TACIT KNOWLEDGE IN VALUE CHAIN MONITORING

GOOD PRACTICE PRINCIPLES AND LEARNING AREAS FOR THE FUTURE

In this brief, the GROOVE Learning Network presents what it has learned about how tacit knowledge of front-line staff is used to improve the results of value chain projects.

Why should my project use the tacit knowledge of my front-line staff members in its monitoring?

Because it will help you achieve better results. Value chain projects start with a general understanding of what is happening in the value chain and the social and market systems lying underneath. They use this understanding to plan strategies intended to facilitate improvements in the performance of the value chains in ways that benefit the poor. The systems in which teams work are complex and evolve, however, and in reality the initial knowledge about them is much more limited than we might like and quickly becomes out-of-date. This means that a considerable degree of uncertainty is an inevitable feature of implementation in value chain projects.

Effective projects accept this and adopt iterative improvement approaches to the way they intervene: experimenting and learning as they go. They continue to investigate as they act, reflecting on their efforts and adjusting their strategies. This allows them to become more sensitive to the systems in which they work, improve the effectiveness of their interventions and maximise results in the long-run.

Monitoring information is fundamental to achieving this. Information contributes to a greater understanding of the system and tracks whether interventions are having their intended effects. Formal monitoring systems fall short of delivering all the information necessary to

IDEA IN BRIEF

- Value chain projects begin implementation knowing much less than they might like, and their information becomes out of date quickly. Uncertainty is an inevitable feature of value chain development.
- Effective projects adopt iterative approaches to improve their performance over time and results in the long-run.
- To do this projects complement their formal monitoring systems by making use of the valuable insights that tacit knowledge of front-line staff can contribute, following five good practice principles.

enable this kind of iterative approach. In projects that effectively deploy an iterative improvement approach, tacit knowledge of front-line staff plays a crucial role to complement the formal monitoring system and serve the needs of teams wanting to learn, improve and reduce uncertainty.

Tacit knowledge has its limitations: it is situation-specific, making it risky to extrapolate. It is inherently subjective and can be biased. Finally, practically speaking, it is difficult to transfer it between people, given its basis on personal experience.

Despite these challenges, projects teams can and do use tacit knowledge of front-line staff to contribute critical, context-sensitive insights on which decision-makers rely to improve results. Drawing on the experience of its members and others, the GROOVE Learning Network has been exploring how they do this. This brief presents what the GROOVE has learned, in the form of five Good Practice Principles.

Key Terms Used in This Brief

Front-line staff refer to staff who directly engage with project partners and intended beneficiaries. This typically includes field teams, project managers and their coordinators and advisors, donor relationship managers and others who actively interact with market actors and other project stakeholders. Front-line staff make project decisions or can help to inform them with their on-going experience and expertise.
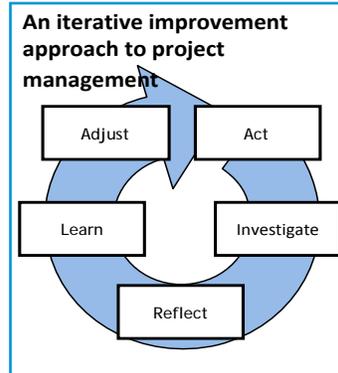
Tacit knowledge is inherently difficult to define. In this brief we use the term to refer to the 'know how' that staff learn from experience in their work. For front-line staff this typically relates to the involved understanding of the systems in which they work, the behaviour of those systems and the development of appropriate skills to interact sensitively with them. Because tacit knowledge emerges from personal experience of a context, it is also inherently difficult to pass onto others - especially in writing. The term '**explicit knowledge**' refers to the opposite of tacit knowledge: knowledge that can be easily codified in terms of written descriptions and data.

Causal logic: This is the underlying logic of the intervention. It is a series of hypotheses or assumptions about cause-and-effect relationships that explain how a set of intervention activities are expected to result in outcomes and in turn contribute to desired impact objectives. Logical frameworks have existed for a long time as summaries of causal logics. More recently it has become best practice to articulate a causal logic in much more detail, often using branching chains. These 'maps' are often called results chains, or causal models.

AN EXAMPLE FROM CARE'S WORK IN BANGLADESH

CARE's Strengthening the Dairy Value Chain (SDVC) project was designed to double the dairy-related incomes of 35,000 smallholder dairy producers in Bangladesh. The project's causal logic assumed that the most effective way of achieving this objective was to increase the participation of the target producers in the formal sector. This would require improved smallholder production practices, increased access to affordable artificial insemination and veterinary services, increased access to quality feed and improved efficiency and transparency in the dairy supply chain. One year into the project, progress was going well, successfully creating linkages between over 17,000 producers and formal sector chilling plant operators.

Around this time, there was a crisis in the dairy sector in Asia due to a large volume of tainted milk in China. Global buyers stopped purchasing milk from China and other major exporters. This left the private sector in China, India and elsewhere with a glut of milk that they wanted to offload quickly without losing too much money. Favorable trade conditions in Bangladesh enabled dairy processors across Asia to rapidly transform their milk into dry milk powder and sell it directly to major dairy processors in Dhaka for prices below what the Bangladeshi dairies would have paid to source milk domestically.

An iterative improvement approach to project management

Adjust / Act / Learn / Investigate / Reflect

Because of this, the Bangladeshi private sector stopped sourcing milk from local smallholders – essentially undermining CARE's SDVC strategy. SDVC's field staff – well aware of the project's causal logic – reported the declines in purchasing from the formal sector they saw to the project's management. The team worked together to identify an alternative sales strategy to promote among the producers.

A rapid market assessment was carried out, directed by the knowledge of the field staff of the local context and its potential. CARE was quickly able determine the volume of milk that could be channeled through sweet shops, tea stalls, hotels and milk bars and other local, informal buyers and how this demand could be increased to absorb the glut in supply. Drawing on field staff's knowledge, the team were able develop and quickly roll out a new informal local market strategy that was sensitive to the relationships and dynamics of value chain actors and consumers in the area. The strategy involved working with existing local groups and networks to stimulate local demand for fresh milk products.

It was as a result of the SDVC team's ability to combine the tacit knowledge of field staff, existing data from the formal monitoring system and new data from the market assessment that participating producers were able to maintain their production volumes and prices and build more stable relationships with local informal and semi-formal buyers.

As the formal dairy market in Bangladesh recovered, CARE was in a position to take forward its formal sector strategy while continuing to build on the learning and existing achievements in the informal and semi-formal sector, consequences from these unexpected events in China.

4 Five Good Practice Principles for Tacit Knowledge in VC Monitoring

Encourage a culture of critical reflection, sharing and engagement in learning among front-line staff.

Enable front-line staff to understand the objectives, logic of the interventions and their hypotheses.

Ensure that front-line staff understand each others' roles and focuses.

Balance orientation towards known hypotheses and open-mindedness towards the unexpected.

Mitigate risks of tacit knowledge by triangulating information to validate evidence.

PRINCIPLES IN DETAIL

Principle 1: Encourage a culture of critical reflection, sharing and engagement in learning among front-line staff

- With the right incentives in place, front-line staff members are encouraged to reflect critically on their work and question its effectiveness.
- A trusting environment makes the team feel comfortable in sharing these considerations and views.
- Front-line staff members are much more likely to continue sharing after the first instance if they are able to see the impact of doing so.
- Transparency about the way shared information is used in decision-making is a good place to build engagement in learning.
- Sharing negative experiences and failures is very valuable for the purposes of learning and long-term success, often more so than positive sharing.

Principle 2: Enable front-line staff to understand the objectives, logic of the interventions and the hypotheses involved

- Front-line staff members who understand the causal logic of the project and know how their specific tasks are intended to contribute to overall objectives are more likely to be able to recognize the strategic relevance of tacit knowledge they possess.
- Facilitating group sessions to map and discuss the causal logic of interventions creates a shared understanding and sense of ownership over the interventions. This increases the likelihood of font-line staff being able to share relevant information with each other.

Principle 3: Ensure that front-line staff understand each others' roles and focuses

- Staff members who understand one another's activities and progress are more likely to realize if they are sitting on important information that other team members lack but might find useful.

- Rewarding in a public way 'knowledge champions' who make sharing a matter of routine encourages others to follow.

Principle 4: Balance orientation towards known hypotheses and open-mindedness towards the unexpected

- Front-line staff who have a good understanding of the causal logic of interventions are more capable of recognizing when something validates or puts into question a hypothesis or assumption in the logic.
- Best performing projects, however, encourage front-line staff to recognize the inevitable uncertainty of working in systems that are complex and continually evolving.
- These teams encourage curiosity and open-ended reflection to give them the best chance of becoming aware of unexpected patterns of change that regularly create unforeseen opportunities and risks.

Principle 5: Mitigate risks of tacit knowledge by triangulating information to validate evidence

- The tacit knowledge of front-line staff tends to be very situation-specific and its subjectivity makes it easily biased, even if this is not intentional.
- What is experienced and observed in one situation can however signal an underlying feature in the value chain that will emerge elsewhere as well. Extrapolation of tacit knowledge can therefore be effective in providing an 'early warning' system of sorts to managers.
- Tacit knowledge tends to be 'ready-for-use' as it comes and this makes it valuable in urgent situations. However, conclusions and strategic decisions made based solely on tacit knowledge can turn out to be misguided and are not advisable.
- It is best to validate any piece of tacit knowledge with other perspectives and triangulate it with formal monitoring data before it directs strategic decisions.

PRINCIPLES IN ACTION

When the GROOVE Learning Network reviewed the experiences of its members, it found a number of recurring practices deployed by projects to facilitate the use of tacit knowledge in monitoring. These are by no means exhaustive, nor are they necessarily best practice. They do, however, offer some tried-and-tested approaches for enabling the flow of tacit knowledge.

Convening regular reflection meetings

First of all, every project that the GROOVE looked at convenes periodic review meetings. These meetings are participated in by all or most of the project's team, including front-line staff, and often partners. The meetings are always much more than just for the coordination of timely and on-budget activities. They all involve the review of any new formal monitoring information about how value chain actors are responding to the project actions. In many projects, such as CHF's Youth Engagement in Service Delivery (YES) program, results are reviewed against

time-bound targets. Based on the monitoring information, there is always a discussion about whether results match up to the expectations in design and planning, and when they don't, why not. This is where tacit knowledge comes out.

Using visual tools as the basis for understanding and reflection

At reflection meetings, many projects use simple analytical frameworks as starting points of common understanding and the basis for sharing experiences between team members. These frameworks always have clear visual explanatory power.

In Practical Action's Market Access for Smallholder Dairy Farmers project in Nepal, the causal logics of specific interventions under review were mapped out in participatory exercises. This created the opportunity for front-line staff to discuss how implementation was unfolding as compared to the original design. In one case – relating to public-private partnerships in animal health fairs – the process led to the identification of a small number of additional, temporary indicators to triangulate tacit knowledge of front-line staff. Information against these indicators was collected in the intervening period and was reported alongside the causal logic at a subsequent meeting. The information confirmed that some aspects of the model were working very well – partner commitments and contributions towards finance and organisation of the fairs – and others were not – participation of very low-income farmers.

A revised strategy of awareness-raising and marketing of the fairs could then be developed, based on evidence from a combination of tacit knowledge and formal monitoring information. CHF's Enabling Market Integration through Rural Group Empowerment program in Rwanda supports smallholders forming nascent cooperatives to gain the skills they need to be more competitive in the marketplace and increase the quality of their production. The program needed an index against which to measure the strengths and weaknesses of these growing businesses so that program support could be targeted better. After initial, problematic attempts to develop the index using a model of what a high capacity cooperative looked like, the team changed tactic. They broke the process of index development into a detailed decision tree of yes-no questions about cooperative governance, management and capacity for growth. Compiling this decision tree was a real team effort, drawing on the knowledge of a number of different team members to capture the nuances about how cooperatives develop in capacity over time. This decision tree is now used regularly by the team in reflection meetings to judge the program's performance against its targets for building capacity of the cooperatives.

Setting learning agendas

In CARE's Productive Safety Net Program (PSNP) Plus Project in Ethiopia, a learning agenda was developed in a highly participatory way with a wide range of staff from across the organizational chart and a multi-partner consortium. The aim of the program was to support chronically food insecure households to 'graduate' off of the government-sponsored safety net and into positions of food security, through facilitative and market-oriented approaches. Collaborative mapping and prioritization of assumptions in the program's causal logic took place, resulting in learning themes relevant across the team. Specific actions around them were planned and implemented to promote program-wide reflection and improved implementation. By engaging front-line staff

in the exercise, the program's management ensured everyone understood what the big picture actually was and empowered them to make changes to help achieve the program's goal. The effort was so effective that the final evaluation cited the collective mapping and development of a program-wide learning agenda as a cornerstone of the team's ability to execute and adapt to achieve results.

Practical Action's Shomparko project worked to make the livestock sector work better for poor women in Bangladesh. A key objective of the project was to build the capacity of 12 local NGO partners in four districts to take on more systemic and facilitative approaches in their agricultural work. Every quarter, reflection meetings with partners took place. During each meeting, one common issue of strategic interest and concern was prioritized in a participatory way. Concerted learning efforts – linked to planned implementation activities and sometimes using dedicated resources – were made over the subsequent quarter to build knowledge of the issue. The findings were presented at the next meeting and often reflected considerable capture of tacit knowledge. As a result of these quarterly learning agendas, the project was able to accelerate the spread of successful approaches and minimize the repetition of mistakes across the partners, while facilitating them to support each others' learning and capacity building process.

Designating 'recon teams'

With the learning agenda for the quarter defined, some of Practical Action's Shomparko project partners designated 'recon teams' from within their teams. It was the responsibility of the recon teams to facilitate further discussions, often with market actors, and compile the partner's contribution to the learning efforts. These partners rotated who was part of the recon teams, with some flexibility for the inclusion of technical specialists for certain questions when appropriate.

CHF International's YES program also has recon teams of sorts. YES takes a value chain approach to empower urban youths to build viable businesses in the solid waste sector. To build its institutional knowledge about waste management practices, two sub-teams were formed, one of environmental resources specialists and one of economic and financial specialists. When a programmatic challenge emerges, the teams are tasked to research potential solutions from their respective disciplinary perspectives and share them with the entire team. At weekly reflection meetings, the broader team considers the solutions from each sub-team, how they could fit together, and what steps to take next.

One of the benefits of designated recon teams is to engage all front-line staff in organized, team-based learning activities where they can hone their skills at working together to pool their respective knowledge. Another is that it diffuses the effort across a broad set of team members.

Making report generation participatory

The approach to report generation in CARE's SDVC Project in Bangladesh is a process of embedded learning and reflection throughout the project's management structure. This ensures ongoing information flows in multiple directions. Months before a semi-annual report is due,

teams begin the process of visiting producer group meetings where participatory performance tracking tools are routinely used by the groups themselves to assess their progress. These results feed into rankings for all groups. These are then reviewed by groups of field facilitators – the most front-line of all staff on the project. The results are fed up to Program Officers, who then sit together to review results and communicate with both field facilitators and regional coordinators. Regional coordinators are part of the core management team and meet with other core team members including the M&E lead, the chief of party and various technical advisors. This group then sits and reviews results before the final content for the report is generated. This process is augmented by quarterly all-staff meetings in each region of implementation (50 + staff per region) and an annual national all-staff meeting in which all staff – from the finance manager and admin officer through the drivers to the field facilitators – are engaged in a collective reflection on progress and encouraged to make suggestions for the coming year of implementation. The program's focus on deep and ongoing engagement of all staff builds trust and commitment within the team, leading to a culture of learning and support.

In CHF International's YES program, elements of CARE's approach in SDVC are also apparent, but less formally. The project Director encourages staff to send draft documents they produce that need his final edits to the rest of the team to give input and for knowledge sharing. All project staff attest to the invaluable contributions of sometimes unlikely colleagues in the team. In this program, informal but effective knowledge sharing is very strong, helping staff understand each other's roles and focuses and what knowledge might be useful from whom.

Appointing non-specialist focal point persons

In CHF's YES program, one member of the team is assigned as the focal point person for each project partner. Issues relating to any given partner always extend beyond the focal point person's specialist expertise, so it is necessary for them to seek advice and support frequently from any number of different technical colleagues, each of whom are themselves focal point persons for other partners. By design, this arrangement makes information flow in multiple directions, helps the team understand each other's roles and focuses, builds trust and stakes in each other's efforts and performance. The cross-pollination that the arrangement facilitates also builds the expertise of team members in new areas.

Rewarding knowledge champions with recognition

Practical Action's Impact Awards are a competition for case studies of learning across its international markets program. Front-line staff is encouraged to take part, and are coached and assisted by their team leaders and the international learning team to consider their project critically, within the framework of questions in the international learning agenda. The annual winner and runners up in the competition are sent a certificate of thanks by the CEO, and a poster of their case study designed by the communications and marketing team in the head office. In addition to that, the CEO has started to use the case studies in his internal and external communications and, when this happens, the coordinator of the awards makes sure that the author of the study hears about it. The case studies are also submitted as papers at international conferences, leading to opportunities for the authors of the cases to travel to conferences if their paper is accepted.

In CHF's YES program, quarterly reflection workshops with partners also involve sharing of knowledge and learning through a competition. Although there are usually small rewards for the best contributing organization, they are almost always humoristic and insignificant in themselves. The real reward comes from the recognition from other organizations in an atmosphere of competition that the program team has managed to foster.

In both cases, the competitions and rewards encourage a culture that values critical reflection, sharing and engagement in learning among front-line staff.

Leading by example

Finally, every project that the GROOVE looked at where tacit knowledge flowed well had, at its outset, committed leaders who drove the culture of sharing and learning by example. As the culture develops, the role of these leaders becomes less important, but it's very important to kick off the change.

HYPOTHESES AND AREAS OF LEARNING FOR THE FUTURE

This brief was intended to advance thinking and practice. As with any brief focused on learning, this is clearly not the end—there is always a new cycle and frontier. The following thoughts reflect some of the issues that arose in the development of this brief.

- Front-line staff members are more willing to share negative experiences when the evaluation of their performance puts greater emphasis on their contribution to the collective learning process over time and mid- to long-term outcomes of the team rather than short-term individual results.
- A robust understanding of the objectives and causal logic of interventions is best nurtured by facilitating front-line staff to explore and determine it for themselves. Though this requires more resources than handing staff pre-prepared objectives, it is a worthwhile investment for the long-term effectiveness of the project.
- Over-emphasis on individual responsibility can be detrimental to information-sharing in a competitive environment. Instead, emphasize the shared objectives and the benefits of regular information flow.
- Feedback loops are a helpful and feasible concept around which to orient front-line staff to look out for expected and unexpected opportunities and risks emerging in the systems in which they work.
- Two properties of cause-and-effect relationships present an ongoing challenge for decision-makers who want to be responsive to rapid information: uncertain lag times and tipping points.

Where can I find tools on this?

The PMSD Roadmap: http://www.slideshare.net/pmsd-map
Participatory Market System Development is Practical Action's approach to value chain development. The Roadmap offers in-depth guidance, training resources and case studies to help you take an iterative improvement approach in your value chain projects. It includes a section on orienting monitoring and evaluation to achieve this (to be published shortly).

CARE Market Engagement Capacity Corner:
http://edu.care.org/Pages/CapacityCorner.aspx
At the Capacity Corner you'll find a variety of materials to help you strengthen value chain development programming, including an 11-module course on monitoring and evaluation for value chain projects that covers the use of staff observations and experiential knowledge.

The Donor Committee for Enterprise Development (DCED)'s Standard for Measuring Results in Private Sector Development:
http://www.enterprise-development.org/page/measuring-and-reporting-results
The DCED Standard offers a framework of criteria to meet for good practices in value chain development monitoring and evaluation.

USAID's Microlinks Value Chain Wiki:
http://microlinks.kdid.org/good-practice-center/value-chain-wiki
The Microenterprise Learning, Information and Knowledge-Sharing (Microlinks) website includes, as part of its Good Practice Center, the Value Chain Wiki. The Wiki contains detailed guidance and a large library of resources to support value chain development programming, including a section on monitoring and evaluation.