

Rethinking systemic change – a case study

A practitioner's perspective from the NUTEC-MD programme in Uganda

Case study

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1. Background

Recent [research](#) by BEAM Exchange sought to understand theoretical perspectives on how market systems approaches can contribute to inclusive economic development through systemic change. It produced a [Discussion Paper](#) and accompanying [Technical Paper](#) with three main insights. **Firstly**, economies are evolving systems, building on the mechanisms of variety creation, selection and amplification. **Secondly**, both, current economic performance, including aspects like the inclusiveness of growth and economic evolution, are shaped by the ability of a society to explore different options for institutional arrangements and adjust them over time. **Thirdly**, this process of evolution is complex. While some aspects can be designed and managed, others need to be explored through a process of learning and adjustment.

This paper responds to these insights by providing a practitioner perspective on the feasibility of applying these theoretical insights into the inception phases of market systems development programmes through the lens of one such programme: DFID-funded “Northern Uganda: Transforming the Economy through Climate Smart Agribusiness – Market Development (NUTEC-MD)”, implemented by Palladium.

Recognising that NUTEC-MD was not designed with these specific principles in mind, it begins with a brief introduction to the programme and key aspects of its inception phase. Using a retrospective single case approach, it then compares and contrasts the extent to which these theoretical perspectives were integrated into the inception phase of NUTEC-MD, identifying opportunities where they could have been further integrated through modifications to the inception phase, and acknowledging aspects of the main research insights that were beyond the scope of the programme (and perhaps any donor-funded programme) to address.

Finally, though it is not possible to generalise findings from a single case to a larger group of programmes it concludes with potential implications for the wider practitioner community based on this case, recognising what is in the realm of possibility for a donor-funded market systems development programme given the constraints within the current development system.

2. Introduction to the programme

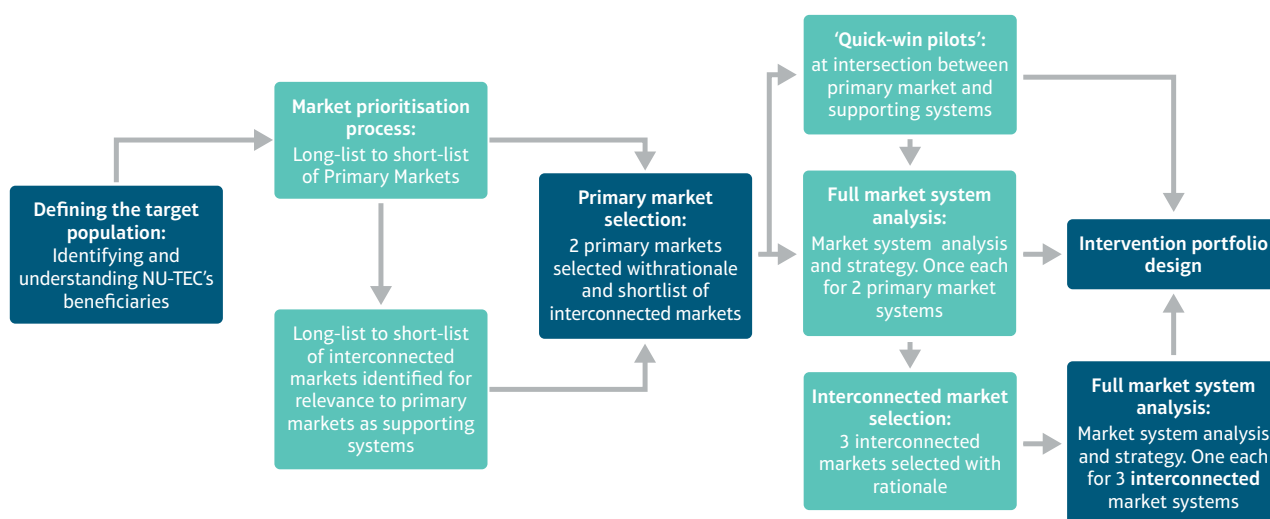
NUTEC-MD is a DFID-funded programme that aims to increase the incomes and climate resilience of poor men and women in northern Uganda by stimulating sustainable, pro-poor growth in selected agricultural markets. As mentioned above, NUTEC-MD is delivered through the M4P approach and aims to catalyse systemic change by addressing root causes of current system performance that systemically disadvantage the poor from meaningfully participating in markets.

NUTEC-MD’s predominantly analytical inception phase was intended to develop a clear understanding of the nature and dynamics of market systems in northern Uganda. It was structured around a number of deliverables, each requiring client approval. The result was a number of market system analysis reports and an opening portfolio of four interventions developed in consultation with potential business partners (Figure 1).

During the inception phase, NUTEC-MD was also required to develop a programme results framework, including end-of-project targets and annual milestones to demonstrate implementation progress for all indicators. Therefore, for each intervention in the opening portfolio, the team forecasted likely results the business model would achieve at each result

level for each year of the programme. The opening portfolio was contractually required to initiate interventions that could plausibly generate 25% of the total results expected by the end of the programme.

Figure 1. Overview of NUTEC-MD inception phase activities and deliverables



3. Practitioner perspective on main research insights

3.1 Economic change as evolutionary process

Summary of findings

Evolution is a general-purpose and highly powerful recipe for finding innovative solutions to complex problems. In the economy, the purpose to be achieved by this process is to cater to human needs and preferences and create wealth. The evolutionary process of creating variety, selecting fit designs and amplifying them is continuously repeated at different levels within an economic system. The economy is a mechanism in which different solutions are developed, tested and amplified. Through competition, markets provide incentives to try new things and create variety. In contrast to biological evaluation, the fitness function that determines what is selected as fit in an economy is thereby an emergent property of the society. It is shaped by the collection of beliefs, perceptions, culture, history, available knowledge and formal and informal institutional arrangements in a society. Good ideas are amplified by shifting resources from unfit to fit designs. For the evolutionary process to work, it is essential that entrepreneurs and a wide range of social actors have an interest and incentive to discover individually and together more of what is possible.

Implications for practitioners

The insight around ‘economic change as an evolutionary process’ carries a number of practical implications for the inception phases of donor-funded market system development programmes. One of which implies that current market development programmes should focus on better understanding the ‘fitness landscape’ in which business models are introduced.

First, this requires creating situational awareness of the market system, how the system evolved, and where the opportunities are for change.

Second, it requires internalising the fundamental concepts of variety, selection and amplification in the identification of best fit business models. This implies a recognition of the need for experimentation (and failure) in identifying best fit models, accepting that no matter how 'situationally aware' a programme aims to be, it is only through introducing a variety of different business models that the 'best fit' models will be selected and amplified. Situational awareness can provide insights into the broad parameters of business models that are likely to be a better fit. However, awareness alone is unlikely to replace the need for experimentation: introducing and testing a variety of specific business models in the real world in order for the system to find a 'best fit'. This includes recognising that many if not most of these will fail.

In the case of NUTEC-MD, the analytical nature of the inception phase certainly embraced the first aspect of this insight, around creating situational awareness. A number of contractual deliverables during the inception phase linked to different aspects of market system analyses helped the team to better understand that a focus on northern Uganda's economic development would require NUTEC-MD to direct efforts away from traditional low-productivity agriculture, toward the introduction and expansion of modern, high productivity activities. And that these activities needed to be understood in the context of northern Uganda's economic history, such as the importance of the introduction of new products such as high protein soybean meal in the 1990s, and new capabilities such as solvent extraction oil seed processing which demonstrated opportunities for expansion.

NUTEC-MD's inception phase activities thus led the programme team to focus efforts within the sunflower and soybean commodity markets and three inter-connected support markets (seed, land preparation, aggregation & storage), with scope to enter new high growth, high value-added markets in the future. The opening portfolio included interventions focused on unlocking binding constraints to growth and catalysing sustainable change to business practice among market actors supporting or operating in high productivity sectors. For instance, a business model to facilitate an increase in the multiplication and distribution of commercial improved soybean seeds in northern Uganda.

The experience of NUTEC-MD however highlights challenges with the feasibility of fully integrating aspects of experimentation into an inception phase when multiple contractual deliverables are required in a tight time frame. First, the structure of the contract favoured analysis over experimentation in its nine month inception phase. While the numerous deliverables around market system analyses were useful in building situational awareness, it did not allow the team the time to sufficiently engage with a variety of market actors. This reduced the team's ability to fully reflect on the findings of the different aspects of the market system analysis and co-design new innovations with market actors based on their growing understanding of the situation. Pressures grew as some deliverables slipped, and the payment by results contract pushed the programme team to focus ever more tightly on meeting contractual obligations.

For instance, oil seed processors are an important market actor in the sunflower and soybean market systems. Fully embracing this research insight would suggest that the NUTEC-MD team should have been working collaboratively and iteratively with processors over the life of the inception phase to understand the results of the different market system analyses conducted, to interpret the results together and to identify a variety of innovative business models to introduce into the system. In practice, the relatively tight time frames of the contract did not provide adequate time for this. Rather, interactions with processors were more transactional in nature, in order to gather the data needed to conduct the required analysis.

In addition, in an effort to drive accountability of the programme team to deliver results, the

contract included a requirement that predictions be provided which demonstrated how the opening portfolio of pilot interventions would plausibly generate a quarter of the programme's total expected impact-level results. Though the discipline of developing projections partners brought to the surface many of the assumptions within the business models that needed to be discussed, in reality it also steered the team to identify 'safe bets', looking for business models that had been successfully tried and tested in other contexts and adapting them to the northern Uganda context, where results projections could more reliably be made.

For example, in working with a large grain aggregator and processor, the team opted to identify a current model that the processor was implementing in another commodity market system and adapt it to the sunflower and soy market systems. This was perceived as less risky for an opening portfolio than other ideas which had not been previously tested in Uganda, as it allowed them to come up with more certain results projections over a three or four year time horizon based on the processor's previous experience in the maize market, rather than developing projections based on little data which risked to fail and not deliver the contractual requirement.

This created a tradeoff between the programme team's ability to provide assurances that results would be delivered by the end of the programme and the space and time horizons required for more innovative thinking and experimentation. This raises questions into the degree to which both can be accommodated in an inception phase which is designed to deliver defined results.

3.2 Institutions provide structure to human interaction

Summary of findings

Humans have an inherent tendency to reduce uncertainty by structuring their environment. Uncertainty is reduced by creating structures, called institutions, which allow people to expect a certain behaviour from others in a specific situation. Over time, institutional constraints accumulate and an elaborate structure of informal and formal institutions emerges. Institutions are 'the rules of the game' both on a level of personal interactions but also on the level of interactions among organisations, firms, and the government. Institutional change is thus an inherently local process. Societies can borrow selected principles, but the effectiveness of such borrowing is often limited due to differences in culture, management styles and work practices. A society's disposition to change, shaped by its history and culture, strongly influences what is possible.

Implications for practitioners

The second insight of this research project is not something particularly new to market systems development programmes, but one that can be difficult to implement. This is particularly true in the current context of results measurement in which many programmes currently operate. This has certainly been the case in NUTEC-MD, where a recognition of the importance of institutions and the formal and informal 'rules of the game' influenced how the programme was designed, and where it intended to intervene. This was used more to limit the scope of the programme's interventions based on an understanding of 'what was possible' with market actors based on current institutional constraints, rather than a focus on addressing binding constraints within them.

As mentioned previously, NUTEC-MD follows the M4P approach. The M4P Operational Guide defines a market system as "the multi-player, multi-function, multi-rule arrangement comprising the core function exchange and the supporting functions and rules which are performed and shaped by a variety of market players."¹ This implies that programmes adopting this approach should engage with a range of different actors from the public and private sectors, representative organisations and civil society.

¹ The Springfield Centre (2014) The Operational Guide for the Making Markets Work for the Poor (M4P) Approach, 2nd edition funded by SDC & DFID

Consistent with this, NUTEC-MD conducted a comprehensive political economy analysis as part of its inception phase to inform its opening portfolio of interventions. The results of this analysis suggested that meaningful growth in modern economic activities was unlikely to happen without government promotion and protection of selected industries. The analysis also identified potential challenges of working with and through public sector actors. For instance, the political economy analysis of the seed market revealed challenges both with the legal framework and enforcement of counterfeit seeds, decreasing trust in commercial seed companies; as well as a poorly functioning seed distribution system managed by the national agricultural research organisation, which restricts the private sector from accessing enough parent seeds to produce new varieties in a timely manner.

In order to get the full picture of the situation, the political economy analysis was done despite the fact that previous work suggested that collaboration with government or other public sector actors might be less effective in achieving results than a focus on private sector actors. Consequently, the opening portfolio of interventions was focused on potential business models with private sector actors such as commercial seed companies within the current institutional arrangements, rather than public sector actors who might explore changes in prohibitive policies or their enforcement to alter current institutional arrangements.

The interventions could, however, be developed with a strong understanding of the existing institutional framework, and the limits of these business models based within these frameworks, which makes them more situationally aware and could potentially mitigate some risks of failure. At the same time, the analysis enabled the programme team to acknowledge that not engaging with the current institutional structure could lead to a preference for market solutions that worked within the current structure, legitimising and strengthening the structure and potentially stifling fundamental and long term pro-poor change.

In addition, the political economy analysis was used to recognise the need to position the programme for the possibility of engagement in institutional change in the future. Initial steps have included building a familiarity of, and credibility with, key actors in government as well as with bodies that represent business interests with government. For instance, the East African Grain Council was a key inception phase partner of the programme team, allowing them to build a relationship with this business membership organisation which could potentially be important in the future.

While the programme has acknowledged the importance of the institutional framework, it is also important to note that the current results measurement framework for the programme – which is used to measure programme success – does not include any programmatic outputs around working with formal institutions and thus the programme in its most basic sense is not incentivised to do this.

Further, the results framework used to monitor and assess performance incentivises more short-term and direct causal impact pathways: identifying the quantitative results related to how implementing a given number of business models with partners (outputs) would lead to improved sector performance in terms of increased sales among business partners (outcome) and poverty impacts in terms of increased incomes for poor people as a results of these business models (impact). The requirement to project results for each intervention along this pathway for each year of the programme also served as a disincentive to the programme team in focusing on more indirect causal pathways. These are more difficult (or impossible) to directly attribute to intervention, or require long causal chains that won't likely lead to higher level results in the short time frame of the programme – including changes to institutional or political processes.

These are both important considerations to take into account when thinking about the results measurement frameworks for market systems development programmes and whether or not a programme's work directly addresses constraints to institutional arrangements.

3.3 Complexity and social change

Summary of findings

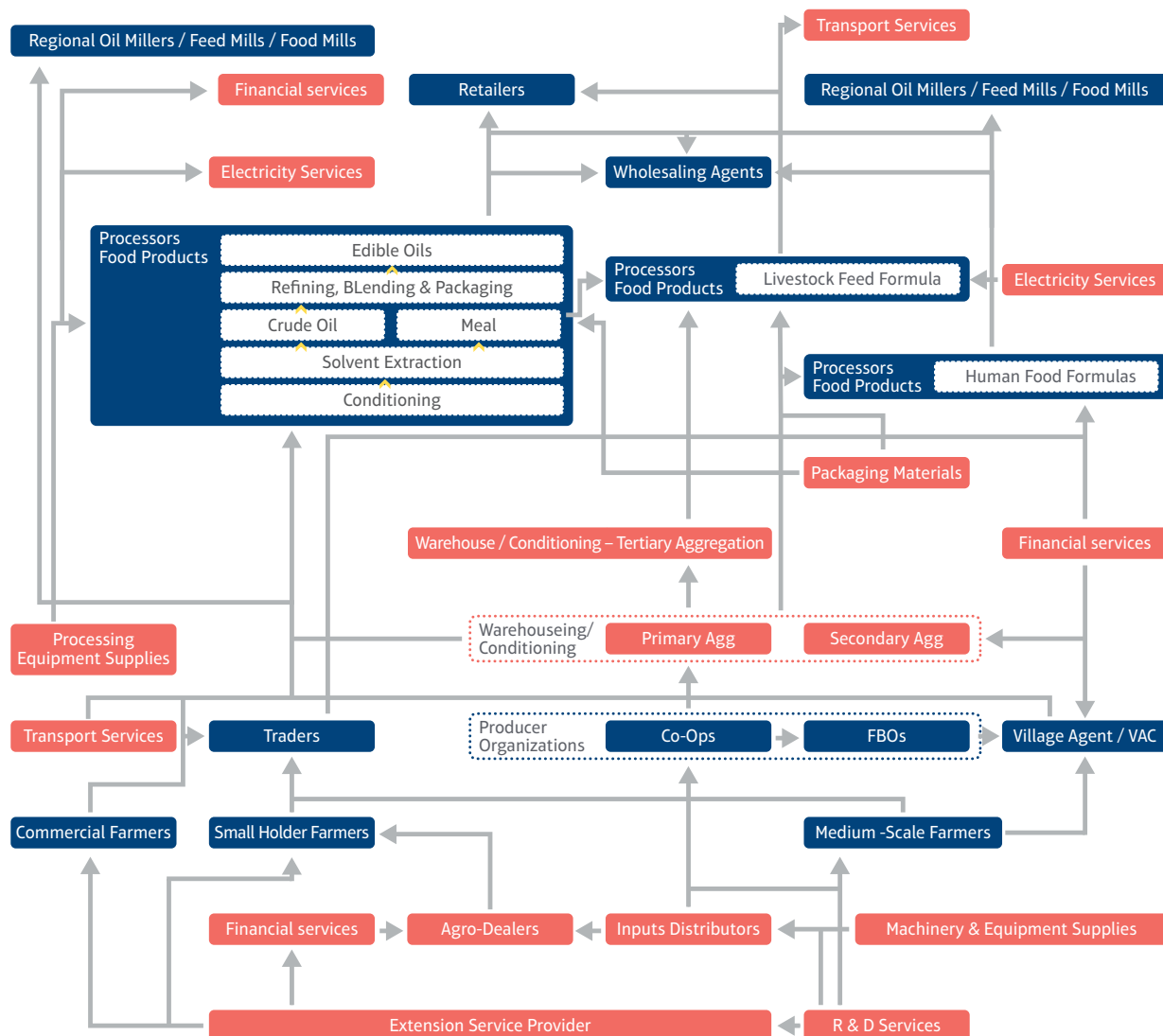
Complexity is a powerful concept to describe the evolutionary dynamics in human systems and the institutional structures which emerge from them. For example the tools and frameworks associated with complexity science allows one to describe and distinguish between complicated and complex systems and problems, recognising the difference between them is a matter of type and paradigm, not of degree. To solve complicated problems, solutions can be designed in advance, as it is clear what the problem is and an agreement can be found on how it can be fixed. To solve complex problems, change initiatives should not focus on solutions, but on evolution. Causality is not predictable because the structure of these systems and problems is not fixed but continuously created by the interactions of the actors in the system. The structure changes with the behaviour of the actors in the system. Interventions change the system in a way so a repeated intervention will lead to a different result. Hence, an understanding of causal relations for each change can only be gained in hindsight and does not allow for foresight.

Implications for practitioners

The last main insight around complexity and social change was the most challenging for NUTEC-MD to fully embrace. As this research insight explains, change in complex systems is created by changes in the interactions and behaviours of the individual actors in the system over time; these interactions cannot be predicted in advance and might lead to a different result if repeated. As such, NUTEC-MD understood that once it intervened in a market system, it would not be possible to fully predict exactly how market actors would respond over time; too many variables (in and out of the programme's control) would be in play which would influence how different actors would react to the intervention at different times - beyond what the programme team intended - and what changes would emerge within the system as a result. Taking this into consideration, NUTEC-MD understood its role as introducing the pro-poor innovation into the system, observing how behaviours and interactions changed among the concerned market actors as a result of the innovation (as intended or otherwise), and responding in reaction to these emergent changes by updating its hypotheses (and the intervention as needed) to catalyse the desired pro-poor change in the long term.

Taking this into account, the inception phase analysis used concepts and frameworks from the field of complexity science to describe the market system of northern Uganda. The NUTEC-MD team first constructed a detailed actor-based map of each market system. An example of one of these maps from the soy and sunflower market systems is presented in Figure 2. The team then used the market system analyses activities to further identify the current behaviours and interactions of the market actors included in the actor map, as well as the current institutional frameworks and structures within the system to determine how these dynamics disadvantaged poor farming households from successfully participating in the market system (systemic constraints).

Figure 2. Actor-based system map of sunflower and soy market systems in northern Uganda



The following is an excerpt from the NU-TEC MD Inception Phase Report which provides an example of the type of findings these market system analyses revealed.

The soy and sunflower market systems were characterised by low yields of poor quality soybean and sunflower grain, leading to low profits for men and women farmers and a low supply of oilseeds grain for large processors. This resulted in a high cost of processing and uncompetitive, locally produced vegetable oil products. The low productivity was perpetuated as farmers, especially women, had low access to inputs, did not make use of inputs because they did not perceive the benefits, and were often not trained on how to use the inputs. Moreover, the risks associated with investment in higher productivity and higher quality inputs were high, and the rewards uncertain, with no guaranteed market that offered a price premium for higher quality soybean and sunflower produce.

Low access to inputs was associated with inefficiencies with input suppliers, who were constrained by poor and unconsolidated distribution channels using multiple actors. This led to low demand for improved inputs, low levels of accountability on quality products, and little capacity to disseminate information on proper use.

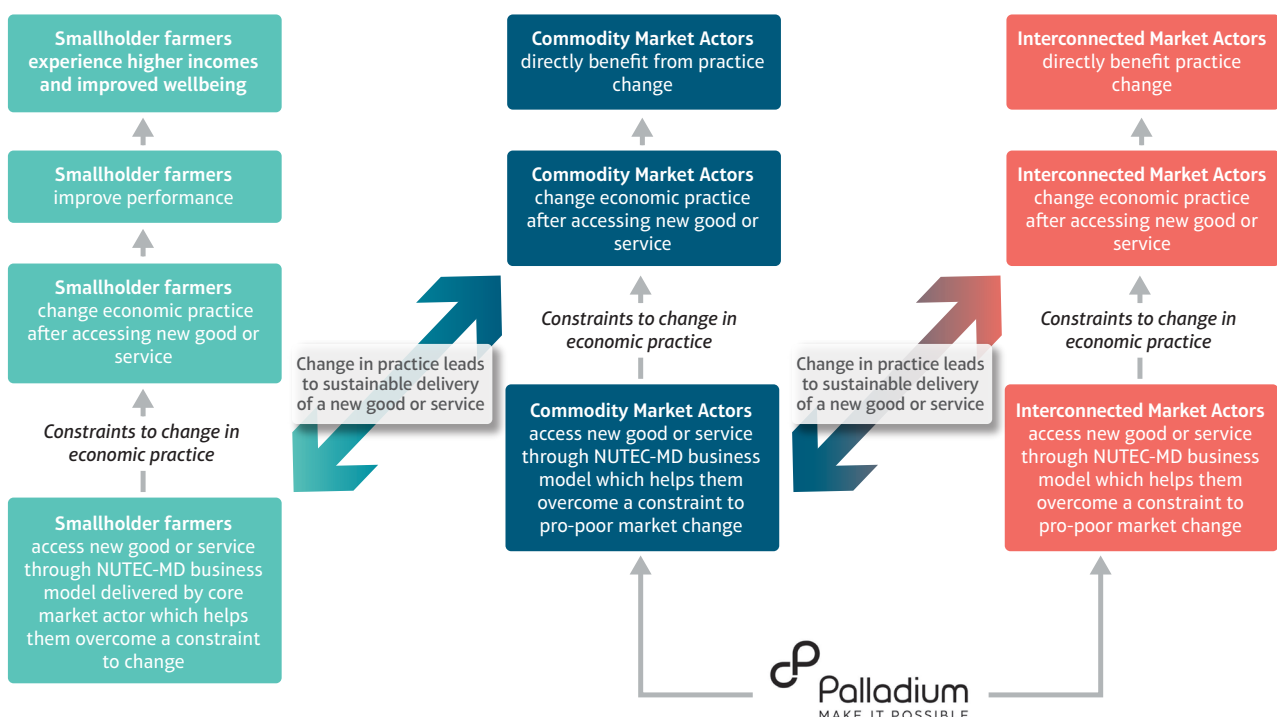
Processors had poor linkages to farmers which resulted in little ability to guarantee their supply

of sufficiently high quality sunflower and soybean grain. While processors had a theoretical understanding of the business case for a more integrated model, they lacked the technical capacity or motivation to roll it out in Northern Uganda, where poor relationship development and predatory behaviour by competitors had limited the effectiveness of efforts thus far.

NUTEC-MD then used this actor-based analysis to design a number of innovative business models which had the potential to alter these dynamics and catalyse pro-poor market system change. To achieve this, the team developed a conceptual framework as its programme ‘theory of change’ which adhered to effective principles of intervention within a complex system, as opposed to constructing a cause-and-effect logic model more suited to complicated systems, where activities are identified that lead to a quantifiable number of programmatic outputs and produce a proportionate and linear change in outcomes and impacts.

The conceptual framework rather described ‘how change happens’ through changes in behaviours and interactions of actors within a complex market system to guide intervention design and delivery (Figure 3). This allowed the team to construct a series of hypotheses of how they thought each business model might address a constraint to pro-poor change in economic practice among each market actor, leading to sustainable changes in economic practices among other actors, ultimately leading to the improved wellbeing of smallholder farmers (causal impact pathway).

Figure 3: NUTEC-MD conceptual framework for developing intervention-specific causal impact pathways



For example, in the soy and sunflower markets, a business model was proposed to develop an integrated service/input delivery and off-take model between aggregators, processors and smallholder farmers. By aligning incentives among these different actors and addressing their constraints to working together, the model was intended to consolidate input distribution channels, reward higher quality and ensure accountability within the supply chain.

Using the conceptual framework, the intervention-specific causal impact pathway articulated the series of anticipates results and underlying assumptions of how implementation of the business model with specific aggregators and processors was meant to lead to changes in their economic practices (delivering embedded services to farmers), how their change in practice

effectively delivered a new service which would in turn address constraints to practice change among farmers (their ability to access quality inputs and secured premium output markets) and processors (more certain supply of premium inputs for processing), and how all actors would economically and socially benefit.

Thus, for each proposed business model, the team developed an intervention-specific causal impact pathway which followed the pathway in the overall conceptual framework with greater detail on the intervention-specific anticipated results and assumptions. These can then be tracked during intervention delivery and revised based on evidence of how market actors are actually changing behaviours and interactions within the system. As such, they served as the framework for developing an intervention-specific measurement system for each intervention.

The adoption of this conceptual framework coupled with results from the detailed market system analyses provided the team with a practical approach to guide intervention design and delivery within a complex system. Adhering to the principles of complexity however was more problematic in respect to developing a predictable results framework for the programme. The example of the embedded services business model above represents just one of a multitude of different business models that NUTEC-MD could have designed to attempt to address the identified systemic constraint from the market system analyses.

Indeed, embracing the concepts of complexity would suggest that NUTEC-MD should in fact have designed and delivered a larger variety of these business models as part of its opening portfolio, allowing some of them to fail, as the system selected and amplified the 'best fit' models, based on how the actors in the system responded and changed practice. The first section of this paper described the challenges the team faced in this regard, how this incentivised a shift towards 'safe bets' in intervention design and discussed whether the scope for experimentation and adaptation is perhaps better suited for implementation rather than an opening portfolio, based on the learnings from these early pilots.

The substantial challenge for NUTEC-MD during its inception phase however was the tension between predictability and plausibility in results projections: attempting to translate the plausible and flexible intervention-specific causal impact pathways into the predictable framework required by the Logframe. This tension is described in more detail in the remainder of this section.

An understanding of the concepts of complex systems suggests that all of the potential business models developed during the NUTEC-MD inception phase will require adaptation, and many of them will fail, as it is impossible to predict in advance the outcomes of the interactions of all variables in the system over time. The intervention-specific causal impact pathways took this into account by including a number of causal link assumptions that were intended to be validated during implementation. As assumptions and intermediate results become evidenced through implementation experience, causal impact pathways would also be updated to represent the most plausible pathways to impact. Results projections through intervention-specific causal impact pathways were thus sensitive to changes in assumptions and included a number of different scenarios for how an intervention might lead to impact under different implementation conditions.

This became problematic however when the results projections from these plausible causal impact pathways were translated into the Logframe structure of outputs, outcomes and impacts which requires a linear pathway and proportionate relationship from outputs to outcomes and from outcomes to impacts. The Logframe as a tool is designed for predictability not plausibility and does not easily accommodate this level of flexibility and adaptation.

As such, the team identified one of a set of plausible impact pathways for each intervention to be included in the Logframe, demonstrating how the programme – under the conditions included in the chosen plausible causal impact pathway - might reach 25% of its results by the end of the

programme in its opening portfolio of interventions, recognising that these impact pathways would continue to evolve and adapt in implementation.

Translating results from the intervention-specific causal impact pathways into the Logframe however forced the results projections from the realm of the plausible into the domain of the predictable. Once results projections were locked into the Logframe, these then became the accountable results that the programme team would be responsible for delivering year on year. The Logframe thus becomes used as a tool for performance and contract management in order to hold the programme team to account for delivering these results during implementation, measured and externally assessed on an annual basis.

As the programme team may be subsequently penalised for failure to deliver against these predicted results during its annual performance reviews, the programme team would thus be incentivised to deliver against the plausible causal impact pathway originally included in the Logframe as opposed to treating this as one possible pathway to impact which requires adaptation through learning, for fear of failure against these predicted targets to which they are now held to account. Using the Logframe as the principle tool for accountability risks to push the programme team to deliver a limited number of less risky business models on an annual basis and measure whether these business models are being delivered according to plan in subsequent years, as it does not easily accommodate deviations from predicted results nor encourage iterative adaptation, failure or exploration.

This is a real and practical challenge for NUTEC-MD. There are a growing number of evaluators and programme theorists who are beginning to acknowledge and address this challenge, including sharing good practice in using the logical framework for adaptive programming and seeking alternative accountability frameworks within DFID-funded programmes using the Smart Rules, though this still seems to be the exception not the rule.^{2,3} In the short term, programmes like NUTEC-MD will continue to struggle to fully adhere to the findings of this research insight using the current and predominant tools and frameworks for donor accountability.

4. Conclusions for the practitioner community

Since the inception phase ended in early 2016, NUTEC-MD has learned a number of lessons from the experiences discussed in this case and has better adapted in order to take a more systems lens to implementation. In the past year, the programme team has made a number of changes in team structure and way of working as a result of this learning process. For example, NUTEC-MD is now working more with multi-actor groups of market system actors in a more facilitative manner to better understand farmer and business behaviour in northern Uganda and co-develop locally-led business models which align incentives across actors.

This has led to more of a portfolio approach within the project overall, with a mixture of some of the 'safe bets' interventions designed during the inception phase and a broader range of new interventions to address key systemic challenges in the markets. This has largely built off of the learnings from these early pilots. Some initial work in the land and seed sectors has also shown that the project has space for institutional change. Structures and processes are now in place to build market-systems organisational cultures, promoting more experimentation and decentralisation of decision making and organising structured learning environments. For example, regular reflection sessions are held with the team to review the intervention-specific causal impact pathways, analyse evidence to determine how market actors and the system overall is responding to the intervention (as intended or otherwise) and update the intervention-specific causal impact pathway and measurement system based on evidence to drive adaptation and learning.

2 Mellor C. (2016) Using the logical framework in adaptive programming. London: Overseas Development Institute

3 UK Department for International Development (2017). DFID Smart Rules: Better Programme Delivery. London: DFID.

Looking back on the inception phase from this time horizon provides a useful perspective in reflecting on how the inception phase might have been differently structured to better respond to these research insights, and where there is (and is not) scope for change within the current development system. This case study identified how a number of the main insights outlined in this research were integrated into its inception phase, though some changes to the contract structure could have provided scope for further adoption. Some of these insights were within the ability of the practitioner team to address, while others would require a more fundamental rethink of how NUTEC-MD was conceptualised initially and consideration of the constraints that can be addressed within the current development system.

In terms of understanding the economy as an evolutionary system, NUTEC-MD's inception phase structure assisted the programme team in developing a rich and robust situational awareness of the market systems of northern Uganda. However, the strong analytical focus of the contract and time frame of the inception phase provided less opportunities for reflection and co-design of innovations with partners.

Donors and practitioners might consider how contract structures could better incentivise ways for these two considerations to come together more closely in inception phases. For instance, striking a better balance in contract deliverables between those focussed on diagnostics and analytics and those which promote reflection and collaboration with market actors.

At the same time, it is important to recognise that the scope for experimentation in pilot intervention design may be limited during inception phases for a number of reasons. Issues around tight time frames for demonstrating early results, donor requirements to ensure accountability through contract structure and other accountability tools, as well as the relative capacity of inception phase teams to produce deliverables can all put early pressure on a programme team. This suggests that perhaps starting 'safe' and 'simple' might be a more appropriate expectation for a programme's inception phase to strike a better balance between analytics and experimentation, allowing space for the programme team to adapt and experiment more fully in implementation based on the learnings from and relationships built in early pilots.

Next, NUTEC-MD and other programmes that follow the M4P approach have a strong recognition of the importance of institutions. Many of the tools and frameworks used by practitioners, including the DFID and SDC M4P Operational Guide point out the need to understand the formal and informal 'rules of the game' in intervention design. Applied political economy analysis is part of good practice in programme design. In the case of NUTEC-MD however, although the programme team was encouraged to be mindful of institutional frameworks in intervention design, this was treated more as a lens to analyse what was achievable with private sector actors during the inception phase rather than as a diagnostic to identify how a market system development programme might proactively work to address constraints in current institutional arrangements.

Working with institutions traditionally has been addressed by governance programmes working for institutional change. For NUTEC-MD to truly catalyse long term and sustainable pro-poor market systems change, it will also need to engage more with institutions. This is a particularly important consideration when reflecting on the insight from this research project that working within a given institutional framework may actually strengthen that framework, even though it might not be conducive for pro-poor change in the long run. The structure of results frameworks should consequently incentivise this work, despite the challenges with attribution of these activities to impact, as work with institutions would require more indirect and longer pathways, which in most cases might not be predictable in advance.

Last, current practice for driving accountability for results made it difficult for NUTEC-MD to fully embrace concepts of complexity in designing a robust results measurement system around its interventions. The Logframe as an accountability and measurement tool favours predictability

and control over iteration and adaptation. This is in some ways in direct contrast with how a programme that embraces complexity should intervene, namely by exploring the design space in the pursuit of best fit models, and learning from experience.

There is a growing community of people within donor organisations and practitioners that are aware of this tension and seeking alternative uses of current accountability tools and alternative accountability frameworks which can better strike the right balance between plausibility and predictability in results projections.

The use of more robust intervention-level theories of change, or plausible causal impact pathways, might help provide the assurances that donors are looking for without the rigid requirements that are needed to translate plausible pathways to impact into predictable and linear results chains. NUTEC-MD attempted to address this by developing a conceptual framework to guide intervention design and plausible causal impact pathways which were flexible and adaptable to implementation experience.

Translating results from the intervention-specific causal impact pathways into the Logframe however forced the results projections from the realm of the plausible into the domain of the predictable. Until we have developed tools and frameworks to better strike this balance, it may still remain difficult for NUTEC-MD and other programmes to fully adhere to these insights.