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A SYNTHESIS OF PRACTICAL LESSONS FROM VALUE CHAIN PROJECTS IN CONFLICT-AFFECTED ENVIRONMENTS

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EXECUTIVE SUMMARY

Over the last year, at the behest of USAID, 10 organizations captured results and lessons learned from projects that used value chain programming in conflict-affected environments. The goal of this paper is to extract larger lessons that emerge from these implementing organizations and the programs they developed across 14 value chains in conflict-affected environments. Based on these lessons, the paper strives to articulate the potential of value chain programming in conflict-affected environments, and to highlight "better practice" that leads to greater programmatic success in such difficult contexts.

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. This is done by linking poor producers to other private-sector actors who have access to growing markets and who have a clear business interest in partnering with poorer producers as part of their supply system. The value chain—so named because of the flow of 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. For a brief summary of value chain concepts, see Section II.

While illustrating the magnitude of challenges facing these programs, the cases demonstrated that the value chain approach can indeed deliver results in conflict-affected environments. Three cases demonstrated significant economic results in terms of sales, employment and private-sector investment:

- In Rwanda, eco-tourism receipts rose from zero to $33 million/year over a five-year period, with $20 million in new investment in infrastructure and assets.
- In Kosovo, domestic dairy sales showed a €36 million increase over a four-year period and created 624 new jobs (in full-time equivalents). Domestic investments in dairy increased by €3.9 million over four years.
- In Rwanda, the coffee value chain moved into export-ready coffee, with sales rising from zero to 940 tons after five years. Private-sector investments in the value chain totaled $5 million over five years, and several thousand seasonal jobs were created.

Four other cases demonstrated that value chain programs can be used to reach particularly vulnerable populations even during periods of on-going conflict:

- In the case of South Sudan shea butter, the program reached women cut off by decades of conflict with new commercial opportunities.
- In the case of Nepal fresh vegetables, the program increased home consumption of fresh vegetables, community cohesion and household income in areas coping with intermittent conflict.
- In northern Uganda, the program linked internally displaced persons (IDPs) living in remote camps with the cotton value chain despite their confinement to the camp area.
- In Afghanistan, the poultry value chain program linked home-bound women to markets and each other, improving their social as well as business networks and raising their self-esteem.

While all of these programs strove for sustainable results, it is too early to declare any sustainable in the absence of donor assistance. That said, the cases provide important insights into eight elements central to program results.

The market must be the driver of the value chain program. Programs achieving the greatest market linkages had moved rapidly from considering markets in terms of generic market demand to well-informed selection of specific

market segments. Most programs sought to upgrade pre-conflict industries to achieve relatively quick results, drawing on locally-available skill sets and, where possible, market systems and productive assets. In addition, the programs with the greatest economic impact explored multiple markets simultaneously—allowing for a "winnowing" of options as more information emerged. Those programs which avoided the important step of engaging directly with buyers in the end markets, either because of logistical and budgetary constraints or staff discomfort in interacting with buyers, resulted in the weakest economic results. These implementers subsequently lacked the detailed information and relationships required for sales, and were taken by surprise by changes in market demand or competitor behavior.

Investment in rebuilding inter-firm linkages and trust is essential but time-consuming. In all contexts, healthy linkages between firms are at the center of successful value chains. In conflict environments, however, 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. The case studies showed that rebuilding linkages after conflict was an early requirement for value chain success. In turn, rebuilding linkages was dependent upon the programs' ability to establish trust between participants. In non-conflict environments, trust generally emerges between participants over the course of years of successful business dealings. For implementing partners working in conflict environments, trust building activities—such as establishing transparency and communication as well as early (if small) joint successes—are an important part of jump-starting this process, and in turn strengthening participants' interest and willingness to link to other businesses. But these activities require staff planning, time and financial resources to demonstrate results—all of which were underestimated at the outset of the programs. The cases illustrate that associations or value chain working groups can serve as important platforms for rebuilding trust and linkages among similar firms or among those linked vertically in the chain.

Specific attention needs to be paid to the business enabling environment and the constraints relating to public infrastructure, particularly roads. There is a growing awareness of the importance of the business enabling environment in conflict recovery. As one case showed, a forum for public-private dialogue enabled local businesses and government to establish regulations conducive to building the domestic value chain. Nevertheless, few of the projects examined conducted a thorough analysis of the policy environment or helped value chain participants engage with relevant government officials. The cases did, however, illustrate that both the presence *and* absence of policy are essential to understand, and that the implications need to be incorporated into project design. The cases also showed that the challenges of limited transport and telecommunication infrastructure in a conflict-affected environment should not be underestimated.

Planning for the delivery of support services is an integral part of developing a successful value chain program. Value chain participants need financial, business and technical support services to successfully upgrade products or services to sell into target markets. At the same time, support services are typically under-developed in conflict-affected environments. The case studies illustrate three possible ways to source essential support services: i) work closely with other post-conflict implementers focusing on relevant parts of the institutional infrastructure—such as banking, agricultural extension or education; ii) encourage local providers of similar services to expand into those services needed by the target value chain; or iii) create embedded services within the value chain. In a few of the cases examined, support services were deemed "outside of the parameters" of the project, which hindered the team's ability to find creative solutions to gaps in support services.

Projects need to focus on sustainability from the outset and use subsidies with care. While subsidies are unquestionably part of every value chain program, four operating principles emerged from the case studies on how to best place subsidies for the ultimate sustainability of the program. First, use subsidies to facilitate the flow of information from the end market through the value chain. Second, use subsidies to enhance specific functions within the vertical chain which serve as bottlenecks to product flow, inducing a trickle-down or trickle-up impact throughout

the chain. Third, use subsidies to upgrade production capacity for the poorer participants only when no other options exist, and then use them strategically and with an exit plan. Finally, plan from the outset for subsidy withdrawal, and communicate this clearly to recipients and other stakeholders.

The most powerful champions are often private-sector participants within the value chain itself. The case studies show that private-sector champions—be they end buyers, processors, or innovative or better resourced producers—are particularly important in a conflict-affected environment because they provide leadership for innovation and trust building. 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. Private-sector champions are most effective when there is a transparent forum for them to share information with other value chain participants —an association of similar businesses or a network of businesses.

A progressive model can provide early success that leads to larger results over time. Managing risk is central to drawing conflict-affected populations into value chains, particularly in disrupted and rapidly changing environments. One way to manage risk is to start a value chain program by targeting easier-to-penetrate, "near in" market segments, while aspiring toward higher-value markets in the future. Programs which followed this approach were able to use initial efforts as a learning and testing ground for future expansion, often uncovering—and resolving early—unexpected obstacles. When combined with flexible, entrepreneurial leadership, these value chain programs were able to progressively upgrade value chain participants' products and services to compete in higher-value markets.

Match life-of-project to value chain timeline. Based on the case evidence, value chain programs take longer to show results in conflict environments than elsewhere. Without exception, the projects had only achieved initial milestones in the first two-year period, and required another three years or more to achieve the first round of economic results. This timeline is generally a mismatch with donor efforts in the post-conflict period, which often contract on 18-month or two-year terms. Several of the cases documented projects that spanned a series of sequential contracts. In each case, the projects experienced a loss of progress with each break in programming, particularly when the break coincided with a critical production cycle.

In short, the programs showing the greatest economic results—in terms of employments and rising incomes—applied most if not all of the eight elements above. Rather than limiting their program framework to a simple understanding of the value chain structure, they based design and decision-making on an in-depth understanding of all of these elements of the dynamic system in which the value chain operates.

I. PURPOSE, AUDIENCE AND ORGANIZATION OF THE PAPER

PURPOSE OF THE PAPER

Over the last year, at the behest of USAID, 10 organizations captured results and lessons learned from field-based projects that used value chain programming in conflict-affected environments. The goal of this paper is to extract larger lessons that emerge from these implementing organizations and the programs they developed across 14 value chains in conflict-affected environments. Based on these lessons, the paper strives to articulate the potential of value chain principles and programming in conflict-affected environments, and to highlight "better practice" that leads to greater programmatic achievements in such difficult contexts.

INTENDED AUDIENCES

There are two intended audiences for this paper. The primary audience is the many and diverse institutions engaged in the recovery process in conflict-affected environments. This group includes donors and implementers that develop and implement programs delivering immediate relief, those that focus on rehabilitation of infrastructure and systems that foster economic recovery or political and social stability, and those with programs aimed at relaunching key economic sectors. Some specialize in mobilizing quickly to meet emergency needs of conflict-affected populations (food, water, shelter, sanitation, security), typically in highly disrupted environments. At the other end of the spectrum, institutions may engage later as conditions stabilize, focusing on foundations for longer-term economic growth. Each of these implementing organizations may reasonably ask: "should value chain programming be part of our toolkit for conflict recovery?" and "in what context can value chain programming show the greatest results and impact?"

A second audience comprises donor and implementer organizations interested in the potential of economic development programs to reduce the incentives for violence by increasing the "economic dividend" of peace. There is much discussion of whether expanding post-conflict economic opportunity is an "inoculation" against the outbreak of renewed violence. Paul Collier's analysis across countries shows that the greatest protection against re-emergence of conflict is increasing incomes and expanding economic opportunities.[1] However, as USAID's Office of Conflict Management and Mitigation notes, economic improvements alone will not reduce causes of violence unless the benefits are distributed across conflict "fault lines," and unless the number and breadth of options available is expanded to reduce competition around a few key activities.[2] A second important question posed by this audience is whether rebuilding economic opportunities can have a positive impact on community cohesion, conflict-mitigation or peace-building. What light can these cases shed on the potential of value chain programming to accomplish these goals? The conclusion section will explicitly address these issues.

[1] Collier, Paul, Development and Conflict**,** Centre for the Study of African Economies, Department of Economics, Oxford University, October 2004.

[2] USAID Office of Conflict Management and Mitigation, Bureau of Democracy, Conflict, and Humanitarian Assistance, "Conducting a conflict Assessment: A Framework for Strategy and Program Development," 2004.

ORGANIZATION OF THE PAPER

Section III below is the core of the paper, presenting the key findings from 14 case studies. This section is designed to answer the question, **"What are the key elements of success for value chain programming in conflict-affected environments?"** For readers who are new to value chain programs, Section III will be more valuable with the help of a "primer" on value chain concepts. Therefore Section II provides a short guide to value chain concepts, with notes on their applicability in conflict-affected settings. Value chain experts may find this section not only easy reading, but perhaps overly simplified. This is intentional, in hopes that it can be helpful both to newcomers and to those who have previously found the value chain literature difficult to digest. Finally, Section IV provides a summary of main conclusions and recommendations.

II. A VERY SHORT COURSE ON THE VALUE CHAIN APPROACH

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. This is done by linking poor producers to private sector actors who have access to growing markets, and who have a clear business interest in partnering with poorer producers as part of their supply system. The value chain—so named because of the flow of product from early stages through higher value-add 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.

USAID's literature articulates the value chain approach as follows:

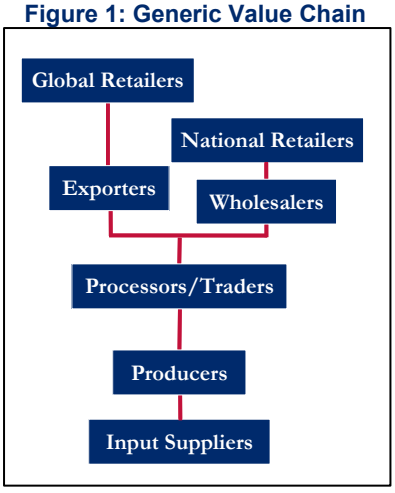
> The value chain approach is a powerful tool to create wealth in poor communities and to promote equitable economic growth. To ensure that the poor are not left out of economic growth strategies, this approach focuses on linking micro and small enterprises (MSEs) into global, regional and local value chains (through linkages with larger firms).
>
> (The) value chain approach seeks to understand how and when MSEs can successfully compete in growing value chains, targeting sectors where the poor are concentrated—agriculture, natural products, and labor-intensive industries. The approach then works to improve the competitiveness of industries (or value chains) in which significant numbers of small firms participate while addressing the constraints that hinder MSEs' potential contributions to and benefit from value chain growth (source: www.microlinks.org, "Introduction to Value Chain Development").

There are seven core concepts within the value chain literature that give more clarity to the value chain approach, and all of which are important to understand thoroughly in the conflict-affected setting.

CONCEPT 1: THE VALUE CHAIN

As discussed above, the value chain is the complete set of producers or providers of additional value who participate in turning a set of inputs into a set of products purchased by end consumers. The value chain is typically shown in a graphic format, organized with those actors closest to the final market at the top of the graph, and those most distant from the final consumer at the bottom of the map. They are then vertically linked to form a complete chain, reflecting buying, selling, or contracting arrangements throughout the chain (see Figure 1).

Figure 1: Generic Value Chain



CONCEPT 2: THE MARKET

Perhaps the most important concept of value chain programming is that *the market is the central driver*. Any value chain program begins with a market opportunity: a growing, profitable market, whether domestic or international, whether highly differentiated or a less differentiated commodity. While "the market" is the most important concept of the value chain, it is also the most misunderstood. Annex A provides four "market principles," which tend to be overlooked, and which are at the center of successful value chain programs.

Over the last 15 years, the concept of market opportunity has increasingly become intertwined with globalization. With very few exceptions, the opportunities facing producers—even in highly disrupted conflict-affected environments—are determined by the local value chain's ability to compete successfully against worldwide producers, whether in domestic or export markets. For example, dairy producers in Serbia and Kosovo compete with milk products imported from Germany and other European countries. Poultry farmers in Afghanistan compete with fresh and frozen chicken imports from Pakistan for local consumers. Shea butter products from Sudan compete with other shea butter producer and processor countries for shares of the food and beauty markets worldwide. In short, value chain programs can only penetrate markets effectively if both of two conditions hold: (1) a high-potential market exists; and (2) the local industry has the capability to not only service that market, but to outperform the competition in terms of price, quality or delivery of a specialty product.

Value chain programmers must quickly shift from a broad understanding of markets to very specific knowledge of buyers, other sellers, trends in requirements and emerging products. As will be discussed in more detail below, the value chain map needs to be as specific as possible about the characteristics of the market. As market clarity emerges, the description of the value chain itself also changes: Participation and organization of the value chain will be different for the separate market segments.

CONCEPT 3: VERTICAL LINKAGES

By definition, vertical linkages are the relationships between participants with adjacent roles within the value chain, as product is enhanced or services added through the chain. However, just as important as understanding who is linked to whom is understanding *how* they are linked and what benefits those linkages convey. Those closest to the customer are typically in the position of having the most market information, as well as often the greatest market power. Those further from delivery of the final product are dependent upon participants further up the chain to i) continue to buy their product (as opposed to sourcing elsewhere), and ii) provide them with information on market demand, which strengthens their ability to produce to buyers' exact specifications. What is more, those further down the chain often receive critical inputs or services from those above them, such as credit, seeds and fertilizers, or training. In short, vertical relationships are key to moving knowledge and benefits down the chain.

In a conflict-affected environment, vertical linkages are particularly important to understand, and to rebuild or enhance as part of the value chain program. Multiple cases illustrated that trust between vertically linked players after conflict is at an all-time low, based on lack of contact or experience, on ethnic differences between those in adjacent functions, or on real or perceived market inequities. As will be shown below, finding "win-win" solutions for all players in the vertical chain proved to be a major part of building an effective value chain in these settings. Programs that ignored vertical linkages, or those that selected only one function of the chain to support, were less effective in building thriving value chains specifically because they did not understand the importance of creating healthy vertical linkages, or how to create "win-win" opportunities between players.

CONCEPT 4: HORIZONTAL LINKAGES

Most value chains have multiple participants in any one function. Agriculture provides an obvious example: Thousands of farmers all produce a particular crop in a given country, while multiple wholesalers and traders collect and market the same product. While these players often see each other as competitors, value chain programming recognizes and attempts to utilize the mutually advantageous linkages between participants performing the same function. Once established, horizontal linkages allow information sharing, collective bargaining, skill building or other benefits to be shared across a large number of similar participants. A classic example is a group of farmers coming together in a farmers' association to purchase lower-cost inputs, to collectively grade and market their output, or to invest together in new technologies. In a market where upgrading is essential, these linkages acquire even more importance as a way to reach many with the same information and skills.

In a conflict-affected environment, re-building horizontal linkages is both more difficult and more important than in non-conflict environments. Networks that may have linked participants in the past may have fallen into disrepair, or may have fragmented along ethnic or other conflict fault lines. Rebuilding these relationships and institutions becomes an essential part of creating a system that can rapidly upgrade processes or products to catch up to market requirements after conflict ends.

CONCEPT 5: UPGRADING

Value chain programs aim to establish a sustainable chain that provides employment and income to participants, and to prepare them to remain competitive as the market and the competition inevitably evolve. The key to this is to establish incentives and opportunities for participants to continuously *upgrade* their processes or products to remain competitive, or to build into even more lucrative markets.

In a conflict-affected context, upgrading becomes both more essential and more difficult. First, markets may have changed during the course of the conflict: tastes may have changed, new competitors entered, or requirements for participation evolved. Second, the institutional base for supporting upgrading is likely to be weaker (fewer market information systems, compromised infrastructure, etc.) Third, the skill base of the value chain participants is likely to be lower due to lost skills, lack of recent participation in competitive markets, etc. In short, while upgrading is important in all value chain programs, it is a particularly essential concept to understand and grapple with in conflict-affected environments.

CONCEPT 6: SUPPORT SERVICES

Support services come from actors who provide specific services to participants in the value chain, without touching or adding value to the product or service itself. For example, financial institutions provide support services to participants in the form of credit, savings or insurance. While a given financial institution would likely serve clients across a wide range of value chains, it may develop specialty products specifically for the needs of a particular group of clients. In general, the presence—or absence—of appropriate support services will impact the ability of participants in a value chain to upgrade their products or services as the market requires.

As expected, support services tend to be less robust in conflict-affected settings than in environments with a long history of stability and economic growth. As will be shown in the cases below, those programs which either found–or created—sources of support services were better able to manage risks of upgrading and strengthen the value chain.

CONCEPT 7: THE ENABLING ENVIRONMENT

The larger environment within which a value chain operates has multiple elements that impact the value chain's structure and performance. Elements include: the physical infrastructure—ranging from roads to power to water to storage facilities; the security situation enabling the movement of money and goods; the policy and regulatory environment—ranging from broad monetary and fiscal policy to specific regulations (such as licensing, standards, etc); the legal system and ability to enforce contracts; public services such as education and health; and informal practices and power structures—from cultural norms to presence of informal systems of regulation and taxation.

In the value chain framework, the enabling environment is depicted as a simple bubble around the entire value chain. In fact, it is the 'traffic cop' of the value chain, setting the rules and influencing outcomes within the value chain in ways that can either be highly constructive or counterproductive to value chain goals.

As expected, in conflict-affected settings, informal policies, physical infrastructure, and security are all of particular importance. However, formal policies and regulations are equally important. According to Collier and Hoeffler, the

policy environment is the key variable that allows economic recovery.[3] They empirically demonstrate diminishing returns of post-conflict development assistance—up to a saturation point where impact of aid goes to zero. Only good policy can shift the saturation point outward, allowing aid to have a positive influence on economic growth. As discussed in Section III, the enabling influence of good policy is indeed directly visible in some of the cases examined in this paper.

It is difficult to over-emphasize the importance of understanding the enabling environment in value chain programs in conflict-affected settings, where sudden changes can either open new opportunities or undermine the best-laid plans. As described below, 2 of the 14 programs were completely halted due to unexpected policy setbacks. The enabling environment, therefore, must be understood early and carefully monitored to minimize the potential for programmatic disaster.

CONCLUSION: A SYSTEMIC VIEW

Each of these seven concepts will be revisited below in the Section III because, far from being merely theoretical concepts, they are the roots of practical success in value chain programs. In fact, those programs that performed poorly failed to pay attention to at least one of these core concepts, while the strongest programs omitted none.

Taken together, the seven concepts create a systemic view of how actors compete or collaborate to reach the market. But even more important than the seven concepts is the overarching value chain lesson that one must *understand the system within which poor producers operate* in order to successfully and sustainably link them to economic opportunities in profitable markets. Even in programs that took a limited approach to engaging the value chain, if they understood the dynamics and incentives of the larger system, then they were better able to achieve their objectives for their particular target population by understanding the system first.

[3] Collier, Paul and Hoeffler, Anke, "Aid, Policy, and Growth in Post-Conflict Societies," Policy Research Working Paper Series, The World Bank, Washington, DC, 2002.

III. ELEMENTS OF SUCCESS IN VALUE CHAIN PROGRAMMING IN CONFLICT-AFFECTED ENVIRONMENTS

In total, this paper draws upon 12 case studies commissioned by the AMAP[4] project as well as 2 other conflict-affected value chain programs funded by and documented with USAID funding (marked with an asterisk on Table 1 below). The cases span a wide array of conflict environments—ranging from ongoing conflict on one extreme, to environments where conflict ended as much as a decade earlier. In addition, the cases range from those that implemented a formal value chain program—working with an entire value chain to enter new markets—to those programs that adopted some of the key principles of value chain programming but modified the methodology to achieve other objectives. Finally, the cases ranged in stage of implementation. Three cases[5] involved value chain analysis only, so were primarily useful for insights into markets and the environmental challenges the value chain would likely face. Most of the others presented value chain projects in process—at various stages of maturity. Only a few were able to look back on completed projects to draw lessons.

Table 1: Value Chain Case Studies Examined for this Paper

Country/Value Chain	Implementing Agency
Afghanistan/Poultry	Chemonics International, Inc.
Afghanistan/Grapes	Chemonics International, Inc.
Bosnia/VegaFruit*	J.E. Austin Associates
Colombia/Coffee	Centro de Recursos para el Análisis de Conflictos (CERAC) with International Alert
Guinea/Groundnuts	International Rescue Committee
Haiti/Construction	CHF International
Kosovo/Dairy	Chemonics International, Inc.
Nepal/Fresh Vegetables	IDE International with Winrock International
Rwanda/Tourism	On The Frontier (OTF) Group
Rwanda/Coffee*	Chemonics International, Inc.
Serbia/Dairy	Mercy Corps
Sri Lanka/Fisheries	International Alert
Sudan/Shea Butter	MEDIC
Uganda/Cotton	International Rescue Committee

[4] These cases were documented with funding from the USAID Accelerated Microenterprise Advancement Project (AMAP) Small Grant Program, implemented by Pact, Inc., following guidance provided by ACDI/VOCA under the AMAP theme "Value Chain Development in Conflict Affected Environments."

[5] Colombia coffee, Haiti construction, and Sri Lanka fisheries were all at the design stage when documented as case studies.

This section extracts lessons from this heterogeneous pool of cases—recognizing that they do not provide a critical mass of "like" projects for comparison and are missing common evaluation criteria that would allow more robust comparison.

As will be seen below, the cases provide insights that are relevant to value chain programs everywhere, regardless of the history of conflict. However, because they took place within conflict-affected environments, the challenges facing the programs tended to be more extreme in two ways. First, the obstacles facing the value chains were multiplied in number and severity, reflecting the more disrupted environments in which they took place. Second, the penalties for missing a critical principle or aspect of value chain programming tended to be higher than in non-conflict environments, leading to a greater potential of program failure.

Conversely, the cases provided significant evidence that despite seemingly insurmountable hurdles, success was possible. The findings below show ways that barriers were overcome—often with creativity and flexibility. These methods no doubt emerged because of the extreme stress of the environment, yet there is every reason to believe that they would also prove helpful in non-conflict environments.

The findings below are grouped around eight themes, the first four of which echo the value chain concepts discussed in Section II. But first, it is useful to highlight cases which demonstrated particular successes.

SEVEN EXAMPLES OF VALUE CHAIN PROGRAM CONTRIBUTIONS: ECONOMIC AND BEYOND

The value chain programs examined in the cases strove to achieve two major types of objectives. One objective—seen in approximately half of the cases examined—was the achievement of sizeable and sustainable economic growth as demonstrated by improved income, employment and private sector investment. Details of three such cases are presented below.

Other value chain programs prioritized reaching particularly vulnerable populations, with long-term economic scale and sustainability as secondary in importance to the main objective of stabilizing the population in the short- to medium-term. Four such cases are presented briefly below. These programs are notable in their achievement of clear benefits to the population, though some of these efforts may be seriously challenged in sustainability of results.

THREE EXAMPLES OF SIGNIFICANT ECONOMIC CONTRIBUTIONS

Three of the programs were sufficiently mature, as well as sufficiently documented, to provide insights into the economic contributions possible in the form of market penetration, income and employment growth, and private investment: Rwanda tourism, Kosovo dairy and Rwanda coffee. In two of these cases, the value chains targeted markets that were considered one step along the way toward a larger market goal. By focusing on an intermediate market segment that was more achievable with the limited capacity of the value chain, these projects were able to reach significant markets nonetheless.

- In Rwanda, original plans aimed to build a multi-product international tourism market. After careful analysis of market requirements, the smaller international eco-tourism market, built around Rwanda's primates, was selected as more achievable. Over a five-year intervention into this specific market, tourism receipts rose from zero in 2002 to $33 million in 2006, with a goal of $55 million in 2008. Moreover, investments in the tourism value chain rose from $7 million in 2003 to $20 million in 2006.
- In Kosovo, value chain programmers originally aspired to market Kosovo dairy products to countries in the region, but decided to focus initially upon competing with imports for the domestic market. Over a three-year period, domestic sales increased by €36 million, adding 624 new jobs (in full-time equivalents). Investments in the value chain totaled €3.9 million.

- In the case of Rwanda coffee, programmers aimed at the international market from the outset, targeting two types of coffee: green coffee (a less processed product) and export-ready washed coffee (a higher-value added product). After six years of engagement between buyers and the supply chain, the program succeeded in growing market presence in both markets. Green coffee sales rose from zero in 2002 to $2.7 million in 2006. Export-ready coffee production rose from zero in 2002 to 940 tons in 2006. Several thousand seasonal rural jobs were created in the coffee-washing facilities. In total, private businesses invested $5 million in reaching the export-ready market over the five-year period.

Each of these three cases showed the following "basic ingredients" which contributed to economic results:

- Earlier reconstruction had established important foundations on which the value chains built. In Rwanda, value chain development began six years after the crisis. In Kosovo, value chain programming followed three years of broad-based economic reconstruction.
- Participants were able to identify a specific growing market segment, and to learn about it through direct engagement with the market. Moreover, there were opportunities to share this information widely with other value chain participants.
- Each focused on building linkages both horizontally and vertically throughout the chain, as well as linking participants to service providers (for appropriate financial services, for example).
- Each value chain developed a collaborative relationship with government agencies to set policies supportive of value chain development.
- Private sector actors were willing to invest in upgrading the value chain, reflecting the strength of the market opportunity as well as the assessment that risks were manageable.
- All of these cases used significant donor resources to launch the value chain, but these subsidies were primarily used to facilitate relationships, and create direct linkages to the market, to new technologies, and to service providers.

Even with their visible successes, these programs remain vulnerable—to disruptions after public funds are withdrawn, to significant changes in their markets, or to setbacks in maintaining quality or consistency of their products and services. Part of the task of the project teams is to ensure that market information and incentives flow through the value chain as part of normal business, so that the chain can continue to grow and prosper without donor support.

FOUR CASES DEMONSTRATE RESULTS FOR HIGHLY VULNERABLE POPULATIONS

Several other cases focused more intensively on achieving results with specific populations affected by conflict. Large-scale economic growth was not a primary objective; rather they focused upon showing rapid impact, generating income for the very vulnerable, and improving social outcomes, such as enhanced relationships or self-esteem. Moreover, these cases were more likely to take place *during* conflict, when the prognoses for long-term stability and economic growth remained uncertain. Four cases highlight this approach: Sudan shea butter, Nepal fresh vegetables, northern Uganda cotton and Afghanistan poultry.

- In the case of South Sudan, programmers worked with women in communities isolated by decades of conflict, and used a community asset—the shea butter tree—to create products with market value. Now at least six years into the effort, hundreds of South Sudan residents earn income from the program.
- In the case of Nepal, programmers introduced new technologies that would increase both the number of growing seasons and the productivity of household gardens in conflict-affected communities near the India

border. The result was increased household consumption of fresh vegetables, marketing of excess production into local markets (a new cash infusion for many households), and enhanced social and business relationships within the community. Program implementers remain concerned about the long-term sustainability of the effort, but can point with pride to the community-level results of the program to date.

- In northern Uganda, the program linked IDPs living in camps with a cotton processing company, which not only purchased cotton from camp residents, but also supported camp residents in cotton production (through land preparation, seed and fertilizer provision, and farmer training). The cotton processing company has continued to purchase raw material from camp residents after the project, providing an important example of sustainability. Perhaps most remarkably, the project demonstrated that even those confined to camps can rebuild economic livelihoods using value chain principles.

- In Afghanistan, programmers worked with networks of home-bound women to upgrade poultry and egg production, dramatically increasing participants' productivity and sales. The project cited significant gains for participants in terms of self-esteem and social relationships, essential for women who had been isolated from each other and from markets. Unfortunately, the project ultimately collapsed, though there is hope that the women may use their newfound strength to explore new opportunities in the future.

Ideally, programs aiming for such outcomes would also succeed in delivering long-term economic results to vulnerable populations, as in the case of Ugandan cotton above. Learning from the lessons discussed below could further improve the outcomes for programs that prioritize working with vulnerable populations.

A. THE MARKET IS THE DRIVER OF THE VALUE CHAIN PROGRAM

Finding markets that are both valuable and accessible is, as in all environments, the starting point for a value chain program. Market options may include large-scale, undifferentiated products (many basic food crops for the domestic or regional market would fall into this category), or more differentiated high-value products. In the case of conflict-affected environments, the initial effort in identifying market options typically revolves around revisiting those markets that were served prior to conflict. There is no guarantee that any of these markets remain viable: changes in market requirements, competitor strengths, or domestic skills and assets may all place these markets out of reach. Yet pre-conflict activities may still have some assets—whether direct experience or physical infrastructure—that could provide a base for rebuilding a competitive position in one of many potential market segments.

In Afghanistan, for example, the team examined multiple historic crops in the region of interest and then built the value chain program around the option of fresh grape exports, which showed the right "risk-reward" balance. Specifically, market risks were low because there was a thriving but under-supplied domestic market for fresh grapes. When combined with historic experience in grape production and marketing, the domestic market provided risk protection for the inevitable "trial and error" of breaking into a new export market. On the reward side, the fresh grape export market showed the potential to earn 400 percent of current returns if the systems and product could be upgraded successfully and export barriers overcome to reach neighboring countries. As the implementers documented in the case study, even though the risk-reward equation was aligned for fresh grapes, it did not guarantee a successful program, due to other environmental challenges. It did, however, provide a real "market opportunity" to explore in more detail.

Of note, the more successful programs explored multiple markets simultaneously—avoiding placing all bets on a single market opportunity. Repeatedly, implementers cited unexpected setbacks that reduced the options they could pursue, all in ways they were unable to predict at the beginning of the investigation. In effect, there was a "winnowing" of options which naturally took place as more information emerged. Those programs that planned for

such winnowing and remained flexible were best able to maximize results in markets that ultimately showed the greatest potential.

Lesson: Start with multiple opportunities, examine both the potential and risks of each market, and remain flexible as more information emerges.

Once market segments are identified that appear to have high potential and manageable risks, the immediate next step is to get specific information from buyers on what they and their customers will buy, from whom they buy now and why, and what they require from their suppliers—for each market segment considered. Who better to provide this information than the buyers themselves?

Of the 14 cases, the most successful began with direct dialogue with potential buyers, some of whom became actual buyers once the projects commenced. The Afghanistan grape value chain team recommends that the first step of a value chain project is to bring sellers face to face with potential buyers to learn what they really want, who the competition is and what they are doing, and what the value chain must do to make a sale. The first round of buyer contact should start at the analysis stage, conducted quickly and professionally by the project analysts/designers. It is then repeated at the implementation stage, involving key value chain participants in this dialogue with buyers. Two other programs that built value chains around buyers are described in Box 1 and Box 2 below.

Box 1: Rwanda Coffee Meets Directly with International Buyers

The coffee value chain project in Rwanda (under the USAID ADAR project) spent six years actively seeking buyers in the U.S. and European markets and investing in a value chain based on direct information from potential buyers in high-value markets. Throughout the six-year period, participants in the value chain participated in trade fairs and buyer conferences in Africa, the United States and Europe. This process of engagement not only served to make contacts and build motivation, but also provided a forum for learning about international competitors, finding improved technologies, tracking changing tastes, and showing a consistent presence and commitment to potential buyers. It led to a major partnership with Starbucks, but only after a long-term, steady engagement process.

Box 2: Northern Uganda Cotton Buyer Participates in Design and Implementation

Near the IDP camps in northern Uganda, the value chain design team not only found that IDPs had cotton production skills, but that the regional cotton processor, Dunavant, was seeking additional supplies of raw cotton. At the design stage, the project worked with Dunavant to resolve significant barriers facing cotton production in the camps, such as collection of cotton within the safety of the camp, delivery of seeds and other inputs to the IDPs, lack of access to land and the need to bring in equipment to plow uncleared land. In short, identifying and then working closely with the buyer was key to both the appropriate design and ultimate results of the project. The project has also explored buyers for IDPs as they return home, aspiring to maintain their cotton income as they resettle in their homes.

Perhaps the greatest challenge facing projects in placing buyers first is staff perspective, comfort and skills in engaging buyers and learning first-hand about markets. Professionals working in conflict-affected areas are often trained to focus upon the protection, recovery and reconciliation of the population. Spending scarce project time in dialogue with larger, wealthier businesses—often situated far from the project focus region—may be both logistically difficult and uncomfortable. Moreover, an easy-to-use buyer survey tool is not yet available to provide techniques to conduct this investigation effectively by those trained in different disciplines.

The value chain literature itself has not sufficiently emphasized the need to identify and engage buyers as the starting point of a value chain program. The result is that many projects draw a well-articulated value chain map from the producer to wholesaler level, but become vague in terms of markets, failing to articulate and understand specific segments, as illustrated in Box 3. Invariably, in such cases the team charged with implementing the project is then unclear about the pros and cons of targeting specific markets, and is blindsided by competitors' actions, by rapidly changing requirements of specific segments (such as certification requirements), or by international and national policies and regulations that impact specific market segments.

Lesson: Place potential buyers at the center of the analysis and the program.

Box 3: Missing the Buyer in Analysis and Design

Several case studies provided outstanding domestic value chain maps, but brushed over analysis of the buyer in their assessment of opportunities and constraints. One example is the **Sri Lanka fisheries** case, which pointed in general terms to the European and Japanese markets for tuna and other deep water fish, and mentioned its major competitor in supplying these markets, but had not examined specific geographic or product market segments, or looked to see if other competitors have emerged. While the case remains one of analysis only, it has not identified a specific market segment to prioritize with a value chain intervention.

Another example is the **Nepal vegetables** case, which focused nearly exclusively at the community, farmer and input supplier (micro-irrigation kits) level. This project, which successfully raised farmer incomes through local market sales, did not create a value chain linking buyers in the expressed target market (Indian off-season vegetables) back to the local project areas. At the time of the case study, project populations were not yet connected to the new market, reflecting the "missing buyer" in the project design.

Even in the case of **northern Uganda cotton**, where the buyer, Dunavant, provided a strong market for IDP-produced cotton, the actual final buyer—in the world cotton market—was not part of the initial analysis. Over the long term, lack of insights into world market trends could leave the value chain vulnerable to elements that are outside Dunavant's control. In such a case, value chain designers would do well to look beyond Dunavant to its customers globally, and to work with Dunavant in that analysis.

B. THE POWER OF THE ENABLING ENVIRONMENT

A major factor of success in the cases was the enabling environment—and especially government policy and regulation. Even outside of a conflict-affected environment, value chain programs struggle to understand the importance and dynamics of policy and regulations that underlie but directly impact the value chain. In the conflict context, both the presence *and* absence of policy are essential to understand, and tend to be both more dynamic and more difficult to track. A description of the magnitude of the challenge was presented in the Nepal vegetable case:

> "Some of the main constraints to upgrading…are weak or non-existing infrastructure, an unstable political system, dysfunctional or disabling national policies, weak government service provision, a risky security environment that discourages investment, and tariff and non-tariff barriers to trade put in place by India to suppress Nepal-originating trade." (p. 27)

Four cases are excerpted below in Boxes 4a and 4b. Those in Box 4a demonstrate the positive power of policy and an improving enabling environment. The case of Serbia shows both a broad policy change, directly impacting the project's ability to encourage processors to upgrade their capacity, and a sector-specific policy designed to push the sector toward international competitiveness. In Afghanistan, export opportunities improved as border crossings became less onerous. Those in Box 4b demonstrate the negative potential of the environment. In Afghanistan, the

project team was unable to successfully engage government officials on an issue at the core of the value chain design. The final case, in Guinea, found project staff caught unaware by a policy change that made their market legally off-limits. In total, these four cases illustrate the many ways in which the enabling (or disabling) environment can directly affect a value chain, the power of single policy changes, and therefore the need to be continuously engaged and aware of the enabling environment conditions.

Box 4a: The Positive Power of the Enabling Environment

In the case of **Serbia dairy**, two government policy changes are of note. First, Serbia implemented a value-added tax (VAT) regime, as advised by international donors. It had the effect of reducing incentives to move dairy products through the gray market, which allowed formal sector actors (in particular processors) to make key investments needed to upgrade the dairy value chain. The VAT decision, which cut across all sectors, was foundational to dairy upgrading. Second, the government established a requirement that all dairy processors be Hazard Analysis and Critical Control Point (HACCP) certified by 2009—a precondition for sales into the European Union. To help the private sector meet this requirement, the government pays 80 percent of HACCP certification costs for those who undertake the process. This sector-specific policy change is driving change throughout the value chain, in some cases resulting in closures of less capable firms.

Government barriers—both in Afghanistan and in Pakistan—hindered exports of **grapes from Afghanistan** to Pakistan in the early years of the project. For all produce, border crossings were time-consuming and resulted in spoilage of fresh produce. Ultimately, Afghanistan's decision to reduce the administrative burden of border crossings expedited the process of leaving Afghanistan. Pakistani requirements that the fruit be reloaded onto Pakistani trucks, however, remained in effect until recently. Value chain participants were affected by these regulations, but were not positioned to engage effectively with the relevant government bodies on either side of the border. Now that both policies have changed, grape exporters are moving more product into Pakistan.

One positive example of public sector engagement came from Rwanda, where the government was highly motivated to enhance economic growth outcomes more than a decade after the crisis. In this case, the government provided not only support but strategic and tactical leadership for rebuilding the tourism sector, led by the Office of Tourism and National Parks, in large part because the project design team created early opportunities to link to, and therefore influence, public sector decision-makers. Specifically, the project created a Tourism Working Group (TWG), bringing together public- and private-sector stakeholders across the tourism sector, which provided an ongoing forum for sharing information and vetting ideas for value chain improvement. Project staff members are now working to engage more public agencies with the TWG, including the Rwanda Investment and Export Promotion Agency and the Rwanda Bureau of Standards to open new opportunities and overcome specific challenges facing participants. The project team recommends using a similar working group approach for all value chain programs to bring private and public interests and actions into accord.

There is always the possibility that business enabling environment issues may be irresolvable, particularly in highly disrupted environments with ongoing conflict or where internal or external parties are purposefully disrupting the value chain. In such cases, implementers should take an honest look at whether the value chain can achieve results in the absence of an enabling environment change. In some cases, such an assessment may lead to early termination of a value chain effort.

Lesson: Know—and influence as possible—the business enabling environment.

Box 4b: The Negative Power of the Enabling Environment

The **Afghanistan poultry** value chain project was successful in terms of building linkages between highly isolated women, improving their social connection, trust and cooperation, as well as their skills and income. In total 1,020 village producer groups were formed, producing 2.5 million eggs per month at their peak. Despite the magnitude of the success, project staff was unable to get the government to grant the producer groups legal status as provincial-level associations, which would have allowed them to continue to serve as provincial supply centers for the village groups. It is unclear whether this decision was due to an absence of trained professionals, a failure to understand the importance of the decision, or a lack of public will and accountability. In any case, failure of the project staff to anticipate this blockage and find a way to get the needed approvals (or redesign the function around them) spelled an end to the entire value chain effort.

The **Guinea groundnut** project centered on the Forest Region of Guinea, close to Liberia and Sierra Leone—both of which have an unmet demand for shelled groundnuts. The project area is far from the capital, Conakry, and away from the traditional groundnut growing regions of Guinea. Disconnected from the policy realm, project designers were taken by surprise by a decision in Conakry to ban the export of groundnuts, presumably in response to rising domestic food prices. This ban has stalled the effort to build an export value chain. However, project staff continued to build both horizontal and vertical linkages with farmers and wholesalers, in hopes that their combined private sector voice can engage government to lift the export ban. In the meantime, the project is working to improve the quality and quantity of groundnuts in the Forest Region, targeting relatively stagnant local markets for unprocessed nuts, and exploring market options for processed products.

A MAJOR HURDLE: TRANSPORTATION AND MOBILITY

Most of the value chains had key functions located in areas that were either remote, were served by transportation systems disrupted by conflict, or were still in the midst of conflict. This introduced multiple challenges:

- Cost of the product went up to reflect the higher transportation requirements in terms of fuel and freight charges. These costs affected competitiveness in both distant domestic and export markets.
- Risk of damage to the product increased, based on the length of the trip and the condition of the roads, and the amount of handling required.
- Ongoing security issues limited safe transport of people and products.
- Border crossings introduced multi-day delays and other burdens. These barriers to transit reflected poor policies and regulations, and in some cases, security concerns.

A few examples illustrate this hurdle. In Kosovo, staff reported that due to the poor road system, costs of collection and transport of Kosovar milk was 250 percent that of regional competitors, placing Kosovo out of the competitive range in the export market. This fact alone refocused the value chain team on domestic markets. In Afghanistan, rail options were unavailable and air freight minimal, so that grape producers had to truck perishable fruit for days over poor roads, before they were off-loaded at the Pakistan border. In Nepal, insurgent, military and government activities limited project staff movement and put specific areas off-limits to extension agents, limiting the spread of new technology. In Colombia, the entire coffee region of interest was unable to get product to market due to lack of a functioning transportation infrastructure, compounded by continuing conflict in the region.

Of course, as transport systems improve and transport costs go down, new markets may become more accessible or more competitive. This was the case with Afghanistan grapes, benefiting from both reduced paperwork for the Afghani government at border crossings, and the later lifting of the Pakistan government requirement that all produce

be shifted to Pakistani trucks at the border. This improvement reduced both time-in-truck and handling, resulting in a higher-quality product reaching the market in Lahore. By monitoring the transportation policies and practices, the value chain team was able to move quickly to capitalize on the policy changes.

Lesson: Mobility and access to transportation can be a particular challenge in a post-conflict environment. Quantify the impact on competitiveness, plan accordingly and monitor regularly.

C. PRIORITIZE TRUST-BUILDING IN VERTICAL AND HORIZONTAL LINKAGES

As discussed in Section II, business relationships—both vertical and horizontal—are often casualties of conflict, or fail to materialize due to conflict. In the most extreme case—Sudan shea butter—the combination of a traditionally non-commercial product and decades of war meant that no history of business linkages existed upon which to build. In Afghanistan, three decades of conflict had reinforced kinship-based linkages that crisscrossed borders into neighboring countries, while domestic non-kinship business linkages languished. In Serbia, both vertical and horizontal business relationships were undermined by deep mistrust. How, in such environments, does a program build a value chain which relies on collaboration across a broad range of participants? One answer emerged from the cases: reestablish trust through collective actions, reinforced by real business gains—even if small.

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.

The case of Serbia's dairy value chain shows multiple barriers to value chain collaboration due to lack of trust. Processers were unable to collaborate amongst themselves, even with the visible incentive of breaking into a new market, based on ongoing competition for existing markets and raw materials. Processors did not trust milk collectors, and as a result, invested in trucks to collect the product themselves despite lowered productivity. Nor did processors trust milk retailers because of poor experience in receiving payment for product. In short, no trust existed in either horizontal or vertical relationships, which hindered collective action that would benefit, at least in the longer-term, the processors themselves. To date, the project has not resolved these barriers to trust and has struggled to identify win-win business strategies for the value chain as a whole.

How can value chains build trust? Box 5 presents two cases—Rwanda and Uganda—that provide techniques for including trust-building in project design.

Box 5: Creating Trust within Vertical and Horizontal Relationships

Rwanda Tourism: In the Rwanda tourism value chain, initial mistrust among participants limited information sharing. The use of the Tourism Working Group (TWG) reduced mistrust by making information highly transparent to participants across the functions, in effect creating a "line of sight" through the value chain. This was particularly important for micro and small enterprise (MSE) participants on the TWG; access to information both increased their participation in eco-tourism and the value of their specific offer to the rest of the value chain. In general, trust rose as participants found specific opportunities together to expand rather than re-divide potential tourism income. In fact, building trust has been such a critical factor in achievements to date that the team recommends that it be a major process indicator for value chain programming in a post-conflict environment.

Uganda Cotton: In the case of cotton producers in the IDP camps of northern Uganda, trust proved to be a critical element to building both horizontal and vertical linkages. Trust was particularly scarce given the context of on-going conflict and their continued displacement, as well as a history of previous contractual failure with farmer cooperatives (a horizontal structure) and buying agents (a vertical structure). As the project team explained, this lack of trust played out with most new arrangements proposed for the project, including rental contracts with local land owners (many from other kinship groups), buyers and their agents, and within the farmer-led Collective Marketing Committees set up by the project as a central product collection point within the camps. Simply put, "It takes time to build trust." To better understand at least one element of trust, the project team recommends starting a value chain program with a mapping of social ties across functions and relationships. With that information in hand, they suggest starting specific relationship-building efforts within existing social networks, then using the demonstration effect and the growing trust within the more homogeneous groups to build out across social networks.

It is tempting to interpret these cases as advocating group formation as the key to building trust. In fact, the essential element in both of the above cases was the bringing together of value chain participants to identify and take collective action that provided direct business benefits. In no case was group formation an end in and of itself: it was always a means to a business benefit, and it was that business benefit that improved trust.

International Alert's tool for integrating conflict analysis into value chain analysis is a good starting place for clarifying where trust and collaboration exists, as well as the sources of conflict and lack of trust, in order to develop a value chain strategy that is sensitive to various parties of the conflict.[6] This tool can go beyond ethnicity mapping to identify other types of barriers, such as mapping previous transaction experiences—both positive and negative. USAID's Office of Conflict Management and Mitigation is also an important source for tools that can be adopted to assess relationships—and the impact of conflict on those relationships—for value chain programs.[7]

It is difficult to overestimate the importance of trust-building activities within a value chain project. As the northern Uganda team points out, establishing communication and transparency took much more planning, staff time and formal design than would be required in a non-conflict environment, where traditional businesses can draw on an evolved network of relationships. Moreover, in a conflict-affected environment, the limited time period of the project forces staff to go to extra lengths to quickly create, or re-create, relationships. Even with such extra attention and effort, the team estimates that building trust requires multiple production cycles to accomplish. If a production cycle is an annual crop, for example, building strong and sustainable vertical and horizontal relationships might take three years to crystallize.

[6] International Alert, "Conflict Sensitive Approaches to Value Chain Development," USAID MicroREPORT, May 2008.
[7] USAID Office of Conflict Management and Mitigation, Op. Cit., 2004.

Lesson: Invest in trust-building, understanding that it takes explicit resources and time.

USING ASSOCIATIONS AS LINKAGE-BUILDING MECHANISMS

World over, business associations are a mechanism to bring together firms with similar interests that can benefit from collaboration. Value chain programs rely frequently on associations (or groupings of like businesses under other names, such as farmer cooperatives) as ways to deliver key inputs and services, improve standards, develop a common voice or market product. The same is true in conflict environments, and indeed many programs focused early attention on their creation.

In initial periods after conflict, multi-function associations provide a forum to enhance vertical relationships through the chain. One case is that of Kosovo dairy, 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 entire chain, and policy issues. As the value chain developed, the Kosovo team discovered that the needs of producers and processors were sufficiently distinct that each function would benefit from its own association. This division from one to two associations was a mark of a maturing and deepening value chain.

In some of the more disrupted environments, associations may be greeted with skepticism, often with good reason. In the northern Uganda case, for example, some of the farmer marketing groups collected fees that either were not used transparently or disappeared. Implementers worry that without more time to build trust and improve governance, the farmer groups are likely to dissolve at the end of the project. Likewise in Nepal, implementers were concerned that farmer associations created to jointly invest in new irrigation technologies would collapse at project end, perhaps because there were few other services the associations delivered.

The precise form a grouping of businesses should take will also vary by location. In the Afghanistan poultry case, women's associations that procured inputs and marketed products failed to secure formal legal status, which limited their ability to provide their core services to members after the project's end. Program implementers were unable to find an acceptable and legally viable alternative, which spelled the end of the poultry value chain effort.

One element that has not proved particularly successful in association building is using a new association primarily for social or trust-building purposes. In Guinea, for example, an association was developed to bring together groundnut wholesalers from one ethnic group with groundnut producers from another ethnic group, and to create a new linkage that would circumvent local traders. With significant external engineering, this new business configuration may work, but has not yet led to significant social or economic dividends for two reasons. First, the project has not found a compelling business benefit that gives the association or the new relationship value to participants. Second, the association is premised on breaking—rather than building—linkages in the chain by aiming to cut out local traders, an approach which frames the new relationship as a "win-lose" proposition rather than as a way to expand market opportunity to improve outcomes for all participants. This approach contrasts, for example, with that of the TWG described in Box 5 above.

To get real value from associations, it is worth pointing post-conflict designers to the broader association-building literature. Three elements of success which appear in that broader literature are also illustrated in the cases. The first element is clarity of purpose: what business opportunity or challenge is the association designed to tackle, and how can it most effectively and efficiently carry out that primary purpose? Second, beyond a common purpose, the association must provide real business value to its membership—whether accessing cheaper inputs, providing a sorting/grading function or allowing members to reduce storage losses or marketing costs. These results should be visible and measureable. A third key ingredient is transparency and good governance. Without accountability, associations will not be able to self-govern and collect or distribute resources after the external project management team departs.

This section must end with a warning: If association development and formalization becomes an end in itself, it can become an enormous draw on resources and yield few benefits. While an association may provide a potential asset for a value chain program, it should only be used if it is a means for delivering specific and valuable benefits to participants in their process of upgrading to reach markets.

D. ACTIVELY ENGAGE SUPPORT SERVICES

As discussed in Section II, participants in value chains need access to support services in order to take advantage of opportunities to upgrade and improve their market position. For example, upgrading production processes inevitably requires an investment of capital: what sources of capital can participants draw upon? Widespread adoption of new animal husbandry techniques may require access to a national extension system: are such services available in the conflict-affected environment? Improved customer service skills across the tourism industry may require access to "customer service training" for value chain participants ranging from tour bus operators to booking agents to hotel workers: how can value chain participants best learn international-caliber customer service skills? Value chain programmers typically look beyond their own value chain participants to source services such as these on an as-needed basis.

In a conflict-affected context, support services existing in the market are likely to be under-developed. This is an opportunity for programmers to do one of three things:

1. 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. These efforts are, in fact, much more prevalent than value chain programs in the post-conflict reconstruction phase. Partnering around a specific value chain also allows them a chance to ensure that their products are meeting concrete economic needs. This approach was taken in the Afghanistan case.

2. Find the closest domestic source for the service, and commission a specialized service with clear parameters on content and quality. For example, a domestic training institution could be incentivized to partner with the international hospitality industry to develop and offer an international-standard training program on customer service for the tourism industry on a fee basis. This was the approach used in Rwanda to get specialized loans for coffee processors.

3. Create the service within the value chain. A classic example is embedded credit made available to producers by those further up the chain, designed specifically to match the production cycle of a given product. Dunavant, for example, provided in-kind credit to producers in the IDP camps of northern Uganda.

In a few of the cases examined, support services were deemed "outside of the parameters" of the project, which hindered the team exploring creative and timely solutions.

Lesson: Pay attention to the support services that value chain participants will need to achieve their goals, and creatively seek out and engage the relevant providers of such services.

FINANCIAL SERVICES

The cases gave particular insights into one support service that is always relevant: financial services. The cases illustrate that the exact package of financial services required by the value chain actors will be specific to the product and the structure of the chain. Producers need credit that matches the production cycle, which is often agricultural. Processors typically need larger loans for longer time periods, including fixed asset loans. For example, in Rwanda, new regional coffee-washing facilities needed capital for fixed asset investments. Such a product was not available in the domestic Rwandan market, particularly for business start-ups. To fill the gap, the project worked with USAID and

the Government of Rwanda to set up a Development Credit Authority (DCA) facility with a national bank, underwritten by the U.S. government. In total, 70 percent of project participants used credit to upgrade their products and processes, many using the DCA window.

Value chain participants are not only credit users, they are also often credit providers. Producers, for example, often receive credit as an embedded service from processors or traders. In the case of Afghanistan, traders advance grape farmers up to 50 percent of the expected value of harvest on the basis of a purchasing contract. Also in Afghanistan in the poultry value chain, egg importers received credit from suppliers in Pakistan (competitors to the domestic producers), then in turn were able to offer that credit to their retailers until the eggs were sold—a practice that might have pushed local retailers to prefer Pakistani imports over local products supported by the value chain program.

At the producer function, which is often dominated by the poorer and smaller businesses in the value chain, 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.

A final source of financial services in conflict-affected environments is informal kinship systems. In the case of Afghanistan, importers and wholesalers use the *hawala* system to settle accounts, even across the border into Pakistan. The system is low-cost and efficient, relying on a centralized record-keeping system. It is also unregulated and does not function beyond the bounds of personal, kinship and ethnic relationships. In this sense, it meets an important need but may not serve broader requirements of a multi-ethnic value chain program. Another source of informal financial transfer is the likely remittance flow from the diaspora in each conflict-affected area. Two of the cases in the design phase—Haiti construction and Sri Lanka fisheries—mentioned the power of remittances ready to support upgrading for poorer participants.

In any case, examining the availability—and appropriateness—of financial services is an essential part of the value chain design and monitoring process. Moreover, it may be a multi-dimensional challenge, where new requirements emerge as the value chain evolves. In the case of cotton farmers in the IDP camps in northern Uganda, the buyer, Dunavant, provided in-kind inputs including seed, fertilizer and land preparation. Even so, IDP participants found that a cash infusion once a year (at harvest time) was insufficient to meet their most critical needs. In response, village savings and loan associations were introduced to help farmers smooth their cash flow throughout the year.

Lesson: Sources and terms of support services influence both incentives and risks facing participants in the value chain. Understand and monitor the sources, terms and incentives of these services, and use that information for program design.

E. FOCUS FROM THE OUTSET ON SUSTAINABILITY AND SUBSIDIES

The true proof of success of a value chain program is the ability of the value chain to operate over time without donor support. This depends on the market providing sufficient incentives, and the value chain being able to manage the inevitable risks, to allow businesses to engage profitably in that market.

Subsidies—i.e., public resources—can be used either to (1) increase the incentives of participating in the value chain by illuminating market potential and facilitating access to the market, or (2) reduce the risks of participating in the value chain, lowering either barriers or uncertainty surrounding the market. A well-planned subsidy can presumably then be withdrawn from the value chain.

Unfortunately, most of the cases focused on "young" programs—where assessing ultimate sustainability is premature. That said, the cases provided examples of both strong and weak practices in working towards sustainability and using subsidies effectively. Summarizing across these examples, four principles emerge which shed light on how to best place subsidies to result in a sustainable value chain. At a minimum, these principles serve as a starting point for debate and improvement.

Principle 1: Use public funds to facilitate information flow from the end market through the value chain.

Good practice: In the Rwanda tourism case, the project established the Tourism Working Group to ensure that information flowed transparently through the value chain, and to create a common view of the market potential and requirements around which businesses and government could prioritize efforts, identify and overcome roadblocks, and work collaboratively. In this case, subsidy was used to facilitate relationships and ensure that information was available across a range of stakeholders, including MSEs considering tourism as a potential market. OTF documents that MSEs have participated in the TWG, identifying particular activities where they can provide value to incoming tourists, such as guides for ecological or culture tours, in handicraft markets, or in providing transport. To date, these efforts have resulted in limited MSE participation, but this has become the focus of deepening the value chain to improve the program's equity results.

Good practice: In the Rwanda coffee case, public funds were used to repeatedly bring value chain participants together with international buyers and competitors to continually give the value chain access to information about the market, competitors and technologies. In addition, the efforts allowed the international community to see and taste the Rwandan product, thereby bringing interested buyers to the value chain. For firm-specific needs, the project again focused upon facilitating access to other businesses (credit providers, equipment providers, etc.) rather than investing directly.

Reasonable practice: In the Afghanistan grape case, the disrupted environment combined with high cultural barriers limited the project's ability to move information into the value chain on a broad scale (across social networks, functions, etc.). In this case, the project team still took the early step to move market information to specific players in the value chain by linking potential grape exporters with potential buyers in Pakistan. Second, by facilitating initial test shipments, the market information then made its way down the chain as the exporters sought appropriate product from producers. While this did not create an understanding of the market that flowed freely across functions or social networks, it served as a starting point from which to build vertical linkages.

Principle 2: Use public funds to loosen bottlenecks that appear at specific functions of the value chain in order to induce a trickle-down or trickle-up impact throughout the chain.

Good Practice: In Rwanda coffee, the bottleneck to entering the export-ready coffee market was the absence of coffee washing facilities, a critical function in the in the export-ready coffee value chain. Rather than subsidize or invest directly in specific coffee-washing businesses, the project used public funds to link entrepreneurs interested in coffee processing to information about markets, buyers and technology, and to bankers able to provide appropriate credit (through a DCA window). While this approach included risks for the project (which could not control whether processors would step forward in sufficient numbers and within the time frame planned), it resulted in the addition of 50 coffee-washing facilities operating without subsidy and providing thousands of new seasonal jobs in rural areas. Each washing facility then developed relationships with hundreds of coffee bean producers, without subsidy, providing an incentive for them to produce beans of the needed quality for the new market. The critical ingredient to value chain success was the presence of a market opportunity sufficiently powerful to attract the entrepreneurs needed to invest in coffee-washing facilities, which relieved the main bottleneck to reaching this new market.

Weaker Practice: An attractive, but ultimately weaker, approach to strengthening a specific function is to invest directly in specific firms using public funds to restart activities (called "firm-level assistance"). The "pros" of this approach

are (1) faster project results, (2) guaranteed access to the firms to address a broader range of capacity issues, and (3) the potential to get firms' constructive engagement into other functions of the value chain (as in the case of Serbia dairy, where assisted firms provided more embedded services to dairy producers than did non-assisted firms). The "cons" of this approach center around longer-term issues: (1) The project's direct support may encourage firms to follow donor desires rather than market signals, resulting in poor market fit (as in the case of Serbia dairy, where the project efforts with processors have resulted in excess processing capacity); (2) The project provides subsidies to some firms but not others – which may undermine investment by other potential entrants or funnel support to less capable firms; and (3) The project's direct subsidies may weaken the assisted enterprises' capacity (or willingness) to undertake future upgrades or investments without assistance.

As a rule of thumb, there may be a case for using public funds to upgrade individual businesses, but only when it is firmly placed within a larger context where incentives and risks are properly aligned, and with a subsidy withdrawal strategy firmly in place and well-communicated. The dangers mentioned above still exist, but at least there is the potential that the business will be aligned with the market opportunity and able to continue without donor support.

Principle 3: Use public funds to upgrade production capacity for poorer participants *only* when no other options exist, and then use them strategically and with an exit plan. (Side note: Recognize the potential budget implications of broad-based producer subsidies.)

Several of the cases used subsidies to jump-start poorer households' participation in a value chain through asset replacement, subsidized equipment or subsidized inputs.

- In Afghanistan, the project found poor women producing eggs and chickens with the "backyard scavenger" method for home consumption and for local markets, but quality and productivity were low. The project also found unmet demand for high-quality local eggs and meat: an opportunity the women could not yet exploit. In this context, the project provided starter kits (equipment) plus free chicken feed for six months to poor women, thereby upgrading poultry and egg production. This subsidy had an in-kind matching component: All of the women first invested their time for six months in a training program before they received the package. The project also had a sustainability plan: Each woman agreed in advance to re-invest 20 percent of her returns to meet ongoing fixed and variable costs, and to pay a group representative who would market product and purchase inputs. This package led to sustainable commercial dealings by the women until, for regulatory reasons, the value chain later collapsed.

- In Kosovo in 1999, the dairy market was at a virtual standstill with 85 percent of production for home-consumption or unregulated local sales. Shortly after the conflict ceased, free cows were airlifted to households with at least one hectare of land and previous dairy experience. Farmers today will point to the sky and talk of the "flying cows." Now, several years later, many of the cows have been lost due to the poor practices of those who received them. Admittedly, the "flying cow" effort took place before a value chain strategy was articulated. The current project has engaged farmers without using livestock subsidies, instead organizing farmers and linking them to critical information on production techniques and market requirements, which enables them to purchase livestock and make a positive return on the investment. While the "flying cow" effort may have served the purpose of providing a visible sign of recovery and did increase dairy home consumption, it was not an effective means of connecting poor households to the market or a growing value chain.

- In the Serbia dairy sector, cattle give-aways were also unsuccessful in connecting recipients to markets. First, cattle went to those who were not able to move milk into the value chain. Second, public resources were insufficient to both reach sufficient numbers of households and at the same time increase individual herds to the size where investments in technology for quality improvements would break even. While the effort may

have improved household dairy consumption and overall asset base, the effort ceased as part of a value chain effort as better analysis became available.

Two more cases illustrate ways to incentivize producers through facilitation rather than direct subsidies. Both cases, however, still leave unanswered questions of sustainability.

- In conflict-affected areas of Nepal, where agriculture was predominantly subsistence-based, micro-irrigation technology was out of reach of the most cash-poor and risk-averse farmers. Rather than subsidize the irrigation kits, the project worked with kit producers to provide lower-cost options, and organized farmer groups to jointly invest in the new technology once available. In the immediate run, this facilitation role appears to be more sustainable than direct subsidies of irrigation kits. However, the project team remains concerned that the farmer organizations may not carry on in the absence of a guiding organization after the project ends.
- In the case of northern Uganda cotton, the presence of a large buyer reduced the need for input subsidies. By providing inputs and plowing new land, plus guaranteeing purchase of output, Dunavant effectively absorbed much of the risk facing farmers. While the one-time plowing was provided as a subsidy to farmers, the inputs were provided on a market basis, with the price deducted from the end-of-season payment. Indeed, as the program continues, Dunavant continues to provide the inputs as an embedded service to producers. It is less willing to continue to plow new land on a subsidized basis, however. It is unclear whether the market will find a solution to fill this gap as the subsidy is withdrawn.

To summarize across the cases, certain practices can be used to reduce the use of subsidies at the producer level. First, subsidies used to demonstrate new technologies can lead to unsubsidized market-based adoption once it is clear that the payoff is substantial. In the case of Afghanistan grapes, demonstration trellises were 100 percent subsidized, after which farmers willingly adopted the technology with a 50 percent subsidy, then were willing to pay 100 percent of the cost. Second, projects can work to increase affordability of new technologies, allowing them to be within the capacity of producers to purchase. Similar to the Nepal case above, the Afghan grape project worked with trellis producers to build and market a less costly trellis. Third, projects can design risk-sharing mechanisms, where participants closer to the market (typically processors or wholesalers) will assist producers to upgrade through an in-kind credit arrangement. Alternatively, multiple producers may reduce their individual risks by jointly investing in a new technology, as was done with Nepal irrigation kits. Fourth, projects can reach out to other service providers involved in the value chain, such as financial institutions, to facilitate input or asset purchases. This was the case in Rwanda, where an existing commercial bank partnered with the coffee program to launch a product that could finance coffee-washing facilities.

Principle 4: Plan from the outset for subsidy withdrawal, and then withdraw them with care.

Once a subsidy is in place, withdrawing it prematurely or without proper preparation can ripple through the entire value chain. To manage toward sustainability, and to avoid shocks that may occur when subsidies are unexpectedly removed, each subsidy in the value chain program should have an exit plan from the outset—with a timeline, a communication plan and indicators to monitor progress toward subsidy reductions. In the case of Afghanistan poultry above, for example, removal of the feed subsidy was well communicated to the participants in advance: They would receive a free kit and chicken feed for six months, after which they would need cash to purchase feed themselves. The project was able to monitor whether the women in fact had made sufficient sales to generate the cash reserves to meet this requirement.

In the Afghanistan grape case, subsidies were highest on the first international marketing trip, where public funds covered not only travel and maintenance, but also purchase of product and shipment. Given the positive results of the first trip, on the second marketing trip public funds paid for travel and maintenance only, while entrepreneurs

provided the product and shipment costs. Marketing visits and test shipments into new markets are now entirely covered by the businesses themselves.

The case of Sudan shea butter deserves special mention. Based on the extreme level of disruption in South Sudan, there were few, if any, private-sector partners to take on value chain functions. As a result, the implementing organization took the unusual (and generally discouraged) step of undertaking entire functions within the project itself, including such efforts as communication, transportation, research and development, and product marketing, in order to build the chain from harvesters to the end market. The project is now working hard to attract private-sector participants into the chain, who are undoubtedly weighing the market incentives against the still-substantial risks. While it is understandable that the Sudan context would require initial subsidies to test the market and offset private-sector risk, the use of subsidies to undertake entire functions of the value chain will likely create future difficulties in extracting donor resources without disruptions to the chain. .

F. TRUST THE PRIVATE SECTOR, AND ENGAGE THEM AS PARTNERS IN THE VALUE CHAIN PROGRAM

Beyond being the beneficiaries of a value chain program, private-sector participants are also the value chain's ultimate "stakeholders," and therefore can be the program's strongest champions. Those programs that recognized private-sector actors as partners were best positioned to have faster local buy-in and participation in value chain efforts.

Private-sector champions come in different forms. A champion may be the end buyer (as in Rwanda in the case of Starbucks), or a processor (as in Uganda with Dunavant), or a lead farmer who can demonstrate new technologies to other who are less able to innovate or bear risk (such as early-adopter farmers who demonstrated trellising for grapes in Afghanistan). These private-sector champions are particularly important in a conflict-affected environment because they can provide the leadership for emerging vertical or horizontal linkages and build trust among participants. 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.

Private-sector champions are most effective when there is a forum for them to link to other private-sector actors. The forum may be an association of similar businesses (such as a farmers' association) or may be a value-chain wide network of businesses. Two illustrations follow in Box 6.

In the best cases, champions' interests coincide directly with the interests of value chain developers and no subsidy is required for them to serve in a leadership role. In other cases, champions may receive project support in the form of new equipment, training, access to outside markets, etc. If subsidies are given to champions, there are several principles to minimize the perception and reality of creating unfair advantage:

- Ensure that the project has sufficient resources and commitment in advance so that successful innovations can indeed be made accessible to a larger group of players (as in the case of Afghanistan grape trellises).
- Be explicit about what the project expects the champion to do and share, including agreement on what will remain proprietary. This is particularly important if a champion's support is needed beyond his/her social and business networks.
- Increase transparency around the champion's effort to increase the demonstration effect, starting at the outset and continuing through sharing of lessons (as in the case of Rwanda's Tourism Working Group).
- Use cost-sharing to the greatest extent possible: i.e., ensure that a subsidy to champions is the bare minimum required (as in the case of Serbia dairy processors).

- Be explicit about time and subsidy limits around investments with champions, both with the champion and with other observers.

Box 6: Finding Private-Sector Champions within the Value Chain

Afghanistan Grapes: The Afghanistan grape project targeted buyers in key export markets, selecting Pakistani buyers who would require sufficiently large purchases to jump-start linkages back in Afghanistan. The project's vision was to use the large initial transactions placed by the buyers to create financial motivation to cooperate both vertically and horizontally, which in turn would build trust over time. In addition, the project sought out private-sector champions at the farmer and input provider levels, providing subsidized support to demonstrate innovations such as trellising and new nursery stock. In the Afghan context, these champions proved more effective at communicating the value of innovation than other forms of information sharing, such as agricultural fairs or farmer associations.

Bosnia VegaFruit: In the Bosnia VegaFruit case, project designers found a single domestic company that could reach a broad supplier network and had sufficient technical and managerial capacity to respond to changing markets, manage risks and manage buyer-supplier relations. They used this private-sector champion to rebuild domestic vegetable and fruit processing capabilities, through which much learning and experimentation could take place in the early post-conflict years. For example, VegaFruit had to respond flexibly and rapidly to new information about markets and various suppliers' capacity to deliver (based on their skill, access to inputs and capital, etc.). In total, the project team pointed the importance of three elements in the success of a private-sector champion: a combination of technical and managerial experience, a flexible business model, and prioritization of risk management over returns in the early years.

There is an important footnote about private-sector champions. As one case illustrated, project designers may label specific private-sector actors (those in specific functions of the value chain) as exploitative. This label is most often attached to small traders, who may serve as producers' only access to the market. The risk is that value chain analysts may not understand traders' function in its entirety. In the case of Guinea groundnuts, small traders not only collected the product, but also graded and shelled the nuts before moving them into the distant wholesale market system. The project worked to eliminate the small traders, who were seen as exploitative, without realizing that they served both quality control and processing functions in addition to transportation. These traders may in fact have been incentivized to serve as champions in the chain, had their role and interests been better understood by project staff.

Lesson: Search creatively for private-sector participants throughout the chain (including in the end market) who have the potential to link others—whether vertically or horizontally related—to markets, technologies or information, or to serve as leaders in innovation for the value chain.

G. CONSIDER USING A PROGRESSIVE MODEL

As all of the above evidence shows, developing skills and institutional capacity to produce a consistently high-quality product from a conflict-affected starting point is typically a many-year, multi-phase effort requiring a carefully coordinated range of interventions. Because of its complexity, several case study authors recommend starting value chain projects in conflict-affected environments as "progressive" or "step-wise" programs.

One form of "progressive programming" is to start with easier-to-penetrate, or "near-in" markets, then build out to higher value markets over time. Even near-in markets are heterogeneous (imagine, for example, the difference between products available in a village versus a small town versus a large urban area), and therefore offer room for continuous learning and engagement in more complex environments. Most near-in options are within the domestic market, where value chain participants can build skills and improve products to compete with imports—which

generally meet international standards—before competing in the free-for-all international marketplace. But near-in need not always indicate a domestic market. Even those projects targeting the international market from the outset benefit from taking a step-wise approach to meeting increased competition and higher quality requirements. Three examples are presented in Box 7 below.

Box 7: Three Examples of Progressive Market Engagement

The **Kosovo** and **Serbia dairy** cases both articulated the need to work progressively through multiple steps: (1) shifting dairy farmers from home consumption to marketing a percentage of their product; (2) building a domestic fresh milk value chain that is price and quality competitive; and then (3) expanding into value-added products that compete with imports (such as yogurts and cheeses), which require more complex processing, marketing and packaging as well as greater quality consistency. The value chains are still working on the second and third steps. There is an aspirational fourth step—building an export value chain to sell beyond Kosovo and Serbia which will require meeting the EU's HACCP certification.

The **Sudan shea butter** case also took a progressive learning approach. The program selected a non-commercialized product—shea butter—owned by communities and managed by women, and built a value chain from scratch around this basic ingredient. At the outset, they examined more than 10 potential market segments, both to clarify their ultimate market goals and to identify initial target markets. In the early years, basic products were developed for local consumers, complemented by a higher-end product to sell to near-at-hand international development agency staff with cash to spend and few goods to buy. Second, a new brand was developed for sale to the African consumer, requiring larger production capacity, greater consistency and a marketing office in Nairobi. Third, an international brand was developed for the U.S. market and piloted in collaboration with an interested U.S. business, Swahili Imports. This staggered approach allowed the value chain participants to learn from experience, while retaining the flexibility to step out of markets that either remained too difficult or did not bring the expected results. The pace of change was largely driven by the ability of participants to learn and adopt new skills required for new market entry. In early years, participants improved techniques and technologies for harvesting and processing shea butter. In subsequent years, they focused on market research and marketing skills, using intermediaries in distant markets (both Nairobi and the U.S.), and establishing standards and meeting international certification requirements for health care products.

Rwanda tourism began by focusing on a range of high-end international markets. At the outset, the team identified four market segments, and made initial explorations into all four. Only one proved achievable and robust enough to develop a specific, actionable plan: international eco-tourism, including access to Rwanda's gorilla population. Learning in and development of this market is expected to provide capacity to later step into some of the other market segments. Then, within the selected market segment, the participants also took a step-wise approach. First, they had to respond effectively to international tourists' primary concerns: security, as well as the lingering taint of genocide. This required a focused information and branding campaign, combined with ensuring consistently positive "early user" experiences in controlled environments (primarily through larger hotels). They also used survey feedback to continuously monitor the strengths and weaknesses of services reaching the customer. Now that this basic product is in place, the value chain—through both public- and private-sector leadership—is working to expand auxiliary service offerings: transportation and tour guide services, restaurants, handicrafts and cultural experiences. They are also working towards offering a smaller lodge experience, which opens the market to a wider range of hoteliers. As they build the breadth and depth of the value chain, training for maintaining quality has become their top priority and challenge.

Lesson: If possible, take a progressive approach to value chain programming to take advantage of the most accessible opportunities and generate early momentum, while remaining on a path toward more attractive markets in the longer term.

A second form of "progressive programming" seen in conflict-affected environments is to begin value chain interventions as opportunities arise in broader—and often earlier—programs. Value chain efforts in Afghanistan, for example, grew out of an initial project to jump-start agriculture. Major project components included restarting seed and agricultural inputs markets, veterinary and market information services, and reconstructing irrigation systems. As the implementing teams undertook these larger cross-cutting challenges, they kept an eye on market activities and were able to identify "pockets of opportunity" to get people back into productive activities in particular markets. The knowledge gained in these early opportunistic forays was then used to craft a more sophisticated subsequent value chain project. At the end of the first project, roughly 75 percent of the economic impacts came from infrastructure and institutional enhancements, particularly from restarting irrigation and veterinary services, and only 25 percent from value chain efforts. However, the project had laid important groundwork—in terms of both the agricultural system enhancements as well as programmatic information—for the value chain work in the follow-on project.

Integrating value chain thinking and principles into immediate relief and reconstruction efforts is an appropriate aspiration for any conflict-affected setting, as it forces planners to continuously consider issues of markets, competition, the enabling environment, support services and equity, all of which are should be woven through decisions and policies on post-conflict reconstruction and investments. If there is sufficient flexibility to engage in value chain efforts if opportunities emerge—and if the proper team is in place to support such activities—these opportunities can yield benefits.

Early post-conflict opportunities are likely to arise around two types of value chains. The first type of opportunity is around domestic food crops, which are typically the largest value chain in the economy. As people return to their homes and rebuild their lives, the first priority is to make sure there is food to eat and food to buy in the marketplace. Not only does food meet a basic physical need, but it is also a major component of maintaining social stability, and therefore becomes an immediate priority. While food crops are not highly differentiated, they are still value chains: requiring inputs, production, transport, storage and marketing at some level. "Upgrading" in this context is moving from limited or no production to a reliable food supply: not an unsubstantial goal.

Second, "infrastructure value chains"—those at the center of post-conflict reconstruction such as transportation or construction services—play a central role in establishing a platform for stability and subsequent economic activities. They are also value chains requiring a market, inputs, linkages, skills, etc. As with domestic food crops, international donors are likely to move resources quickly into these service value chains, and if domestic actors are not capable of engaging, donors may source services externally.

The Haiti construction value chain is a case in point, where donor reconstruction funds are in danger of moving "off-shore" to Dominican construction firms specifically because Haitian firms lack the policies, inputs, management skills and financing to take on larger contracts. The case study authors point out the potential for domestic value chain participants to play a larger role, which would only be possible with significant upgrading. The challenge facing the program is to move rapidly to get critical government and donor engagement and support to build capacity within the Haitian value chain.

Collier and Hoeffler have noted the "boom and bust" cycle of international assistance in the wake of a conflict.[8] Specifically, they document that aid is plentiful in the first three years of post-conflict relief and reconstruction, then drops away dramatically roughly when the country's capacity to turn assistance into economic growth is highest. Integrating value chain thinking and planning into early programming (as described above), followed by more

[8] Collier, Paul and Anke Hoeffler, "Greed and Grievance in Civil War," Oxford Economic Papers, Oxford University, 2004.

intensive value chain efforts as conditions stabilize is ideal from a conflict-recovery perspective, though it requires "beyond the bust" planning on the part of the donors. The section below discusses the importance of long-term thinking and continuity for the ultimate success of the value chain, showing that if value chain investments do begin early, they need to bridge beyond the relief and reconstruction phase to yield meaningful results.

H. MATCH LIFE-OF-PROJECT TO VALUE CHAIN TIMELINE

Even in the best case, value chain programs require multiple years to show results in a conflict-affected environment. For example, even in the success story of coffee in Rwanda, the first contract with Starbucks came after four years of engagement, and the significant partnership with Starbucks emerged after six years. In a very different context, the Sudan team now estimates that it will require a minimum of seven years to see positive returns on investments. In Kosovo, early efforts in the dairy industry began to show results after four years, with significantly more time required for achieving true market competitiveness against imported products.

So what should a donor use as a project timeline? Five case experiences are cited in Box 8 below. In general, they suggest that programs in conflict- affected environments are only likely to show initial glimmers in the first two to three years, coupled with improved knowledge of both opportunities and challenges that would inform and improve programming in subsequent years.

Not surprisingly, projects are likely to end before all their goals have been achieved. In three cases, projects were suspended before results were solidified, each time resulting in loss of progress or increased risk to participants:

- In the case of Afghanistan grapes, the initial project ended in 2005, followed by a 12-month break before another project began. During that time, there was no follow-up by the value chain participants on project efforts, reflecting a lack of individual incentives to pursue the nascent market. In fact, staff reported that much of the same ground had to be covered again when the new project began.
- In the case of Afghanistan poultry, the well-organized and highly motivated women's groups carried on with operations after the project closed earlier than originally planned. Unfortunately, because a key institution was not made permanent before the end of the project, the entire value chain slowed to a stop over time as the women lost access to inputs.
- In the case of Guinea groundnuts, project activities were halted temporarily due to renewed conflict in early 2007. Activities were able to resume only when the planting season had passed. In order to show results before the project's end, staff and participants agreed to try groundnut production in the off-season, when weather risks were considerably higher. This experiment increased the risks facing producers specifically because of pressure of the pending project end date. Happily, the harvest was successful. Most farmers have now returned to their traditional planting cycles.

If these three cases reflect a broader trend, there is significant danger in halting in-process value chain efforts before achieving specific milestones or sustainability objectives. Of course, it is possible—and even laudable—to halt a value chain effort well before the end of the project if it is clear that market assumptions were misplaced, or if the team is not capable of leading the project to long-term market success. Donors and implementers alike would do well to create, then monitor and manage against, a project plan for value chain investments and returns, and for the timing and method of removing project subsidies. The plan is likely to evolve—possibly dramatically—due to forces beyond the program's direct control, whether in the conflict environment or in the broader market. These issues should be identified and confronted early to avoid the sudden shock of program closure before certain objectives are met.

Box 8: How Quickly do Value Chain Programs show Results?

In the **Kosovo dairy** case, pre-value chain programs focused on restoring the food supply and replenishing agricultural input markets. Building on these reconstruction efforts, value chain-based activities began in 2002. As of the end of 2007, they were beginning to yield results in domestic sales of higher-quality milk, with considerable constraints remaining. After five years, producing at international standards is still at an early stage.

In the case of **Afghanistan grapes**, two projects worked over four years to build a grape export market, with only limited results to date. Program staff reports that progress in capacity building, inculcating new behaviors and getting government approvals is "slower than anticipated." Lags in implementation may also reflect an environment that is seen as too high-risk for private-sector players, who are unwilling to invest in the value chain. In 2008 and 2009 (project years four and five), sales figures are expected to rise substantially.

The project described in the **Nepal vegetables** case strove not only to increase farmer production and incomes, but also to support peace and reconciliation. Such a multi-purpose project, the designers caution, requires not only stronger coordination and greater resources, but also a longer timeframe for success and sustainability. After nearly three years, initial results show improvements in individual household income, but insignificant progress in reaching the target market.

In **Serbia's dairy** value chain, results began to appear in the fourth year of the project, when production, sales and product quality all increased and embedded services began to flow down the value chain. As the project team writes, "Assistance delivered during the post-conflict period of 2001-2004 took several years to yield results. Dairy processors needed time to expand their markets and supply networks, while dairy farmers required time to realize results of new farming techniques and pregnant heifers." (p. 34) They caution that "donors should have realistic expectations about the pace of subsector revitalization in post-conflict environments where social and financial capital are low." (p. 47)

In the case of **Sudan shea butter**, implementing staff has been engaged in the value chain for nearly seven years, and are now seeing increased capacity in certain functions and early but positive financial results. They are realistic about the distance yet to travel for the value chain to succeed on its own, and estimate that it will require up to 10 years of engagement before support and subsidies can be phased out.

Lesson: Avoid sudden breaks in programming, whether due to project cycles or other forces. These breaks lead to loss of investments to date, and increase the risks facing participants. If the breaks cannot be avoided, find ways to keep them short and minimize their damage on the value chain.

IV. CONCLUSIONS

A. CONTRIBUTIONS OF CONFLICT-AFFECTED VALUE CHAIN PROGRAMS TO ECONOMIC GROWTH OBJECTIVES

There is no doubt that value chain programming can work in conflict settings, as demonstrated at the beginning of Section III by the range of cases showing positive results. That said, success is not guaranteed and the process will inevitably be long and challenging. Two generalizations emerge:

- The speed and scale of economic results appear to be lower in conflict-affected environments than in non-conflict environments. This is because constraints tend to be more significant—whether based on atrophied skills, a disrupted environment, culture or other challenges.
- Programs begun later after conflict appear more capable of generating large-scale economic results than those immediately following conflict, largely because the programs begin in less disrupted environments. This was illustrated by the twin successes in Rwanda, programs which commenced six years after the crisis. These cases reinforce Collier's insights that the greatest potential for rebuilding platforms for economic growth takes place several years after conflict ends.

It is difficult to guarantee that value chain programs will provide an "adequate" economic return to assistance funds, given the risk factors. However, the financial data provided in the Rwanda tourism and coffee programs and Kosovo dairy case show that value chain programs can deliver meaningful results, both in terms of employment and sales. Moreover, the data pointing to increased private-sector investment provide the best indicator that a value chain program has increased real ownership and entrepreneurship within the private sector. All value chain programs should set and monitor such economic indicators, even if targeting more vulnerable populations.

B. CONTRIBUTIONS OF VALUE CHAIN PROGRAMS TO HEALING CONFLICT FAULT LINES

The value chain programs examined here did not appear to offer significant contributions to conflict resolution or peace-building, and generally did not bridge the "fault lines" that underlay the conflict. However, these cases *did not provide a reliable test* of the potential of value chain programming for these purposes, for three reasons.

First, with few exceptions, the value chain programs were not designed using a "conflict lens."[9] As a result, the projects did not seek out opportunities to engage and/or monitor impacts across conflict-affected groups. A notable exception was the case of Nepal vegetables, which aimed to increase community cohesion and peace-building through engagement in the fresh vegetable value chain. Indeed, participants did point to improved community relations stemming from their expanded common interest and joint efforts.

Second, with one exception, there was no explicit attempt to bring together multiple parties from the conflict in the value chain program. In the case of Guinea groundnuts, the team did build linkages between two ethnic groups, but failed to involve the local refugee population, which was a major party in local tensions. The one exception was the case of Kosovo, which set up a dairy board that explicitly included both ethnic Albanians and Serbs. Unfortunately, there was no evidence in the case as to whether this structure had a direct impact on either participation of different ethnic groups or increased cooperation between ethnic groups.

[9] For more on the "conflict lens", see USAID Office of Conflict Management and Mitigation, Op. Cit., 2004.

Third, most programs started—quite pragmatically—by strengthening or mending existing relationships rather than building new ones. There were two exceptions. First, Guinea groundnuts explicitly brought together different ethnic groups from different functions. To date, there is little evidence that the effort put into this new relationship will lead to economic or social benefits. Second, the northern Uganda program was effective in linking IDPs from multiple kinship groups to similar cotton opportunities, despite the challenges of working across social fault lines.

Despite the limited case evidence, the cases did provide a few hints on how conflict mitigation and reconciliation may be better accomplished within value chain programs in the future:

- By explicitly mapping conflict variables onto the value chain map. Does the value chain include conflicting parties? Where do conflict fault lines appear within the value chain? Which groups are not present on the value chain map, and why?
- By building a transparent forum that shares information across functions (and social groups), as shown by the Rwanda Tourism Working Group (TWG). The forum aimed to continuously provide reliable data to all comers, and to increase—rather than re-divide—the economic pie. When facilitated by an outsider, the new information and expanded opportunities provided a platform for parties to find common ground.
- By using "private-sector champions" from multiple sides of the conflict to articulate a common interest and demonstrate an ability to work together (either on specific business deals or on joint public-sector advocacy).

In short, by consistently and rigorously using a "conflict lens" in design and implementation, the programs could more likely identify and integrate opportunities for reconciliation, or at least ensure that they will "do no harm."

Overall, value chain programming appears to be a weaker instrument for achieving reconciliation goals than other types of programming. Broad investments in education, health, infrastructure or access to credit, for example, can be targeted across conflict parties or fault lines, and can serve a wide range of individuals within a community. Value chain programs (by definition working with those active in a specific market) can then provide a useful complement to broad-based programs, particularly if the value chain includes a sufficient proportion of the population to have a noticeable economic impact at the community level.

C. MISSING TOOLS FOR SUCCESSFUL VALUE CHAIN PROGRAMMING

In reviewing the 14 cases, it became apparent that many implementers were overwhelmed by the complexity of the value chain approach, and failed to examine markets, competitors, environmental conditions, value chain relationships or conflict dynamics in sufficient detail at the program's outset. It is unclear whether this problem stemmed from a lack of accessible tools, or whether tools were available but inappropriate given data and time limitations in the field. Regardless of the reasons for this hurdle, value chain programs can increase their success rate by improving the accessibility and appropriateness of tools in five areas:

- Better information on specific market segments. Buyer survey tools already exist, but are often not used by implementers. Can a simpler generic tool be created that still will capture critical information for a specific market?
- A simple competitiveness and competitor assessment tool. Why are so few value chain practitioners examining the structure and trends of competition? Do field-based practitioners need a simpler tool than Michael Porter's Five Forces?
- An approach for assessing the value-add and relationships embedded in horizontal and vertical linkages so that implementers can understand information, services and power dynamics throughout the system.

- A guide for assessing the enabling environment, to assist in initial understanding and ongoing monitoring of an inevitably fluid situation.
- A conflict assessment tool that maps conflict drivers and fault lines onto the value chain. International Alert is working with USAID's AMAP project to refine a successful conflict assessment tool for use by value chain practitioners.

These tools need to be available to any range of potential value chain designers and implementers, with the goal of raising the likelihood of program success, based on a better understanding of the system in which the program will operate.

D. FINAL COMMENTS FOR VALUE CHAIN PROGRAMMING IN CONFLICT-AFFECTED SETTINGS

Ideally, value chain programming combines sustained, determined engagement over a period of years on one hand, with flexibility and opportunism to allow quick movement in a dynamic environment on the other. The cases show that one without the other is unlikely to result in a sustainable value chain program.

Second, the cases show the importance of program leadership that has a strong entrepreneurial bent, and as one implementer said, "an ability to lead from behind" (that is, an individual who can empower value chain participants to step into leadership roles from an early stage). What is more, a well-led value chain program should have—and regularly refer to—metrics of performance that establish and track milestones, and serve as an early warning system. As one implementer recommended, milestones should include less tangible but essential outcomes, such as trust-building. In general, programs with value chain specialists at the helm appeared to be more successful at both understanding and implementing the basic principles (such as in selecting a competitive market segment), and also at navigating the significant challenges that emerged over time. However, even those experienced hands commented on the increased difficulty of programming in a conflict-affected environment, and the need for constant flexibility, trouble-shooting and market contact.

Third, it is important to reiterate that this synthesis paper serves as a *starting point* for investigation into the potential of value chain programming in conflict-affected environments. Future efforts will undoubtedly refine and expand upon these initial insights, and explore questions that can only be examined through longer-term observation. Ideally, future investigations will not only deepen the findings here, but will go beyond them to shed light on value chain programs' ability to smooth the transition from early conflict recovery to long-term economic development. In particular, a close examination of "early engagement" value chain efforts—in basic food crops and in construction and transport sectors—will yield stronger insights into creating sustainable value chains that have significant scale, a multiplier effect for other value chains, and the potential for delivering on the essential "peace dividend."

ANNEX

FOUR PRINCIPLES OF "KNOWING AND ENGAGING THE MARKET"

Throughout this paper, the mantra has been repeated: "Start with—and remain close to—the market." The programs that did this best showed stronger results than their counterparts. What are the key elements of their approach? This annex shares four principles of "knowing and engaging the market" that are often overlooked in value chain design and implementation.

PRINCIPLE 1:

Markets are segmented. Programs must go well beyond identifying generic markets to find **specific market segments** that have growth potential, and that can include poor producers within the value chain.

PRINCIPLE 2:

The program's decision of which market segment to target is based on the **local industry's ability to compete** in that market segment, not just the presence of an opportunity. That requires detailed analysis of three elements: (1) the market itself; (2) the competition; and (3) the domestic industry.

PRINCIPLE 3:

A competitive edge can be gained over rivals through a combination of three strategies: (1) producing and delivering goods and services more efficiently; (2) differentiating products or services through quality standards and branding; and (3) exploiting new market demand.

PRINCIPLE 4:

Markets change. Competitors change. Within the value chain, change is inevitable. Create an information flow from the market and competitors that keeps the domestic value chain "in the know." Embed a system for validating, sharing and responding to market information within the value chain.

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