



Making Sense of 'Messiness'

Monitoring and measuring change in market systems: a practitioner's perspective



Abstract

Market systems are intricate webs of players, actions and interactions that take time and effort to understand. For programmes that want to develop and change market systems, as opposed to becoming part of and potentially undermining them, it is important to make sense of these intricacies - the 'messiness' - in order to understand the effects that interventions are having and to assess whether or not pro-poor outcomes are likely to endure.

In the first part of the paper, the authors set out the tools and processes that a DFID-funded programme in Nepal, Samarth-NMDP, uses to help deal with market system 'messiness', building on existing good practice in monitoring and results measurement from the *DCED Standard*. The second part of the paper details experiences of using these tools and processes during the programme's first eighteen months of implementation.

About Samarth-NMDP

Samarth Nepal Market Development Programme (Samarth-NMDP) aims to reduce poverty in Nepal by applying a market systems development approach. Funded by the UK Department for International Development (DFID), Samarth-NMDP is delivered in partnership with the Government of Nepal by a consortium of Adam Smith International, The Springfield Centre for Business in Development, and Swisscontact.

Samarth-NMDP focuses on catalysing pro-poor growth in a range of agricultural and rural sectors, including in ginger, vegetables, dairy, aquaculture, swine, media, mechanisation and tourism. A number of interventions in these sectors are implemented with the support of partner organisations. The programme began in 2012 and is expected to run until 2017.

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Introduction

The market systems development approach

Samarth-NMDP adopts a market systems approach to poverty reduction in order to improve the inclusiveness of markets in which rural households in Nepal participateⁱ. The intention is to catalyse lasting changes in how markets function - usually relating to goods, services and access to markets - which allow poor women and men to take advantage of opportunities that contribute to a reduction in poverty even after interventions have ceased. These are known as systemic changesⁱⁱ.

To incite such changes, Samarth-NMDP focuses on improving the specific market functions and rules that influence transactions currently disadvantaging the poor. The programme operates as a temporary facilitator, attempting to stimulate public and private players, who have a demonstrated commitment to change, to adopt new or improved roles and innovations. The programme achieves this through running a series of interventions that seek to build the incentives and capacities of such players to uphold behavioural changes in the long-term.

The implications of the approach on monitoring and results measurement

The nature of the approach has a significant bearing on how Samarth-NMDP monitors and measures results. The market systems that project teams work in are not straight-forward, nor wholly predictableⁱⁱⁱ. In the early stages of implementation, in particular, systems appear somewhat 'messy', characterised by a constellation of players, roles, rules and relationships that are difficult for interveners to comprehend in their entirety.

Understanding how market systems work takes time, curiosity and a certain amount of experimentation. It requires a programme-wide acceptance of 'trial and error', a commitment to accumulating relevant knowledge, and a willingness to refine or throw-out strategies as teams learn more. Indeed, monitoring and measuring market player receptiveness to the systemic changes being promoted and collecting, interpreting and acting upon accurate data is the basis for decision-making. If this is done well, projects can improve their performance in real-time and increase the likelihood of attaining significant impact.

Monitoring and results measurement should help project teams ask the right questions and point them towards where they should look for answers. To support project teams to improve performance, useful data must be generated - both formally and informally - and interpreted consistently and often to make decisions about how, when and with whom to intervene.

The focus of these questions should also be on understanding the *means* by which poverty reduction occurs, not just the *ends* of growth and incomes. This requires questioning whether behaviour and practice changes are able to sustain new opportunities for the poor. Looking closely at the players within market systems and verifying their motivation and capabilities to continue to perform the new or improved roles they have adopted, as well as how they might react to future challenges, provides the foundations for gauging whether impact is likely to be sustainable or short-lived. It also means asking questions about spill-over effects and looking for answers in the magnitude of the wider market system response.

ⁱ Market systems development is also known as Making Markets Work for the Poor (M4P). For more information about the approach see the *Operational Guide*, *Synthesis* and *Perspectives* papers on the Making Markets Work for the Poor Approach commissioned by DFID and the Swiss Agency for Development and Cooperation (SDC).

ⁱⁱ Systemic change is explained in more detail in Part One

ⁱⁱⁱ In Samarth-NMDP terminology, *project teams* are groups of staff assigned to work on one particular market (with a core or cross-cutting value chain at its centre), and each *project* consists of a series of interventions.

To guide project teams in their line of questioning and support their search for answers, a number of key *tools* can be used, which are operationalised through routine *processes* that support knowledge accumulation and inform intervention decision-making^{iv}.

The paper offers reflections and advice aimed at peers using the market systems development approach who are engaged in setting up or refining ways in which they monitor and measure results^v. The first part of the paper provides an overview of the tools and associated processes adopted by Samarth-NMDP, which are then described in more detail in *Annexes A and B*. The second part of the paper covers experiences of using - and adapting - these during Samarth-NMDP's first eighteen months of implementation, as the programme's own understanding and knowledge of market systems has increased.

^{iv} In this paper: *tools* are the essential supporting structures of how results are monitored and measured (e.g. results chains), and *processes* are the series of actions, events and documents which provide space for these tools to be interpreted (e.g. monthly meetings).

^v While all Samarth-NMDP sectors informed the case study, only those sectors sampled as part of a DCED results measurement audit in August 2013 (ginger, dairy and swine) have been used as 'real life' examples. Examples are based on observations made by project team staff during monthly and quarterly review meetings, and direct quotes are taken from a series of questionnaires completed by Samarth-NMDP staff and implementing partners in these three sectors in September 2013.

Part 1: Developing a Results Management System that deals with 'messiness'

The first part of the paper explores how Samarth-NMDP has built upon existing good practice in the field of monitoring and results measurement to develop a *Results Management System* (from now on referred to as the *System*) that supports its project teams to improve intervention effectiveness^{vi}. The *System* augments a well-used tool in the form of results chains, makes use of a relatively new one for assessing systemic change, and includes a number of processes, both interactive and document-based, within which the tools and actions around them are applied. Together, these help project teams to navigate the 'messiness' of the market systems they are looking to change.

The results chain

According to the Samarth-NMDP Dairy Project Manager, results chains are the “*backbone of any intervention*” – and, indeed, results chains constitute the key monitoring tool in Samarth-NMDP. These causal models are vital to set out how each intervention is expected to contribute to permanent changes in how a market system functions, and the effect on the poor. They constitute a living guide for project teams, depicting the relationship between what they do, the system-level changes they are trying to achieve, and the pathway to poverty reduction.

The discipline of developing results chains prior to beginning a project is useful, lending staff some degree of focus amid the perceived ‘chaos’ while they possess only a limited understanding of how a market system functions. Far from being rigid plans or blueprints to follow at all costs, results chains as used in Samarth-NMDP have proven highly amenable to dynamic planning, requiring teams to simply update results chain boxes and their associated indicators as and when a team's understanding of how change is likely to take place improves^{vii}.

“Results Chain[s] help establish rigour in results measurement which can [be] lack[ing] in traditional ‘logframed’ projects that rely mostly on one-off impact evaluations. Results chains help to clearly identify data needs, and make results management an on-going process of collecting evidence of successes and learning.”

Implementing Partner - Mercy Corps Nepal

Results chains, however, are only as useful as what is written into them, the indicators used to measure change at each step and the plans for data collection and analysis, so good practice in their composition and usage - as guided by the *DCED Standard for Results Measurement* - is essential^{viii}. Samarth-NMDP used the *DCED Standard* both to construct a *System* capable of producing estimates of results achieved as well as to support the generation of timely and relevant information for use by project teams^{ix}.

^{vi} Other programmes call this a ‘Monitoring and Results Measurement System’, ‘M&E System’ or an ‘Impact Assessment System’.

^{vii} For each intervention and each sector, Samarth-NMDP draws a results chain complete with underlying assumptions, a set of indicators, a plan of ‘when, how and by who’ data is collected, an attribution strategy and projected impact. All of these are updated as and when appropriate as a result of project team progress and learning.

^{viii} The *DCED Standard*, which emerged from practitioner experiences of monitoring and measuring results in private sector development, outlines the key elements for a programme to be able to credibly estimate results. In August 2013, Samarth-NMDP became the first programme to go through and pass an ‘in place’ audit against the *Standard*. The full independent auditor’s report can be read on the DCED website at <http://www.enterprise-development.org/page/audits>

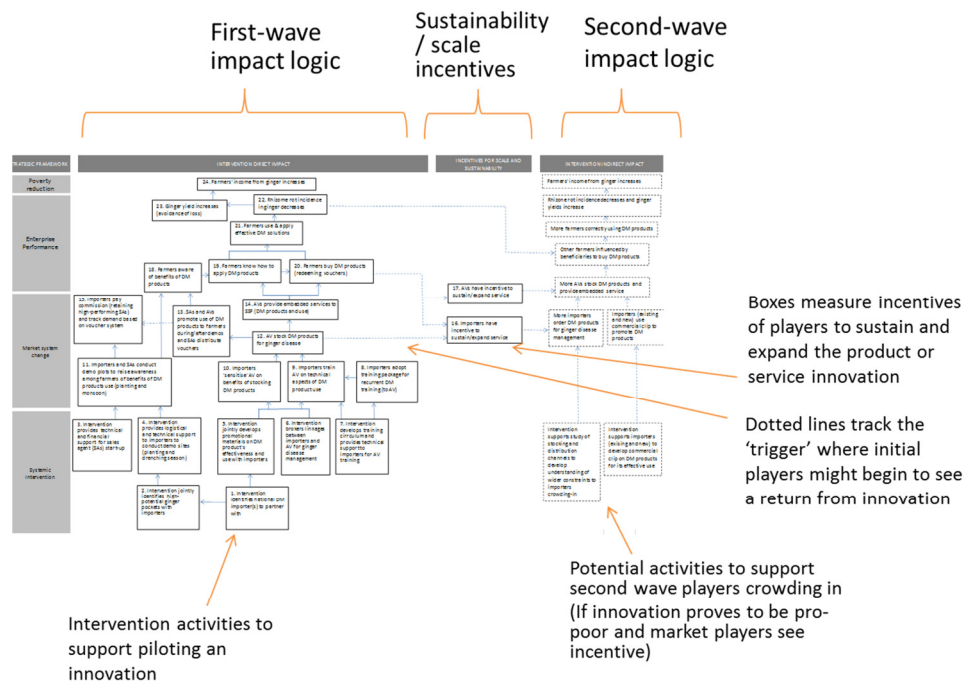
^{ix} The same data that is used to ‘improve’ results also has utility to ‘prove’ results achieved, since the measures that help teams better understand effectiveness can likewise constitute indicators that confirm progress, causality and attribution. ‘Prove’, in this sense, does not equate to scientific proof, but rather the provision of credible estimations that combine rigour with practicality.

Augmenting the results chain

Samarth-NMDD categorises impact in two ways: 'first-wave' and 'second-wave' impact^x. First-wave impact is generated as a result of the market players with whom the project has initially and temporarily partnered having successfully piloted role changes or a pro-poor innovation. However, the intention is always for more players to crowd-in to this space and themselves adopt new behaviours, either as a result of a further intervention or autonomously. This second-wave impact not only brings a greater breadth of impact, but also strengthens the sustainability of pro-poor outcomes^{xi}.

It is important that second-wave impact is understood and tracked. To aid in this, Samarth-NMDD augmented the standard results chain by adding the node from where second-wave impact was predicted to stem. A new column, 'incentives for sustainability and scale', was inserted as depicted in *Figure 1* to capture the specific intent of initial pilot-phase partners to continue, or even expand upon, the pro-poor innovation^{xii}. This acknowledges the need for market players to first realise a benefit from experimenting with a new way of working before further investments are made in promoting and amplifying something that has not yet been proven to stick, even at a localised level. The boxes in the additional column therefore mark the point where what has been pioneered is deemed more likely to sustain, grow and evolve - and where, in effect, market player ownership confers some measure of systemic status on what was previously only an intervention-supported experiment. An example of this from a Samarth-NMDD results chain from in ginger sector is included in *Annex A*.

Figure 1: Augmented results chain depicting 'first-wave' and 'second-wave' changes



Operationally, this point also represents a strategic shift for the project: from a 'piloting phase' (phase one of Samarth-NMDD projects) to a 'crowding in phase' (phase two). This shift can itself be 'messy'. It may be non-

^x Impact in Samarth-NMDD is defined as positive or negative changes among the programme target groups: poor farmers and entrepreneurs living on less than US\$2.50 per day.

^{xi} This is also known as 'indirect impact' by others in the development field, however, the authors prefer the alternative expression 'second-wave impact'. The term 'indirect impact' gives the false impression that such impact was not initially intended or planned for.

^{xii} Exact incentives are of course dependent on the nature of the market and players within them. In general, the programme tracks net return for private entities, as well as analysing business plans and conducting more qualitative in-depth interviews with key decision-makers, such as business owners.

sequential: for example, other players may crowd-in around a buzz, even if the model is not yet proven viable. It may also be reversible. For example, the incentives of those with whom the project initially experimented - even successfully - may change over time. Lastly, the shift between project phases may not be mutually exclusive. For example, the players that had originally experimented with a new way of working may only have full ownership over their new or improved roles following a further less intense spell of support and this may occur in parallel to other players being supported to crowd-in.

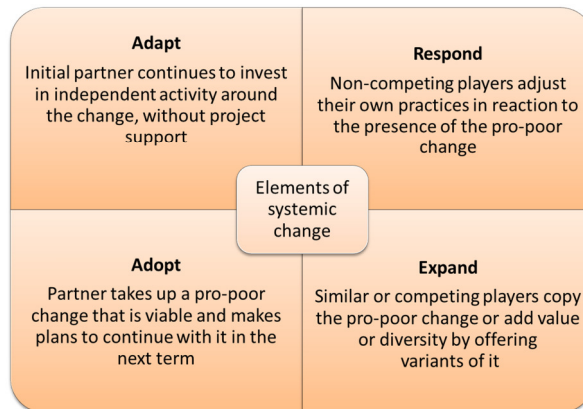
Given this 'messiness', project teams were discouraged from over-specifying the means by which second-wave impact may come about and from setting out precise phase two activities at the outset of phase one, lest they ignore nascent signals from the market itself. Teams were instead advised to think through where the points for wider system response may lie as well as a provisional scope of work for how second-wave impact could be amplified^{xiii}.

A tool to measure systemic change

Samarth-NMDP considers a change to be systemic when it has taken root in the market system. In other words, when the new and improved behaviours of permanent market players are sustained, independent of project support, and manifest themselves beyond the market players the project has directly partnered with. Each project team must be clear about the systemic change they are aiming for and focus on its achievement^{xiv}.

Whilst results chains are a useful tool to map the sequence and narrative of change, they struggle to capture change beyond the piloting phase, and the extent to which interventions are having a transformational effect on the wider market^{xv}. To compensate, Samarth-NMDP utilises the tool in *Figure 2* to define - at any given point in time - whether changes instigated by projects have a systemic quality^{xvi}. Definitions and sample indicators for each of the four elements - adopt, adapt, expand, and respond - are set out in *Annex A*.

Figure 2: Tool to assess systemic change



This tool helps teams to look for and capture the reactions of market players, be they foreseen or unforeseen, in whatever order they occur. With it, project teams are equipped to track roles changes and innovations post-pilot to assess ownership and reflect on whether there are signs of new behaviours sustaining: did players qualitatively or quantitatively invest in the innovation without support? Did other, perhaps competing players,

^{xiii} The *DCED Standard* also provides a means to measure the second-wave effect generated by new ways of working, and verifying the larger numbers that result from this kind of impact.

^{xiv} Possessing a clear vision of systemic change, and focusing on this, helps mitigate a risk associated with market systems development: that projects end up supporting individual organisations more than they had intended. Doing this could in fact distort the market (instead of developing it) and even promote unfair competition.

^{xv} The programme is currently trialling the integration of 'sustainability indicators' in its results chains - see *Annex A* for more details and example sustainability indicators.

^{xvi} The tool was developed by The Springfield Centre, and was first utilised by the Katalyst programme in Bangladesh in 2011. See *Good Practices in Facilitation: The Systemic Change Framework. The Springfield Centre (2011)*

assume new roles, or did the innovation spread - is there diversity? Did market players in a position to support the innovation adjust what they do to accommodate its presence?

Samarth-NMDP colour-codes the tool to give facilitators a visual depiction of the elements that are judged to have been reached^{xvii}. This helps to assess how embedded role changes and innovations have become as well as the magnitude of the system response. It also draws a project team's attention to where it is appropriate to intervene next, with whom and how, so as to further strengthen the systemic qualities of the initial behaviour changes^{xviii}.

Instituting processes that support decision-making

In support of operationalising the two tools, Samarth-NMDP has put in place a number of complementary processes, both interactive and document-based, to improve project team understanding of the effects that interventions are having and to provide an evidence-base that informs decision-making. These processes encompass a deliberate programme-wide strategy to support teams to deal with the wealth of incoming information, sorting the relevant from the irrelevant, and to encourage information-seeking and analytical behaviours that allow teams to reflect on what does and does not work in 'messy' systems in real-time.

Formal processes

Further to their routine informal interactions, project teams are required to sit and formally review intervention performance on monthly and quarterly bases. In quarterly meetings, teams review progress against the latest iteration of their intervention results chains, reflecting on the status of activities undertaken, the appropriateness of the present intervention strategy in bringing about the changes desired, and whether or not both the causal logic and assumptions still hold. Here, results chain boxes are colour-coded to both depict progress and give an early indication of where there may be challenges that require further analysis, or where visions and strategies need to be revisited (see the Update Format and colour-coding guide in [Annex B](#)). In monthly meetings, teams focus more on the progress of specific partnerships and whether or not partners are proving to be an effective vehicle for inciting the desired systemic change(s). Here, formal indicators are reviewed alongside more rapid and non-statistically robust early warning checks (see [Annex B](#)). Teams are encouraged to complete standard programme templates to record decisions made during quarterly and monthly review meetings (for the formats see [Annex B](#)) and update their results chains to reflect changes in direction, if appropriate.

Informal processes

In conjunction with the above, each project team is requested to keep an *Observations Diary* and an *Activity Log*, which record the level of partner buy-in for each intervention. The *Diaries* and *Logs* require individuals to document relevant information from market player interactions and insights from field visits, so that these can be discussed among the whole project team at the next available opportunity. *Diaries* and *Logs* effectively constitute a 'communal memory' for each project team - of market intelligence and insight as well as a narrative of a particular partner's ownership over what they are experimenting with (for sample contents of the *Diary* and *Log*, see [Annex B](#)). These are crucial components of the programme's approach to learning and knowledge management and their utilisation ensures a flow of information and discussion points for debate in quarterly and monthly meetings.

^{xvii} A green rating indicates that evidence has been collected and that an element has been reached, a yellow rating indicates tentative or unverified evidence, while a blank box suggests that there is no evidence of change against the element.

^{xviii} This tool is also used to report on achievements against the Samarth-NMDP logframe, which measures the number of sectors where market players have begun to 'buy in' to a new way of working, contributing their time and resources towards a proven pro-poor solution, and the number of sectors where there is evidence of a wider system response - measured, in the Samarth-NMDP logframe, in terms of role changes and innovations being replicated.

Part 2: The Results Management System in use

The second part of the paper illustrates how results management tools and processes have been operationalised to date, particularly how they have enabled both significant changes and smaller refinements in the strategies of several projects. It also explains the practical implications of such changes, how the *System* has evolved over time, and the cultural values and staff competencies the programme has been promoting in order for results management to be used effectively.

Adjusting strategies

Although subject to a degree of flux - generating resistance to or opportunities for change - the market systems that Samarth-NMDP intervenes in are rarely ever-changing. Rather than being pre-occupied with this flux, teams have needed to come to terms with the circumstances (such as context, capacities, partner incentives) that they were not fully knowledgeable of prior to intervening. In other words, the 'unknowns'.

These unknowns have not proven impossible to locate, and many were in fact not hidden characteristics. They have often become known through a simple function of time, familiarity and discrete action. Better understanding how something 'messy' works is a process, not an event – and the extent to which systems are understood is time- and action-dependent. The quantity, quality and diversity of interactions that staff have with the market and their ability to correctly 'read' the real motivations, incentives and buy-in of players largely dictates how quickly projects uncover unknowns. This is the natural progression of a trial and error approach in action.

"Revisiting the project objectives, strategies and tactics might seem cumbersome, but it's better than all the 'what ifs' in the end."

Samarth-NMDP Sector Analyst, quoted during a quarterly strategic review in October 2013

Though it will soon require updating, having a level of analysis that supports the composition of a sensible theory of change and an initial results chain, before a pilot begins, is an important discipline. While this will always be based on a partial understanding of how players and systems work, Samarth-NMDP cautions against intervening blindly: a balance must be struck between too much and too little *ex ante* analysis. Whatever the initial balance, the imperative remains that as understanding improves, and if new opportunities come to light, project teams must always be ready to revise or throw-out their old plans.

Revising strategies during the piloting phase

By September 2013, just twelve months after programme start-up, almost all interventions and their respective results chains in Samarth-NMDP had evolved, in some cases quite considerably away from the initial drafts.

For example, after a study investigating the sustainability of a previous programme's work in ginger storage technologies, the **ginger project team** decided to amend their intervention strategy, which was originally aimed at communicating the benefits to smallholders of constructing their own individual storage pits out of low-cost materials. The study indicated that the relatively low capacity-utilisation of individual pits had ultimately conferred little economic benefit on those who had constructed them and that it made more sense to re-focus efforts on testing collective models of storage, where potential economic returns were thought to be higher. The revised intervention will now look to link a government research institute to a network of ginger buyers operating as local traders, who will orchestrate the transfer of knowledge about this improved collective storage design to farmers.

In another instance, having initially designed an intervention aimed at improving the stock of available pig seed in collaboration with breeders at the village-level, the **swine project team** grew to see the potential leverage that intervening with players higher up the value chain - with so-called commercial pig breeder farmers - would confer.

As teams enter into partnerships and as they spend more time out in the field, the knowledge-base which informs each intervention strategy is enhanced. Projects discover who the innovators are, whether or not there are any positive outliers, and how the poor's interaction with markets can be bettered. Often, the true preferences and intent of partners are revealed only as deals are formalised and as initial pilot activities begin. **Box 1** sets out some of the more significant learning of the **dairy project team** and how it necessitated changes to intervention strategies across the board shortly after interventions commenced.

Box 1. A narrative of learning in the dairy project

The dairy project is working on a broad set of interventions aimed at catalysing change in smallholder production and marketing systems. The first year of intervening, however, has seen drastic changes in the project strategy and the nature of all of its interventions.

As the team started to look deeply into the incentives and capacities of players within the system, almost all interventions relating to forage seed, feed, veterinary services and milk aggregation and sale were deconstructed and built up around different market players. This was based on a process of probing that uncovered the real incentives of market players to change the way they were working. It led to the identification of alternative players who were more likely to be willing and able to take on improved roles in the system. All revisions and reflections were strongly encouraged - even if it meant short-term delays - so that the team could move forward on a foundation that maximised the chances of achieving pro-poor changes that prove sustainable in the long-term.

For one intervention in particular, it was felt that the initial analysis had focused only on a small part of the dairy sector - the so-called 'formal' milk selling channels - and had neglected other milk selling channels that in fact dominated transactions involving the poor. This caused the project team to pause the intervention altogether in order to undertake further scoping of the more relevant milk selling channels before any harm was done in forcing smallholders into marketing channels for which they were ill-fitted. The team also began to document learning and produced a working paper that reflected on the effectiveness and sustainability of a previous programme's approach to developing the formal milk selling channel.

In another intervention, shortly before entering into partnership with a large national feed manufacturer, the project team came to understand from the enterprise owner that one of the project's core intervention activities - to run feed trials at the local level to raise awareness of commercial pellet feed benefits - was part of the manufacturer's existing plans. Given that this enterprise owner had already come to see such trials as an effective means of raising awareness among farmers, and had 'bought in' to the benefits, the team elected not to take partnership discussions around feed trials any further with this company. Instead, the team switched their focus to thinking about how a competitive response among other feed manufacturers might be nurtured.



Interaction between a veterinary doctor and animal health technicians in Chitwan District

In all cases above, project teams have completely overhauled their respective intervention results chains and have entered into a different set of partnerships with market players previously not on their radars.

Making decisions post-piloting

The *System* has also supported teams to make decisions about who to work with, and how, as the first term of partnership comes to an end after piloting. Mapping monitoring data onto the tool to assess systemic change has helped project teams judge whether partnerships should be renewed, adjusted or even exited from, based on the level of contribution, motivation and degree of ownership from partners during the pilot. **Box 2**, below, shows how the tool has been used in Samarth-NMDP by the **ginger project team**.

Box 2: Benchmarking systemic change in Samarth-NMDP's ginger project

By early 2014, in an intervention designed to respond to constraints affecting the availability and best usage of disease management products, at least one company importing agricultural inputs into Nepal was now investing their own time and resources into selling bio-fungicides and providing embedded advice to ginger farmers through local agro-vets and agents. Evidence demonstrated that this company was not only beginning to buy into a new way of selling and communicating important information about these inputs (signs of 'adopting'), but was also, to a limited extent, beginning to internalise the approach and make it their own ('adapting').



An importer-trained agro-vet selling products to customers in Ilam

For example, under **adopt**, the company initiated three demonstration sites unsupported by the project, in addition to the five that the project were supporting to communicate best practice application of the disease management inputs. Under **adapt**, there have been signs that the importer wishes to contract at least one of the commission agents that the project helped to finance for the piloting period and of one of the agents looking to open an agro-vet business. The same company has also taken the initiative to register their product with the national pesticide regulatory authority, thus lowering import duties for future orders, and has placed an order for approximately twice as much stock than that which they imported at the same time in the previous year. Lastly, the manager of the company is keen to find ways of reducing the costs associated with expanding the sales and distribution model into new areas, indicating that they are unable to bear the same costs as were spent by the project on the pilot and need to think through how to adjust the model to better suit the company's human and financial capabilities.

With some signs of ownership from one of the two companies, the team will now look to monitor how the more promising importer makes plans to invest in the forthcoming season, reducing significantly the project's involvement in the meanwhile, whilst exploring what they can do to entice change in other firms trading in disease management inputs.

The practical implications of improved understanding

The ability for project teams to make practical decisions on how to react to new information as it comes to light is important. A balance has to be struck between reacting to each incremental improvement in understanding, which could overload teams, and ignoring vital signals. The demands of capturing and interpreting market intelligence, particularly around partners, is a priority. However, the time spent documenting evolutions in strategies and results chains can detract from operational work. In acknowledgement of this, Samarth-NMDP has advised project teams to revisit results chains quarterly, consider partnership progress monthly, and to use their *Diaries* and *Logs* on a needs basis.

In practice, most teams in the first eighteen months of operation have opted to use and update their results chains far more frequently - approximately each month. As each team's understanding of their respective market systems improves and as they learn where to look for relevant information in order to find the quickest and most accurate updates, the frequency of iteration is expected to slow.

"At times, the flexibility can lead to too many changes, hampering the flow of implementation activities which can be sensitive to seasonal calendars in [the] case of agriculture-related projects."

Implementing Partner – Mercy Corps Nepal

Just as understanding of market systems improves over time, leading to adjustments in intervention strategies, the tools and processes at the heart of how information is captured and interpreted must keep pace with how

a programme evolves^{xix}. The *System* should be in-tune with on-the-ground realities and its own design and operationalisation should itself be subject to periodic review to ensure that it remains fit-for-purpose. Applying a 'start small and build' philosophy, Samarth-NMDP began with minimal programme-wide guidance on results management, initially expressed in a series of short 'How to' notes. As this advice was tested, guidance notes were revised before being codified into a manual some six months after interventions began. The programme also learned to provide teams with better resources for results management, increasing both the financial and technical staff resources available to project teams for monitoring and measurement tasks.

"During the first couple of years of the programme, it is important to have a fast feedback loop on the [results management] system which can inform improvements and, if necessary, simplifications."

Extract from Samarth-NMDP pre-audit (DCED Standard) review

Samarth-NMDP cultural values and staff skills

'*Things change*' is a mantra that Samarth-NMDP has been trying to encourage all of its project teams to embrace. This, however, requires a mind-set change for staff often more used to dealing with blueprints than guides. Such a programme culture, reinforced through the interactive processes described in the first part of the paper, also requires a different set of criteria to judge performance. In line with this, the programme supports each project to be *process-driven* and not fixated on end-targets alone. Prospects for achieving systemic changes can be jeopardised in the course of trying to force through 'target-chasing' activities, especially at the beneficiary-level. Results chains constantly remind project teams of being focused on inciting systemic change in the market and to not take any shortcuts that limit the prospect of sustainable and far-reaching impact. Equally, the process of regularly verifying the causal logic and underlying assumptions of each results chain, as well as the attribution of change to project activities, ensures that the achievement of beneficiary impact remains clear and under scrutiny.

"Continue promoting a programme-wide culture of honest inquiry and using information on results to improve interventions and strategies. Enforce meeting process targets such as analyses, intervention guides, meetings with partners, quarterly strategic reviews etc. Consistently give feedback on the extent to which staff and partners are gathering unbiased information on results and using that information effectively to adjust activities and strategies. De-emphasise the achievement of targets that depend on market system players. Instead, encourage regular review of results projections with careful analysis on why projections are changing. Ensure that all managers consistently demonstrate and promote unbiased analysis of information and using that information in decision-making at all levels of the programme. In the prevailing development culture of focus[ing] on meeting targets, this ethos will require careful cultivation."

Extract from Samarth-NMDP pre-audit (DCED Standard) review

Developing this culture has not been straight-forward, and has itself been carefully stage-managed. For example, the programme's year-on-year logframe milestones have never been presented to project teams, nor has the word 'target' been used in any of the guidance: 'projections' are stressed instead. The programme has also sought to promote honest and open dialogue about what is working, what is not working, and why.

The programme's Operations Manual, which speaks of the requirement for systematic monitoring and results measurement, as well as a continuous reflection on performance and progress towards results, re-enforces this message. It gives primacy to the use of processes over impact targets, freeing teams to make sense of the 'messiness' and focus on laying the foundations for sustainable change. At the same time, teams are actively discouraged from making short-sighted investments that 'buy', rather than build towards impact^{xx}.

^{xix} The SEEP Network paper 'Monitoring and Measuring Change in Market Systems: The systemic M&E principles in the context of the Kenya Market Assistance Programme' referred to this as an "evolutionary M&E framework".

^{xx} If, for example, someone was told they had to improve the incomes of 10,000 farmers in a two-year period (and performance would be judged by this), then naturally their incentive would be to 'control' this result as much as possible, investing heavily (and probably directly at farm-level) to make sure the target was reached. This may yield short-term improvements in income, but is unlikely to be sustainable or locally-driven by players in the system. If instead they were told they had two years to work to improve the functioning of the vegetable seed supply system, and on a yearly basis had to make a reasoned estimate of what impact they expected to eventually achieve, this would allow the space to build up more sustainable systems around the poor.

“Projects attempt to influence the attitudes and behaviour of market players to take on new roles within market systems: ultimately, however, projects do not exercise full control over how market players go about their business, so results cannot be guaranteed. In line with the portfolio approach, it is not expected that all interventions will succeed.

Project teams – both implementing partners and Samarth-NMDP – are therefore held accountable for how they go about the process of managing for results (by piloting well thought-out and viable business models, monitoring and evaluating change to learn/improve, and leveraging for scale).”

Extract from Samarth-NMDP Operations Manual: Accountability and Results Framework

Adhering to this programme culture requires effective use of the tools and processes described in this paper, as well as investment in building staff competencies in monitoring and measurement. All staff are routinely reminded that their responsibilities do not end upon the completion of their discrete activities. Rather than having M&E Officers in a siloed unit, as is often the case in comparable programmes, Samarth-NMDP instead emphasises the need for all project team members to understand and use results management^{xxi}. Indeed, one of the core competencies that each project team member should possess is being able to “*focus on change and results*” (see *Annex C*).

“I think my capacities in monitoring and results measurement have improved since I started working as part of Samarth-NMDP ... In this approach, results management plays a major role, as at every step, we are capturing the whole process of market [system] change, rather than just the final result of increasing farmers’ income.”

Samarth-NMDP Sector Analyst

^{xxi} This was also a key learning highlighted by the SEEP Network paper: “Monitoring and Results Measurement in Value Chain Development: 10 lessons from experience”.

Conclusion: The primacy of process

Programmes seeking to truly develop market systems have to come to terms with 'messiness'. They cannot implement a blueprint and must accept there is no perfect plan. Teams implementing interventions using this approach can deal with uncertainties - stemming from what will almost always be an incomplete understanding, at least initially - by planning iteratively and acting incrementally. However, this requires a set of tools and processes to help staff make sense of market systems.

In dealing with 'messiness', there is still a need to be able to estimate results and verify causality, at the same time as being able to monitor ownership and zero-in on the sustainability and size of any given pro-poor change: 'has this lead to a change in how beneficiaries behave?'; 'have market players fundamentally changed how they operate?'; and 'has there been a response beyond the organisation we have partnered with, and if not, why not?'. Existing good practices in monitoring and results measurement, such as results chains and the *DCED Standard*, provide the spine of how this is done, around which complementary tools and processes, as described in this paper, can be added.

Yet for all this to be operationalised, a shift in cultural mind-set is required: one that takes seriously the application of structures for gathering, interpreting and reacting to data. Indeed, "*the effective use of data – learning by measuring – is at the heart of how we should manage complexity*"^{xxii}. That is, in market systems development, results can really only be as good as the use of the tools and processes that help teams learn, adjust and improve.

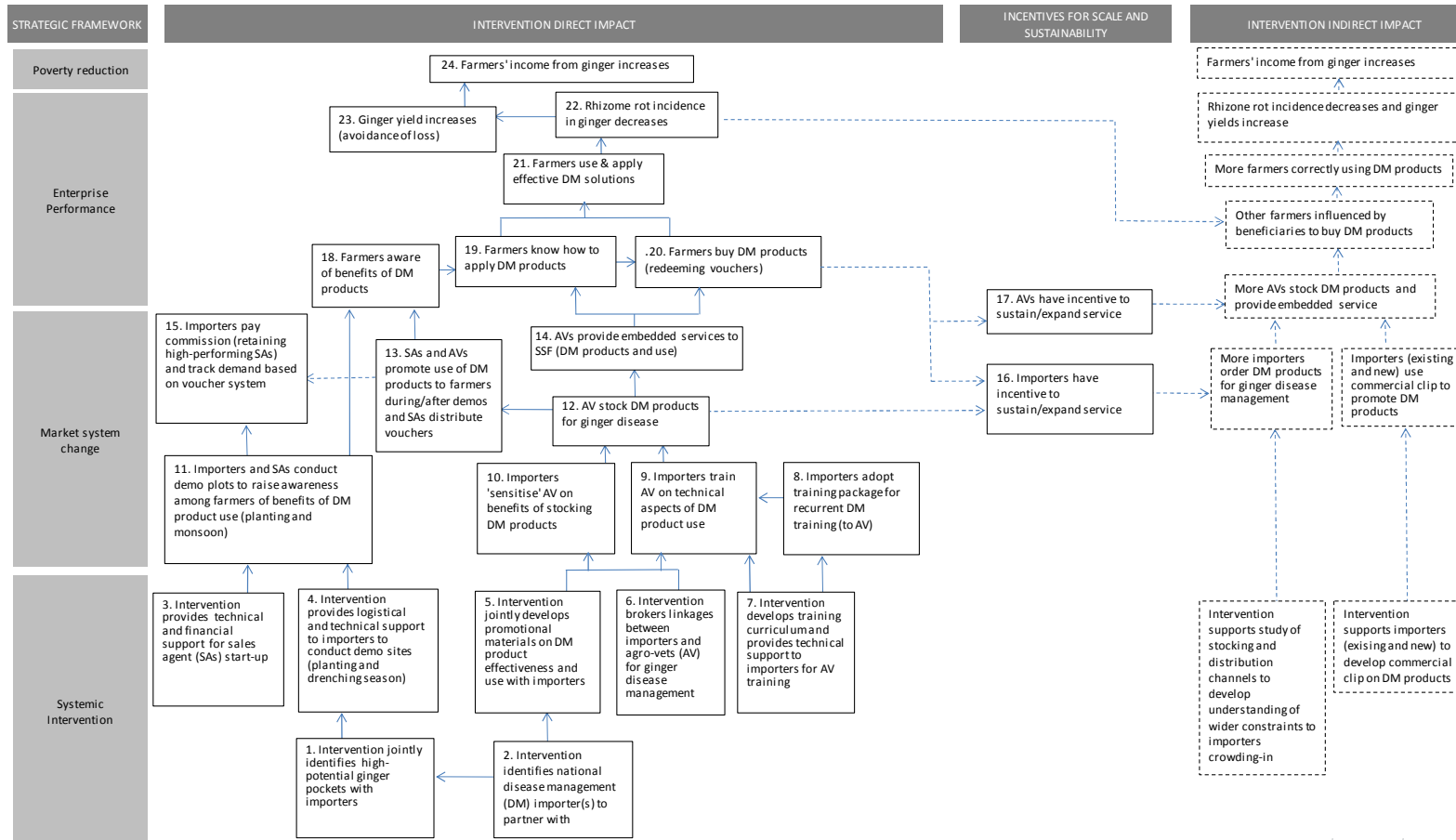
Finally, it may not be because markets are overwhelmingly complex and dynamic that development programmes have been largely unable to engineer lasting changes in how systems fundamentally function for the benefit of the poor. Instead it is more likely that we, as a community of interveners, have often been too simplistic and static, in taking 'snapshot' views of markets and in assessing performance using short-term measures largely devoid of indicators concerning whether outcomes are likely to last post-intervention. Samarth-NMDP judges itself on whether pro-poor impact proves sustainable and grows after intervening, and as such, has designed and operationalised a *Results Management System* that allows teams to frequently check progress towards this ambition, and act quickly on signs that change will not prove sustainable and inclusive - before it is too late to do so.

^{xxii} Owen Barder, at <http://www.cgdev.org/blog/learning-measuring-practice>

Annexes

Annex A: Key Results Management Tools

Results chains: sample results chain from the ginger disease management intervention



Systemic change: further guidance on definitions^{xxiii}

ADOPT

What is it? A new market player successfully adopts a pro-poor innovation. This innovation is precisely defined in the intervention's results chain and measurement plan. This can be in the form of a new or improved product/service offer, business model, or the uptake of a new role/responsibility. The adoption stage is reached when the identified partner has the incentives and capacity to independently uphold the change being piloted, which will ultimately benefit the poor. Note that this innovation has to be viable and valued by partners and beneficiaries alike. As this stage, the sustainability and scale of impact are likely to be low.

Measurement: a mix of quantitative and qualitative measures. These examine areas of:

- *Viability:* Innovation is commercially viable or has some degree of organisational benefit that 'inspires' or 'motivates' the partner to continue after the pilot (profitable/beneficial). These may be immediate (increased sales) or non-immediate benefits (developing a new customer base, identifying and targeting a new market segment).
- *Division of labour:* Market player takes on an appropriate share of the responsibility in the pilot (functions/roles, payment/costs). Samarth-NMDP is not bank-rolling pilot activities that have no developmental benefit or supporting those that do not work to overcome risk aversion.
- *Satisfaction levels:* Market player is satisfied with the results/learning from the pilot and the beneficiaries are satisfied with the outcomes that result from the introduction of the innovation and are benefiting.

ADAPT

What is it? The initial partner acts independently of project support to continue, in some manner, with the role change and/or innovation that they originally piloted. The player is keen to improve the performance of the innovation further and works to tailor it, making investments that support its continuous, and perhaps improved, operation. The adaptation stage is achieved when early adopters continue to improve, develop and roll-out the innovation themselves and the pro-poor outcomes remain intact.

Measurement: a mix of quantitative and qualitative measures. These examine areas of:

- *Investment and improvements:* Continuation of the *status quo* (e.g. for a second season), investing in and tailoring the model in a way that demonstrates learning from the initial innovation introduced (e.g. right-sizing or making it more efficient). May be characterised by partner self-experimentation – i.e. introducing the innovation to new areas (extending pilot locations) and/or new markets without programme support.
- *Mainstreaming (commitment) within market player:* Innovation is given an organisational home (institutional structure, branding) and/or player has a vision of the future featuring the initial innovation. Innovation is written into business plans, budgets, corporate strategies and procedures such that it is mainstreamed internally.
- *Division of labour:* Market player's responsibilities and contributions towards costs have evolved from the pilot partnership. Samarth-NMDP is not funding recurrent functions/activities and all necessary product/service development activities are performed by the market player.
- *Benefit flow remains:* Adaptations to the original innovation have not distorted (or will not distort) the 'business model' so that the poor are no longer benefiting.

EXPAND

What is it? A number of other market players have adopted the innovation, or clear variants thereof, as the project's original partners (the early adopters) begin to reap benefits. These players may be adopting due to

^{xxiii} All content under this heading draws from "Good Practices in Facilitation: The Systemic Change Framework." The Springfield Centre (2011) and other materials from The Springfield Centre. These are also incorporated into the Samarth-NMDP Results Management System User Manual.

competitive pressures or as a result of a demonstration effect. This ‘crowding-in’ expands the outreach of the pro-poor innovation, effectively making it more mainstream, and thus increases the scale and sustainability of the pro-poor change.

Measurement: a mix of quantitative and qualitative measures. These examine areas of:

- *New players crowding-in:* Other players are copying the original innovation introduced by the early adopters or are trialling versions of the original model that add diversity to the market system and increase choice for the consumer of the service/product.
- *Scale agents on-board:* Scale agents have been brought on-board to promote/push the innovation in new areas, with new players, and possibly in adjacent markets. The potential for the innovation to be a ‘mainstream’ offer is high.
- *Competitive markets:* Depending on the nature of the market, competitive markets are becoming thicker (crowding-in of service/product offers) or thin markets have the characteristics of openness and few barriers to entry. Note that some markets are inherently more collaborative than competitive.

RESPOND

What is it? The innovation triggers a secondary response from players in the wider system, or in adjacent markets connected to it. These responses appear in the form of changed or new supporting functions and rules that reflect the impact that the innovation is having on how other market players behave. Essentially, the original pro-poor change has created a new set of market conditions that have encouraged evolution and re-organisation of the market. With new supporting functions and rules modified in supporting systems, pro-poor innovations become further ingrained within the market system, giving them the characteristic to last and adapt to future market conditions (including shocks). Facilitators are confident that the innovation can continue to survive in its current form or ‘move with the times’ as appropriate. Indicators of both sustainability and scale are high as the innovation’s longevity allows the target group to benefit long after the programme has exited.

Measurement: usually qualitative. This examines areas of:

- *Market reaction:* Are new types of market player re-configuring their own roles and responsibilities and/or adding new functions as a reaction to the gradual mainstreaming of the model introduced? Has the introduction of the innovation prompted pro-poor and pro-growth government and sector/industry body responses? Do businesses and policy-makers recognise a need to fundamentally change the way they think about “XYZ”?
- *Resilience to shocks:* Is the change embedded enough so as to ‘survive’ shocks to the system, or has it already survived a shock to the system that is worth detailing?

Annex B: Key Results Management Processes

Programme template for Quarterly Progress Updates

Sector:	
Intervention:	[One update per intervention]
Date covered:	[Samarth programme quarter (Nov-Jan; Feb-April; May-July; Aug-Oct)]
Completed by:	[Name of all staff involved in discussing / writing report]

1. Key activities in the quarter

- [Summary of key activities undertaken during the quarter. Note any leverage from market players.]

2. Key results for the quarter

Market system change	[Summarise key results for the quarter at the market system-level, including any indications of sustainability and replication. Cite data/information from results management (inc. indicators).]
Enterprise performance	[Summarise key results for the quarter at enterprise level (changes in enterprise competitiveness / productivity, business practice change etc.). Cite data/information from results management (inc. indicators).]
Poverty reduction	[Summarise key results for the quarter at level of poverty reduction / incomes, if any. Cite data/information from results management (inc. indicators).]

3. Intervention assessment

Operational assessment	[Are activities on track, are activities being executed effectively, are the right facilitation tactics being used? Highlight any key learning.]
Strategic assessment	[Do the assumptions underlying the intervention logic continue to hold, are the results meeting or exceeding projections, are any modifications to the strategy required? Highlight any key learning.]
Recommendations	[Recommendations at the operational or strategic level for follow-up action]

Programme template for Monthly Project Team Meetings

Intervention progress and tactics review		
Intervention area	Name and systemic change statement	
Intervention 1	Intervention title	
Item	Summary	Actions required
Assessment of partner relations (status, willingness, intensity)		
Assessment of leverage secured (buy-in, sharing/splitting of roles, co-investment)		
Any improvements to your understanding of the systemic constraints		
Signs of change at market system level. Indication of partner (or non-partner) market players performing differently		
Signs of change at enterprise performance level (farmer or entrepreneur knowledge, attitudes, practices)		
Observations from the field (i.e. changes in wider context able to positively or negatively affect this intervention - problems or opportunities?)		
Appropriateness of intervention strategy and tactics used		
What decisions have you made today?		

Early Warning Checks^{xxiv}

While interventions seek to influence market player behaviour, facilitators are not seeking to dictate their actions. This sentiment is at the centre of another process - 'early warning checks' - which constitute a further means of determining whether interventions are on-track and to aid facilitator decision-making. While they can be used across most Samarth-NMDP interventions at any time, they are particularly important during pilot phase interventions that are engaged in proving a change concept (e.g. testing a business model) and/or a technical solution. These checks are embedded within results chains and are effectively the main indicators used to measure the 'adopt' element of systemic change. The three core early warning checks are:

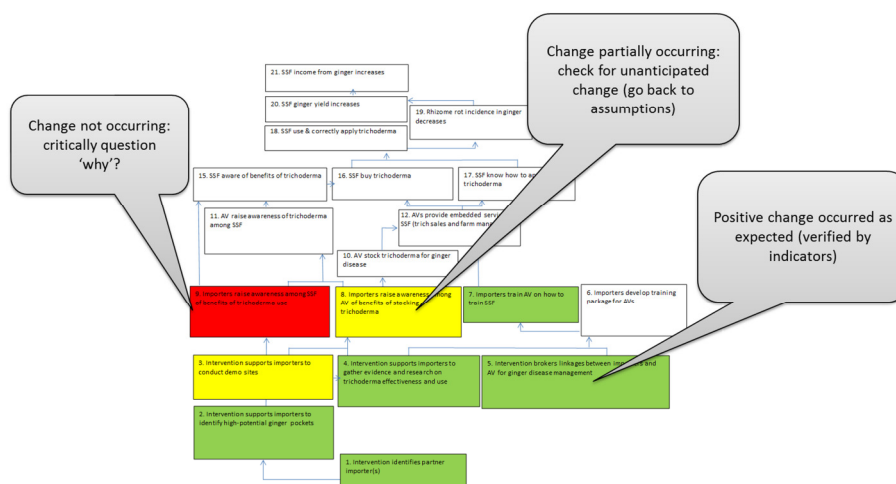
Check	Trigger	Description
Value proposition check	Market player develops service offering	Check whether target groups are likely to value, and benefit from, the new service (benefit > cost, including any transaction costs). Identify any perceived barriers to up-take on the side of target groups (e.g. price too high, transaction cost too high).

^{xxiv} These checks track trends in the level of capacity of market players, the degree of buy-in or commitment, the viability of pro-poor business models in commercial service providers, and the institutionalisation of practice change.

Target beneficiary check	Target group access service	Check who (poor and disadvantaged groups) is accessing the new service, and whether they intend to continue to access the service and would recommend it to a peer.
Sustainability check	After first testing / piloting by market player	Check whether market players see value in continuing to offer the service, or have plans to upgrade the service or roll-out to new regions.

An example of the 'traffic light' rating in practice^{xxv}

Teams are encouraged to use their results chains as visual aids to discussions, utilising colour-coding to highlight 'sticking points' and talk through issues with and resolutions to the current cause-and-effect logic. The colour-coding tasks teams with finding out the reasons 'why' there are red boxes, and to unblock them by coming up with alternative strategies and means of working with partners – or to realise where there have been unintended consequences of their work.



“We see the results chain in our day to day work and make decisions accordingly. The traffic light system seemed very good to make decisions to move forwards”

Implementing Partner – Practical Action

Observation diary excerpt^{xxvi}

Date	Type of entry	Diary entry
10-Apr-13	General Market Observation	There is a severe shortage of ginger seeds in Makwanpur at present. Due to poor production (quality and quantity) this year, farmers do not have enough quantity of quality seeds for this planting season. According to Mrs Ram (ginger trader) 40 tons of high quality seeds have been collected from Makwanpur and transported to Ilam by FAO.
12-Apr-13	General Market Observation	On average 75 tons of ginger passes through the Birgunj border to India on a daily basis during December to February. Two officers from the Plant Quarantine office provided this information which is in contrast to the previous information provided by traders from Makwanpur - that ginger trade through Birgunj border is limited due to problems <i>en route</i> .

^{xxv} The assessment of change is based on indicators, using the timeframe outlined in the impact projections. Where change was expected by a certain date: red indicates no positive change (or a negative change); yellow indicates partial change; green indicates change occurred as expected. If change was not planned to have occurred yet, the results chain box is left blank.

^{xxvi} Names of individuals and companies have been anonymised.

12-Apr-13	Lesson learned	Farmer to farmer communication is found to be more effective in disseminating information regarding events compared to other media like radio and newspapers. Pamphlets might be another effective means for alerting farmers to these kinds of event.
12-Apr-13	Market Player behaviour	Some agro-vets from adjoining locations requested ABC to conduct similar demonstrations in their area so as to inform the farmers about rhizome rot disease management through use of bio-fungicides. ABC provided plant protection materials for carrying out demonstrations in 3 additional sites in Makwanpur.
15-Apr-13	General Market observation	Most of the farmers in these areas have already planted ginger, despite the fact that it has not rained yet. Due to this there is less possibility of <i>trichoderma</i> demand in the plantation season following demonstrations. However, the farmers who were present to view the demonstration might purchase <i>trichoderma</i> in the drenching season or maybe in the next plantation season after seeing the effectiveness of the product in curing the disease.
07-May-13	General Market observation	With the increasing number of tea farmers who want to shift to organic tea cultivation, there is a high demand for bio fungicides in Ilam. But since the farmers do not have linkage with authentic bio-fungicide suppliers, the sales are very low. Farmers are dubious about the organic bio-fungicides even though these products have organic certification from IMO or NAASA. They ask for yearly renewal certificates from agro-vets when they come to buy these products.

Activity log (record of partner buy-in) excerpt

Description of activity / interaction with market player	Date	Type of market player	Project contrib.	Market player contribution		
				Financial	In kind	Non-financial (in person days)
The identified pocket areas visited and sites for demonstration (n=7) selected: Makwanpur	22>24 Dec-12		Logistics, staff time			3 Days Staff time (Marketing Officer)
Ginger plantation demonstration (Ilam)	12-Mar-13	Imp. & Agro-vet	Promotional materials, logistics, staff technical support	Bacteriamycin (60gm) (NPR 300) Neem Cake (10 kg) (NPR 1000)		2 days (Marketing Officer)
Importer conducted demonstration in Makwanpur district with local agro-vet	05-Apr-13	Imp. & Agro-vet	Logistics, promotional material, staff time (technical)	NPR 500 (Tea and snacks), Bio Cure F (200 gms) (NPR 100)		Half day contribution from agro-vet and CPTN
Ginger plantation demonstration (Ilam) – extra demo	25-Apr-13	Imp.	None	Bacteriamycin (60 gm) (NPR 300) Neem Cake (10kg) (NPR 1000)		Contributed 1 day (CEO)

Annex C: Core Skills and competencies for results management

Samarth-NMDP approached staff skills development through ‘learning by doing’ - something that teams would work towards on their journey to become effective facilitators. Against a set of results management competencies, set out below, teams were requested to discuss their own capacity gaps on a monthly basis, which formed the basis for identifying any learning needs. Developing capacities has involved a mix of more formal training (holding training events or through discussions at review meetings) and on-the-job training.

Staff core competency excerpt

Core competency	What this means in practice
Understands the two-fold purpose of RM, and the key terms and concepts in monitoring and results measurement	Can describe the ‘prove’/‘improve’ objectives of results management (RM), and can accurately identify and describe the purpose of the key elements in the RM system (indicators, results chains, measurement plan, projections, attribution, assumptions and risks). Also understands their specific duties and project team duties with respect to monitoring and results measurement and can describe the content and purpose of monthly/quarterly review meetings, updates and impact assessments.
Can describe the respective results chain(s) covering their work	Can clearly and concisely explain each intervention and sector results chain, describing how intervention activities will lead/are leading to market system change, improved enterprise performance, and poverty reduction.
Uses the result chain(s) to review strategic progress and guide operational decisions	Decisions on revising, stopping or introducing activities are done in reference to the results chain through identifying 'sticking points', where change, as was foreseen, is no longer possible/likely with the strategy/tactics being used.
Knows the indicators being used to track progress of intervention(s)	Knows both what indicators do and don't measure, but specifically the indicators they are using to track changes in the market system and in enterprise performance. Provides input on whether indicators are sufficient to gauge and can input into whether measurement plans are adequate for obtaining the required data and market information.
Able to carry out basic research / data collection	Able to feed productively into the design and conducting of measurement tasks such as observation, in-depth interviews, key informant interviews, and surveys. Understands different sampling methodologies that can be used and is aware of the strengths and weaknesses of different survey and impact assessment designs.
Able to identify signs of project-inspired/autonomous change in the market system	Can describe the expected / achieved system-level changes for each intervention and is able to pick up initial signs of change (project-instigated or autonomous) in the market system. Outside of planned measurement tasks, teams keep the relevant 'tabs' of their intervention guides up-to-date and there is a strong behaviour of constantly tapping-into sources of market information, investigating leads, and feeding back into strategy reviews.
Management and oversight of contracted-in researchers	Able to manage contracted-in research organisations ('accredited research partners'), to clearly communicate the rationale behind survey questions and the kinds of changes we are expecting/not expecting, and to ‘shadow’ enumerators in the field to ensure they are on-track.
Able to distinguish between first- and second- wave impact	Can describe the difference between intervention-supported results and results achieved through replication by market players (crowding-in) and beneficiaries (copying).

Samarth-NMDP is delivered in partnership with the Government of Nepal by a consortium of



The Samarth-NMDP implementing partners who contributed to this case study were

