



**USAID**  
FROM THE AMERICAN PEOPLE

**BEST PRACTICES IN IMPLEMENTATION  
PAPER SERIES**

# **PARTICIPATORY MARKET SYSTEM DEVELOPMENT**

**BEST PRACTICES IN IMPLEMENTATION OF VALUE CHAIN  
DEVELOPMENT PROGRAMS**

**microREPORT#149**

## **SEPTEMBER 2008**

This publication was produced for review by the United States Agency for International Development. It was prepared by Alison Griffith and Luis Ernesto Osorio of Practical Action, subcontractor to ACIDI/VOCA under the Accelerated Microenterprise Advancement Project.

# PARTICIPATORY MARKET SYSTEM DEVELOPMENT

## BEST PRACTICES IN IMPLEMENTATION OF VALUE CHAIN DEVELOPMENT PROGRAMS

microREPORT #149

### **DISCLAIMER**

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.

## EXECUTIVE SUMMARY

The international Markets and Livelihoods Program has been evolving an approach to market development for the poor that is both systemic and participatory. This paper shares some of its learning and experience from past and current projects in Africa, South Asia and Latin America. Taking a systemic perspective has influenced the decision-making processes of program teams, particularly in the vision for market change and the scale and impact that can be achieved. As the dairy subsector in Nepal illustrates, an analytical framework (the Market Map) is useful to understand market systems.

The Market Map guides a process of engagement and interaction between market system actors. Participatory workshops can promote dialogue and improve understanding between actors. The process needs careful facilitation as the case of coir in Sri Lanka demonstrates. These workshops aim to lead to actions and ultimately to transformations in the market system. The role of multi-stakeholder forums in taking forward issues for action is discussed with examples from Sudan and Peru.

Transforming relationships between market actors is crucial to increasing competitiveness, a key issue for the poor in market chains. The case of livestock in Zimbabwe shows what is possible in an extreme context if market actors have the incentive and desire to work together.

In the final section, the challenges for practitioners to become effective facilitators of market system development are explored, sharing tips from Practical Action's team leaders. In addition to changing organizational mindset and culture, the paper highlights the future challenge of dialogue with donors and others on the pro-poor impacts of market system development and the need for a more flexible and less controlling approach.

## INTRODUCTION

While “Making Markets Work for the Poor” may seem a rather ambitious and perhaps surprising aim for a technology organization like Practical Action,<sup>1</sup> the move to establish a new thematic program around markets was driven by nearly four decades of learning from attempting to help small-scale producers increase their incomes. Too often, improved access to skills and technology options was not matched by improved incomes and better livelihoods. In the mid- to late 1990s, Practical Action joined the international discussion<sup>2</sup> exploring the challenges of sustainable business development services (BDS) delivery. Practical Action began to re-orient its thinking and practice to become facilitators rather than providers, recognizing that this would help achieve better scale and sustainability. Yet still producers talked of “marketing problems,” and support often failed to unlock the opportunities that were so badly needed. An evaluation of a program to improve the agro-tools markets in Sudan demonstrated how a lack of systemic thinking limited the success of Practical Action's interventions. Practical Action had focused on only one area of input supply to farmers (tools) and, failing to understand the whole picture, did not consider that blacksmiths were improving product specifications beyond the means of their customers and were effectively pricing themselves out of their target market. Furthermore, in South Asia, the Bangladesh team leader describes<sup>3</sup> how the donor-funded project to establish a small enterprise unit providing BDS to rural producers in 25 subsectors had limited results. The business success rate was lower than expected because other factors in the market restricted their growth and options.

This learning about the limitations of technology inputs and other BDS has been common across the program and promoted a move towards a more systemic approach. Since 2002, Practical Action's Markets and Livelihoods team<sup>4</sup>

---

<sup>1</sup> Previously known as Intermediate Technology Development Group (ITDG) See [www.practicalaction.org](http://www.practicalaction.org)

<sup>2</sup> E.g. Donor Committee on Enterprise “Blue Book”; ILO BDS Seminars

<sup>3</sup> Feedback from Abdur Rob, Team Leader Bangladesh Markets and Livelihoods programme

<sup>4</sup> Based in Bangladesh, Nepal, Sri Lanka, Sudan, Kenya, Zimbabwe and Peru

has been developing an approach termed Participatory Market System Development (PMSD)<sup>5</sup>. The main steps in PMSD, which will be explained in the following sections are:

- preliminary mapping and analysis of the market system by the facilitator to capture and organize information;
- participatory market mapping workshops with all stakeholders to identify opportunities and blockages and develop action plans; and
- engaging a multi-stakeholder forum of actors with influence in the system to meet regularly to take forward specific actions.

The practices shared in this paper illustrate part of the journey toward finding ways of reaching more than the “lucky few” beneficiaries and ensuring that the benefits persist long after a project ends. These factors —scale and sustainability—have provided the further impetus for Practical Action to continue exploring approaches that use the potential of markets to bring lasting change to the lives of millions of poor people.

## **TAKING A MARKET SYSTEMS APPROACH**

Markets are complex and dynamic and it can be daunting for program staff to adopt a systemic approach to pro-poor market development. A systemic approach entails taking account of critical actors, the relationships among them and the context that influences how they behave and interact in the market. These contextual factors include institutions, rules, infrastructure and natural resources. ‘Systems thinking sees interrelationships rather than things, patterns of change rather than static ‘snapshots’... Systems thinking is a discipline for seeing the ‘structures’ that underlie complex situations, and for discerning high from low leverage change” (Senge, P. 1990, adapted from Pasteur, K. 2004). Pursuing systemic change means addressing underlying constraints and stimulating market players and functions in a way that may take a facilitator in an unexpected direction.

Because a systemic approach requires a different way of working that many agencies are not used to, staff may be tempted to default back to the comfortable and familiar territory of providing inputs and services and directly intervening. Having a clear approach (PMSD) and an analytical framework to understand market systems (the Market Map<sup>6</sup>) has helped Practical Action address this challenge.

The Market Map describes specific market systems and has become a foundation of the program and a shared language. It is made up of three inter-linked components:

- Market chain actors and their linkages—the economic actors who actually own, transact and transform a particular product as it moves through the market chain from primary producer to final consumer.
- Business and extension services and input providers—the services and inputs that support the market chain’s operations.
- Enabling business environment factors—infrastructure and policies, institutions and processes that shape and influence the market system.

Some early learning by Practical Action staff in mapping the aloe market system in Kenya confirmed the importance of understanding the whole system before jumping in with technical fixes. Previously, implementers would have paid most attention to the poor producers and their linkages and worked to unblock the issues identified by them. However, in this case mapping the market system highlighted a key issue in the business environment that had a

---

<sup>5</sup> PMSD has evolved and has drawn heavily on the learning of others e.g. CIAT, ILO, Springfield.

<sup>6</sup> More on market mapping at [www.bdsknowledge.org/dyn/bds/docs/detail/465/1](http://www.bdsknowledge.org/dyn/bds/docs/detail/465/1)

dramatic impact on the competitiveness of the value chain. Due to an environmental trade restriction, export trade had been forced underground, and consequently the price received by exporters was very low compared to world market prices. This meant that no amount of improved production, processing and marketing would have a significant impact on the competitiveness of the chain. What was needed was an advocacy strategy for sustainable harvesting and an improved trade environment.

Practical Action's new program in Nepal has been able to draw on past learning, like the aloe case, and use a systemic approach to develop their strategy (see Box 1).

### **Box 1: Nepal's New Markets and Livelihoods Program**

A relatively “quick and dirty” subsector selection exercise highlighted dairy as having impressive potential. In Nepal there are around 3.5 million families that keep cattle for milk, yet only 400,000 of them sell into formalized milk chains. So far, limited progress has been made in achieving sustainable incomes for the majority of poor producers. Previous attempts by development projects to stimulate the dairy sector have tended to target specific services and inputs with mixed results. In some cases, supply increases have led to poor returns for farmers and even wastage (due to so-called milk holidays). However, the current environment for investors in the dairy market is improving, and there is a need and an opportunity to develop the system so that small-scale producers can benefit. The Nepal team conducted participatory market mapping workshops in four districts to determine the opportunities and constraints as perceived by the market actors and stakeholders. The team leader Deepak Khadka describes the process as follows: “[T]he bigger challenge was to come up with a project design that would create the space or environment for market actors to understand the issues, engage with each other to find a win-win solution and to move ahead with an action plan. This was easier said than done and required a lot of patience to stop ourselves from jumping in and finding a quick fix.”

The Market Map of the dairy market system in Western Nepal (Annex A) was initially compiled by Practical Action field staff, with further development during stakeholder workshops. The central component of the map shows the flow of money from end markets to primary producers, rather than the flow of goods in the opposite direction (as is more typical). This design emphasizes that users should concentrate on analyzing market demand, rather than starting with producers and pushing supply. Despite the natural limits of attempting to simplify an enormous amount of complex information, the map does reveal the interconnectedness of the actors and issues within the market system, as well as the areas that need to be addressed to unlock potential. The Market Map is useful to guide the early stages of program development and ensure that the whole system is taken into consideration.

Market system maps are useful to synthesize a large amount of complex information and illuminate potential leverage points, and consequently mapping is gradually becoming more common in program design.<sup>7</sup> Practical Action has structured its Market Map in a way that encourages users to identify a wide range of different actors and issues, and to show these and the interrelationships within the map format. It also promotes understanding of the relative size and scale of an opportunity and specific issues affecting competitiveness. Although this can produce a rather complicated map, what is important is the process of information-gathering and learning, which sets the foundation for a systemic approach. It's most important function, however, is not purely as an analytical tool for program designers, but as a framework to guide a process of participation leading to engagement and interaction between market players. The following section considers how this can lead to the empowerment of market stakeholders.

---

<sup>7</sup> Subsector mapping has been used by agencies for several years and this is evolving into a more systemic representation as, for example, in USAID's value chain maps.

## MARKET SYSTEM ANALYSIS AS A TOOL TO EMPOWER MARKET STAKEHOLDERS

Practical Action gives a high priority to empowering market stakeholders, particularly marginalized small-scale producers,<sup>8</sup> but is also aware of the criticism that participatory and inclusive approaches can lead to raised (and sometimes dashed) hopes and expectations, tensions and confusion. The Participatory Market System Development (PMSD) approach therefore aims to lead to outputs that ultimately bring about transformations in the market system. This section considers two tools that ensure movement toward concrete actions: participatory market mapping workshops and multi-stakeholder forums.

### PARTICIPATORY MARKET MAPPING WORKSHOPS

Practical Action has been using participatory market mapping workshops in different contexts to promote dialogue and improve awareness among actors. The premise is that understanding market systems with the actors themselves will lead to engagement and ultimately empowerment, which has the potential to bring about change. In Nepal, program staff intended to use the market mapping exercise to inform the design of a new program in the dairy subsector. However, interaction among market actors led to unexpected results (see Box 2).

#### **Box 2: Milk Matters in Tanahu**

The opportunity for dairy farmers in this western district of Nepal appears to be significant: A large processing plant that recently opened is desperate to buy milk, struggling to meet even 10 percent of requirements to operate at capacity. But the problems facing dairy farmers are many and varied, issues affecting milk quantity and quality such as fodder shortages and animal health and husbandry, and infrastructure and transport difficulties. In addition, Nepal is emerging from a long conflict and relationships tend to be fragile or non-existent.

It is reasonable to question whether participation is a good option in the face of such a complex and challenging situation, especially since the project team primarily wanted to get information so they could design a program for donor funding. At this stage they were less concerned with getting market actors to build relationships. Yet providing an opportunity for interaction meant that communication was inevitable. Initially, farmers and traders exchanged barbs about milk prices, but the facilitators were patient (and refrained from too much interference) and found that the dialogue transformed when one of the milk processing firms began to discuss areas of concrete collaboration—specifically, how they could provide a chilled collection facility (if the farmers became more organized) and veterinary services. The team learned that this sort of dialogue just needs the right conditions and opportunity: After the end of the workshop they observed a group of farmers discussing terms and conditions intently with a buyer. They concluded that market actors can find their own solutions if given the chance.

Participatory analysis and mapping may not be an effective approach if it is not accompanied by engagement and empowerment of stakeholders from the beginning, as Practical Action found in its post-tsunami work in Sri Lanka. The coir market was identified by the program team as an area with potential for post-tsunami livelihood development, and in 2005 Practical Action and Caritas conducted research and organized participatory market mapping workshops to create a long-term development plan. The process stagnated until 2006 when Oxfam, the Southern Development Authority and the Exports Development Board joined with Practical Action to implement the

---

<sup>8</sup> Market Opportunity Groups are one way of enabling small-scale producers to engage more effectively with other actors – see Zimbabwe case study in Section 3.

plan in communities where Oxfam was already active.<sup>9</sup> The stakeholders (most of them new to the process, as the geographic area was different) did not embrace the plan despite the wealth of information available. From this experience Practical Action learned that the market map is a powerful tool to visualize and analyze the system but it is the process of participatory market mapping that gets market stakeholders to engage, gain a common understanding of constraints and opportunities, build trust and collaborate.

#### LESSONS LEARNED CONCERNING PARTICIPATORY MARKET MAPPING PROCESSES

- **Timing and incentives are important.** Implementers must understand the conditions and issues that have the potential to bring about change. They should not “push” for change to happen but should instead take on a catalytic role.
- **Driving factors are necessary.** Quality and quantity are common issues that can drive the process. The more urgent these issues are, the better.
- **Small-scale producers may need support** to feel confident and articulate their views in these forums.<sup>10</sup>
- **Representation from and engagement with key stakeholders is important.** NGOs typically exclude intermediaries like traders due to preconceptions or misunderstandings about them.
- **To deal with the challenges of physical, social and cultural distance, facilitators must be innovative and responsive to the context.** For example, Practical Action is beginning to explore the use of video market documentaries so disparate actors can share their perspectives with others.
- **The process should lead to action.** Formulating Joint Action Plans helps stakeholders to be specific and this helps to manage expectations. Facilitators need a long-term vision but should promote short-term action.

Facilitators need a range of tools to promote market development processes. Participatory market mapping workshops are one such tool and Practical Action has found them to be effective in a range of contexts, locations and value chains. However, the key principle that facilitators should aim for a light-touch role can be difficult to maintain if it does not lead to action and ultimately change. Similarly, when the process is overtaken by strong interests, it can be difficult for a facilitator to remain “hands-off.” In these situations, the skill of the facilitators is paramount and of far greater importance than their knowledge of the value chain. (Facilitation is discussed more in section 4.) Facilitators need to know how to handle unforeseen situations and also to determine which tools are most appropriate. It may be tempting to push through initiatives to promote change, but experience shows that this is unwise and unlikely to be sustainable. GTZ’s ValueLinks Manual is uncompromising on this point: “Unless there is a clear decision and commitment by enterprises to get ahead with upgrading there is no role for facilitators...Facilitation can only contribute to a process of change already underway.”

Knowing what type of collaboration is appropriate in a given situation requires experience and skill. For example, facilitators must know when to move on from participatory workshops with all market actors to other forums such as one-on-one meetings, interest groups or networks. The proceeding section considers one such tool for facilitation of cooperation.

---

<sup>9</sup> One of the key challenges was to balance the priorities of the various NGO facilitators and this had an impact on the outcome since coordination and ownership of the plan was problematic.

<sup>10</sup> It need not require much: for example, women farmers representing different areas in Zimbabwe just needed a physical space in order to agree a common agenda the night before negotiations with a big buyer.

## MULTI-STAKEHOLDER FORUMS

The majority of Practical Action's projects have involved a type of interest group or forum that often emerges from a participatory market mapping exercise (or may already exist in some form) and can focus on issues that affect systemic competitiveness. Typically, the issues are ones that market actors cannot make progress on alone (see Box 3), so the interest forum can play an important role. (They are distinct from and operate separately from commercial bilateral exchanges).

### Box 3: A taxing situation for livestock farmers in Sudan

The 4.35 million nomadic pastoralists in Sudan<sup>11</sup> produce livestock, much of which is exported to the Middle East. Yet they face innumerable challenges to gain access to inputs and advice, make effective links with buyers and become competitive and viable players. Practical Action has been working in Kassala (Eastern Sudan), home to almost 200,000 pastoralists, since 2006. The process of participatory market mapping contributed significantly to the empowerment and awareness of semi-nomadic pastoralists. Specifically, it led to the identification of key systemic issues and priorities, such as the need for more and better animal health services, improved market coordination and a more favorable business environment. The latter concerned a taxation regime that directly affected the competitiveness and incomes of pastoralists. A livestock forum was created democratically by 35 market stakeholders as a result of the first market mapping workshop. It started with a broad agenda but the issue of taxation became a top priority. A tangible outcome of the market mapping process was that the Livestock Forum successfully lobbied the government to remove the double taxation that pastoralists faced when moving between the states of Kassala and Gedarif.

There is no “typical” composition of these forums in terms of numbers and members, but groups that emerge somewhat naturally through shared interest and commitment tend to work well. Practical Action may play a catalytic role (as in the case of CODELAC below), but the principles of good facilitation apply (i.e., not leading but adding value to the efforts of market players). Practical Action recently analyzed five interest forums in different contexts and subsectors.<sup>12</sup> Two contrasting examples are the hibiscus forum in Sudan and the dairy forum in Northern Peru. The former, after two years in operation, still struggles to get its members to collaborate toward improvements in the market system, whereas in the same period, the latter made impressive progress. CODELAC, as the dairy forum is known, has engaged a stable group of around 15 – 20 active members, created conditions that have led to an improved set of quality standards for cheese, and become sort of a “one-stop shop” where organizations that have new dairy-related initiatives can come to get members’ feedback and support, identify synergies with other regional initiatives, and explore collaboration with governmental agencies and donors. Many challenges are ahead—such as its possible formalization and the associated implications for flexibility, costs and dynamics of engagement with members;<sup>13</sup> the expansion of its geographic scope, and increasing direct participation of small-scale farmers<sup>14</sup>—but it is evident that the forum has made considerable progress so far. Members of CODELAC interviewed by Practical Action in November 2007 considered it important for the forum to keep to its role as a space for feedback or validation of initiatives, collaboration and learning, and to avoid the direct execution of projects that compete with the interests of the members. CODELAC has led projects to improve the business and learning environment for all market stakeholders, such as the Annual Cheese Festival, the 2006 Dairy Competitiveness Seminar and the Cheese Museum.

---

<sup>11</sup> National census of 1993 updated 2005

<sup>12</sup> More details of our analysis and preliminary findings at: [http://practicalaction.org/?id=pmsd\\_IF\\_ia2](http://practicalaction.org/?id=pmsd_IF_ia2)

<sup>13</sup> Interviews with a sample of CODELAC members in Peru in November 2007 suggest that the decision on whether and how to formalize the forum (it is legitimate but it is not registered as a formal organization) is still an on-going debate but the trend is towards formalization.

<sup>14</sup> Despite improvements in this area, NGOs still play a significant role in bringing their voices and interests to the forum, which is an issue that CODELAC is trying to address.

The analysis of the five interest forums suggests that to be successful they need to add value to the agendas, initiatives and plans of their members. The following are two key success factors:

1. Maintaining neutrality—the forum should not aim to be pro-poor; it should be a space for ideas and to create equal conditions for all members.
2. A focus on “life-or-death” threats or “golden opportunities” (e.g., livestock taxes or quality of water in cheese production) that can only be addressed through collaboration.

Other factors relate to how relevant the forum is to the members’ needs (specific working groups to address concrete issues can be useful) and how effectively the forum incorporates new members.

Interest forums can also perform the important function of balancing other external issues with market development priorities. For example, subsectors that are highly dependent on fragile ecosystems are often affected by environmental issues that may have long-term or hidden impacts, but which are critical to long-term competitiveness. In Sri Lanka, Practical Action’s participatory market mapping in lagoon fisheries highlighted some dominant issues concerning the sustainable management of the lagoons. A different kind of interest forum emerged whereby stakeholders (including fishers, professionals and policy makers) discussed a range of key issues in a web-based discussion. This discussion was linked to a radio series and the issues were aired in the public domain. Although this forum was intended to be time-bound and focus on specific concerns, it was so successful that the participants decided to stay connected and discuss wider topics as well. There have been several tangible outcomes, for example agreements have been reached concerning pollution and garbage dumping, which were threatening the livelihoods of the small-scale fishers who depend on the lagoons for income.

## TRANSFORMING RELATIONSHIPS TO ACHIEVE COMPETITIVENESS

The systemic thinking and participatory approaches described in the previous two sections should lead to specific outcomes to realize a vision of market change. They involve a process that produces concrete actions on the ground. Box 4 describes how transforming relationships is key in the pursuit of more efficient market chains that benefit the poor.

### **Box 4. Market actors in semi-arid Zimbabwe develop new business models to survive and prosper<sup>15</sup>**

Alex Mugova, Practical Action’s team leader in Harare, believes that the deep crisis in the country has forced market actors to become more creative and open to new ideas. This view is borne out by the results of a 30-month project to develop the beef cattle market system in the Guruve District of northern Zimbabwe. The project, which started in 2005 and cost £50,000,<sup>16</sup> is estimated to have brought benefits to around 100,000<sup>17</sup> people. This has been achieved through developing new business models between lead farmers and input suppliers of veterinary drugs and seeds, and strengthening relationships between farmers and buyers.

#### **Achievements**

- 16,000 farmers received services and inputs to produce better quality, healthier cattle
- Cattle prices increased by 8 percent between 2006 and 2008<sup>18</sup>
- Off-take rate for cattle increased from 5 percent to 10 percent
- Livestock disease incidence reduced by 20 percent

<sup>15</sup> The full case study can be found at [http://practicalaction.org/?id=pmsd\\_livestock\\_zim](http://practicalaction.org/?id=pmsd_livestock_zim)

<sup>16</sup> Approximately US \$97,000

<sup>17</sup> 20,000 livestock producers with 5 family members per household. The end of project evaluation in December 2007 interviewed 400 households.

<sup>18</sup> In real terms; hyperinflation has made it difficult to get accurate data on income and price changes but feedback from farmers gives a good indication of 8 percent. The team observes that this would have been higher if the situation had been more stable.

### **Transforming the market system**

- 800<sup>19</sup> village-based paravets provide animal health products and advice to 16,000 remote small-scale cattle farmers and earn incomes of \$100 p.a.<sup>20</sup>
- Farmers' Market Opportunity Groups meet regularly with buyers to discuss livestock purchase logistics and indicative prices.
- Farmers working together in small, informal groups (about 15-20) share production knowledge and collectively market their animals.
- Improved supply of seeds to farmers to grow cow peas and guar beans has provided them with dry season fodder as well as additional cash and better food security.
- Government livestock department invests part of its limited resources in supporting the training of paravets and liaising with farmers to ensure that the advice meets their needs.

### **The Participatory Market System Development Process**

The PMSD process has been instrumental in creating an environment of optimism and trust in spite of initial skepticism among participants. A main driver in the process was the buyers' early commitment to pay more for larger, healthier animals. VETCARE's<sup>21</sup> concerns about the technical competence of local paravets were addressed by helping them to develop a thorough training plan with the Department of Livestock, tested through an initial pilot with 20 paravets. The paravets are selected by their communities and are verified by the Department after training. The business model that has emerged involves paravets purchasing drugs from VETCARE and selling them to farmers alongside "embedded" advisory services. The various market actors involved produced joint action plans and met quarterly to review them, which helped build relationships and keep things on track.

In the initial analysis it was important to understand the whole market system and the inter-connectedness of related markets, such as those for cow peas and guar beans. Stimulating the supply of seeds ensured that livestock farmers had fodder for cattle in the dry season. These crops also enhanced food security and income.

### **Scaling up**

The intention of working with VETCARE was to create a vibrant market for the supply of veterinary products to remote small-scale farmers. The optimal situation is to create conditions that will encourage other companies to see the opportunities and also offer attractive products and services. The circumstances in Zimbabwe of weak, thin markets and a lack of companies in a position to offer such products and services have caused VETCARE to remain dominant for the time being. However, VETCARE's national coverage has enabled them to replicate the model and VETCARE is working with the Department of Livestock to expand the approach in four other districts.

The potential issue of paravets "pushing" VETCARE drugs is mitigated to a great extent by the fact that farmers only use drugs as a last resort because of the cost. Furthermore nearly all paravets are competent in local knowledge and herbal remedies. As this is based on traditional knowledge it is shared and provided as a "community service," but in some areas there has been an emergence of a market for these remedies where they are seen to be as effective as "modern" drugs.

Other scaling up has been observed in the related market systems of goats and chickens, where actors are applying some of the same practices and approaches, for example, using the services of paravets. This is reaching an additional 4,000 farmers directly.

---

<sup>19</sup> 200 paravets were trained by VETCARE and the Department of Livestock but they have in turn trained, on average, another 3 lead farmers creating another 600 new paravets.

<sup>20</sup> \$100 may seem low but it needs to be seen in the local context where, according to a Harare press release on 3/6/08, (March 6 or June 3?) the minimum wage was Z\$6bn/month (approximately \$0.80)

<sup>21</sup> VETCARE is the name here used for the large national veterinary products company (since permission to use their real name has not been obtained)

## UNDERSTANDING AND MEASURING RELATIONSHIP CHANGE

Lasting and tangible changes in relationships between market actors can be difficult to assess, but it is important for facilitators to understand the nature of the change and its potential for future development. To help achieve this, Practical Action has adapted the “Relationship Matrix” originally developed by SDCAsia—a qualitative and largely subjective tool that is currently rarely applied by the market development community. Annex B shows the matrix template with indicative examples of the kinds of processes that might be important to measure. Users of the matrix identify the critical sets of relationships between actors, and the different processes or factors that affect how they do business with and relate to each other. More details of how to use the Relationship Matrix can be found at [http://practicalaction.org/?id=pmsd\\_relmatrix\\_ia2](http://practicalaction.org/?id=pmsd_relmatrix_ia2)

Practical Action and its partners and stakeholders want to better understand how effective the PMSD approach is and to promote learning on different aspects of relationship change within market chains. In Bangladesh, the program team has been exploring how to use the matrix to monitor relationship change and to promote deeper dialogue between key sets of actors. In a recent groundnut project<sup>22</sup> a small stakeholder working group comprised of representatives of traders, farmers and service providers agreed on the most important aspects of their commercial relationships (e.g., quality, price, value addition, information and trust) and their current situation in relation to each of these aspects. The group explored where they would like to get to (within a realistic timeframe) and identified some activities that would help them improve relationships. Concerning value addition, for example, traders and farmers recorded that currently many key processes such as grading, cleaning and drying are done by traders. The traders were keen to transfer some of these functions to the farmers to improve efficiency (and increase value in the chain). They agreed a plan to achieve this including some training activities and awareness-raising amongst farmers. The project team facilitated the discussions but the ownership remained with the actors. This learning has indicated that the matrix can be used not only to monitor how relationships are changing, but also to help market actors themselves become more empowered. As they take responsibility for developing relationships and achieving joint aspirations, sustainability begins to emerge.

## FACILITATION

Pro-poor market system development requires skilled facilitation, especially when it is participatory, involving many actors and interests. Practical Action’s evolution from an organization that often employed hands-on technology fixes to one that is a facilitator of systemic market development has been a journey in building values, confidence, capacity and skills. Practical Action continues to experience many challenges in facilitation and has learned that it is important not to force things but put energy and resources where they can best serve as catalysts for change. Practical Action is improving in getting the “right” mix of stakeholders—for example, not excluding those who might intimidate the facilitator or other stakeholders or who are difficult to track down. Practical Action is also learning about managing different interests and perspectives, particularly when some dominate at the expense of the majority. In some cases, bilateral dialogues can be more effective in moving specific issues forward. An important skill in facilitation is to be sensitive to what will work in a specific context and to be flexible in adapting specific approaches and tools to the needs of that particular situation.

Sustainability of facilitation roles is an important future challenge for the program. In Bangladesh the team is looking for ways to transfer their supporting, facilitative roles to other market actors who have a permanent presence, such as Chambers of Commerce or commercial companies. Interest forums can also play a longer-term facilitation role.

---

<sup>22</sup> Funded by CLP/DFID July 2006 – November 2007. Forthcoming case study  
[http://practicalaction.org/?id=pmsd\\_groundnut\\_ban](http://practicalaction.org/?id=pmsd_groundnut_ban)

### **Practical Action's Team Leaders' Top Tips for Market Facilitators**

- Create the conditions for **trust**, be flexible and patient.
- Innovate to engage market actors, for example by using video or value chain tours<sup>23</sup> to promote understanding and communication.
- Use “hooks” to attract actors and enable them to establish the benefits of participation early on.<sup>24</sup>
- Establish credibility through wise use of expertise in the subsector.
- Achieve quick wins (balanced by a shared long-term vision), but manage expectations.
- Engage participants in monitoring and feedback mechanisms.

Practical Action has observed two key challenges for practitioners shifting to facilitation. First, practitioners can be driven by a desire to be seen by partners and communities as “doers.” This may be motivated by a perception that this is necessary in order to remain in a location or protect jobs. However, this way of thinking can change over time. In Eastern Sudan Practical Action saw a changing mindset in the project manager who now describes his role as a facilitator as “bringing all actors together and helping them find their own solutions... I see myself as a gear within a machine. I want to help others move.”<sup>25</sup> This approach resulted in a process which led to the taxation changes described in Box 3.

The second challenge relates to practitioners' perceptions of what donors want, namely quick fixes, controlled processes, predicted outcomes, detailed activities and high spending rates. It is possible, and even likely in some cases, that the typical approaches of many donors can deter practitioners from using facilitation as an effective strategy. Practitioners need to dialogue with donors about how to address these challenges.

Practical Action's journey to become successful facilitators of pro-poor market development is just beginning. Promising progress has been made, as have mistakes. Both are valuable experiences for addressing future challenges. Practical Action will continue to explore systemic and participatory approaches in different contexts in addition to issues such as the role of technology and innovation in market systems and the implications of market development on fragile ecosystems. Practical Action is committed to continue the learning journey, and values the opportunity to build relationships with others interested in improving the livelihoods of the world's poorest people.

---

<sup>23</sup> Bangladesh team have been using value chain tours to help market actors get a first hand understanding of how the value chain works. They have found this effective in different subsectors, e.g., dairy, pottery, groundnuts.

<sup>24</sup> A good hook is for example, specific improvements in quality.

<sup>25</sup> Rifaat Bashir interview with Luis E. Osorio April 07

## REFERENCES

The paper is based on the experience and learning of past and current projects of the international Markets and Livelihoods program, using evaluations, reports and correspondence.

Albu and Griffith, Mapping the Market: participatory market-chain development in practice. SEDJ Vol 17 No 2 June 2006

Albu, Mike and Alison Griffith (2005) 'Mapping the Market: A framework for rural enterprise development policy and practice', [www.bdsknowledge.org](http://www.bdsknowledge.org)

Almond, F. and S. Hainsworth (editors) (2005) Beyond Agriculture – making markets work for the poor, proceedings of an international seminar, CPHP, March 2005, London, UK.

Bernet, T., A. Devaux, O. Ortiz and G. Thiele (2005) 'Participatory market-chain approach', BeraterInnen News 1/2005, Lindau, Switzerland, available through [www.sfiar.ch](http://www.sfiar.ch)

Idrovo, Ivan, and Marian Boquiren. 2004. Bridging the gaps in the kaong subsector: A case study in building win-win relationships, Value chain cum BDS market development. Report prepared by Strategic Development Cooperation-Asia (SDC Asia), Philippines.

GTZ ValueLinks Manual; Module 4; [http://www.value-links.de/manual/pdf/module\\_04.pdf](http://www.value-links.de/manual/pdf/module_04.pdf)

Miehlbradt, Alexandra and Mary McVay, Jim Tanburn, Editor (2005) From BDS to Making Markets Work for the Poor, The 2005 Reader page 38.

[http://www.mmw4p.org/dyn/mmw4p/docs/452/Reader\\_2005\\_final\\_LOW\\_RES.pdf](http://www.mmw4p.org/dyn/mmw4p/docs/452/Reader_2005_final_LOW_RES.pdf)

Pasteur, Kath (2004): Learning for Development: A literature review. Lessons for Change in Policy and Organisations No 6. Brighton: Institute of Development Studies.

## ACKNOWLEDGEMENTS

The lessons and insights from the International Markets and Livelihoods Team have been invaluable, in particular there have been inputs from Alex Mugova (Team Leader, Southern Africa), Abdur Rob (Team Leader, Bangladesh), Deepak Khadka (Team Leader, Nepal) Ibrahim Ali Idriss (Team Leader, Sudan), Rifaat Bashir (Project Manager, Sudan), Jayantha Gunasekera (Team Leader, South Asia), Chopadithya Edirisinghe (Project Manager, Sri Lanka), Daniel Rodriguez (Program Director, Latin America), Maria Sol Blanco (Project Manager, Peru),

We are also grateful to Clare Tawney of Practical Action Publishing for her comments.

# ANNEX A. DAIRY MARKET MAP IN FOUR DISTRICTS IN WESTERN NEPAL

## Enabling Environment

Conflict, strikes and *bandhs*

Pricing scheme based on fat and protein content

Inadequate infrastructure (roads, water, electricity)

Mass migration of youth

Access to Forest (fodder)

Policy on AI services

Milk supply "holidays"

Financial Policy for MFIs

Dairy subsidy policy

## Core Market Actors

**Large processors**  
(Total Vol: 425K L/d)

- Dairy Dev. Corp. (150K L/d)
- Sujal Foods (100K L/d)
- Small processors (50KL/d)
- Himalayan dairy (100K L/d)
- Sita Ram Gokul (25K L/d)

**Upcoming large processor**  
Chitwan Dairy (Chitwan)  
Projected Vol: 150 K L/d

**District Level Collection Facilities:**  
Number: 7 - 8  
Total Vol: 100K L/d  
Av. Price: Rs. 30 - 32 / L

**Private chilling vats & collectors:**  
Number: 4 - 5  
Vol: <10K L/d  
Price:Rs30(TBC)

**Small Dairies:**  
Number: less than 10  
Total Vol: 10K L/ day  
Price: Rs. 28-30/L

**Urban Cooperatives**  
- Total number: 15-20  
- Total Vol: 50K L/d  
- Av. price: Rs. 28 - 30/L

**Rural Cooperatives:**  
- Total number: 100+  
- Vol: 100K-150K L/d  
- Av. price = Rs. 28-30/L

**Medium/large dairy farmers in region:**  
- Total number: 100  
- Vol: 25K-30K L/d

**Potential small holder dairy farmers in region**  
(non- commercial production level):  
- Number: 200K-300K  
- Potential Vol: 1M L/d

**Small holder dairy farmers in region** (semi-commercial production level):  
- Number = 60K-70K  
- Vol: 300K-350K L/d  
- Av.price: Rs. 26-28/L

**Fresh Milk market**  
Urban Location:  
Kathmandu, Chitwan, Pokhara  
Vol: 400K-500K L/d  
Price: Rs. 34 -38/L

**Powdered Milk Market**  
Vol: 2.4 MT/day  
Price: Rs. 30 -34/L

**Processed Milk Products**  
Vol: 10K L/d (TBC)  
Price: Rs. 30 -34/L

**Rural Fresh Milk mrkt**  
Location: Chitwan, Dhading, Tanahu, Gorkha  
Vol: 70K L/d  
Price: Rs. 30 -34/L

## Input/ Service Provision

Financial products for poor farmers (e.g. loans, insurance, revolving funds) etc

Artificial Insemination Services (public and private)

Fodder/ Grass/ Feed, pasture improvement info, seeds

Transport Services (from large trucks to human-powered transport)

Dairy equipment and maintenance

Animal health advice and drugs (public and private)

Breeding stock

Info & knowledge (public and private; mass media and targeted communication and training)

Milk testing technologies

Technical skills: improved grass, modern dairy practices, basic business management

# ANNEX A: NOTES TO THE DAIRY MARKET MAP FOR WESTERN NEPAL

## KEY

**Percentages:** indicate current share of volume produced by farmers and channelled by intermediaries

**Arrows** show flow of money from end markets to producers

**Bold arrow:** Dominant market channel

**Normal arrow:** existent market channels

**Dotted arrow:** potential market channels

## MARKET CHAIN ACTORS

**Semi-commercial farmers (60,000-70,000):** Average productivity very low i.e. approx 1 litre/day per cow (2.3 litres/day for buffalos). Due to poor genetics (breed), low quality feedstuffs and health problems the milk quality is low further eroding their prices.

**Non-commercial farmers (250,000-300,000):** They have at least 1 or 2 milking cows/ buffalo but are either not producing adequate amount to sell or have not seen the incentives to be linked with the market channels to sell their milk.

**Cooperatives** are the traditional point of milk collection. Dhading, Tanahu and Gorkha have relatively few; Chitwan has over 100 mostly formed by DDC to secure their supply. Most have chilling facilities and some have technologies (though old) for pasteurization and minimal processing; however less than a third have any storage facilities.

**Large-scale processors:** Dairy Development Corporation is government-owned and the largest and most influential actor since 1969. It dominates provision of chilling facilities, which has hampered private investment up to now. Private processors are now starting to emerge and even overshadow it.

## SERVICES/INPUTS

All the services and input included in the Map have various levels of challenges in terms of outreach, affordability, appropriateness and quality.

**Milk quality testing technologies:** Services mostly embedded into cooperatives and/or large processors or dairies but transparency and impartiality is dubious. Intermediate technologies like lactometers are hard to find and not used properly when available.

**Financial products:** Current loans and insurance products are not suitable for small holder dairy farmers. Interest rates are relatively high and repayment options are not conducive for dairy farmers (does not take into account their production cycle).

**AI service:** Weak or non-existent. Gorkha district has no AI service and semen is unavailable. Service providers are not well trained or equipped for rural and remote locations resulting in low success rate and at times death of cow from infection.

**Breeding stock and cattle purchase markets:** Improved breeds of cattle come from India and there are stringent quarantine measures. Majority of small-scale farmers rely on poor supply and low quality of breeding stock.

**Fodder/ grass/ feed:** Nutrition inputs are one of the key constraints to realizing production potential. Lack of access to community forest is a problem and other options require more labour and time. Feed is not affordable as most is procured outside the district. Knowledge on improved grass cultivation is low and land to grow them scarce.

**Transport services:** labour for transporting milk to local market centres is scarce and/or expensive (partly due to migration). Large scale processors use small trucks with milk cans rather than chilled tankers – further eroding milk quality.

**Animal health advice and drugs (public and private):** The key issues are: Lack of out-reach: lack of quality services; lack of resources for service providers to upgrade their skills and knowledge. Traditional healers are currently an important but low-quality channel of advice for marginalised farmers.

**Dairy equipment and maintenance:** As large processors expand their supply catchment areas there will be a need to ensure that local service providers are available. Trained providers (electricians and metal-workers) are hard to find due to migration.

**Info & knowledge (public and private; mass media and targeted communication and training):** mass media, such as radio, targets few products at increasing the knowledge of small holder dairy farmers. From other sources, there is a lack of available knowledge providers for agro-vets, AI providers and other essential providers.

**Embedded services:** the majority of intermediary players are interested in improving bulking and chilling. Some processors have taken additional steps by hiring professional agro-vets who provide technical advice at collection point. However, the service is paid by all milk suppliers whether they ask for advice or not (cess deducted from every litre of milk). Processors are open to exploring new models as long as they make business sense.

## **BUSINESS ENVIRONMENT**

**Agriculture policies** such as agriculture subsidies, import duties and quarantine laws look good in theory but create an unfavourable environment for small holder dairy farmers in practice.

**Fat- and protein-based pricing scheme:** promoted by DDC and given its governmental nature and size this scheme acquired a “quasi-policy” status. However most farmers go down the route of low added value transactions where price is determined by volume.

**Conflict** has hit small holder farmers the hardest as there has been very low out-reach of government extension services to rural and remote areas. Continued political unrest has resulted in frequent strikes and *bandhs* which force farmers to throw away their milk as they lack storage facilities.

**Weak governance** has made this sector highly vulnerable to corruption, bribes and bureaucratic hassles e.g. on issues such as import of cattle and semen. Decreasing access to community and leasehold forest for small holder dairy farmers is a further issue.

**Milk holidays:** during flush periods large dairy processors often stop buying milk for a set number of days. Farmers have learned to live with this practice but it has a negative impact on the efficiency of the whole system. Instead of evening-out seasonality peaks it discourages emerging farmers from taking part in this sector, hampers value addition to extra supply (e.g. powdered milk, sweets and ice creams) and reinforces national dependency on imports during dry seasons.

## ANNEX B: RELATIONSHIP MATRIX TEMPLATE

Baseline, Current, and Future Picture of Relationships					
<b>BETWEEN (Market Actor 1) AND (Market Actor 2) E.G. FARMERS AND TRADERS</b>			<b>BETWEEN (Market Actor 2) AND (Market Actor 3) E.G. TRADER AND PROCESSOR</b>		
Baseline	Current	Future	Baseline	Current	Future
<b>Process 1 e.g.<sup>26</sup> Transactions and Purchasing</b>					
Spot selling and purchasing	Longer term relationships beginning to develop. Each trader has informal network of suppliers. Commitments from traders to take product from regular suppliers.	Long-term trading partnerships and relationships established and are growing business for both actors.			
<b>Process 2 e.g. Information Sharing/Transparency</b>					
			Limited, one-way flow of info.	Info on demand in the short and medium term; plus production issues. But info only provided on ad hoc basis. Buyers uneasy about providing traders with info on market and company's operations.	Flow of information enables joint efforts to respond to market demands, including innovation, and both actors can jointly take advantage of market opportunities.

<sup>26</sup> Examples adapted from SDCAsia BDS Project Report on the kaong Subsector

Baseline, Current, and Future Picture of Relationships					
BETWEEN (Market Actor 1) AND (Market Actor 2) E.G. FARMERS AND TRADERS			BETWEEN (Market Actor 2) AND (Market Actor 3) E.G. TRADER AND PROCESSOR		
Baseline	Current	Future	Baseline	Current	Future
<b>Process 3 e.g. Quality control</b>					
Quality control rarely done. % of rejects or price penalties	Quality control conducted at buying stations	Quality control the norm. Low % of rejection rates			
<b>Process 4 e.g. Value-added services and Co-operation</b>					
Traders provide limited learning and skills to farmers based on local norms.	Traders monitor production and delivery stages. Training and mentoring services to solve production bottlenecks. Buying stations set-up to reduce transportation costs and/or 'walking'.	Interdependence and partnership. Both parties work together to exploit cost, quality, technical, and marketing advantages.			
<b>Process 5 e.g. Basis of Competitive Offer</b>					
Price; Strong supply of product.	Increase volume of semi-processed products; Good quality products; Lower cost of transactions resulting in competitive pricing structure and more consistent prices.	All parties transact business under better conditions primarily through specific differentiation factors other than price.	Price and supply availability	Quality improvements: community is becoming known for top quality products. Economies of scale and lower costs of transaction.	Quality, cost efficiency and price, dependability and reliability, socially responsible trading practices.