MARKET SYSTEMS RESILIENCE

This document is a short brief intended to help people better understand Market Systems Resilience and navigate some of the key concepts and tools available.

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Executive summary

When faced with recurring crises, individuals' and communities' resilience is closely interlinked with the ability of the market to continue functioning. Market systems resilience (MSR) considers how entire market systems can survive and recover in the face of shocks and stresses. The MSR lens can help humanitarian and development practitioners assess system resilience in order to not only address immediate needs but support sustainable, transformative system change.

Existing programmes applying an MSR lens have learned to derisk their market support through an improved understanding of system resilience. In implementation, they have demonstrated the value of encouraging adaptive behaviours, targeting multiple system functions, and applying creative and context-informed facilitation strategies.

However, while MSR frameworks provide a foundation for assessing system resilience, they can be difficult for practitioners to translate into clear implementation decisions, particularly for practitioners who are not accustomed to systems thinking. There is need for continued learning on how to make MSR more accessible and apply frameworks to support implementation in contexts that require both market support and urgent assistance.

Acknowledgements

DevLearn specialises in consulting and training for inclusive economic growth, with a focus on market-based and systems approaches. We have worked in agricultural, humanitarian, and financial sectors, and have expertise in gender and social inclusion, green economic growth, and urban poverty in fragile and emerging markets.

The Markets in Crises Community of Practice (MiC) is a diverse community of practitioners engaging with and supporting markets in crisis contexts, including humanitarian agencies, civil society organizations, academic institutions, businesses, and governments. MiC provides a forum to share ideas, experiences, resources, and learning with the aim of improving market-based programming and facilitating links between those whose work focuses on crisis responses and those who are more concerned with longer- term market development work.

This document was drafted by Catie Crowley with the support of DevLearn and MiC. In drafting it, we are grateful for the support of Sasha Meunch, Meseret Getahun, Alexa Swift, Karri Byrne, Nayeem Kashem and Adam Kessler.

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Introduction

When it comes to Market Systems Resilience, the few frameworks that are available are conceptually similar and are challenging to apply for the average humanitarian or development practitioner.

As a result, this brief focuses firstly on demystifying what MSR is by explaining core concepts, and suggesting some tools to help get started. Secondly, it compiles advice and learnings from interviews with ten practitioners who have applied MSR thinking.

This document is part of a learning exercise on MSR for the Markets in Crisis Community of Practice (MiC), and it seeks to provide guidance for humanitarian and development practitioners embarking on applying an MSR lens.

It is clear that MSR spurred an important shift in how the sector thinks about resilience. Whether a programme seeks to help households cope with crises in the short to medium-term or aims for sustainable transformative change, considering resilience only at the individual or community level will have its blind spots. Having acknowledged this, looking at resilience at the system level becomes an essential lens for supporting the livelihoods.

Key definitions

Market system: dynamic space, incorporating resources, roles, relationships, rules and results – in which private and public actors collaborate, coordinate, and compete for the production, distribution and consumption of goods and services (Downing et al., 2018).

Resilience: the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth (Downing et al., 2018)

Market Systems Development (MSD): a coherent medium-term approach to understanding and intervening in markets so that they work better for people living in poverty. MSD works for lasting change by addressing the root causes of market exclusion and weak performance in the economic systems upon which poor women and men rely (Byrne, 2021).

Market Systems Resilience: the ability of market systems to allocate resources, draw on system-level resources (such as social safety nets, social capital, the financial system, or government assistance), and innovate in order to solve problems in the face of shocks and stresses (Downing et al.,2018).

The goal is that projects can be comfortable applying this framing to their work, whether they are using markets to help people meet immediate needs or are working to transform markets for the longer term. Ultimately, the key to MSR is becoming comfortable with systems thinking and its complexity – something easier said than done.

A review of MSR frameworks

The core question at the heart of MSR is: How can a market system continue functioning in the face of shocks and stresses? To phrase this another way: when there is a crisis, how can people use markets to get the things that they need? This section outlines some key context and concepts of MSR.

MSR was developed within the MSD space

MSR arose in response to a major blind spot of many MSD frameworks. They paid insufficient attention to how systems change in response to shocks and stresses and how market actors manage risks. Over the last several years, frameworks have emerged that aim to help practitioners understand and

improve the capacity of markets to mitigate, innovate and adapt in the face of shocks and stresses. Notably, GOAL developed their Resilience for Social Systems (R4S) methodology in 2016, and USAID and Vikara Institute published their Market Systems Resilience[1] framework for measurement in 2018.

MSR was largely developed by MSD thinkers and practitioners, especially those with experience applying MSD in fragile or crisis prone markets. MSR sits within the MSD space, and functions as an additional lens that is applied to programs or interventions that use a systemic approach. As it filled a critical gap for market systems programmes, MSR has gained traction among a host of active programmes, with an MSR community of practice and a growing base of learnings generated by programmes that have applied the lens to their work.

MSR introduced a new way of understanding resilience

Understanding resilience at the system level was a new idea. Proponents of MSR liken it to a veil being lifted – once you consider how the system responds to risks, it becomes very obvious that this angle of analysis is critical for an intervention's success. Even for programmes that prioritise household or community resilience, using MSR can help leaders identify issues that affect households and communities but might be unseen by existing livelihoods tools.

As some practitioners pointed out, **MSR is simply good MSD**. In other words, it is always useful to consider and prepare for risks to the way relevant systems function. By extension, **MSR is not just for fragile contexts**. Though the need to consider resilience is more evident in crisis-prone environments, the impact of the COVID-19 pandemic on global supply chains serves as a recent reminder of the importance of resilience even in highly developed and stable markets.

MSR requires systems thinking

For many, **systems thinking is a totally new way of approaching problem solving**. MSR does not emphasise households or businesses as individual actors, but seeks to understand the glue that binds all of these market actors together and makes the system function. See the box below for key MSR concepts that are rooted in systems thinking.

It can be overwhelming to be faced with the myriad of interconnected and ever-changing variables that make up a system. However, systems thinking is not as scary as it sounds. People often use systems thinking in everyday life, and the concepts are intuitive.

What MSD aims to do is tease out the **underlying drivers** of a problem (a 'market failure'), and work with 'market actors,' to solve it by targeting their capacities and incentives. When a shock happens, market actors will change and adapt to deal with the new reality. Facilitating positive coping, adaptation, and transformation is what MSR is about.

On the other hand, for an MSD practitioner who is accustomed to systems thinking, MSR may introduce more of an emphasis on resilience at the household level compared to traditional MSD programmes. Indeed, resilient market actors reinforce a resilient system, and a resilient system reinforces individual-level resilience.

[1] The term MSR seems to have been popularised through the development of this USAID framework, but this paper uses MSR as a blanket term for any lens of analysis that considers resilience at the system level.

Key systems thinking concepts

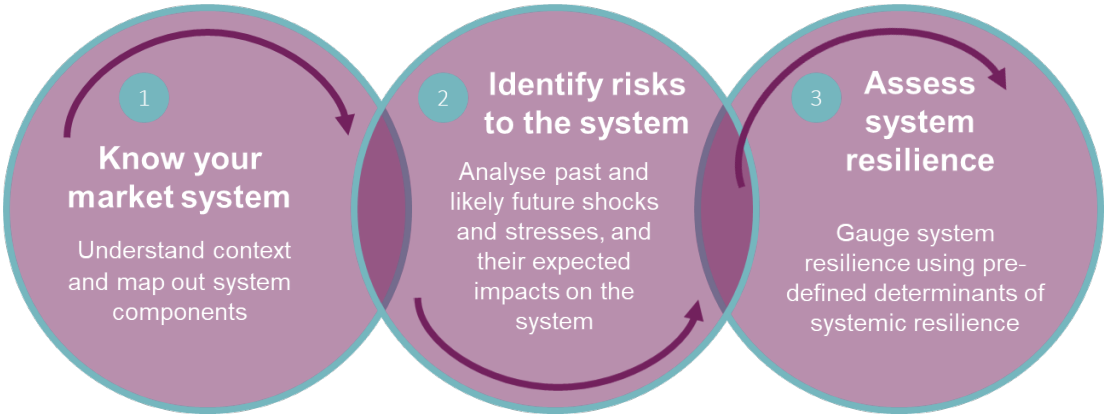
Market systems are complex. A market system is made up of all the interconnections between its components, and these systems react and self-organise in response to events. Market systems are constantly evolving. They can be embedded within other systems and/or at interplay with other systems. Some variables in the system change quickly and easily, while others are slow-moving (MSR framework, 2018). When talking about a market system, there are three main 'levels': 1) individual market actors and firms, 2) value chains, and 3) sub-systems (comprised of multiple value chains, i.e. a 'food system') (Vroegindewey, 2019).

Shocks and stresses affect the system. Shocks are external short-term changes that have substantial negative effects on the system state or its ability to withstand future shocks. Stresses are long-term trends or pressures that undermine the stability of a system and increase vulnerability within it (Sagara, 2018). Shocks and stresses are often compounding and interdependent.

Resilience is how the market system responds. System resilience is the market's ability to prevent, mitigate, cope with, and adapt to negative impacts of shocks and stresses. With this definition, resilience is seen as a set of capacities or characteristics that can be developed. One widely used framework categorises resilience capacities in terms of: 1) absorptive capacity (ability to absorb impacts using coping responses), 2) adaptive capacity (ability to make adjustments that allow functioning despite negative impacts), and 3) transformative capacity (ability to transform structures and functions to a new state, especially when adaptive measures are overwhelmed) (Bene, 2012).

MSR frameworks are conceptually similar

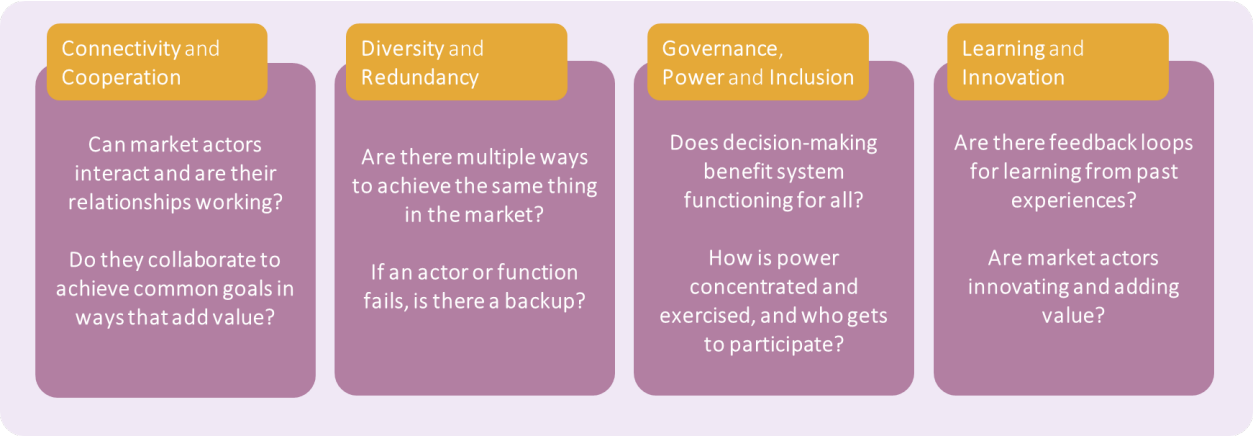
Some well-known frameworks include MSR from USAID, R4S from GOAL, and MSRI from iDE. These frameworks are conceptually very similar. At a high level, they involve three main steps illustrated below. The first step constitutes the basic market analysis that would be a starting point for designing any MSD intervention, the second step considers risks to the system, and the third step assesses the capacity of the system to continue functioning in the face of these risks.



More specifically, assessing system resilience means first defining the characteristics that allow a system to manage, mitigate, and adapt to shocks and stresses, and then assessing the extent to which the system displays those characteristics. The terminology varies by framework, with GOAL's 'determining factors of resilience', MSRI's 'principles and determinants of resilience', and USAID's

'domains of resilience'. The figure below summarises some of the main ideas of these characteristics as defined across different frameworks.

Figure 1. Pillars of MSR: Characteristics of a resilient system



Though frameworks vary slightly on how they define these capacities, there is considerable overlap, with an emphasis on **connectivity** and **cooperation** between market actors, **diversity** and **redundancy** (multiple pathways to accessing or doing the same thing), **governance** and **power structures** (how resources are controlled and allocated by system actors), as well as **learning** and **innovation** (problem solving). See Appendix B for a comparison of how different frameworks define characteristics of a resilient system.

Indicators for measurement: MSRA Tool[2]

The MSR framework from USAID contains guidelines and suggested indicators for measuring each characteristic, or 'domain' of system resilience. They recommend:

1) Selecting 6-8 indicators for each domain based on relevance to the market system and feasibility of measuring the indicators.

2) Collecting data on indicators and scoring each domain from 1 (very reactive) to 4 (very proactive) based on whether indicators match a 'reactive' or a 'proactive' description of that domain.
   - Score of 1 (very reactive)= more than 50% of indicators correspond to reactive domain definition
   - Score of 2 (somewhat reactive)= 10% to 50% of indicators correspond to reactive domain definition
   - Score of 3 (somewhat proactive)= 10 and 50% of indicators correspond to proactive domain definition
   - Score of 4 (very proactive)= more than 50% of indicators correspond to proactive domain definition

To use the example of Diversity, some of the possible indicators suggested include (see Appendix C for more detail):

- Count of different sizes of businesses
- Redundancy rate
- Business failure rate
- Business start-up rate
- Diversity of business models
- Diversity of types of products and services
- Variation in distribution or marketing channels
- Variation in financial services

In addition to suggested indicators, there is guidance on how to measure/assess each indicator option.

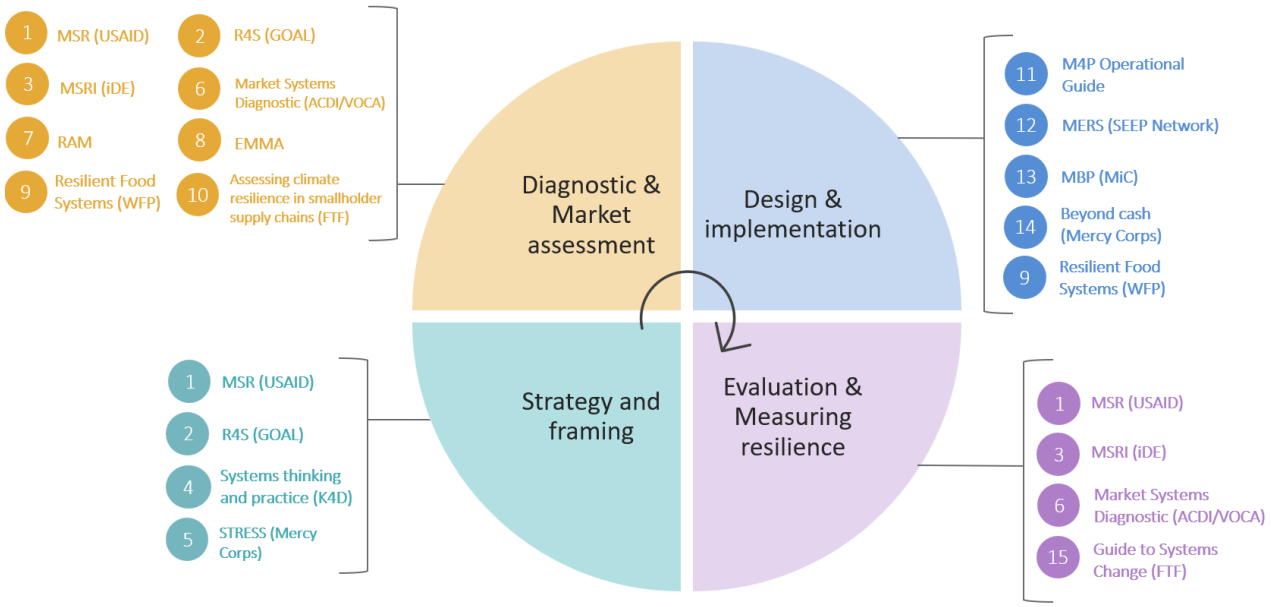
MSR frameworks alone are not enough

[2] Found on page 18-32 of Market Systems Resilience: A Framework for Measurement

These high-level components of MSR thinking are mainly geared toward assessing resilience of the market system, but **tend to lack clear guidance on implementation**. Because MSR acts as a lens applied to an MSD approach, practitioners often draw on principles of implementing MSD projects when using MSR. Additionally, each project operates in a complex and unique market system, and generalising learnings from a specific case can be difficult. MSR is a relatively new space, and the base of learnings from projects that have applied MSR is still growing. Ultimately, MSR thinking has not produced clear guidance on how to go from MSR assessment to design and implementation.

It is also useful to remember that **MSR frameworks are a starting point, and can be simplified and adapted to suit your system's context**. Most practitioners interviewed for this research were framework-agnostic, and modified certain elements of a framework's definition of a resilient system or drew from elements of multiple frameworks. For example, when drawing on USAID's eight domains of resilient systems, a programme might drop a domain that is less relevant, redefine domains in a way that made more sense to them, or focus on a few priority domains. If the systems thinking and understanding of systemic resilience is there, projects can be quite pragmatic about how they choose to apply MSR.

Figure 3. Frameworks for applying MSR



Considering the entire programme cycle (strategy, diagnostic, design, implementation, evaluation), it may be useful to mix and match tools. The figure above identifies a range of tools that might be useful, and it is linked to a table in Appendix A that gives more detail and links to each resource.

What we have learned about implementation?

As an MSR lens is applied to a growing number of interventions, best practices and common pitfalls are beginning to emerge. The following section provides some insights and emerging lessons from practitioners and MSR experts.

Transformative change is the ultimate goal of MSR

Directly filling gaps in social services is good for promoting resilience, but it is important to think about how the system can transform to manage risks on its own. Existing coping strategies in the market are all too often reactive, short-term, and piece-meal and tend to involve absorbing the risk and coping through communal mechanisms. To ensure that market actors can anticipate risks and allocate resources proactively requires a fundamental shift in market actor behaviour and in the way markets deliver value to households.

Systems change is a tall order, and single solutions will not be enough. It is important to consider layering multiple forms of support to achieve a given change in the market. For example, when supporting smallholder farmers by addressing a key constraint of access to seed, you cannot assume that market forces will ensure other supporting functions fall into place. This means you will likely be tackling several functions and considering both the supply and demand side.

Transforming the mango sector in response to a shock

Feed the Future's Kenya Crops and Dairy Market Systems (KDMS) Activity sought to improve resilience of the mango sector, which had been greatly affected by a major shock -- a fruit fly infestation and a subsequent ban on exports to the EU that caused losses of about $500,000 per year. Mitigating fruit flies would require significant changes to the mango ecosystem.

To transform the sector, the programme addressed constraints on both the supply and demand side. They did this by engaging private sector actors to boost their willingness to invest in farmers' pest management. At the same time, the programme supported agribusinesses to distribute pest management services and inputs to remote areas of the infested region via agent networks and franchise models. In parallel, KDMS also helped redesign a national traceability system to provide services and create producer incentives for pest free growing and post-harvest management.

It was through targeting multiple actors and functions in the market to strengthen cooperation, competitiveness, and diversification that KDMS was able to rapidly shift agricultural practices of mango growers. As producers adopted pest management the ban was lifted in 2021 (Visser & Springer 2023).

Incentives in the market are also key. A project might intervene in a certain crop value chain due to that crop's importance for food security, but if incentives and barriers in the market prevent smallholders from scaling or prevent that crop market from growing, it will achieve isolated improvements rather than transformative change.

A resilient system is not necessarily the most efficient system

Traditional MSD programmes seek to make markets function better to the benefit of poor or vulnerable people. When accounting for resilience, it may be necessary to redefine what a well-functioning market system looks like and deprioritise efficiency.

For example, the principles of redundancy and diversity in the market are about providing substitutes when a shock causes losses in the system. This might mean buffering inventory or planning for lead

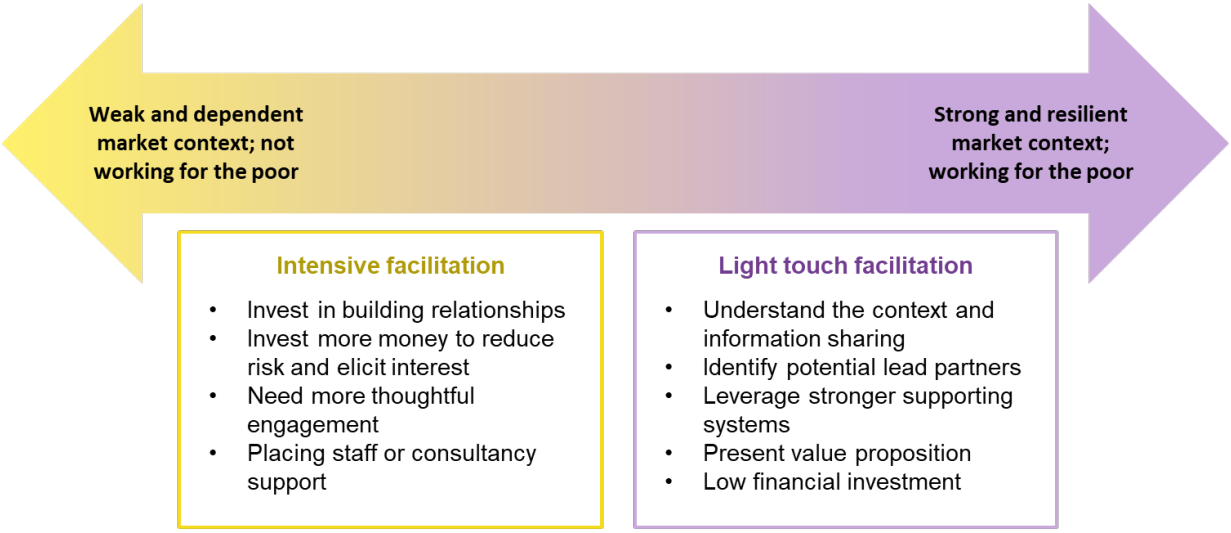
times in sections of the value chain to allow for delays (Vroegindewey, 2019). If you are working on improving supply of inputs, you will likely want to partner with or support multiple input suppliers at different levels of the market system with differing networks and geographies. Even if they provide the same service, this ensures that supply of inputs can continue in the event that a supply route is cut off.

MSR accounts for these risks by building this ability to respond to shocks into the definition of a well performing market.

Be pragmatic about your facilitation approach

The facilitation role in market systems refers to how a project supports or influences market actors to change their behaviour/practice, as opposed to traditional approaches in which the project intervenes directly. In fragile contexts with recurring shocks, it is likely that a project is operating in a 'thin' or a weak market. These contexts are characterised by a low volume of transactions, few active firms, a misalignment of incentives to cooperate, and a dependence on outside funders for market functioning (Grant, 2022).

When operating in these markets, a project is unlikely to achieve desired changes with only typical light touch or indirect facilitation approaches. Thus, how heavily or directly you intervene in your market system can depend on the level of market function, as shown by the diagram below (adapted from Grant, 2022). Though practitioners in the MSD space might decry direct or heavy handed facilitation, MSR (like the MBP framework) sees it in function of its necessary role in catalysing change.



Programmes that applied MSR found that it was often necessary to take on additional cost sharing with partners or make a concerted effort to reduce uncertainty for more vulnerable market actors. This can offset the reality that markets do not always operate with incentives to serve the most marginalised individuals and that market actors in fragile contexts are often more vulnerable and risk averse.

Balancing push and pull approaches

When applying MSR in fragile contexts, practitioners might be juggling urgent crisis response alongside building capacity to adjust and recover. This often requires a combination of direct or "push" approaches to address the immediate needs of households and reduce their risks, with "pull"

approaches to facilitate access to market-driven coping mechanisms (Garloch 2012). Programmes that apply MSR typically use pull strategies, but in practice have found it necessary to layer these two types of support. However, push approaches can potentially undermine the changes that a project is aiming for in a market system.

Market led crisis response

The RIPA North programme's main interventions focused on vertical integration of livestock supply chains in Ethiopia. The livestock sector was not working for producers who were selling animals at low prices and were often unable to access markets. Meanwhile, abattoirs near Addis Ababa faced supply issues, and drought and conflict undermined the linkages between producers, traders and buyers. The programme aimed to use agent based models to improve relationships, embed services between actors, and reduce uncertainty and risk for both regional traders and pastoralists (Mercy Corps, 2023).

Halfway through the programme, a drought in the Somali region required emergency response, and the programme activated a 'crisis-modifier' to respond to immediate needs while still complementing the longer-term strategy. This included vouchers for inputs and animal health services that could be redeemed with private veterinary pharmacies. This assistance countered the rapid depletion of livestock assets that households faced while strengthening business models and business viability of market actors, thus complementing RIPA's market support in the animal health and animal fodder systems. The drought response also involved commercial destocking through subsidies for livestock traders to purchase animals from households in drought affected areas. This approach, which involved market mobilisation rather than targeting specific households, created linkages among producers and buyers that could benefit both actors beyond the subsidy (Mercy Corps, 2022).

This example highlights how MSR is not rigid, and deviates from traditional MSD facilitation only approaches as urgent needs necessitate a balancing act between market goals and crisis response.

Using these approaches to juggle urgent response with longer term coping, adapting, and recovery through local systems is an area where the MSR community could learn from the MBP framework and other guidance from humanitarian practitioners. Additionally, as MSR gains traction in spaces with both development and humanitarian actors, it highlights the imperative for improved coordination between actors employing these two types of support to achieve holistic response that addresses both immediate challenges and supports long-term system changes.

Look for opportunities within the chaos

Chaotic implementing environments can make it very difficult to predict outcomes and to plan, but they can also present serendipitous opportunities and leeway that might not exist in more stable markets. Keeping an eye out for unexpected opportunities or outlier cases can bring about the most innovative solutions.

Noticing cases of positive deviance for how small businesses adapt in a crisis could give way to new approaches. For instance, climate change in pastoralist communities has often meant that cattle rearing is riskier while goats, traditionally reared by women, have become relatively more important as sources of income. This has shifted gender norms to give women more decision-making power. MSR can help projects identify where change is emerging and capitalise on newfound opportunities.

When a shock occurs, actors that might not have otherwise been relevant may now be important. For example, one project found that the role of transporters during COVID-19 restrictions became much

more important than it would be during normal times, which led to a shift toward focusing on transport. Revisiting assumptions and noticing how dynamics in the market change can help your team keep an eye out for these opportunities.

Your measurement philosophy should reflect a systemic approach

MSR deals with questions that are difficult to measure, and to some extent, grappling with complexity is a shift in how we think about measurement. Looking for qualitative patterns and how things evolve will rely heavily on qualitative information.

This means that measurement should be practical and directly tied to decision-making. Rigorous attribution strategies can be misguided, as we are dealing with complex or indirect pathways to change. When thinking about contribution, we should adopt a common sense approach for finding indications of change. Triangulation (feedback from multiple types of market actors) and outcome harvesting can be useful here.

What's next?

For any project that has a long-term goal of sustained changes within a system, the value of looking at resilience at the system level is evident. This is true even for programmes that are dealing with crisis response, but want to support local coping capacity. Understanding systemic resilience is essential for intervening in local markets and food systems, and for understanding critical aspects of household resilience.

How you tackle applying the MSR lens might depend on who you are. For those who use systemic approaches already, MSR has a lot to offer. It slots neatly into the MSD approach, supporting programmes to derisk their activities and account for market resilience. For practitioners who are new to systems thinking, MSR might involve a larger learning journey around incorporating systems thinking more broadly into your work.

Frameworks have already helped spur thinking around system resilience, but there is a need to make MSR more practically applicable and provide explicit guidance around implementation. As an important learning for the MSR community, there is further to go to ensure that MSR frameworks are accessible to a broader range of practitioners who are applying market based approaches outside of the traditional MSD space. For those who are using markets or supporting markets, but are not yet transforming markets, how does the MSR framework map onto MBP programming? This is an important area for further exploration for those in the Markets in Crisis space.

Appendix A: Table of recommended frameworks and tools

	Framework or tool	Stage	Summary
1	**Market Systems Resilience (MSR) – USAID**	Strategy, Diagnostic, Measurement	This is a framework for understanding resilience at the systems level. It treats markets as complex adaptive systems and set out 4 structural and 4 behavioural domains of market systems resilience. It contains a Market Systems Resilience Assessment Tool with steps for assessing each resilience domain using a menu of indicators. This framework has been applied in some capacity by about 35 projects across 26 countries.
2	**Resilience for Social Systems (R4S) - GOAL**	Strategy, Diagnostic	This toolkit has detailed guidance for assessing socio-economic systems, including market systems. Developed with support from the Springfield Centre, it blends traditional market mapping tools with risk assessment to identify system vulnerabilities and assess resilience using six determining factors of resilience.
3	**Market Systems Resilience Index (MSRI) – iDE**	Diagnostic, Measurement	This research and analytical framework is a model for assessing 11 determinants of resilience to create an indexed measurement of MSR. Detailed guidance is not publicly available, but more information can be found from this 2021 blog post.
4	**Systems thinking and practice – K4D**	Strategy	This guide offers a starting point for engaging in systems thinking, with conceptual frameworks and facilitation tools for using this mindset to understand and enact social change.
5	**Strategic Resilience Assessment (STRESS) – Mercy Corps**	Strategy	This methodology is designed to help teams apply resilience thinking in humanitarian and development contexts, assessing resilience capacities at the household, community and system level to shape a more robust long-term strategy.
6	**Market Systems Diagnostic (MSD) – ACDI/VOCA**	Diagnostic, Measurement	This diagnostic tool analyses changes in market structures and enterprise behaviours using a mix of quantitative enterprise surveys, structural analysis of systems, and qualitative workshops to understand whether and how a market system is changing to become more resilient. Read more on how it was applied in Honduras, here.
7	**Rapid Assessment of Markets (RAM) – IFRC and ICRC**	Diagnostic	These guidelines provide a quick look at how markets operate immediately after a shock to support decision-making around response options and identify what further market system analysis is needed.
8	**Emergency Mapping Market Analysis (EMMA) – IRC, Oxfam, Practical Action and Interaction**	Diagnostic	This toolkit guides a ten step process for pre or post shock market selection and analysis. It provides explanations of market concepts and recommends response options with a focus on emergency response.
9	**Resilient Food Systems – WFP**	Diagnostic, Implementation	This framework looks at assessing the functioning and resilience of food systems, with emphasis on context mapping. It lays out three common context 'types', providing practical recommendations for each context.
10	**Assessing climate resilience in**	Diagnostic	This guide provides a roadmap for measuring climate resilience in smallholder supply chains, and is targeted

	smallholder supply chains – FTF		toward companies interested in assessing resilience for the purpose of securing supply.
11	M4P Operational Guide – SDC and DFID	Implementation	This complete operational guide is for practitioners applying an M4P (making markets work for the poor) or MSD approach. It contains detailed guidance on the overall approach, strategy, diagnosis, intervention, measurement and management. For practitioners who wish to apply an MSR lens but don't know how to go from assessment to intervention design and implementation, Chapter 4: Intervention can provide a starting point.
12	Minimum Economic Recovery Standards – SEEP Network	Implementation	This handbook offers best practices for using markets to address humanitarian needs and building economic resilience of crisis-affected communities. As a Sphere companion, they have an emphasis on market systems and market aware programming.
13	Market based programming (MBP) - MiC	Implementation	The framework was developed to help humanitarian actors understand market approaches in fragile contexts. It identifies overlap between MSD and the market-based responses that can be used in humanitarian contexts.
14	Beyond Cash (Making markets work in crisis) – Mercy Corps	Implementation	This framework helps market systems practitioners and humanitarians think through applying systems thinking and carrying out interventions in a protracted crisis context. A core tool is a 4x4 matrix looking at how direct and systemic approaches contribute to meeting immediate needs while building long term resilience.
15	Guide to Systems Change – FTF	Measurement	This guide sets out a step by step for how MEL managers can approach measuring systems change, providing practical tips, resources, rubrics, templates, analysis frameworks and planning exercises.

Appendix B: Characteristics of resilient systems according to different frameworks

7 Principles of Resilience Thinking (Stockholm Resilience Centre)

1. Maintain diversity and redundancy
2. Manage connectivity
3. Manage slow moving variables and feedbacks that reinforce or dampen change
4. Complex adaptive systems thinking
5. Encourage learning
6. Broaden participation
7. Promote poly-centric governance

Characteristics of Resilient Systems (Bene, 2012)

1. Diversity
2. Governance
3. Acceptance of uncertainty and change
4. Community involvement
5. Preparedness
6. Equality
7. Social values and structures
8. Non-equilibrium dynamics acknowledged
9. Continuous learning
10. Cross-scalar perspective

MSRI Principles & Determinants of Resilience

1. Structure of the market:
   Redundancy
   Diversity
   Functionality
2. Connectivity of the market
   Inclusion
   Integration
   Collaboration
3. Support of the market
   Feedback loops
   Enabling environment
   Preparedness
4. Environment
   Physical environment
5. Financial
   Financial viability of market actors

6 Determining Factors of Resilience (R4S – GOAL)

1. Connectivity
2. Diversity
3. Redundancy
4. Governance
5. Participation
6. Learning

8 Domains of Resilience (MSR – USAID)

Structural
1. Connectivity
2. Diversity
3. Power Dynamics
4. Rule of Law

Behavioural
1. Cooperation
2. Competition
3. Decision-making
4. Business strategy

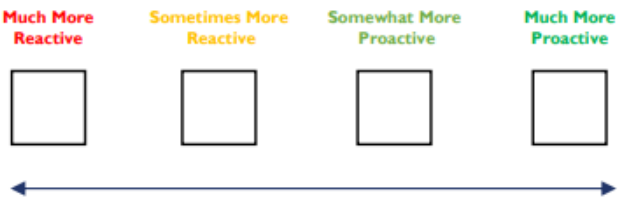
Appendix C: Indicators for measurement

An example of a full indicator scorecard for the domain 'Diversity' in the USAID model is shown below (Downing et. al., 2018).

Diversity: The Different Ways that the Component Parts of the System can be Assembled

Reactive: Limited with minimal specialization.

– Dependent on a small number of actors/nodes that are critical to system functioning.



Proactive: Increasing with specialization.

– Component parts of the system can be assembled to perform the same function in different ways.

Indicators

Code	Indicator	State	Data Source
Variation			
	Count of different sizes of businesses Number of different categories of business risk profiles	F	
B1F	Redundancy rate*	F	Expert opinion
B2C	Business failure rate*	S	Secondary
B1B	Business start-up rate*	F	Secondary
Diversity of Types and Kinds			
B2B	Level of business model diversity*	S	Expert opinion
B1C	Diversity of types of products, services, etc. in a sector	F	Expert opinion
B1D	Level of investments value addition within key value chains (i.e. processing, increasing segmentation/specialization)	F	Expert opinion
B1E	Growth of specialized services targeting businesses within an industry	F	Expert opinion
Diversity of Composition			
B2A	Diversity of channels*	S	Expert opinion
	Count of different supply and distribution channels Count of different marketing channels		
Mediating Factors			
B2F	Variation in financial services*	S	Expert opinion
B2D	Innovation Index*	S	Market players
B2E	Perception about risk-taking*	S	Expert opinion
	Fragmentation of land Sedentarization Social norms regarding gender, age, wealth, ethnicity Financial flows – public investment, private investment Roads/infrastructure Labor markets (labor shortages or surplus) Variety of ways businesses are structurally related (slow) Number of geographic production nodes (slow)	S	

For guidance on how to define and measure each indicator, the full notes are found on pages 28-32 of Market Systems Resilience: A Framework for Measurement.

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