BEST PRACTICES IN IMPLEMENTATION PAPER SERIES

VALUE CHAINS AND THE CLUSTER APPROACH

TRANSFORMING RELATIONSHIPS TO INCREASE COMPETITIVENESS AND FOCUS ON END MARKETS

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

INTRODUCTION AND BACKGROUND

This paper is part of a series commissioned by the Accelerated Microenterprise Advancement Project (AMAP) Knowledge and Practice II Task Order to promote adoption of value chain methodologies that benefit small and very small firms. This paper focuses on the efforts of USAID/Dominican Republic (USAID/DR) under the Competitiveness and Policy Program (CPP) to strengthen the mango value chain by transforming relationships to increase competitiveness, and by focusing on end markets. The CPP was implemented by Chemonics International between March 2003 and December 2007. This paper also includes examples from other Chemonics programs of best practices in transforming relationships among stakeholders and focusing on end markets. It includes two short annexes that provide additional details on CPP activities and impact, the cluster methodology as an instrument to augment value chain support programs and CPP efforts to create a focus on end markets. The study is structured based on major lessons learned as well as key best practices derived from these lessons.

LESSONS LEARNED AND BEST PRACTICES

SHIFTING VALUE-CHAIN GOVERNANCE AND TRANSFORMING RELATIONSHIPS

Lesson Learned: A cluster approach can be a valuable mechanism to address value chain constraints, especially those requiring the transformation of stakeholder relationships.

The premise underlying both value chain and cluster approaches is that individual firms often face sector-level constraints that they cannot address alone. Therefore, any effort to increase competitiveness must do more than support individual firms, since inter-firm cooperation is important to achieving this goal. These two approaches have common intellectual roots in Harvard's Michael Porter, who played a key role in developing both theories.[1]

The differences between the approaches may be subtle. The value chain approach considers a broad market system and the development of products/services from input suppliers to end-market buyers. Essentially, the value chain focuses on the *flow* of a developmental process. It differs from a supply chain in its emphasis on creating *value* in each segment of the chain.

The cluster approach also considers an industry value chain, but it focuses on *geographic* concentrations of interconnected companies and their interactions. In particular, it concentrates on the synergies between these enterprises, including those between firms in different segments of the value chain. As a result of this geographic focus, the cluster approach does not always focus on the entire value chain but on core and supporting companies in specific locations (e.g., software in Silicon Valley, tourism-related companies in the Punta Cana area of the Dominican Republic, etc.). It sees collaboration between cluster members as the source of resolutions of common problems. For example, technology firms in Silicon Valley regularly cooperate with universities (Stanford, the University of California at Berkeley, California Polytechnic State University and others) on research initiatives and core curriculum that stakeholder firms deem necessary to grow their businesses. In Italy's footwear industry, cluster stakeholders meet jointly with leather supply companies to ensure quality standards. Technology firms in Ireland join forces in formal cluster initiatives to provide input into government high-tech policies, including infrastructure support.

[1] Business theorists would argue that Porter did not develop either concept. Regardless, Porter clearly played a key role in bringing attention to value-chain and cluster analyses through his seminal books, *Strategy* and *The Competitive Advantage of Nations*.

Besides its geographic focus, a cluster is often distinguished from a typical value chain in that it includes stakeholders who may be one step removed from the actual value chain but who nonetheless provide key inputs into value chain operations. In an example from tourism, universities and civil society groups that focus on environmental issues are not typically thought of as part of the tourism value chain, but they are often considered part of a tourism cluster. Table 1 (on the next page) highlights differences and similarities in the value chain and cluster approaches.

Table 1: Value-Chain and Cluster Approaches

Variable	Value Chain	Cluster
Definition	The value-creating flow of a good from raw materials, production, commercialization, and ultimately delivery to end-users or consumers	A geographic concentration of interconnected businesses, suppliers, and associated institutions creating direct and indirect synergies among them
Geographic focus	Entire value chain, regardless of location	Typically, industry firms in concentrated geographic area, which may or may not include entire value chain
Composition	All companies in product flow; usually defines "stakeholders" more narrowly to include enterprises primarily, but also some public sector entities	Stakeholders who (directly or indirectly) create synergies (see below); usually defines "stakeholders" more broadly and more formally
Commonality	Both value-chain and cluster projects supported by USAID have focused on specific segments (producers, buyer linkages) as well as a broader range of activities along the value chain. The major difference between the two may be in the cluster approach's formal focus on developing associative relationships among stakeholders (compared to some more restrictive value-chain approaches). However, the emphasis USAID's more encompassing value-chain approach places on the importance of value-chain relations is akin to a cluster methodology. Accordingly, a cluster approach is completely in line and supportive of USAID's value-chain approach.	

By definition, in a cluster, stakeholders in a fairly concentrated geographic area develop direct or indirect associative relationships. For example, some clusters function informally, with selected firms joining forces to develop supplier standards, influence curriculum at universities to enhance available human capital, etc. Other clusters have formal organizations with clear strategic objectives and plans, such as the numerous high-tech clusters in Ireland as well as the agriculture and tourism clusters supported by the CPP in the Dominican Republic (DR). Clusters are different from associations in that the latter tend to represent specific segments of the value chain, e.g., producer associations, which are common in all developing countries. Clusters involve stakeholders from various value-chain segments. When clusters become formalized or institutionalized—that is, when they become a legal entity, as was the case with the mango cluster in the DR—a cluster essentially becomes a stakeholder association. In this sense, a cluster represents one instrument stakeholders can use to address value chain issues. It can also be a powerful tool to implement USAID's value chain approach by using the "stakeholder association" to create trust, address common problems and strengthen the value chain. For example, a USAID program using a value chain approach could create a stakeholder association to address issues.[2] The result would be no different from a cluster approach. Indeed,

[2] Indeed, during the creation of the agricultural clusters in the Dominican Republic under CPP guidance, a local research group objected to the term "cluster" because it was an English term. Initially, some suggested the name "Association of Mango Producers and Exporters," but this did not include transportation segments, educational groups, civil society, and other groups involved in the cluster. Others promoted the name "Mango Stakeholder Association" until it became evident that Spanish did not have a translation of "stakeholder" that conveyed what the association was to become. In the end, the term "cluster" was accepted, although the cluster's legal name is "ProMango."

USAID's value chain approach entails a broad definition of the value chain (including support institutions such as universities) that makes clusters especially useful in strengthening them.[3]

In the Dominican Republic, the tourism value chain historically did not include representatives from government or civil society in communities near tourist resorts. However, their absence created a serious problem, as many community issues—from crime to trash collection to sanitary conditions at small local restaurants—have considerable impact on a tourist's perceptions. As the industry has moved increasingly from promoting visits to an upscale hotel to promoting a "destination" experience (where tourists enjoy a richer encounter with their vacation destination), it has been necessary to incorporate local government, SMEs, microenterprises and other groups into the traditional tour operator-travel agency-airline-hotel value chain. This expansion was made possible by the creation of a formal organization: the cluster. Through the CPP, newly created tourism clusters have played a critical role in creating a more inclusive value chain.

Because these stakeholders were addressing local issues whose impact on their industry they saw daily (dirty streets, crime), they felt a sense of urgency perhaps missing among other, geographically removed participants in the value chain. For example, TUI, a leading international tour operator based in Europe, informed hotels that the cleanliness of some beaches in Puerto Plata was hurting their bookings, but they did not propose, nor were they interested in, getting involved in a solution. On the other hand, the Puerto Plata Tourism cluster approached this local problem impacting international tourism by involving the hotels, the municipality, and neighborhood civil society associations. They were moved to do so by their geographic proximity to the problem. As the cluster successfully addressed similar issues, trust between the hotels and the community grew.

Best Practice: A cluster approach may be most effective in strengthening a value chain when: (1) the value chain is very unstructured throughout its segments (transportation, distribution, enabling environment), thus requiring intervention by numerous stakeholders who could not resolve any single issue alone; (2) trust among stakeholders is weak and hence a special effort to create trust or "social capital" is necessary; or (3) obstacles to objectives (i.e., increased sales) need to be addressed by multiple stakeholders and value chain segments.

CPP encountered an example of an unstructured value chain necessitating a cluster approach in its efforts to strengthen tourism value chains throughout the DR. While on the consumers' end, the tourism value chain was structured by major international operators, at the local level the value chain was highly unstructured, with few linkages between communities and major hotels, local restaurants, suppliers of tourism services, etc. The cluster worked to bring together these stakeholders (especially small-scale and micro-enterprises who did not feel part of the value chain) and link them to larger hotels and even international tour operators.

A cluster can also help create social capital by bringing stakeholders together to resolve common problems. As noted above in the example of the DR's Puerto Plata Tourism cluster, stakeholders are more motivated to solve problems when they know each other, are in physical proximity, and can develop mutual trust. Trust can be built among cluster members through concerted efforts to educate them about the need for cooperation and by organizing experiences where cooperation leads to small, incremental successes, thus creating the social capital necessary for bigger joint undertakings. For example, CPP staff spent considerable time meeting with stakeholders to ensure they understood each other's needs and interests and the importance of cooperation. In these meetings,

[3] Initial skeptics of the cluster approach in the DR, including mango stakeholders, often asked if clusters would soon disappear as had other development fads. The CPP's response was that whether or not the term — or even concept of — "cluster" survived really did not matter. What mattered was the efforts of a group of stakeholders coming together to solve common problems based on mutual trust. The creation of a culture of cooperation and trust among stakeholders was an approach whose enduring value would survive changes in development nomenclature. This is indeed the case with the mango cluster.

they explained cluster and value chain theory as well as why cooperation was essential to increase exports. However, key to generating trust were cluster initiatives to train farmers on post-harvest handling and to provide common training on mango pruning techniques and other "small" but important initiatives, which eventually led to the major initiatives of joint exports, two years after the cluster was created.

As discussed below, CPP encountered an example where objectives could only be met through collaboration in its work with the Dominican mango value chain, where phytosanitary and fruit-fly control issues required the attention of multiple stakeholders, especially small farmers. Given its focus on joint resolution of common problems, the cluster methodology is especially useful in these cases. See Annex 2 for further discussion of this practice in the CPP context.

Best Practice: If they are to effectively address value chain constraints, clusters must be used as a means to achieve an end and not as an end in themselves.

In recent years, the cluster approach has fallen out of favor among some international donors.[4] The author's experience with cluster approaches in Eastern Europe, Latin America and Asia suggests that the primary reason for this loss of enthusiasm is that clusters were too often conceived and implemented as an *end* (i.e., the objective was the creation of a cluster) rather than as a means to achieve an end (a more competitive value chain that boosts exports and investment and creates employment). In contrast, the CPP envisioned the clusters it supported (including other agricultural products and tourism) as only a *means* to address specific value chain constraints, including meeting international phytosanitary regulations, improving fruit quality, and generating sales and exports. The CPP was not especially concerned if the mango cluster would exist five years from now. What was critical was that the cluster was laying the groundwork for stakeholder cooperation along the value chain (i.e., introducing new paradigms that *would* continue to make enterprises in the value chain more competitive long after the project ended).[5]

Lesson Learned: Engendering trust among stakeholders is essential in strengthening value chains.

Creating value along the supply chain—the essence of value chain theory—requires trust among stakeholders along each segment of the value chain. In particular, producers must understand how cooperation can generate economies of scale, reduce costs and improve product quality. Producers, distributors and buyers must cooperate if they are to ensure that producers generate the exact products that consumers need and that goods get from producers to customers. Creating this culture of trust entails a shift in paradigms that allows formerly antagonistic stakeholders to come together to address key obstacles and meet common objectives. The Mexican competitiveness guru Enrique Villareal deems this process "transforming a value chain into a chain of trust."

In the case of the DR mango value chain, historical suspicions and sometimes antagonistic relationships between small farmers and larger commercial enterprises made building trust easier said than done. Despite the clear need to cooperate, larger producers viewed each other as competitors. Small producers, in turn, did not trust the larger enterprises. In fact, given the poor quality of their mangoes and the relatively low prices they earned at local markets, most of the small enterprises could not really be considered mango producers at all. Many were content to "rent" the harvesting of trees to landless peasants (often of Haitian origin) for a fixed price per tree. Given this situation, it

[4] This is somewhat ironic since the cluster approach continues to be implemented by leading industries (software, biotechnology, industrial machinery, communications, etc.) in all major industrialized countries.

[5] Although only limited resources were dedicated to sustainability issues, the cluster today is sustainable from member dues. A key lesson: sustainability is possible when members see a clear economic benefit. All the sustainability workshops and lectures in the world would have meant little to cluster members if they did not view their contributions as a good investment.

is not surprising that early efforts to organize a mango producers' association, and then a value chain association, had failed (including USAID's early effort in 1998).

Yet over time it became obvious to the larger companies that they could not address phytosanitary issues such as fruit-fly control by themselves. Rather, such issues required cooperation with many smaller farmers. Moreover, many of the leading firms were sufficiently progressive to recognize that they knew little about high-quality mango production. By 2005, cooperation and a greater spirit of trust had emerged between stakeholders. Through the cluster formation process, the CPP brought together large and small producers to discuss the mango market's potential and how cooperation in key areas was necessary to tap that potential. Several large firms stepped up and agreed to invest in demonstration plots using techniques such as effective pruning, which had been shown to produce significantly higher yields. Such actions convinced smaller producers that these techniques could work on their own farms. Government secretariats who had previously provided little help to farmers began to provide resources to extension efforts and policy issues as a result of cluster initiatives and cluster lobbying.

The combined impact of these activities was to create a perception that the cluster really could help the whole industry and not just a few players. However, leadership remained a challenge. While the industry needed strong leadership, commercial enterprises were leery of getting "too far ahead" in exerting direction, and stakeholders resisted any group perceived as "taking control" of the industry.

Best Practice: USAID projects such as the CPP must play an essential "honest broker" role in bringing stakeholders together to generate trust.

The CPP, as well as other projects implemented by Chemonics and discussed below, played an important role in helping unite stakeholders. Value chain projects need to understand the critical nature of this role.

Key to the CPP's success was (1) patience in promoting stakeholder cooperation; (2) stakeholders' respect for its management, especially its senior agricultural technician; and (3) helping to create Dominican leadership among firms and government to continue project efforts after its end. Both large and small farmers came to perceive CPP efforts—and thus efforts to unite the value chain—as fair and intended to support all stakeholders, rather than a small group. The CPP worked especially closely with sector leaders, including large firms and public-sector institutions, to ensure that initiatives were driven by Dominicans, not just CPP, and thus sustainable. For example, although project funding was available, the CPP refused to contribute to numerous initiatives that management believed should be funded by cluster members. These initiatives included establishing membership fees according to export and production capacity, which the cluster eventually established thereby making its day-to-day operations financially sustainable. In other words, the "honest broker" role was not to be confused with permanent financier.

Another example is USAID's work bringing together small farmers and sesame processors in the Paraguay Rural Poverty Alleviation project (VENDE). In that project, in 2003 a number of sesame processors in the north-central part of Paraguay were getting orders for processed sesame from Japan and Korea that they could not fill due to a lack of raw sesame. Regional suppliers were having difficulty providing the quantity and quality of raw, industrial-grade sesame these firms needed for commercial processing. From the processors' perspective, they most needed suppliers to produce a type of sesame that can only be harvested by hand. To further complicate the situation, at that time there was no precedent for close collaboration between sesame farmers and processors, and both groups distrusted each other. While some processors considered moving their facilities to other countries, VENDE was able to halt these plans by bringing these groups together. The project helped them set clear expectations and establish a realistic understanding of the financial returns of cooperation. It also educated them about the value chain process and the players involved. Most important, it focused on a key indicator: increasing sales. This

emphasis on generating sales constantly reminded people that they were working toward a common, mutually rewarding goal (see "Best Practice" on the next page).

After two years of providing assistance to firms and farmers, USAID/Paraguay helped double sesame production in the country by helping producers solve problems in a way that met the specific requirements of identified buyers. Recently, the Sesame Chamber of Paraguay estimated that sesame exports increased by $20 million between 2004 and 2007. After five months, it is estimated that the cultivation of seeds alone generated approximately 800,000 days of work for Paraguayans. USAID/Paraguay also helped increase exports (for the four sesame processors involved in the program) by approximately $8 million. More than 50 percent of this amount went directly to small producers that the project helped meet the requirements of the sesame processors. Today, producers continue to expand exports, with additional producers joining in as they note the success of their peers. Thousands of farmers in both Paraguay's impoverished north-central zone and elsewhere were increased their incomes by growing a more viable cash crop. Furthermore, a number of rural entrepreneurs began providing new services to firms and farmers to meet their sesame-related needs. VENDE technicians are instilling the local capacity to ensure that these efforts are sustainable.

Beneficiaries of USAID's Peru Poverty Reduction and Alleviation project (PRA), implemented by Chemonics, indicated that the most important "service" provided by PRA was building trust.[6] Specifically, the honest-broker role in generating increased sales and incomes became essential to create a culture of cooperation among stakeholders. For example, five plantain grower cooperatives in Peru's remote Aguaytía area competed for a limited number of local buyers. When PRA introduced new buyers from the capital's largest supermarket chains, they made it clear that they would only deal a single group, not five different ones. In this context, cooperation took on a new urgency, catalyzed by the broker role played by project technicians. Yet bringing together capital city enterprises and five competing rural groups would have been extremely difficult if the project had not been viewed as an honest broker.

Best Practice: Repeated, successful interactions and cooperative initiatives reinforce the value of working together and create trust, especially in the context of a clear goal of increased sales and incomes. Early accomplishments are essential in fostering trust and need to be incorporated in early action plans.

Nothing breeds success like success. While meetings, workshops, and discussions on the benefits of cooperation pave the way for associative relationships, they are not enough. In fact, they may be ultimately counterproductive if they do not produce demonstrable and quantifiable results. Economists describe the trust created through repeated, successful transactions through transactional theory.[7] To create such trust, the CPP and the mango cluster focused on a series of smaller, "doable" value-chain initiatives that created confidence in cluster activities while addressing

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[6] Chemonics implemented the Poverty Reduction and Alleviation program from 2000-2008. In broad terms, PRA consisted of two major components: Business Services and Public-Private Partnerships (PPPs) Infrastructure Finance. Under the first component, PRA operated economic service centers in the interior of the country since 2000. The Business Services Component focused on "economic corridors" in rural Peru, especially the highlands, high jungle and jungle areas. The project has measured success through the new sales of its clients, the new jobs accompanying those sales and investment by clients in physical plant and equipment. Technically, PRA is not a value chain program. However, in focusing on increasing sales by local firms, it has in fact addressed value chain issues through much firm-based work. Through March 2008, PRA increased sales by more than $250 million, created 73,000 new jobs, and catalyzed more than $16 million in investment by clients in plant and equipment.

[7] The classic example cited by the theory is the use of credit cards in the modern economy. While some individuals obviously default, it is the process of repeated, successful transactions that permits an individual to use them, merchants to accept them, and banks to issue them.

constraints in various segments of the value chain.[8] These initiatives included low-cost production and post-harvest handling technical assistance, observation trips to producer countries to see best practices, technical assistance to boxing/packaging stakeholders, and trade missions to the United States and Europe to meet with potential clients. In the case of the observation and trade mission trips, representatives of larger and medium-sized firms financed their travels and CPP funds enabled more than 15 small producers to participate in these trips. In one trip to South Africa for which CPP funds were unavailable, the larger firms paid for the participation of numerous small producers. Cluster members cited the camaraderie developed during these trips as an important factor in trust-building among stakeholders.

The CPP guided these initiatives based on a clear strategic direction. For example, measures aimed to allow exporters to meet U.S. and EU phytosanitary regulations consisted of a number of small steps: from workshops on international standards to training in fruit fly trapping techniques and meetings with government officials. These incremental steps eventually led to U.S. and EU approval of entry into their markets as well as the development of a national strategy. But it was the early successes (e.g., lobbying for public-sector support for enhancing the government extension program, contributions by larger firms to finance key activities, etc.) that made this final achievement possible. By contrast, starting out with a national strategy before trust and social capital had been created would probably not have been successful.

Of course, the most important successful transaction is generating increased sales. For years, Peruvian jewelry manufacturers imported their gold from abroad, even though Peru produces gold itself. ARIN, a jewelry manufacturer and exporter with facilities in Lima, was anxious to find a way to buy gold locally to enhance its competitiveness. PRA agreed to help, but only on the condition that ARIN open up operations near the source of much of Peru's gold, the mines operated by Yanacocha in Cajamarca. This condition was necessary not only to generate local jobs but also to demonstrate a clear commitment by the company. ARIN agreed. Little by little, and alliance formed by ARIN, Yanacocha, two certifying banks and PRA began working together—building trust along the way—and figured out a way for local jewelry manufacturers to source gold locally under Peruvian law. Supreme Decree 105-2002-EF ratified the arrangement, ARIN opened up a gold-chain manufacturing facility in Cajamarca, and PRA helped train local women to work for ARIN. The operation was highly successful in generating employment for poor women in the Cajamarca economic corridor

Lesson Learned: The institutional aspect of value chain enhancement is crucial.

Best Practice: Map out stakeholder leaders at project start-up (and preferably, during project design). Identify key individuals and firms and engage them in project activities. Involving support institutions in value chain enhancement can contribute significantly to the sustainability of value chain competitiveness and can help build trust.

In the DR, two highly regarded and trusted institutions emerged as early supporters of mango producers and exporters. The first was the Centre for International Cooperation on Agricultural Research for Development (CIRAD), a French organization whose mandate includes agronomic research and sustainable agricultural development in tropical and subtropical areas. CIRAD had been working in the DR for some time and took an early interest in promoting Dominican mangoes. Its support included technical assistance related to the mango market and support for pilot demonstration plots. Similarly, the National Council for Agricultural and Forestry Research

[8] Some stakeholders initially preferred the cluster to focus on one "big" initiative, such as a joint packing warehouse and water treatment plant (required as a phytosanitary step to access the U.S. market). Cluster leadership, with CPP backing, argued that not only would such an initiative take some time but also it was better to address a broad array of issues, especially those that could be addressed immediately.

(CONIAF), a semi-autonomous government entity, also supported the sector by providing meeting spaces, access to new technologies, and demonstration farms for commercial varieties such as Keith. An important factor in building collaborative relationships was the respect and trust that most producers (small and large) had for these institutions.[9] Both larger producers and many small farmers had dealt with them in various programs previously and respected their work.

While the State Secretariat for Agriculture (SEA) is not highly regarded and is not able to deliver particularly effective support to producers, the mango cluster developed a strategy of supporting its extension divisions, even successfully lobbying for increased government funding for SEA activities related to mango production. A full-scale, "institution-building" approach would not have been appropriate for the CPP, given its mandate, limited resources and SEA's weaknesses. At the same time, the cluster and the CPP understood that ongoing cooperation with and support from SEA would be needed to enhance and maintain value chain competitiveness. This cooperation has indeed proved instrumental in the value chain's continued progress. While SEA still has many serious problems outside the scope of the mango value chain, they continue to be engaged in numerous mango-related initiatives, especially ongoing phytosanitary issues where a state role is essential.

In the case of USAID's VENDE Project in Paraguay, Chemonics helped exporters of orange juice concentrate who had linkages to Brazilian distributors and wanted to leverage them to penetrate the difficult Brazilian market. Despite these relationships, it became clear that customs procedures were impeding exporters from doing so. For example, customs delays made on-time delivery of their products to buyers impossible. Working with Fruitika, a Paraguayan firm trying to penetrate the Brazilian market, Chemonics provided assistance to Brazilian customs offices to (1) help them better understand their own rules and procedures and streamline operations; and (2) help Fruitika understand their customs laws. As a result, the firm was able to export more than $60,000 of product during its first year in the Brazilian market.

This best practice—map out stakeholder leaders—suggests that, in most cases, it is best to define the value chain broadly to include not only the private enterprises directly involved in the product flow but also all institutions (government, civil society and universities) that impact the value chain's enabling environment. To do so requires an early and thorough mapping of business, public sector and other organizations involved and identification of their existing or potential contributions.

Best Practice: Identify key "anchor" or lead firms with visionary management and an orientation towards cooperation, and make them central in value-chain enhancement efforts.

Most often, these anchor firms will be major buyers who have a stake in ensuring quality and price competitiveness, and thus a stake in the process. A Chemonics' example of cooperation between an anchor firm and USAID can be found in the coffee value chain in the Mexican state of Chiapas. AMSA, Mexico's largest coffee buyer and part of a major global commodities group, teamed with the Mexico Rural Prosperity and Conservation Initiative (RPCI) to develop a technical assistance program focused on productivity and quality and involving numerous segments of the value chain. The program has ensured high-quality coffee for AMSA and has permitted farmers to produce coffee that generates a price premium. By contrast, RPCI's efforts to strengthen the forestry and lumber chain in the state of Oaxaca have met serious obstacles due to the absence of anchor firms. Small-scale and communal producers

[9] This is not the case for all organizations working in the sector. For example, the State Secretariat for Agriculture was perceived as highly political and inefficient. While SEA would have a necessary role to play in addressing some value-chain constraints, if it had taken early leadership in forming the cluster and value-chain organization, likely its political nature would have generated mistrust among farmers.

(mostly poor, indigenous communities) sell to small local lumber yards that do not have the capacity or the interest in taking on an anchor-firm role.

In the case of the CPP mango value chain program, two large firms emerged as key players, both of which saw the need for the cluster: Frutas del Caribe SA (FdC) and Mangos de Matanzas (MdM). FdC, a relatively new entrant into the mango industry, was interested in exporting mangoes to the United States, where its vegetable customers had expressed strong interest in the *Banilejo* variety for the ethnic market. MdM was primarily interested in exporting to the European Union. Fortunately, these firms (especially MdM) understood that cooperation was required for the industry to be competitive. MdM's president became a major proponent of the cluster concept and was elected by more than 50 founding members as the first cluster president. Supported by the CPP's honest broker role, other commercial firms as well as small farmers began perceiving these enterprises as legitimate sector leaders.

Anchor or lead firms in a value chain are easily identifiable. Engaging them is essential for success. In the case of Dominican mangoes, FdC and MdM, the two lead firms, played a pivotal role throughout the life of the program, including setting quality standards, training smaller firms, taking the lead with the government on policy and regulatory issues, etc. Fortunately for the value chain and clusters, both firms had progressive management who early on gave the cluster enthusiastic support. Obtaining strong anchor-firm commitment is not always possible at a project's outset. If this is the case, project implementers need to assess how much can be done to impact other value chain segments without anchor firm cooperation. For example, some of the tourism clusters supported by the CPP faced a situation in which leading hotels and tour operators did not always exert leadership roles. In these cases, the cluster identified segments where it could work without their active participation (e.g., micro and SME promotion, environmental issues). Ultimately, however, effective value chain enhancement (as well as cluster promotion) needs their support. Other sector leaders were not so easily identifiable. For example, a leading researcher from CIAF eventually played an important role as cluster executive director. Initially, he had been reluctant to exert leadership as he viewed the cluster as primarily a private-sector initiative. However, CPP technicans' discussions with him and MdM while creating the initial value-chain leadership map identified him as a key leader.

LESSONS LEARNED AND BEST PRACTICES

A FOCUS ON END MARKETS

It is widely accepted that enterprise development and value chain programs must focus on what buyers want and not on what is currently produced. Nearly every value chain or enterprise program today characterizes itself as "market-oriented." Such an orientation is essential but not always adhered to in practice. A goal of impacting end markets suggests that the initial focus must be on demand—what customers want—and then work backwards to what value chains are producing and how they must change to meet this customer need.

Lesson Learned: It is crucial to focus on value chains geared to producing what buyers want rather than try to sell what is currently produced.

Best Practice: Focus support on products (and their value chains) that have significant growth potential, based on specific, firm-level demand.

Nothing will inhibit cooperation among stakeholders more than competition in a slow-growth, limited-opportunity market where relations between firms is perceived as a zero-sum game. By focusing on products with significant growth potential, development practitioners are not picking winners. Rather, they are letting the market pick those

winners, by focusing on products it demands. Industries have different market segments, with different demands and competitors. Accordingly, it is important to ensure that demand exists not only for the industry in general but also for the specific product and its value chain.

For example, in the DR, the CPP team did not just focus on demand estimates for mangoes in general, but on demand for specific varieties and categories (e.g., organic) in different markets during very specific seasonal windows (e.g., when major suppliers like Mexico and Peru could not supply those markets). This best practice recommendation may seem obvious, but it is often not followed in practice. Projects often have pre-established products or value chains that were selected not according to market demand, rather according to other characteristics, such as creating employment in low income regions, political importance, or other non-market considerations. As noted above, these projects are often asked to be "market-driven" when in fact they begin from the premise that they will receive support, regardless of identified demand. While this approach may be understandable given the many considerations that development programs must take into account, such an environment is not conducive to transforming relationships to increase competitiveness nor does it support a focus on end markets.

Similarly, market studies often claim to have found "market demand" for a product in general expressions of consumer interest. However, when confronted with paying for a product, those consumers may show much less interest. It is important to be sure that the "demand" identified is not a mere expression of interest for a general product (e.g., "mangoes" rather than specific varieties). Rather, implementers should identify firms willing to buy a specific product. To generate trust among stakeholders, they must believe that market demand truly will lead to increased sales if they take the right steps collaboratively. In the face of clear opportunities for market growth, mango producers and exporters realized that their biggest competitors were not Dominicans but producers and exporters from other countries.

Best Practice: Communicating with stakeholders and preparing them to focus on end markets is essential. Tasks to accomplish these tasks must be incorporated in early work plans and program activities.

A focus on end markets often does not come easily to stakeholders, especially producers. Many stakeholders, particularly small farmers, are risk averse (for good reasons) and more comfortable with traditional ways of doing things. USAID's PRA project was especially aggressive in developing a focus on end markets, beginning each initiative to support a specific company or value chain by looking through the lens of the buyer. Only when specific buyer firms were identified did the program provide technical assistance and other support on the supply side of the value chain. These demands were also carefully and repeatedly communicated to producing firms, with PRA technicians ensuring that these firms met buyer specifications. In identifying buyers, PRA focused not on expressions of interest, general market studies or need for a product, but on willingness and ability to pay for the product.

For example, when PRA started, Peru imported most of its potato chips from Colombia. To better the livelihood of poor potato farmers in Huánuco, PRA started not with the farmers themselves, but with Frito Lay, which has processing facilities in Lima. Frito Lay expressed interest in helping farmers there shift from traditional to industrial-grade potatoes and in signing forward contracts with them. With PRA's assistance to farmers and other segments of the value chain, Frito Lay has purchased more than $1.6 million of Huánuco potatoes. Today, Frito Lay exports potato chips—labeled "Made in Peru with Pride"—to Colombia, Ecuador and other countries. Of course, there is risk in relying on just one principal buyer. But a key lead buyer may be essential to create the impetus to increase sales, improve technology and bring stakeholders together. The inherent risk might be mitigated through multi-year contracts and by securing other buyers over time.

In the case of Mexico RPCI, a constraint on expanding sales to larger buyers of certified lumber willing to pay a premium was the size of boards cut by local saw mills. Such boards had always been cut relatively short in order to make transportation easier for available trucks. Unfortunately, larger customers outside Oaxaca wanted much longer boards. One important project effort was to boost understanding that increased sales to customers willing to pay a higher price would require a shift in cuts and an investment in new trucks and/or partnerships with transportation companies.

CONCLUSIONS

This paper highlights two key areas where USAID's value chain approach can play a crucial role in increasing sales, generating employment and reducing poverty: (1) transforming relationships among stakeholders in value chains, especially between large and small producers, and (2) promoting a focus on end markets. USAID's CPP project implemented by Chemonics in the Dominican Republic demonstrated that a cluster methodology can be highly supportive of and complementary to USAID's value chain approach, especially in transforming stakeholder relationships and value chain governance and in building trust among stakeholders. However, part of this lesson is a best practice that clusters must be means to more effective value chains that create jobs and increase incomes rather than ends in themselves.

The lessons learned and best practices highlighted in this paper indicate that engendering this trust is one of the most important elements of creating effective value chains. Generating this trust can be done through various means. A strong "honest broker" role for USAID projects is essential, especially in uniting small producers and linking buyers and sellers. On the other hand, project staff must ensure that stakeholders assume this role over time in the interest of sustainability. In addition, the CPP's experience and that of other projects implemented by Chemonics indicate that trust can be more effectively built by creating a crescendo of small, successful activities (e.g., training, initial transaction between small and large producers, etc.) that lead to more significant transactions (such as, joint exporting).

The experience of successful small and large firms worldwide, as well as effective development programs, demonstrates that producers must focus on what customers and clients demand and not on what these producers have historically grown and/or produced. This focus on end markets is so logical that it can easily become a truism, simply accepted as part of a project proposal or an RFP, but not necessarily adhered to during implementation. The CPP and other Chemonics projects highlighted herein indicate that practitioners must have the discipline to make this best practice a reality that is enforced in project implementation. In this regard, it is essential for project staff to effectively communicate to producers the need to maintain this end-market focus through every phase of assistance, rather than assume it is understood or accepted by beneficiaries after initial discussions. Anchor firms as well as other stakeholder institutions can also play a key role in this communication process.

ANNEX 1: SUMMARY OF MAJOR CPP ACTIONS AND IMPACT

CPP value chain/cluster actions and results during 2003-2007 included:

- Organized all major producers (including hundreds of small farmers) in the mango cluster, later legally registered as ProMango, as well as exporters, input suppliers, distribution companies and government institutions supporting the sector.
- Delivered stakeholders throughout the value chain, but particularly producers and exporters, to the State Secretariat for Agriculture a proposal for a National Fruit Fly Management Program that covered regulatory aspects, infestation control techniques, a management committee structure, a one-year budget, an emergency response action plan, monitoring and trapping techniques and certification requirements.
- The cluster removed obstacles to the U.S. import of Dominican mangoes by helping members meet international phytosanitary standards through use of a hot water treatment facility and fruit fly monitoring program. In June 2005, the DR began exporting fresh mangoes to the United States for the first time.
- Trained more than 70 producers in anthracnose control, a post-harvest disease responsible for more than a 90 percent fruit rejection in the market.
- Provided technical assistance on new post-harvest techniques (such as hot water treatment) to control anthracnose in organic production and fruit fly infestation.
- Supported efforts of five producer/exporters to obtain EUREPGAP certification by guaranteeing their compliance with international standards for traceability and good agricultural/manufacturing practices.
- Trained more than 400 producers in pruning and flower induction to increase productivity and improve fruit quality.
- Trained more than 150 producers and exporters in mango post-harvest handling techniques. They received the latest information in harvesting methods, handling products, hygiene, sorting, packaging and refrigerated container management. As a result, fruit quality significantly improved, lowering fruit rejection by buyers.
- The cluster organized a joint venture export business that included more than 150 small producers to export their fruits to Europe. They exported more than 85 MT in the first year and generated more than $350,000.
- Aiming to shift small farmers from producers to entrepreneurs, provided training in business administration to more than 50 people Session covered topics in accounting, personnel management, strategic planning, marketing, business registration, production, packaging and transport cost assessments.
- Organized international and domestic visits to model farms, packaging operations, and transport companies. Organized commercial delegations to potential customers in the United States and Europe.
- Mango production more than doubled: from 4,000 MT in 2003 to 8,500 MT in 2007. An investment of more than $10 million contributed to this increase and expanded acreage under cultivation for future growth. The cluster expects production to increase by 100 percent by 2012.
- Mango exports of fresh fruit to the United States and Europe increased from negligible levels (zero, in the case of exports to the United States) to approximately $1 million in 2007, with 30 percent increases in exports expected annually in the coming years.

ANNEX 2: THE CLUSTER AS A MECHANISM TO ORGANIZE AND PROVIDE ASSISTANCE TO THE MANGO VALUE CHAIN

The CPP's efforts to create a strong end-market focus were driven by numerous circumstances and activities:

- **Increasing demand and prospects for growth and rising incomes**. As noted earlier, increased interest in Dominican mangoes and the prospects for significant sales began generating a win-win mentality among producers and exporters. This did not happen overnight, but slowly Dominicans began perceiving the "competition" not as those nearby producers and exporters, but as those in Mexico, Peru, Haiti and other countries.

- **Creating a customer-driven consciousness**. Creating an understanding of the need to meet high buyer expectations required considerable initial effort, especially in an industry when producers were accustomed to having local buyers accept nearly everything they delivered, albeit at low prices. For example, some producers initially resisted the need to shift to varieties other than what they grew, since they believed that local varieties were much better than Tommy Atkins, Keith and others favored in the United States and Europe. In the case of a perennial crop like mangoes, shifting to new varieties requires a long-term commitment, since a plant takes years to grow from a seedling to its first commercial harvest. Producers also balked at what they perceived as the high rejection rate by exporters (as well as importers) when joint exports began late in the project. Activities to create market consciousness occurred throughout the period of CPP assistance. These activities included workshops, discussions and field visits to the packing houses. An eye-opening experience for many producer/exporters (especially small farmers) was a visit to Peru, when participants visited state-of-the-art farms and packing houses, where the host firm highlighted the systems it had developed to meet customer expectations. Similarly, small coffee producers in Mexico's Chiapas region under USAID/Mexico's RPCI came to understand demands for high quality only after the project promoted linkages with international buyers. The program trained coffee "cuppers" who came to distinguish between acceptable and the excellent quality demanded by Starbucks and other buyers.

- **Developing a strategic vision**. Through a highly participatory process involving stakeholders throughout the value chain, the cluster developed a competitive vision to guide its efforts: To be, by 2015, the leading exporter in the Caribbean and Central America to the United States and Europe of high-value, ethnic and organic mangoes. Cluster members understood that the commitment to high value had to be linked directly to market and customer expectations. The strategy identified major constraints throughout the value chain but focused especially on production, post-harvest handling and quality, and markets.

- **Analysis of export markets**. The CPP initially provided direct assistance to help the cluster undertake an assessment of target markets, identifying the United States (specifically the Northeast) and Europe (Holland, Italy, Germany) as promising targets. This first assessment focused on general Internet searches and existing Dominican exporter contacts. The latter was particularly important in the case of the U.S. market, where FdC had identified through one of its vegetable buyers a niche opportunity for Banilejos, in high demand by the Dominican diaspora in the New York area. The CPP, together with the value chain's anchor firms, continued market linkage efforts. In 2006, the cluster, with CPP support but counterpart financing from the larger exporters, undertook a major market study, which not only further identified buyers, but provided detailed benchmarking information on competitors. The analysis also included detailed monthly pricing information in the U.S. and European markets, thus helping the cluster develop a strategic road map for penetrating and

positioning themselves within market segments offering the greatest opportunities. Based on this analysis, the cluster decided to focus on the top 5 percent price range of select organic, gourmet, and ethnic mangoes.

- **Joint exporting**. Based on contacts made with the Dutch company Westfalia through a cluster trade mission the previous year, in 2007 the cluster jointly exported 19 containers worth approximately $400,000 to the European market. The shipments benefited more than 150 small growers (many producing less than two hectares), giving them direct access to international markets for the first time. The joint effort was required to meet Westfalia's quantity demands, which even the largest producers were not capable of meeting at the time. But cluster members had been discussing a joint operation for more than two years, as a means of increasing economies of scale, reducing costs and thus improving competitiveness. As further discussed below, together members learned from trial and error and navigated the complex process required to meet export requirements and be more customer focused.

As noted above, developing a customer and market-focused mentality is an ongoing effort. However, there is no doubt that stakeholders in all segments of the DR mango supply chain are acutely aware that production—without diminishing its importance—is but one of the key value chain segments whose constraints must be addressed. This new focus on end markets has extended to the domestic market. The quality improvements made during the last four years have resulted in local buyers, especially supermarket chains, now insisting on better fruit. Producers accustomed to delivering whatever they produced are now facing buyers that are willing to pay higher prices, but only for mangoes that meet their standards. In 2008, representatives of supermarket chains began attending cluster meetings.