challenges in this chain?**

The main challenge in the chain for NTFPs, in general, is the sustainability of the production. If the demand increases, the products are harvested from the forest using unsustainable harvesting techniques. This is a long term threat to the trade in these products. The Gnetum Africanum, or wild spinach, is already under threat. The honey production is not under threat as honey can also be produced domestically.

Many constraints still face the growth of the honey industry. There are only limited inputs available for production of the honey, processing of the honey and packaging. For instance, most of the hives are very simplistic which affects production. The development of the branch can be stimulated by producer groups. These groups are aware of the importance of coordination between the chain actors, but are challenged by a lack of means. The possibilities of training people is especially constrained by the lack of money within the groups.

**18. What can future projects on value chain development in fragile states learn from this chain?**

- Cross-border trade
- Processing products

- *For more information see [www.fao.org/forestry/enterprises/45715/en](http://www.fao.org/forestry/enterprises/45715/en)*
- *Pictures from Ndoye, Ousseynou and Abdon Awono (2005) The Markets of Non Timber Forest Products in the provinces of Equateur and Bandundu, CIFOR Cameroon.*

## A.8 The value chain for grapes and raisins in Afghanistan

A. McMahon (Chemonics)

*Project implementer: USAID and Chemonics*

*When: 2007*

### 1. Which actors participate in the chain?

Grapes are grown by thousands of smallholders. Traders collect the grapes from the farmers and sell the grapes to other traders until the grapes are sold on regional markets, wholesale markets and shops to the consumer. Grapes can change hand up until 14 times before they reach the consumer depending on the distance between the farmer and the outlet market. Due to the lack of cooling facilities along the chain and bad infrastructure the grapes are sold only within the country, although there is a large demand for grapes in Pakistan. Luckily the internal market for grapes is very large too.

Raisins are dried grapes. Raisins are seen as a residue product of the grape production. A lot of fresh harvest is spoiled along the chain. These residues are transformed into raisins; the leftovers are spread on the floor in the sun to dry. The raisins are bought and sold by the same traders that handle the fresh grapes. The quality of the raisins is very low; they can be found on the regional markets piled up high, polluted with dirt and gravel, and covered in insects. There are 5-10 processing plants for the raisins, including raisin cleaning lines, but the machinery is very old and cannot handle the low quality raisins produced by the farmers. Raisins were one of the main export crops before the wars when the processing plants were functioning at full capacity. Quality of the raisins is now too low to sell outside Afghanistan, there are only some exports to Russia and central Asian countries for the processed food industry. Farmers regard the raisins as waste and are not interested to increase the quality of the raisins.

### 2. How do actors get their inputs (land, water, seeds, fertilizer etc.) are these products available on the market?

The farmers returned to their vineyards after being displaced for decades. The years of conflict with the Mujahidin and the Taliban destroyed many orchards. The Shomali plain was the fruitbasket of Afghanistan and was intensively cultivated. However, the grapevines survived 10-20 years of neglect. There is a problem to get new plants to replace diseased or old plants. The USAID RAMP project brought in new grape varieties, which were also more suitable

for export, and trained some farmers to start nurseries. Land is a problem in some areas where warlords introduced a feudal system. Farmers have to give part of their produce to the warlords and grow opium for them. This is however not the case in the Shomali plain. Lack of water is a huge problem in Afghanistan. Pesticides and fertilizer are not available and are not used by the farmers. Suppliers of inputs also have to cope with a large mistrust of the farmers, making it difficult to convince them to buy inputs. RAMP tried to facilitate the development of importers and distributors of agricultural inputs.



*Demonstration vineyard: left row trellised, all other lying on the ground.*

### **3. Which service providers (can) offer services to this chain?**

The grape farmers lack knowledge and skills to improve their production. The cultivation in Afghanistan is very different to other places in the world. The vines grow along the ground instead of being trellised which makes picking the grapes more difficult and decreases exposure to the sun. Pesticides and fertilizers are not used as supply is lacking. The education level is low. Many schools were closed during the years of conflict, and girls were not allowed to attend at all under Taliban rule. Simple business skills, not to mention higher-level technical knowledge, are missing. The grape vines are often old and diseased, but are seldom replaced due to a lack of young plants.

The RAMP project facilitated demonstration farms to introduce grape varieties that are more durable and suitable for export and showed the benefit of using trellises. Additionally RAMP builds capacity at the Ministry of Agriculture on grape production, but extension services are still at beginners stage. The project also tried to help develop importers and distributors of pesticides and fertilizer. The distributors were assisted to extend their distribution systems into the rural areas and were trained on the extension services they could offer to farmers. To cope with the large mistrust towards the reliability of the inputs, a franchise concept was developed to increase recognisability of the small shops in the rural areas. Due to the low level of knowledge on agriculture at the Ministries, extension services through commercial input suppliers have a larger chance of success. Some suppliers were very interested to work with RAMP and saw extension services as an additional way to increase trust between them and the farmers.

### **4. Which systems are in place to prevent certain pests?**

There are no systems in place to deal with pests in the grape vines.

### **5. How do farmers reach the market (e.g. producer organisation, farm gate traders, travel to wholesale markets)?**

The value chain comprises thousands of smallholder farmers who sell most of their crops to traders at the farm gate, some who sell in their own local market and a very few who sell at the district level or export. Traders visit the farmers at the beginning of the growing season and make pre-buying agreements for all their agricultural crops. The farmers sometimes receive a down payment and receive the final payment after the trader has sold their product leaving the risk with the farmer. If no pre-harvest arrangements are made, the farmer places his produce on donkey cart and brings it to the nearest road hoping a trader will come by to buy his crops. Despite the nominal existence of farmer associations, they do not pool their product for processing or selling.

Before the start of the RAMP project, the main aspect of the project was to get farmers to bundle their production and resources. This would lead to more efficient use of resources and better bargaining power on the market. However, this aspect had to be dropped as it proved to be impossible to find farmers who were interested in grouping together with other farmers. Culturally, Afghan people are used to keep to themselves and do not trust or interfere with others. This cultural habit has been deepened by the years of Taliban rule.

### **6. Do all actors have access to information or do information asymmetries exist?**

The further the farmers are away from markets or town, the worse off they are the roads,

making it difficult to travel to nearby villages or towns to get price information. Cell phones are penetrating the country but coverage in rural areas is low. The lack of market information is one of the biggest hindrances mentioned by farmers. Farmers always think they are cheated by the traders, however, considering the low levels of production and distance to the market, the traders provide an important service.

**7. Is it possible to transport goods or are the roads in a bad state? Do road blocks hinder transport/ is electricity an issue in this chain and is it available?**

Security is a problem throughout the country, and getting worse in the east and southeast. Insurgents attack the population, government and international peacekeeping forces. The police are widely seen as incompetent and corrupt. It is very difficult to transport goods when having to cope with illegal taxation, banditry and bad quality roads

Electricity is lacking in Afghanistan outside Kandahar and Kabul. Without cooling the grapes they deteriorate fast. If a cooled supply chain could be set-up, the grapes could be sold to Pakistan where there is a large demand for grapes and prices are high. The RAMP project built one cooled operating plant for grapes, but the operational cost were so high due to the necessity of a generator, that no-one wanted ownership over the plant. Export to Pakistan is actually feasible now that there is a border agreement between Afghanistan and Pakistan, making it possible to pass the border without offloading the lorries.

**8. Are products sold through formal or informal markets and are sellers protected on informal markets?**

The distinction between formal and informal is vague. Farmers make pre-harvest arrangements with the traders, but enforcement is low.

**9. Can chain actors turn to courts or other forms of justice in case of dispute?**

Disputes are settled through village elders. If courts would be available to small farmers they would probably not be trusted enough to be used. Corruption and collusion is commonplace and everything is said to be for sale.

**10. Which systems are in place for savings and credit?**

Official credit is not available. Farmers sometimes get a down payment from the traders to buy inputs. Shopkeepers could provide credit but this is not common. In the initial project plan the farmer groups could be used to develop credit instruments, but without groups it is difficult to develop internal credit mechanisms. Further up in the chain, machinery and production plants are in state of despair, but people do not dare to make any investment due to the instable security situation and the difficulties in reaching the export market due to quality and sanitation.

**11. Which systems are in place to cope with risk (insurance)?**

The perceived risk involved in trying to penetrate new markets is a strong disincentive to try new methods or make new investments. Most grape farmers have small plots and cannot afford any reduction in their crop, so they are afraid to jeopardize the status quo with new methods and technologies. Insurance is necessary to mitigate these risks, but is not available. Insurance only comes in the means of livestock assets. Subsidies can be

instrumental in mitigating risk sufficiently to enable value chain participants to try new markets and adopt new technologies to meet those markets' requirements.

**12. At which moments in the chain are quality systems in place and who is responsible?**

There are no quality systems in place in the grape or raisin chain. Table grapes from Afghanistan could meet the quality demanded from the export markets, if the cold chain would be better developed and quality of the grapes would be improved. Testing facilities for certifying raisins against international grades and standards are extremely limited, and some required tests are not available at all.



*NGO extension agent talking to grape farmer.*

**13. Which standards apply to this chain and who is responsible?**

Testing facilities for certifying raisins against international grades and standards are extremely limited, and some required tests are not available at all. The government does not have capacity to set standards or enforce them. The certificates are seen as a formality; there is little confidence in the tests and it seems that the certificates can be bought.

**14. If the chain is involved in export, are export licenses necessary and who can get these (other transaction costs/tax)?**

There is little to no export in the grape or raisin chain. If certificates are necessary for export these can be acquired more easily illegally than legally. Transaction costs are high due to a lack of trust and because of banditry and illegal taxation.

**15. Are any government policies in place to stimulate this value chain (other institutions)?**

The government is not very interested in agricultural production. They can see the potential but have more important issues on their mind. The conflict hinders proper governance at all levels of commercial activity, engendering bribes and unofficial taxes that increase the cost of doing business. Traders complained that the government's monetary policy is to support the Afghani at artificially high rates against the dollar. Since the economy is highly dependent on imports, this policy makes consumer and capital goods more affordable for Afghans. But it also makes exports from Afghanistan more expensive than they would otherwise be, reducing the cost competitiveness of Afghan horticultural products among others in international markets.

**16. Will this chain survive in the coming years, even if possible aid has stopped?**

Farmers in Afghanistan have been growing and producing products for years. They will continue to produce and traders will continue to buy. However, export is a challenge. If cooled supply chains are established, the grapes could be sold in Dubai increasing the margins from all actors in the chain. It will take some decades, but export will be possible in the long run.

### **17. What are the main challenges in this chain?**

The biggest impediment for this chain, and other chains for that matter, is the complete breakdown of social trust and networks and high risk-aversion. People do not want to collaborate and do not trust their neighbours. This makes it very difficult to convince people of the benefits of collaboration. Other challenges are corruption, the bad road condition, lack of electricity, lack of education, security, mines and a lack of governance at all levels in the chain and the low knowledge of production leading to low quality grapes.

### **18. What can future projects on value chain development in fragile states learn from this chain?**

- When you are going into a post-conflict environment economic fabric has been severely damaged. The most impact will be achieved not by working with individual chains, but across chains as the issues most relevant to this chain are relevant to the whole economy like infrastructure, input supply, trust etc.;
  - In a severely damaged economic and political environment it is not sufficient to educate chain participants about end-market requirements. Actors at several, if not all levels of the chain need (financial) support to meet those requirements for a longer time period;
  - Focus resources on creating and strengthening the horizontal and vertical linkages on the chain. Be prepared for great difficulty in doing so if the population is traumatized by long periods of conflict and insecurity, and/or there is little basic cultural inclination to cooperate.
- 
- *For more information see McMahon, A. (2008) on USAID's Rebuilding Agricultural Markets Program (RAMP) and Accelerating Sustainable Agriculture Program (ASAP) projects in Afghanistan*
  - *Pictures by Alene McMahon (Chemonics)*



The Special Chair Humanitarian Aid and Reconstruction focuses on the everyday politics and practices of service delivery, livelihoods and disaster risk reduction in the institutional landscapes of conflict- or disaster-affected areas. It engages in multi-sited qualitative and quantitative research. Research of Humanitarian Aid and Reconstruction is collaborative, interacting with policy and practice throughout the process to enhance research uptake.

## IS Academy Occasional Papers

### Occasional Paper #1

#### **Human Security and Capacity in Fragile States: A scoping paper**

Ian Christoplos and Dorothea Hilhorst, 2009

### Occasional Paper #2

#### **Fond de Commerce? Sexual Violence Assistance in the Democratic Republic of Congo**

Nynke Douma and Dorothea Hilhorst, 2012

### Occasional Paper #3

#### **Fond de Commerce? Assistance aux victimes de violences sexuelles en République Démocratique du Congo**

Nynke Douma and Dorothea Hilhorst, 2012

### Occasional Paper #4

#### **From Gardens to Markets: A Madam Sara perspective**

Talitha Stam, 2013

### Occasional Paper #5

#### **Including conflict-affected producers in agri-food chains: Honey Business in Northern Uganda**

Sarah Drost, Diederik de Boer and Jeroen van Wijk, 2013

### Occasional Paper #6

#### **State and Non-State Institutions in Conflict-Affected Societies: Who do people turn to for human security?**

Gemma van der Haar, 2013

### Occasional Paper #7

#### **Land governance as an avenue for local state building in eastern DRC (also in French)**

Mathijs van Leeuwen and Gemma van der Haar, 2014

### Occasional Paper #8

#### **Shedding light on a Blind Spot: Incorporating labor constraints and labor productivity in the planning and evaluation of agricultural interventions**

Timo Gaasbeek en Roelof van Til, 2014

### Occasional Paper #9

#### **Rethinking 'entrepreneurship' in fragile environments: Lessons learnt in Somali women's enterprise, human security and inclusion.**

Holly A. Ritchie, 2014

### Occasional Paper #10

#### **Policy Review: International and Dutch policies in the field of socio-economic development in fragile settings**

Anette Hoffmann, 2014

### Occasional Paper #11

#### **The Women's Movement in South Kivu, DRC: A civil society analysis**

Dorothea Hilhorst and Marie Rose Bashwira, 2014

### Occasional Paper #12

#### **Studying 'the state' in Bukavu: A system, an idea, and a process**

Fons van Overbeek, 2014

### Occasional Paper #13

#### **Navigating uncertainty: A mosaic of memories of local authorities in Bukavu**

Fons van Overbeek, 2014