The Donor Committee for Enterprise Development

Assessing Systemic Change

Implementation guidelines for the DCED Standard, Adam Kessler, August 2014

Key points

- Control Point 5.1 in the DCED Standard requires that: "*The results of systemic change at key levels in the results chain(s) are assessed*". During audit, therefore, clarity about what is (and is not) systemic change can become important.
- There is however no industry agreement about where this dividing line is, not least because of the very wide variety of market systems, contexts and programmes where it must apply. None of the current definitions available are both sharply defined and widely agreed.
- There is meanwhile some agreement about the qualities that systemic change should have: scale, sustainability, and resilience.
- As part of the DCED Standard, therefore, programmes aspiring to systemic change should articulate their vision for the market, and for the changes that their work will trigger, that will have these qualities.
- They must also document the causal pathway to those changes, and how it is revised in light of experience. Discussions continue on the most practical format for such documentation.
- Programmes should set indicators for each key step on this causal pathway, and measure them according to good practice. Programmes should also assess the extent to which they contribute to the changes that they observe.
- As the Standard is explicit on this aspect, the DCED will need to continue work to elaborate it pragmatically and effectively, in collaboration with all others involved.

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Acknowledgements

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1 Introduction

When markets work well, they enable the poor to find a job, sell what they produce, and purchase essential products and services. Across the world, however, many poor employees, producers or consumers are not able to access functional markets. Private sector development practitioners are increasingly focused on trying to better understand the ways in which markets work, and intervene to improve the ability of the poor to participate and benefit. This requires practitioners to understand **market systems**, commonly defined as an arrangement through which people and organisations produce and exchange goods and services.

The market system comprises three main sets of functions. These are the **core functions** of exchange, **supporting services** such as finance and information, which are necessary for the exchange to take place, and **rules** which govern how the other functions can operate. A market system comprises multiple actors, including the private sector, government and civil society.[1]

The **DCED Standard for Results Measurement** recommends that practitioners capture wider changes in the system or market that they work in. Doing so will enable practitioners to learn more about the market system, track the emerging results of their intervention, and continually adapt their approach to maximise their impact. It will also enable programmes to assess and report the broader benefits from a more functional market system, demonstrating the value of a market development approach to funders.

This guide is written primarily for practitioners in market development programmes. It recognises that assessing changes in market systems poses significant challenges. These are both operational (as discussed in our 2013 M4P Peer Learning Event)[2] and theoretical.[3] Given the current investment in programmes with systemic objectives, however, there is a real need for practical guidance that will help field staff to monitor market-level changes. Consequently, this document outlines a simple, flexible structure through which programmes using the DCED Standard can outline and monitor a causal pathway to changes in the market. It leaves a number of questions open, however, and we

[1] DFID/SDC. (2008). *The operational guide to the Making Markets Work for the Poor (M4P) approach.* www.value-chains.org/dyn/bds/docs/681/OP%20Guide%202008.pdf

[2] DCED. (2013). Report on the first M4P Peer Learning Event.

[3] See for example Osorio-Cortes, L; Jenal, M & Brand, M. (2013). Monitoring and Measuring Change: The Systemic M&E Principles in the Context of the Kenya Market Assistance Program. SEEP Network. www.seepnetwork.org/monitoring-and-measuring-change--the-systemic-m-e-principles-in-the-context-of-the-kenya-market-assistance-program-resources-1201.php

hope that existing programmes will continue to experiment. We look forward to continuing the conversation and strengthening the guidance contained here in future.

Why monitor changes in market systems?

In a rice value chain program in Ghana, Engineers Without Borders (EWB) worked to encourage input dealers to provide better information to farmers on chemical and fertilizer use. On paper, this could benefit everyone. Input dealers would increase customer loyalty and demand, and so build their business. Farmers would have improved access to quality products and information, contributing to better practices and an increase in yield.

In practice though, none of the input dealers were interested in working with EWB. The reality was that each input dealer just sold to their network of family and friends, and were not interested in increasing their business size. Trying to facilitate change was like squeezing water from a stone. The programme was trying to increase competitiveness, but the input suppliers wanted to maintain a status quo of networks of family and friends, and not take any risks or increase competition.

EWB's project design made sense given what they knew at the beginning. They could not realistically have known about the input dealer's resistance to change in advance. Only in retrospect did the difficulties become clear. Good management in complex situations is not about trying to avoid these 'failures' but to learn from them, and improve in the next iteration of the program intervention. EWB's effectiveness should be judged on how they responded to information about these difficulties and their ability to adapt to their continually changing intelligence about the system.

Source: Morcrette, A., & Pennotti, C. (2011). *Know What You Know: Harnessing Tacit Knowledge in Value Chain Monitoring.* The Groove Learning Network.

1 What is a 'systemic change'?

1.1 Definitions of systemic change

There is no broadly accepted definition that clearly differentiates between changes that are and aren't 'systemic'. This is somewhat concerning, given the huge investment in programmes which aim to cause systemic change. In fact, some of the language surrounding systemic change has been vague – and sometimes unhelpfully grandiose. For example, it is common to speak of systemic change as addressing the 'root causes' of poverty, which (taken literally) is most unlikely in practice[4]. This paper encourages programmes to be realistic about the kind of systemic changes they can expect.

Systemic change is change in **underlying causes** of market system performance that can bring about a better-functioning market system.[5] A 'systemic' change has three key characteristics:

[4] For a typical example, see Jochnick, C. (2012). "Systems, power, and agency in market-based approaches to poverty," Oxfam America Research Backgrounder series. This states that 'to address the roots of poverty, it is essential that these efforts are not only holistic (involving multiple actors), but systemic (engaging deeper dynamics and influences)—and that they simultaneously strengthen markets and the capacity of poor people to engage those markets'.

[5] DFID/SDC. (2008). A synthesis of the Making Markets Work for the Poor (M4P) approach. www.value-chains.org/dyn/bds/docs/681/Synthesis_2008.pdf

- **Scale**. Systemic changes influence and benefit a large number of people who were not directly involved in the original intervention.
- **Sustainability**. Systemic changes continue past the end of the programme, without further external assistance.
- **Resilience**. Market players can adapt models and institutions to continue delivering pro-poor growth as the market and external environment changes.

Changes to the market system can benefit or harm the interests of the poor. Practitioners should explicitly focus on **pro-poor change**, and not simply assume that changes are beneficial.

A positive systemic change should lead to a more functional market. Miehlbradt and McVay (2006) portray a **functional market system** as having five key characteristics.[6] Firstly, the market is expanding, with growing sales, increasing competitiveness, and the entry of new firms. Secondly, the market is resilient and responsive. This means that firms innovate and produce new products, there are strong relationships between different market players, and there are systems in place for learning and transferal of information. Thirdly, the market benefits the poor, through their direct participation and the attainment of environmental, labour, and other social standards. Fourthly, there is a supportive and open business environment which enables inclusive business. Finally, there is a 'change driver'; an institution or set of entrepreneurs driving the market change process.

Given that there is no broadly accepted definition of systemic change, the DCED Standard can accept a variety of definitions from programmes. It expects these definitions to incorporate the three principles listed above; scale, sustainability, and resilience.

When is a change 'systemic'?

It is challenging to draw a dividing line between what is, and what is not, systemic change. For example, consider a project that supports a large input dealer to adopt a new business model, teaching its small suppliers based in rural communities about good farming practices. Other small-scale input providers who were not approached during the programme's pilot eventually see the gains accruing to those providers who do adopt this model, and approach the large-scale input dealer to adopt the same model. Some practitioners argue that this is systemic change, because the programme did not directly encourage these behaviour changes through its pilot. Others argue that it is not, because they are approaching a firm that the programme did work with, and consequently this is a case of "natural growth" in the business model of the targeted input dealer.

Not all programmes aspire to catalyse systemic change; if there is no such aspiration, then a DCED audit[7] of a programme's use of the DCED Standard would simply mark that section as 'not applicable'. If however the programme explicitly aims to achieve systemic change, the DCED auditors will look for evidence that the programme has articulated a vision and pathway of systemic change, which goes beyond the firms that the programme originally worked with. In the above example, the programme should be looking to assess changes beyond the large input dealer that it originally partnered with. This may include the replication of that innovation by competitors or rivals to that input dealer (although this may not be feasible, for example because the input dealer is the only one

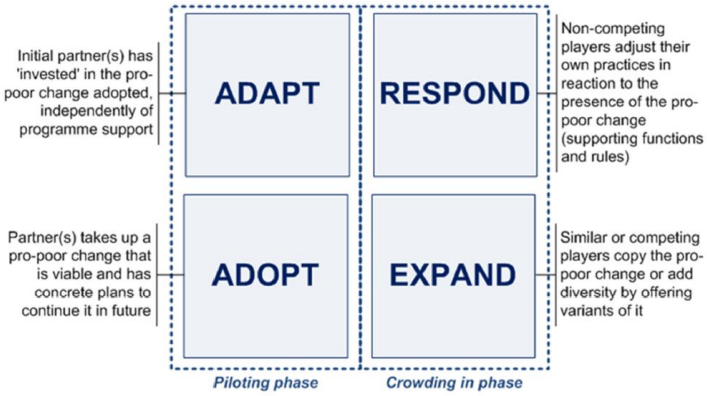
[6] Miehlbradt, A & McVay, M. (2006). The 2006 Reader: Implementing Sustainable Private Sector Development. ILO. www.bdsknowledge.org/dyn/bds/docs/497/PSDReader2006.pdf

[7] An audit is an external, confidential, and objective assessment of the monitoring system in use in a programme, using the criteria of the DCED Standard. For more information, see www.enterprise-development.org/page/audits

in the market). It may also include the entry of financial service providers to help small suppliers purchase the inputs, changes in norms regarding how businesses relate to their suppliers, or wider growth in the market. Although growth in the partner firm is an indication of progress along that pathway, programmes should aim for and monitor changes in the broader market.

1.2 A framework for systemic change: Adopt/Adapt/Expand/Respond (AAER)[8]

The Adopt/Adapt/Expand/Respond (AAER) framework is a two by two matrix which helps programmes manage and measure changes in market systems, which has been published on the Springfield Centre website and was originally developed by Springfield and Katalyst.



On the left-hand side, the matrix describes individual organisations which the programme supports directly. This corresponds to the piloting stage of the programme, when new pro-poor innovations are tested with different market players. Innovations may be products, services, role changes, the uptake of new or changed responsibilities, changes to business models or how organisations cater to or approach a particular segment - but always involve a behaviour and practice change. By the end of the piloting phase, pro-poor innovations should have 'stuck' with the market players that they've been trialled with - be fully owned, overseen, and paid for by the players themselves.

On the right-hand side, the matrix refers to competing and non-competing market players that operate in the market system. The ambition of the facilitator should therefore be to encourage a market response to changes in practice (e.g. the pro-poor innovations piloted), in order to improve the scale, sustainability, and resilience of pro-poor outcomes.

It is important to note that the steps outlined above will not always follow a linear sequence, and might be achieved by a group of interventions, rather than by one alone. The matrix is best used by facilitators wishing to take stock of 'where they are' in the implementation phase and as an aid to sector strategy revision. It is not intended as a step-by-step guide to intervention planning.

For more information on this framework, see *Adopt-Adapt-Expand-Respond: a framework for managing and measuring systemic change processes*, a briefing paper published by the Springfield Centre.[9]

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[8] This section summarises concepts created by Springfield Centre and discussed at length in Nippard, D; Hitchins, R & Elliott, D. (2014). Adopt-Adapt-Expand-Respond: a framework for managing and measuring systemic change processes. Springfield Centre. www.springfieldcentre.com/wp-content/uploads/2014/06/2014-03-Adopt-Adapt-Expand-Respond-Briefing-Paper1.pdf

[9] Nippard, D; Hitchins, R & Elliott, D. (2014). Adopt-Adapt-Expand-Respond: a framework for managing and measuring systemic change processes. Springfield Centre. www.springfieldcentre.com/wp-content/uploads/2014/06/2014-03-Adopt-Adapt-Expand-Respond-Briefing-Paper1.pdf

2 Articulating the pathway to systemic change

Programmes aiming at systemic change should articulate an **ultimate vision** for the market, which states what changes they expect to see in the market system and for the target beneficiaries. The programme should also specify a **causal pathway**, to explain how they expect their activities to contribute to this change. This pathway should specify the incentives that different market players have to change behaviour, the mechanisms through which innovations and learning can be transferred from one market player to another, and how programme interventions are expected to influence behaviours, relationships, inceptives, rules, or capacities. It is likely to differ from market to market, and potentially even from intervention to intervention.

Articulating an explicit pathway to systemic change can improve programme management. Mapping out the linkages between programme activities and the expected systemic change clarifies the causal links, and the assumptions on which they rely. For example, private sector development programmes often expect pilots to be scaled up, assuming that there are sufficient players with the incentives and the knowledge to do so. Once clearly articulated, these assumptions can be checked to see if they are realistic.

Moreover, articulating this pathway is a crucial step for results measurement. Market systems typically change slowly – often beyond the lifetime of the project. In order to manage the interventions effectively, the programme needs to understand what short term changes are expected along the pathway and monitor those.

Practitioners should be aware that any pathway is inevitably a simplification, and will always be a guide to expected changes, not a definitive description of them. Simplistic causalities can be misleading; change may be non-linear, and outputs and outcomes can both influence each other. For example, a trade facilitation programme may posit that a reduction in the time taken to cross a border-post will lead to an increase in traffic, as traders take advantage of this opportunity. In practice, they might find that any increase in traffic will in turn cause additional delays, increasing the time taken to cross a border-post again.[10]

Nonetheless, some simplification is generally needed, to produce an actionable hypothesis; the key is to adapt it in the light of experience as it is gained. Consequently, this pathway should be continually revised in the light of the programme's learning and new experience. Perhaps the most important aspect is how the pathway is used and updated, in the light of experience and results - more than the exact format of the initial pathway (which could be discussed indefinitely).

There are multiple possible pathways leading to changes in market systems. The below sections give some examples, but a key message of this paper is that programmes are invited to experiment with different ways of envisioning and representing pathways to show how they expect to achieve systemic changes.

[10] Ramalingam, B; Laric, M & Primrose, J. (2014). From Best Practice to Best Fit: Understanding and navigating wicked problems in international development. ODI working paper. http://oxfamblogs.org/fp2p/wp-content/uploads/2014/05/BestPracticetoBestFitWorkingPaper_DraftforComments_May2014.pdf

2.1 A pathway from piloting to deeper market response

Private sector development programmes often start by partnering with a small number of market players, in order to introduce a new business model or practice. For example, they may share the costs of a seed company which pilots a new way of selling seed to smallholder in smaller, cheaper packets. Programmes will typically assess the extent to which the partner took on and owns these new practices, and so how sustainable and resilient the changes are likely to be. This is known as the **piloting stage**, captured by the 'adopt' and 'adapt' quadrants of the AAER matrix above.

Private sector development programmes often expect other businesses, individuals, or market players to replicate the new behaviour or business model tested in the pilot stage. This replication can take place at different levels in the value chain. For example, a programme may partner with an agricultural supplier to set up pesticide spraying services. Other agricultural input suppliers, influenced by the success of the programme partner, may then start up a similar service. The target beneficiaries of the programme may also replicate new behaviours. For example, consider a programme which aims to support shoe-making entrepreneurs. If one entrepreneur sees that his rival has improved the quality of his shoes; they may copy the quality improvements and so also gets higher prices for their goods. This is known as the **scaling up stage**, and can be seen as 'expansion' in the AAER framework.

Copying and Crowding In

'Copying' and 'crowding in' are commonly used terms, defined by the DCED Standard as:

- **Copying**: Other target enterprises copying behavioural changes that those affected directly by programme activities have adopted.
- **Crowding in**: Enterprises at levels other than the target level copying behaviours that those affected by programme activities have adopted or entering a sector or value chain as a result of improved incentives and environment created (at least partly) by the programme. This term also applies to government agencies or civil society organizations, who are not directly involved in the programme, copying behaviours of those who are directly involved in the programme, or who change their behaviour as a result of improved incentives or environment created (at least partly) by the programme.

Ultimately, private sector development practitioners often hope that the pilot and scaling up stages result in deeper changes in the market system that increase scale and sustainability. This might include changing norms and practices, the emergence of a change driver, or a change in supporting functions to the original innovation. For example, if the programme originally supported a seed supplier to sell to smallholder farmers, a deeper response might involve a financial service provider providing finance to the farmers in order to buy the seed. This can be seen as 'response' in the AAER framework.

It should be noted that these steps may not follow a linear path, and there are multiple ways to depict these pathways. For example, the Kenya Market Trust uses a benchmarking tool that moves from early adopters, to early majority, late adopters, and finally to solution-seeking behaviours.[11] Copying and crowding in can be mapped in a projects results chain, showing at what levels and how

[11] Osorio-Cortes, L; Jenal, M & Brand, M. (2013). Monitoring and Measuring Change: The Systemic M&E Principles in the Context of the Kenya Market Assistance Program. SEEP Network. www.seepnetwork.org/monitoring-and-measuring-change--the-systemic-m-e-principles-in-the-context-of-the-kenya-market-assistance-program-resources-1201.php

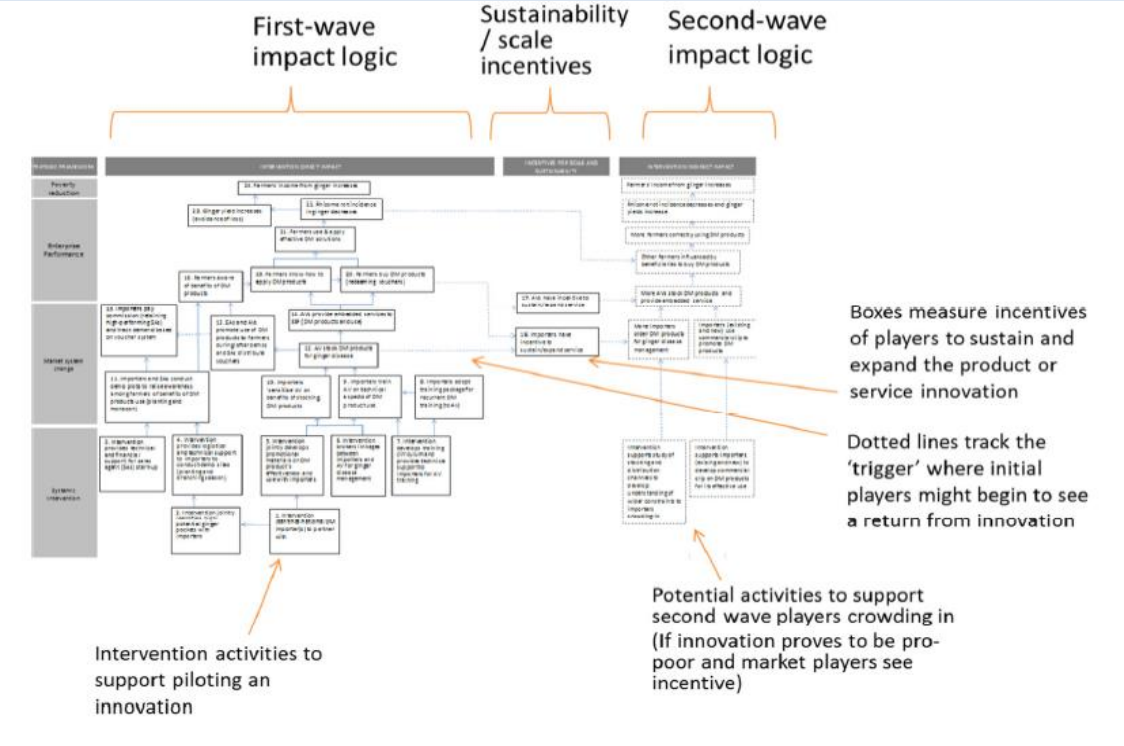
programmes expect these changes to occur, and how they will contribute to their goals.[12] See the box below for an example from Samarth-NMDP.

Intervention-level pathways of change in Samarth-NMDP

Samarth-NMDP is a market development programme based in Nepal. Samarth-NMDP examines 'first-wave' and 'second-wave' impact. First-wave impact is generated through market players with whom the project has temporarily partnered to pilot a pro-poor behaviour change or innovation. Second-wave impact is the crowding-in of more players, who themselves adopt new behaviours or innovations. This second-wave impact increases scale and sustainability of the pro-poor outcomes.

Samarth-NMDP develop a results chain for each intervention, in order to clarify their expected impact. On the left, the results chain shows the 'first wave' impact of the pilot intervention. In the middle, Samarth-NMDP show the 'incentives for scale and sustainability'. This captures the intent of initial pilot-phase partners to continue, or even expand upon, the pro-poor innovation. The boxes in the additional column therefore mark the point where the pilot is deemed 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. This has a clear management implication, as it represents the point at which the project can switch from a 'piloting phase' (phase one of Samarth-NMDP projects) to a 'crowding in phase' (phase two).

Samarth-NMDP use the AAER framework to define whether changes instigated by projects have a systemic quality. Samarth-NMDP colour-code the matrix to give facilitators a visual depiction of the elements that are judged to have been reached. 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 in order to further strengthen the systemic qualities of the initial behaviour changes.



[12] See for example the DCED case study of Katalyst Results Measurement. www.enterprise-development.org/page/download?id=1696

Source: Ripley & Nippard. (2014). *Making Sense of 'Messiness'.* Samarth-NMDP/Springfield Centre. www.enterprise-development.org/page/download?id=2369 Also see *Samarth-NMDP Annual Results Report* (2014). http://samarth-nepal.com/resource/samarth-nmdp-annual-results-report

2.2 Alternative pathways to systemic change

While many programmes have found the above frameworks useful, it is not the only way to conceptualise systemic change, and may not be appropriate in all contexts. For example, some markets may be dominated by single companies, with little potential for crowding in. Programmes which work to change rules or regulations through government or other non-private actors may also need to develop different pathways which show what they mean by 'systemic change' and how they expect to achieve it.

In particular, the pathways through which programmes can achieve deeper systemic change ('response' in the AAER framework) are complex and, as yet, little understood. Programmes cannot assume that a pilot or crowding in will lead to a deeper market response. Programmes which wish to measure and claim these changes will need to put significant effort into defining the changes that they expect and developing a pathway that shows how they expect to achieve them.

There is certainly more to be done in finding, representing, and measuring credible pathways. Consequently, we hope to see future experimentation and innovation from different development programmes. The DCED Standard does not require the use of any particular framework; programmes are welcome to apply any that show how they expect to achieve sustainability, resilience and scale.

3 Defining indications of change

Once the pathway to systemic change has been defined, the programme should establish what it can monitor in order to assess progress along that pathway.

This means that the programme should not only monitor longer-term systemic changes. It should also monitor short term changes that are necessary for the longer-term changes to occur. These are often called 'leading' indicators as they provide information before the final outcome occurs.[13] This is essential in order to provide regular information which can show whether the programme is likely to achieve its aims, and how it can adjust implementation if necessary.

Types of indicators

- Leading indicators provide information before the result takes place
- Coincident indicators yield information at about the same time as the result.
- Lagging indicators provide data after the result takes place, often with considerable time lag due to data collection routines and long results chains

For example, if the programme seeks a policy change, it may start off by monitoring initial signs of progress in the policy process, such as a key actor identifying or debating a policy issue. Later it would monitor the change in policy, and it would finish by monitoring the implementation of this

[13] Box from Britt, H. (2014). *Discussion Note: Complexity-Aware Monitoring.* USAID http://usaidlearninglab.org/sites/default/files/resource/files/Complexity%20Aware%20Monitoring%202013-12-11%20FINAL.pdf

policy, and its impact on the poor. Programmes should consider when the changes which they expect to see will occur, in order to plan their data collection.

3.1 Selection of indicators

Indicators for market-level changes can be challenging to collect data on, and time-consuming to analyse. As far as possible, the programme should set a limited number of indicators, based on a clearly defined causal pathway. These indicators are likely to need revision as the programme progresses, as it learns more about the market and the potential for sustainable impact. Each programme will typically monitor both quantitative and qualitative indicators.

For example, a programme that uses the AAER framework (described above) might set indicators for each step of the framework. Some examples are given below. For a more complete list of examples, see the Springfield briefing paper: 'Adopt-Adapt-Expand-Respond: a framework for managing and measuring systemic change processes'[14] and *Making Sense of 'Messiness',* a case study of Samarth-NMDP.[15]

Stage	Indicators
Adopt	• *Extent of benefit to partner firm:* ○ Changes in costs, revenues, and/or margins. ○ Number of first-time/repeat customers. ○ Other commercial benefits (developing a new customer base, identifying and targeting a new market segment, brand recognition, etc) • *Partner buy-in:* ○ Partner's share of financial and non-financial (e.g. roles, division of labour) costs of pilot; ○ Partner's willingness to assume all recurrent costs by pilot end. ○ Location of driving force for innovation within the company (e.g. CSR department, senior management, etc.) • *Satisfaction:* ○ Partner's satisfaction with results/utilisation of learning from pilot; ○ Target group's satisfaction with (and benefits derived from) new/better product or service introduced
Adapt	• *Independent investments and improvements:* ○ Partner's financial investment and forward budgeting/planning in the change(s) after programme support ends; ○ Experimentation / refinement / tailoring of product/service; ○ Partner 'roll-out' of piloting in new areas and/or markets. • *Mainstreaming of innovation within market player:* ○ Partner dedicates staff to upholding change (e.g. amends job descriptions, team responsibilities);

[14] Nippard, D; Hitchins, R & Elliott, D. (2014). Adopt-Adapt-Expand-Respond: a framework for managing and measuring systemic change processes. Springfield Centre. www.springfieldcentre.com/wp-content/uploads/2014/06/2014-03-Adopt-Adapt-Expand-Respond-Briefing-Paper1.pdf

[15] Ripley & Nippard. (2014). *Making Sense of 'Messiness'.* Samarth-NMDP/Springfield Centre. www.enterprise-development.org/page/download?id=2369

	○ Budgets, business plans, strategy, and other institutional documents accommodate change adopted. • *Benefit flows to the poor are sustained:* Target group continues to benefit after programme support to the partner ends.
Expand	• *Competitors or similar organisations 'crowd-in':* ○ Commercial players – number of competitors that copy or improve upon the changes pilot phase partners have made. (% of total in market) ○ Involvement of 'scale agents' (a player that can influence other players) • *Competition or collaboration in the system (depends on their nature):* ○ Level of competition ○ Extent to which new players (i.e. late adopters) face barriers 'to entry'. ○ Level of collaboration between players (e.g. effectiveness of representative organisations, joint ventures, adherence to rules/regulations etc).
Respond	• *Market reaction:* ○ New types of market player take on new roles or responsibilities, or add new functions as a reaction to the gradual mainstreaming of the model introduced. ○ Pro-poor and pro-growth government and sector/industry body responses. ○ Change in attitudes and norms about how to do business. • *Changes in the business environment*: ○ Fundamental changes in mindset from business and policy-makers. ○ Changes in regulations, rules, and policy related to the innovation. • *Ability of system to cope with shocks:* Evidence that change can withstand, or has withstood adverse events (e.g. negative responses, economic downturns, drought/flood)

4 Measuring changes in market systems

4.1 Tips for measurement

There are few hard-and-fast rules for measurement in market systems. Some key principles are below. For others, see USAID's discussion note on complexity aware monitoring[16] and a paper from the Market Facilitation Initiative on monitoring and measuring changes in market systems[17]:

- **Assess stakeholder feedback**. In market systems, there are multiple stakeholders, including the private sector, governments, civil society, and poor producers, consumers, and employees. They will each have different information about changes that have taken place, and a different view about whether they are positive or negative, and why. Practitioners should aim to speak with as many stakeholders as possible, including the poor who are expected to benefit from the programme. Although stakeholder feedback can be gathered ad hoc, during informal

[16]Britt, H. (2014). *Discussion Note: Complexity-Aware Monitoring.* USAID http://usaidlearninglab.org/sites/default/files/resource/files/Complexity%20Aware%20Monitoring%202013-12-11%20FINAL.pdf

[17] Osorio-Cortes, L & Jenal, M. (2013). Monitoring and Measuring Changes in Market Systems – Rethinking the current paradigm. Seep Network. www.seepnetwork.org/monitoring-and-measuring-change-in-market-systems---rethinking-the-current-paradigm-resources-937.php

conversations, the programme should also plan for interviews and outline these plans in their results measurement plans.

- **Take an investigative approach**. The fund manager must adopt a flexible approach to measurement. Accepting that systemic change cannot be fully predicted in advance, a certain amount of detective work is required to establish what has changed in the market system following the intervention. This requires practitioners not only to verify the pathway which they predicted, but to be alert for unexpected changes and use this to revisit their pathway. Participatory approaches may be particularly valuable to uncover unexpected information.
- **Triangulate information**. Information should be triangulated from multiple sources. This means that practitioners should not rely on one source of information, but look for confirming or contradictory information from other sources. This will include stakeholder feedback, as above, but could also include newspaper and magazine reports, country and market statistics, and other secondary data.
- **Examine trends**. Market systems constantly change, for reasons both related and unrelated to the programme. Consequently, programmes should not just take static snapshots of market performance, but seek to understand the type and pace of change, and reasons for this. For example, a programme may aim to map trends for key indicators (such as the size of the market) for a number of years before the beginning of the programme. If the market grows during the course of the programme, trend data will help staff understand whether this reflects a change, or simply a continuation of the existing growth rate.
- **Tap into tacit knowledge**. Tacit knowledge is "understanding developed through experience, difficult to transfer because its foundations are built implicitly". Capturing tacit knowledge allows intangible and hard-to-define aspects of the market system to be monitored, for early signs of impact to be detected and acted upon, and for field staff to input into the decision making process. Morcrette and Pennotti (2011) recommend that, in order to use tacit knowledge, programmes should ensure that their staff understand the programme logic and key assumptions. Tacit knowledge should be documented where possible, in particular where it is used to make a decision.[18] Samarth-NMDP discuss how they collect tacit knowledge in their case study.[19]
- **Invest in rolling baselines.** Baseline information is a crucial component of a results measurement system. It can be challenging in programmes which are working to change market systems, as their understanding of the market, anticipated causal pathway, and activities can change drastically over the course of implementation, rendering any initial baseline information irrelevant. Given that systemic change takes a long time to occur, it is often acceptable to conduct a baseline after the start of the intervention, as long as significant changes have not yet occurred. Initial baseline data will often be collected during the market analysis stage. Following that, additional baseline data collection can be conducted as the programme approach evolves. For example, if the programme changes strategy to work with retailers, then additional baseline research may be needed with retailers.

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[18] Morcrette, A., & Pennotti, C. (2011). *Know What You Know: Harnessing Tacit Knowledge in Value Chain Monitoring.* The Groove Learning Network www.slideshare.net/marketfacil/know-what-you-know-harnessing-tacit-knowledge-in-vc-monitoring-working-draft-ver1

[19] Ripley & Nippard. (2014). *Making Sense of 'Messiness'.* Samarth-NMDP/Springfield Centre. www.enterprise-development.org/page/download?id=2369

4.2 Measuring the impact of systemic change on the poor

Measuring the impact of systemic changes on the poor is critical. It can be, however, extremely challenging. For example, a programme measuring its direct impact may investigate whether the introduction of a new agricultural technology, through a single partner firm, results in an increase in incomes for smallholder farmers. If this technology is then taken up more widely by the market, then it could be implemented by different firms with no direct connection to the programme, working it in different areas in varying ways. The diversity, scale, and unpredictability of the market response make a meaningfully assessment of impact far harder.

In order to report the impact of systemic changes on the poor, programmes typically extrapolate from pilot studies and assumptions. For example, they may have established the direct impact as being $100 per farmer, and scale this up according to the estimated number of farmers reached by other firms in the wider market. Programmes which seek to report this impact should ensure that assumptions are carefully made and documented. In many cases, the assumption that direct beneficiaries benefit to the same extent as indirect beneficiaries may need additional validation. In the above example, agricultural technologies are likely to have different benefits in different regions, according to how the company implements them. In general, before reporting significant impacts on the poor the programme should conduct additional research to validate the impact of this technology. Programmes may find that qualitative evidence of impact is obtainable earlier than quantitative evidence. Alternatively, programmes may find evidence on the impact of systemic change too demanding to collect, and primarily report on changes at the market level.

5 Assessing attribution

Wherever a project is implemented, many changes will occur over time. Some of these changes may be unrelated to the project, and would have happened regardless of whether the project was ever funded. Other changes occur as a result of the project, and these changes can be **attributed** to the project.

Systemic change is particularly difficult to attribute. Markets are constantly changing, and it is very difficult to distinguish causes. Many techniques used to attribute direct impact involve control groups, which are generally not feasible when trying to assess systemic changes. There are four key considerations to plausibly attribute a systemic change to a programme.

- **The development of a clear pathway** which describes how the programme expects to change this market system. This should have clear, plausible, causal links between different steps in the pathway.
- **Evidence that expected changes have occurred at different levels in the pathway**. For example, if one of the expected changes is for vets to crowd in and provide additional services to rural farmers, then the programme would need to assess whether this is happening or not.
- **Evidence of causal links between the changes in the pathway**. For example, if the causal pathway posits that an initial pilot and programme dissemination activities led to more businesses crowding in, then they should be able to explain how the businesses which crowded in learnt about the business model, trace a link from the dissemination activities, and show

similarities between the different business models. This will require qualitative information from relevant market players to better understand the process of change and various influences on it.

- **Look for alternative causes of the changes you observe**. Markets and other systems are always changing, for a wide range of reasons. If the programme observes a change, they should look for alternative reasons why it might have occurred. This might include other government or civil society, innovation from the private sector, changes in the business environment or even the weather. By considering the various possible reasons for the observed changes, the programme can strengthen their claim to have had some influence.

6 Where next?

Many projects struggle to implement even basic monitoring, using simplistic representations of the logic or results chain. The skill set and resources to do simple monitoring have been under-estimated by almost everyone involved. There is, therefore, a constant tension between what is desirable (and even logical from a theoretical point of view) and what is likely to get done on the ground.

Project managers and staff have many demands on their time, and what sounds reasonable in theory may be vastly over-complicated in practice. The challenge therefore is to find ways to represent and manage systemic change, that are complex enough to be meaningful, while at the same time being simple enough to get done.

Consequently, there is a need for further analysis in this area. Building on existing examples, market development practitioners need develop and test pathways for systemic change. In particular, examples would be valuable from projects working in different contexts and using different theoretical models, especially from programmes which are old enough to have seen more significant changes. This will help understand what pathways are realistic, how they can be represented, and how they can be monitored over time.

As 'Capturing Wider Changes in the System or Market' is a core element of the DCED Standard for Results Measurement, the DCED has an obvious interest in ensuring that systemic change is clearly defined, and that good practices are sufficiently accepted to make audits consistent. There are, however, a number of agencies with interests in this area. In particular, the BEAM Exchange is mandated to support market systems approaches. The DCED will work with these and other relevant agencies to move this area forward.

7 Key References

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