Critical Systems Thinking Towards Enhancing Community Engagement in Micro-insurance

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Critical Systems Thinking Towards Enhancing Community Engagement in Micro-insurance

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Abstract This paper attempts to build a conceptual framework for community engagement in micro-insurance scheme design and deployment. The framework is founded on critical systems thinking literature that introduces the characteristics of openness, flexibility, and agility. The authors have focused on a community-led micro-insurance model, where the nature of the engagement itself underpins the success or failure of a scheme, due to their very nature of operations. Select systems thinking tools are introduced to better understand issues that arise in enhancing community engagement and flexibility, both of which are regarded as a critical aspect in the development of micro-insurance schemes. Reference and learning are drawn from an on-ground scheme in India implemented by the Micro Insurance Academy. The second author of this paper was the lead for this scheme. This is a proposed framework and is yet to be tested on ground.

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Introduction

The need for flexibility and adaptiveness for an organization or program in the current age cannot be overestimated. However, the same needs to be enabled through frameworks that counter rigidity and agility. When a program is centred around community engagement and addresses a volatile field like insurance, staying flexible, and yet effective, is of utmost necessity. This is not only true for the program design, but also for the process used to arrive at the same.

The case in discussion here is micro-insurance. Community-led micro-insurance models facilitate creation of a monetary corpus that can support families against unforeseen circumstances. The community underpins the success or failure of such models due to their very nature of operations. Critical systems thinking (CST) can lend a strong perspective for design and implementation of community engagement frameworks for micro-insurance due to its focus on challenging boundaries, application of flexible intervention methods and the innate desire to work towards the betterment of people.

An overall literature research revealed that there is no current research on approaching micro-insurance from a CST perspective; neither is there any evidence of the formal application of CST in design and implementation of micro-insurance schemes. Application of CST enables the system to be consciously agile and flexible so that it is adaptive and sustainable for the long run.

In this paper, we begin by defining micro-insurance and set the stage for the importance of community engagement in micro-insurance. Then, CST is introduced leading to a discussion on its relevance for the sector. This is followed by drawing references from an on-ground case in India from the Micro Insurance Academy (MIA) and the experiences from the same. We then work towards building a

conceptual framework for the application of CST to micro-insurance from a community engagement perspective, based on the MIA model. This framework is inspired by flexibility in systems design.

It is to be noted here that in this paper, we will not enter into a technical evaluation of the MIA implementation model. The focus will be on community engagement in the model.

Micro-Insurance and Community Engagement

What is Micro-Insurance?

For the purpose of this paper, we will refer to the definition of micro-insurance as coined by Dror and Jacquier (1999), who define micro-insurance by stating that "*micro* refers to the level of society where the interaction is located, i.e. smaller than national schemes, and *insurance* refers to the economic instrument. A more accurate descriptor of the proposed concept might perhaps be voluntary group self-help schemes for social health insurance. For ease of reference we suggest calling it *micro-insurance*" (pp. 77–78). By characterizing micro-insurance as voluntary, group-based and self-help insurance, Dror and Jacquier (1999) focus on the process rather than on the socio-economic profile of the clientele or product characteristics. A thorough discussion on various definitions of micro-insurance can be found in Dror and Piesse (2014).

There are several models of micro-insurance that can exist from a service delivery perspective. The scheme that has been considered in this paper follows a mutual/cooperative model. In such cases, the policyholders own the scheme, pool the risks among themselves; they are involved in product design and awareness creation and are responsible for claims management. The policyholders are from the local community sharing common value systems and characteristics, e.g. members of a Self-Help Group (SHG) federation or a cooperative. In such schemes membership is voluntary, and the business model is inclusive and not-for-profit. The scheme considered in this paper is aligned to the definition of micro-insurance as defined by Dror and Jacquier (1999). Given the very definition of micro-insurance considered here, community engagement becomes a crucial factor for the success of the scheme as it is essentially owned and managed by the community itself.

Setting the Importance of Community Engagement

Micro-insurance models operate in local settings where local solutions are driven by local drivers. In such situations, there is a need for operations research/management science applications (Sushil 2018) that are of a local nature and that reflect the realities of community life (Johnson 2012). Going by the very model of micro-insurance considered for this paper—that is mutual/cooperative—community engagement lies at the heart of success for such schemes. The community where the scheme is implemented needs to be involved, consulted and engaged in an intense and robust manner throughout the process. Being cognizant of the societal, religious and local issues is pivotal for the facilitators in driving the scheme to success. Community members need to be involved through the design and implementation process. Trust needs to be created through a sense of co-ownership and shared responsibility. Local communities need to be involved in setting up of guidelines that align with their norms and belief systems. Dror and Firth (2014) argue that in low- and middle-income countries the decision to buy insurance is not an individual, but collective. This adds more to the reason of why the community needs to be engaged.

The relation between community engagement and success of developmental schemes is not a subject of debate. However, it is important to note that the term engagement here does not refer to mere seeking opinions about what the community wants; it rather relates to empowering the community to make informed decisions and enable it to act as the agent of change for their own betterment. Here, a higher order of participation is referred to, which is about "empowering people to mobilize their own capacities, be social actors, rather than passive subjects, manage the resources, make decisions, and control the activities that affect their lives" (Brett 2003; p. 5). This perspective of engaging the community is important for this context because in a mutual/cooperative micro-insurance model it is the community that has to manage the scheme operationally, and the implementing agency just becomes a facilitator.

Critical Systems Thinking (CST) and Micro-Insurance

A community exists in a complex ecosystem where there are multiple social, political and economic variables. To understand the interplay between communities and micro-insurance schemes better, a critical perspective needs to be undertaken so that pre-set boundaries are proactively critiqued, established mindsets are constantly questioned, and prescriptive approaches are challenged in the interest of greater agility and flexibility. Hence, we have adopted a CST perspective to understand community engagement in the select scheme considered in this paper.

Jackson (2003) defines a system as "a complex whole the functioning of which depends on its parts and the

interactions between those parts" (p. 3). Chowdhury et al. (2007) note that "the central idea behind systems thinking is that organisations are constituted of sub-systems, or elements, that are in interrelationships with one another, and that exist within a boundary. What is important is not the elements per-se, but the interrelationships between them, because it is the nature of the interrelationships that give character to the system" (p. 10). Systems practitioners are encouraged to challenge status-quo, strive to sweep in multiple perspectives and endeavour to unearth hidden agendas, with the overall understanding that the whole is more than the sum of its parts. Ackoff (1971) laid some foundational stones for systems thinking and approaches when he said that a systems thinker needs to think about the total performance of the system and not its parts; this is only possible when one looks at relationships and approaches a situation from a holistic point of view.

Systems thinking has moved through three main stages—hard, soft and critical. Hard systems thinking is influenced by a "reductionist" approach where the understanding is that identifiable parts fulfil their individual functions, which contribute to the functioning of the whole system. This understanding looks into the world as an easily identifiable arrangement of a system and sub-systems, which are coherently connected, enabling the existence of the system with prediction and control—a perspective that supports and perpetuates the existing status-quo. Methodologies like Hall's (1962) Systems Engineering, Forrester's (1969) Systems Dynamics and Beer's (1972) Viable System Model are influenced by this school of thought. Soft systems thinking, on the other hand, is inspired by the interpretivist perspective, going by which "soft" issues are explored regarding how the involved human beings interpret the system around them and what meaning they render to it. This paradigm lends the perspective that social systems can only be understood when one immerses themselves into the situation of the target group and looks inside-out. Methodologies like Checkland's (1981) Soft Systems Methodology, Ackoff's (2001) Interactive Planning, and Mason and Mitroff's (1981) Strategic Assumption Surfacing and Testing are influenced by this school of thought. Finally, critical systems thinking (CST) brings human beings to the centre stage as the creator and interpreter of structural systems in the world. This school of thought lends the perspective that to understand the system, it is needed to understand the intentions of the people who have created them, and the complex interplay between the involved and the affected parties in the creation and regulation process. Improvement of the situation under intervention remains a key agenda for CST. Methodologies like Ulrich's (1983) Critical Systems Heuristics, Beer's (1994) Team Syntegrity and frameworks like Midgley's (2001) Systemic Intervention are inspired by this school of thought.

Bringing a CST mindset helps the interventionist to be flexible and accommodative in the system design. It helps the interventionist to approach the problem situation and design the system with more openness so that it is agile and adaptive for changing requirements. In the insurance environment where uncertainty is the only certainty, there cannot be rigid structures to understand and intervene in the system. Issues and structures need to be looked at as a continuum, bringing in optimal methods and interventions with different steps, when required. As Sushil (1994) says: "It can be seen that the problem situations in real life are not clustered on the ends of the continuum, i.e. well-structured or unstructured. The problem situations in real life lie on the whole continuum; rather, practically more in the middle part than the ends, with some parts structured and some ill structured" (p. 640).

Understanding the Relevance of CST for Micro-Insurance

We believe that CST offers a strong perspective in understanding the nuances of a micro-insurance scheme. Going by the definition of micro-insurance chosen for this paper, the community is at the heart of the scheme. Also, the very same community is one that is at threat to be marginalized and not having equal access to life opportunities, the reason for which micro-insurance is relevant.

Working in a community scenario may present several challenges. Comprehending the situation itself is often ambiguous. Societal norms are often unstated yet stubborn. Behaviour patterns can seem unpredictable for an outsider. Let alone the volatility of the threats themselves that micro-insurance is trying to address. In such a situation, being able to stay flexible and agile is of paramount importance.

CST brings in an intersection of both the functionalist and interpretive perspectives that can accommodate flexibility and agility in system design, informed with the values of justice and inclusion.

The reference case we have chosen for this paper is based in India. The country itself offers a range of cultural sensitivities and uniqueness, given that it is bound in strong traditions and belief systems. These conditions still define the role of individuals within the community based on their gender, age, religion, and caste. This in turn presents its own challenges in the part individuals play in the design and implementation of any scheme.

The context under consideration presents probable conditions most necessary for the adoption of CST—the situation is "messy" with multiple societal variables, where no one method can address the requirement of a

holistic and effective community engagement model, and at the core of the model lies the objective of empowerment and improvement.

Understanding the Micro-Insurance Implementation Model

To understand the nuances of a micro-insurance delivery model, we have referred to an on-ground case from the Micro Insurance Academy (MIA), with due permission. The second author of this paper was the lead for the design and implementation of this scheme for MIA.

Based out of New Delhi (India), MIA is a leading global agency in the micro-insurance domain. MIA seeks to bring insurance solutions to some of the world's most vulnerable communities. The organization provides technical expertise to help design, implement and scale micro-insurance schemes. Its expertise includes research, implementation, advisory and insurance education. MIA has been serving four risk categories: health, life, crop and livestock, across various countries in Asia and Africa.

The particular scheme that has been taken up for reference in this paper was based in Hajipur and Bidupur blocks in Vaishali district in the Eastern Indian state of Bihar. The implementation of the scheme was part of a larger project that was mandated by the Swiss Agency for Development and Cooperation (SDC), represented in India by the Climate Change and Development Division (CCD) of the Embassy of Switzerland, New Delhi. Called "Climate Resilience through Risk Transfer" (short form: RES-RISK), this project aimed at enhancing community resilience to climate change and variability through the design and implementation of micro-insurance solutions. The overall project areas covered selected blocks in Vaishali and Muzaffarpur districts in the state of Bihar and Beed district in the state of Maharashtra. For the purpose of this paper, only the scheme in Vaishali is considered, where MIA partnered with a Non-Governmental Organization (NGO) called Nidan for implementation of the project. The project started in 2012 with the field implementation.

Vaishali harboured communities rich in social capital including women's Self-Help Groups (SHG), organized around common interests. The SHGs represented change agents that focused on social and financial challenges in the community and mobilized resources to address the same by coevolving solutions. The NGO, Nidan, had been working for many years in several districts in the area. Nidan had an established credibility and was known to have served as a catalyst in the area by facilitating collective action and supporting structures which catered to the needs of the underprivileged.

MIA follows a nine-step implementation model for micro-insurance (MIA 2016). These steps are: Engage the community, Identify the risk, Appraise the risk, Insurance education, Selection of benefits package, Set-up of operating infrastructure, Scheme enrolment, Handholding, and Phase-out.

We realize that currently there is considerable overlap between the steps. Often there is also confusion between the terminology of a step and what actually happens as part of the step. However, undertaking a critical analysis of the steps and recommending a refined model for MIA is outside the scope of this paper. This paper solely focuses on the experiences of community engagement throughout the implementation model. Technical detailing of the insurance scheme is outside the scope of discussion of this paper and hence is not detailed out here.

In the following discussion, we have defined each of the steps and reflections are drawn from experiences from the RES-RISK scheme in Vaishali, specifically focusing on community engagement approaches, methods, and impact.

Engage the Community

The foundation of the RES-RISK scheme was well laid in early 2012. MIA and Nidan agreed to enter into a Memorandum of Understanding (MOU) for the implementation of the scheme in Vaishali district. MIA employed one field manager located in Bihar State and Nidan allocated up to ten field coordinators to work for the implementation of the project.

MIA and Nidan brought together SHG representatives and community leaders for initial information sharing sessions about the objectives of the RES-RISK project; the concept of community-based micro-insurance and how it could help the community was shared. Interactive knowledge sharing sessions were carried out by the team with the community. MIA also conducted focus group discussions (FGDs) to get initial impressions about the risks related to health, crop and livestock faced by the community, and their interest in the proposed approach.

Entering the community was the most challenging part as there needs to be trust and mutual understanding between both the change catalyst (MIA) and the community. In the case of the RES-RISK scheme, Nidan was already working with SHGs in the community; this greatly helped in easing the process.

Once the SHG and community representatives bought into the idea of micro-insurance, the next challenge was to bring the rest of the community on board. This was done by training the field staff on how to engage with the community and discuss topics related to risk and micro-insurance. Orientation workshops were carried out that included general information about the importance of insurance in

their specific context, interactive question-and-answer sessions and through various games.

Identify the Risk

Once the specific intervention area and target community was identified, the second step was to capture the socio-economic profile of the community, identify the risks, understand their risk coping strategies (financial and non-financial), and assess their need and demand for micro-insurance. Based on this assessment, initial operating imperatives were formed for the establishment of the micro-insurance scheme.

For the RES-RISK project, this step was carried out through a baseline survey which combined quantitative and qualitative techniques and collection of secondary data. For the quantitative study, a survey agency was appointed to carry out a baseline survey covering over four-thousand households. The survey collected data around household composition, education, income and expenditure, practices in agriculture and livestock husbandry, health seeking behaviour, and risk coping mechanisms. A quality assurance process was institutionalized, and the field staff was trained to monitor the data collection and sanity.

As part of the qualitative study, FGDs and key informant interviews (KIIs) were carried out.

Community members had a lot of queries for the field staff. These queries normally centred around the premium amount, frequency, and the extent of coverage of the scheme. There was an initial preference for coverage of high-frequency events, such as medicine and consultation costs, but it was explained to the community members that these risks are better dealt with differently than with insurance. There were also trust-related concerns and operations-related questions, such as who will do what. The more the community members understood the model, the more specific questions came up. By giving specific responses to the questions and relying on the relationship with Nidan, the community members finally showed interest in participating in the scheme in the model that was presented.

As an outcome of this step, the overall risk exposure and coping capability of the community was understood in depth.

Appraise the Risk

This stage was about bringing in risk modelling for actuarial pricing of health benefits, crop index insurance and livestock mortality insurance by using locally relevant data, derived from the baseline and secondary sources, and not just relying on country or regional-level average data. The baseline study provided local data on frequency and severity of costs generating health events to be potentially covered through health benefits (e.g. hospitalization, lab testing, imaging, transportation, wage loss). The baseline also provided estimates on the mortality rate of livestock required for pricing of its cover. The design of the index-based crop insurance for the most important crops was based on secondary data for weather and crop yield, interactions with farmers from the intervention area and with agricultural specialists from local agricultural universities.

To prevent the community-based insurance schemes from the risk of running out of money because of such covariate risk exposure, and also due to regulatory obligations that require to place risks of this nature with a licensed insurer, MIA first calculated the premium that fairly reflects the local risk, and then explored with several licensed insurers an agreement for them to accept to cover the risk on behalf of the community through group contracts.

Insurance Education

This is the step that covered all the activities from design of business processes, benefits packages, creating awareness tools and conducting the awareness campaign. Many of the activities included conducting training workshops in Vaishali with representatives of the community and the field partner.

During the business design workshop, the project team explained to the participants the business processes of the micro-insurance scheme. The training covered the ground structure required to run the scheme, roles and responsibilities of key functionaries, processes related to enrolment, and claims management. The participants were requested to give feedback to fine-tune the business processes to local needs. They were also involved in planning the ground structure, i.e. how many claims committees were required and what SHGs they represented. Claims committees were comprised of SHG representatives and were responsible for taking claims decisions.

The objective of the benefits options consultation workshop was mainly to come up with four to five benefits package options for the health cover to be used in a consensus building exercise called CHAT (CHoosing All Together). Once the health risks had been appraised, the team could present a calculator to the community participants. The calculator allowed for seeing the impact on the premium when a health benefits package was changed: For example, health benefits could be added or removed, and for a selected benefit the caps could be changed to match the needs and willingness to pay. The community participants also found consensus on some specifics for the livestock cover. For the crop insurance, no discussion was

required as indices were already designed for one to two main crops per season and farmers can only insure those crops, which they cultivated.

Selection of Benefits Package

The benefits package options derived from the benefits options consultation workshop differed in terms of what was covered and the premium it entailed. The options were graphically presented on the so-called CHAT board. CHAT boards were extensively used for the selection of the one benefits package to be provided to the entire community. In the first round, CHAT was played at the local community group level. After the facilitator had explained the benefits packages in detail and played some awareness games, each SHG member was asked to choose a benefits package by marking the choice with a coloured sticker. After a group discussion on the individual choices, the SHG members carried their CHAT boards home to discuss their choice with their household members. They could reconsider their choice after those discussions. About a week later the group met again for the second round of CHAT, where the group members discussed until they found consensus on the most optimal models that reflected the preference of the entire group. In the third and final round during the benefits package finalization workshop, all the SHG choices were evaluated and the community had to find consensus on one package for the entire scheme.

This stage is highly interactive and involves creating a relationship of trust with the community. It also created peer pressure that later encouraged all community members to join the scheme.

Set-Up of Operating Infrastructure

This was a very critical stage where MIA builds institutional capability for the community to operate and sustain the scheme. Specific committees were formulated with identified roles. One Claims Committee in each of the two blocks was set up with trusted members of the community to manage claims. After the launch it was decided to form a Coordination Committee with representatives from the Claims Committees and the field partner. The Coordination Committee was responsible for administration and financial operations including managing the bank account of the scheme and for redressal. The committees met once a month.

By choice the RES-RISK scheme, like most of MIA schemes, mainly focused on women as an entry point to the community. The reason was that women are generally believed to be more reliable when it comes to managing risks, more trustworthy when handling finances and tend to think more holistically about money and risk management than men. That is also the reason for the large SHG and micro-finance movement in India to focus on women. Also, Nidan's SHGs were all women's groups. The Claims Committees were also comprised of women. The project not only supported better risk management, but also empowerment of women who were trained to assume positions of authority.

Scheme Enrolment

The awareness campaign was followed by the enrolment carried out by the facilitators and supported by the field staff. Households were registered and premiums were collected individually from each household. The ownership of the scheme was in the hands of the enrolled members of the community, and no individual or stakeholder made any profit out of the same.

There were no significant challenges in RES-RISK Vaishali in enrolment of memberships. Two factors played a significant role in easing enrolment numbers. First, Nidan was a trusted name in the local region as a positive change agent. There was no extra effort required to establish its credibility. In addition, the community was effectively involved throughout the entire process of the situation assessment, scheme design and launch. However, MIA and Nidan did hire local people to mobilize households individually and the SHGs played a strong role as a catalyst to convince households of the benefits of the insurance scheme.

The scheme was launched in July 2014, initially to cover only health risks as health is generally and also the highest prioritized risk that is common to everybody in the community and especially in this case.

Handholding

Once the scheme was launched, functionaries were made responsible for claims management (assessments and settlements) and administration. They were also responsible for re-enrolment/renewals after 1 year for the health cover. These activities were carried out with significant support from Nidan. After each cover period (yearly health and livestock), policyholders had the option to re-enrol or opt out of the scheme. In case of re-enrolment, minimum procedures were followed as the scheme already had all the details of the member. The due re-enrolment amount was paid into the scheme.

MIA in the meantime streamlined its implementation strategy and had worked on the training and educational material. The re-enrolments for the July 2016 health cover showed an increase beyond the 2014 and 2015 health enrolment numbers. The enrolments for the crop cover displayed a significant increase from the rainy season 2015

over the winter season 2015/2016 to the rainy season 2016. Livestock enrolments increased considerably from 2015 to 2016. Admittedly the enrolment base was much lower for crop and livestock than for health.

The reimbursement process was being executed in a seamless manner.

Phase-Out

MIA constantly supported and reviewed the execution of the scheme through all the stages. Capacity building was done by adequate training and imparting of technical know-how through the program. Once the scheme was self-reliant and self-sustaining, MIA phased out.

With MIA's support in re-enrolment drive and constant partnership with the local field agency, capacity building initiatives have since been a continual focus. Currently, the RES-RISK scheme in Vaishali is being encouraged to institutionalize a structured monitoring process where regular audits can be carried out to assess systems and processes adherence during execution of the scheme.

Towards a Systemic Model of Community Engagement

With the experiences from the RES-RISK project, we will attempt to understand how critical systems thinking (CST) can enable better community engagement for the MIA model incorporating the characteristics of flexibility and agility in the scheme.

In the following discussion, we will focus on how CST can be extended to understand the nuances of every major phase that the MIA model goes through, and how CST can support each of these phases to bring them much closer in engaging with the community.

Critical Systems Thinking (CST)

We draw from Midgley (1996, 2001, 2006, 2014) for a theoretical understanding of CST. Midgley shapes his definition of CST on three principles—boundary critique, methodological pluralism, and improvement.

Boundary Critique

Midgley emphasizes upon the concept of "boundaries" that lie at the heart of CST—why and how the interventionist draws their boundaries for the situation they are working on, and how these boundaries affect the intervention and those whose lives are being touched. A further nuance that Midgley introduces is the understanding of "marginalization". In any situation, where there is more than one party

involved, each party (or each interventionist) will bring forward their own ethics and judgements to draw their own boundaries. These boundaries may or may not be amenable to the other parties involved. In situations where specific aspects, areas or people are left out due to inclusions in and exclusions from boundaries, this may give rise to marginal areas. Hence, depending on influence the parties have, there will always be a "primary" boundary and a "secondary" boundary, where the primary boundary is always the narrower one. The aspects, areas or people who are not included within the primary boundary are "marginalized"; this is the area where conflicts arise. Outside the secondary boundary lies the wider system that is not that relevant.

An effective interventionist is hence one who constantly critiques their own boundaries and the ones that exist around them. Midgley believes that boundaries are a prerogative of values judgements that people have, which defines what knowledge and considerations are taken as pertinent and what is left out. Boundaries therefore have consequences.

Methodological Pluralism

CST presents a direct alter-point to the classical concept of social science paradigms (Burrell and Morgan 1979), where each paradigm is founded on distinct ontological bases, with supposedly impermeable walls between them. Methodological pluralism breaks the myth of paradigm incommensurability and creates possibilities to operate across paradigms, making them permeable and complementary.

Work across paradigms with a pluralistic approach has been reported by various systems practitioners like Taket and White (1996), Mingers (1997), Midgley (2008), Jackson (2003), Sushil (1994) and Chowdhury (2012).

Midgley (2014) proposes to look at methodological pluralism from two stances—first, where a methodology can be seen as dynamic and evolving, accommodating learning on an ongoing basis; second, where methods and perspectives from other methodologies and schools of thought can be mixed and matched together.

Improvement

A CST intervention is ideally directed towards improving a situation. People on ground need to be empowered in an inclusive environment so that they can own their actions to make change viable and sustainable. Midgley (2003) notes that "improvement" needs to be understood temporarily and locally. This is because what may seem as an improvement for one set of stakeholders may not be considered so for another. This again has a strong bearing on boundary critique itself with the question—whose

improvement is it anyway? Referring to the temporary nature of all improvements, the point one needs to critique again is if the situation changes for betterment, how long will it last for. This introduces the need of looking for creating sustainable improvements.

Applying CST to the MIA Implementation Model

The nine-step MIA model can be addressed better by approaching them under three distinct phases and understanding each phase in terms of the predominant principle that needs to be borrowed from a CST perspective. This leads to identifying systems methodologies that would enable the implementation model reap the best benefits from every step.

There are three main phases in MIA's implementation model: Appreciation and Structuring, Modelling and Set-Up, and Sustenance and Phase-Out. Given that betterment and empowerment are the essential elements driven by MIA's approach, each of the nine steps can be better aligned to its vision if specific systems methodologies can be leveraged for them, under the focus phases. We explain this in the discussion below. In no way we are suggesting that the current tools that MIA uses are replaced by the methodologies/approaches discussed below. Rather the methodologies/approaches below may further help in applying the existing tools within an informed ontological framework for better leverage. The essence of CST is to look at systems as a construct; hence the specific systems methodologies/approaches we have discussed below may help establishing the construct in a more holistic manner.

Appreciation and Problem Structuring

This is the first phase where MIA enters a community. The two steps in the existing model are: Engage the community, and Identify the risk. This phase is not only about information gathering, but also about establishing trust in the community. The MIA interventionist here needs to work intensely with the community to establish the problem situation of the community with the community itself.

In this phase, maximum focus needs to be on what constitutes a problem and why, and how it can be best structured so that any intervention yields the desired results. Checkland's (1981) Soft Systems Methodology (SSM) can be a powerful methodology to help the interventionist appreciate and structure the problem situation taking into consideration multiple variables and viewpoints.

Checkland (2000) articulates that the central idea behind an SSM intervention is the understanding of human activity system. This understanding can be a viable perspective to approach the first phase of the MIA micro-insurance implementation model to bring in effective community engagement and agreement of working towards a feasible change in the community. The initial steps of engaging the community and identification of risks are strongly pinned on working in the context of a human activity system where logical inter-connections are to be understood that are often unarticulated or non-evident. It is also in this phase that purposefulness needs to be identified through the appreciation of emergent properties in the community. This is only possible by working with the stakeholders with diverse worldviews to build systemic models of the situation. What is often perceived as a risk by one cohort of stakeholders may not be considered so by another; or the very definition of the degree of risk can vary from participant to participant. Hence the mindset that the interventionist will need to adopt is a move away from considering "problems" to that of considering situations that are "problematical". Identification of the risks will also involve prioritizing and informed segregation of the risks themselves. This can be effectively facilitated by working with a variety of models, options and solutions within different human activity systems in the same situation.

This phase of Appreciation and Problem Structuring can be brought to life by an inquiring mindset, understanding different human activity systems that exist in the same situation, and structuring models of the problem at hand.

SSM can offer a sound platform for surfacing of different viewpoints from stakeholders, and the various tools it provides can enable effective problem structuring approaches for the first two steps. This methodology may be placed in the interpretive domain of sociological thinking.

SSM has 7 stages that bring together diverse group of people to share issues of concern-stated or unstated.

1. Stage-1 involves the general recognition and thinking about the "situation considered problematical". This is a highly engaging stage that is led by extensive dialogue and discussion with the stakeholders (individual and/or groups) involved in a common setting. Existing tools Q&As and FGDs can be leveraged for this stage.
2. Stage-2 involves creatively expressing the problem situation in the form of "rich pictures". Rich pictures can be a powerful tool of expression for less literate communities where members may be more comfortable expressing themselves in pictorial representations. Experiences and life stages can be drawn out that also facilitates greater involvement of the community as it helps them re-live some of the experiences they had had in a collective sense. The idea of rich pictures is not to make the perfect drawing, but to let imagination

and interpretation flow unhindered so that personal expressions and experiences are captured.

3. Stage-3 is the articulate phrasing of the problem situation in the form of a "condensed representation" bearing in mind the CATWOE (Customers, Actors, Transformation, *Weltanschauung*, Owners and Environment). This is called the "root definition". The interventionist will have to play a significant role here with communities (considering that they may be less literate) to help them understand the concept of each of the letters in the CATWOE and help articulate the root definition. This is an intensive stage and needs to be driven by adequate information and sound knowledge. Existing tools of key informant interviews (KII) can be used by the interventionist to delve deeper into the problem situation.

4. Stage-4 involves the process of building "conceptual models" of the system based on the root definition. Conceptual models are ideal situations that should have occurred in the event of a life experience. These would include the ideal rehabilitation or financial buffer systems that would have emerged at the event of the community being exposed to a risk factor. This stage may end up being highly technical and being aloof from the actual community. MIA's Treasure Pot game is a sound platform to simulate the insurance concepts arrived at for the community.

5. Stage-5 demands comparing the models with the real-world situation. This can be done pictorially or through engaging discussions. Existing use of PowerPoint presentations can be leveraged here.

6. Stage-6 involves the participants in debates and discussions about their worldviews to bring about an accommodation of perceptions. This is where difference of opinions within the community can be overcome with informed dialogue and presentation of logical facts. The previous stages of working on the problem situation in a robust and engaging manner will greatly support this stage for agreement of risk priorities where there may be differences of opinions and perspectives.

7. Stage-7 is the final implementation stage where the derived plans are put to action. This stage of SSM is not relevant here as it will fall under the gamut of the second phase.

Teams of participants harbouring different thought processes can be clubbed in the above stages to represent different perspectives. Conceptually, SSM may aid the interventionist to be open to different viewpoints of individuals or groups. Greater is the diversity of thinking, richer is the appreciation and inclusion of perspectives. The interventionist will need to keep an open mind for interests

that are less represented or marginalized and take proactive initiatives to include them in the problem structuring process. The deliberative process can effectively enable "accommodation" of worldviews and perspectives rather than seeking "compromises" of conflicting ideas arising between primary and secondary boundaries.

Product Modelling and Set-Up

This is the second phase of the MIA implementation model that covers five consequent steps after the first phase: Appraise the risk, Insurance education, Selection of benefits package, Set-up of operating infrastructure, and Scheme enrolment. During the risk appraisal step, the baseline survey sets the tone for developing the risk covers that form the basis of the micro-insurance scheme design and process. This is an important step that determines the level of inclusion and benefits coverage for the "real" needs of the community. The concept of boundary critique can play a crucial role here to determine who/what is included or excluded from the baseline study itself, to start with, and whose interests are considered in the scheme design. Often the facilitator has the tendency to play the "expert" role that results in design of programs from one vantage point. As Churchman (1970) suggests, the ability to harbour different perspectives on the nature of the same context underpins the concept of boundary judgments. However, being able to critique one's own thinking and conceptual boundaries can bring them closer to the participants in an immersive environment. This establishes a commitment to the value systems of the community rather than to any individual value judgment.

As a researcher on the baseline study, the facilitator needs to be encouraged to think of their own and stakeholders' boundaries; therefore, the facilitator takes on the role of an interventionist.

Through the various steps of this phase, there are different priorities that come to the fore. For the baseline study and quantification of the risk benefits during the risk appraisal step, the design of the study itself will need to ensure that stakeholders and their interests are included. For insurance education that also involves product design, a commitment to the value systems will mean that it is unbiased to any specific stakeholder and has financial empowerment of the community as an ideal state it is striving towards. For the selection of benefits package stage, where consensus seeking is strived for, the interventionist will have to ensure that both the personal requirements of the members and social requirements of the community are catered for.

The Critical Systems Heuristics (CSH) methodology can offer an effective mindset to the interventionist. CSH offers an understanding of the core, intermediary and peripheral

roles stakeholders play in a system, and appreciate the social and personal worlds of any problem situation. Driven by the philosophy of Kant (1969 reprint), Habermas (1974) and Popper (1963), CSH is a methodology expounded by Ulrich (1983) which puts the position and activity of the involved and affected people in social planning into scrutiny. To be *critical* means "to discern or to judge carefully" (Ulrich 1983: p. 19) the very norms and values one is situated within. Kant renders criticism an absolute status "to which everything must be subjected" (cited in Ulrich 1983: p. 20). This follows the concept of the "whole system", which is always to be regarded critically as it is not possible to comprehend the totality of a whole system, because boundaries of systems are always changing. *Heuristics*, according to Ulrich (1983), is the art of discovery—the art of the usage of "problem relevant knowledge" to problematize the problem itself—an art which is beyond the scope of "rational inquiry". As Ulrich (1983) comments "Accordingly, by heuristics we understand not a collection of prototypical problem solutions or problem-solving techniques, but rather the art of making *'the problem'* the problem" (p. 22).

CSH is typified by asking a set of twelve questions in the "is" and the "ought" mode. For example, different perspectives can be elicited and understood from the following questions, "Who is the actual client of the systems design?", and "Who ought to be the actual client of the systems design?". The set of twelve questions are as follows (Ulrich 1983):

1. Who is the actual *client* of the systems design?
2. What is the actual *purpose* of the systems design?
3. What is the built-in *measure of success*?
4. Who is actually the *decision maker*?
5. What *conditions* of successful planning and implementation of the system are really controlled by the decision maker?
6. What conditions are not controlled by the decision maker (i.e. are in the *environment*)?
7. Who is actually involved as *planner*?
8. Who is involved as *expert*, and of what kind is the expertise?
9. Where do the involved seek the *guarantee* that their planning will be successful?
10. Who among the involved *witnesses* represents the concerns of the affected? Who is or may be affected without being involved?
11. Are the affected given an opportunity to *emancipate* themselves from the experts and to take their fate into their own hands?

What *world view* is actually underlying the design of the system? Is it the view of (some of) the involved or of (some of) the affected?

As the interventionist builds towards the specific steps for the product modelling and set-up phase, these questions will constantly push them to consider their own value judgments in relation to others'. A drive towards genuine engagement will help identification of the primary and secondary boundaries that form in the scheme design and benefit selection process. Root causes behind emergent conflicts can be better understood with this perspective, which would have been earlier incomprehensible and the facilitator would have liked to make speedy decisions, without understanding value systems and boundaries. Both social and personal worldviews and benefits can be unearthed as a result of the same, ensuring sustainability of the system design.

Setting up the operating infrastructure requires introduction of predictability and control. It involves setting up of sub-systems with effective coordination and information flow between them so that operational aspects of the scheme are seamless. The Viable System Model (VSM) can lend a useful perspective in setting up the operating infrastructure.

Pioneered by Beer (1972), and inspired by neurocybernetics, VSM is a structural design of an organization. It identifies constituent parts of a system and articulates how they interact with one another to ensure viability. Beer advocates that this model sets out to explain how systems are capable of independent existence due to the prevalence of fundamental laws of viability. VSM is a functionalist endeavour to approach not the system per se, but the relationship between constituent sub-systems to establish predictability and control.

According to Beer (1972), an organization (or any social system) has five sub-systems. It is to be noted in the beginning that even one person or one department can play the roles of all the five systems. As the system becomes more complex, the number of people or departments can increase, but the functions of the five systems will always exist in any human activity system.

System-1 is the *implementation* system where the actual operations or execution of work takes place. Therefore, there may be several system-1, depending on the complexity of the overall system. Each System-1 has its own localized management and deals with its own local environment. In the case of a micro-insurance scheme, system-1 may be constituted of Claim Committees, Scheme Coordinator and Activists, External Liaisons, so on and so forth. System-2 is the *co-ordination* system, which is responsible for maintaining a harmonious balance of functions between the system-1. It also serves as a liaison between the system-1 and system-3. System-2 ensures information is filtered and moderated between the system-1 and the adequate amount of communication is maintained between system-1 and system-3 for smooth integration of the system. The

MIA model has an already identified Coordination Committee. Its role will need to be duly articulated to reflect its essence and expectations from its functioning. System-3 is the *control* system which ensures adherence to policies and goals in the sub-systems of the larger organisation. It ensures compliance and optimization. More specifically, it can also be looked at as playing the audit role. It is the "real" control system. In case of the design of the MIA delivery model, clear responsibilities and criteria for evaluation need to be introduced to enable the process of observation, collection of physical evidence, interviewing and reporting; these responsibilities are currently fulfilled by the Coordination Committee itself. System-4 is the *development* system, which Beer calls the "biggest 'switch'" in the organization (Jackson 2000; p. 161). This system is responsible for gathering information for the organization from the contingent environment and passes on information with the system to influence decision making and adaptation to enable the system to remain viable in its own environment. This element is currently missing in the MIA model, which needs to be introduced. This is an important function that will enable the scheme to be relevant with changing circumstances. System-5 is the *policy* making and executive unit of the VSM, which Beer calls the "multinode", an elaborate and interactive integration of managers (Jackson 2000). It is the highest decision making unit in the system. It balances demands from different sub-systems and steers the organization forward in a holistic manner. MIA will need to work carefully to identify the one person or team to be this highest body for specific schemes.

These five systems follow the law of "recursion" throughout the sub-systems, which imply that all the five systems exist and operate within each system.

Application of the VSM can help set up of the micro-insurance scheme operating infrastructure as a viable system. Further insights from Beer (1972) can help the interventionist constantly critique their own model of implementation towards making it optimized and more productive. For instance, Beer talks of the factors of actuality, capability and potentiality. Actuality is "what we *are* managing to do now, with existing resources, under existing constraints"; capability is "this is what we *could* be doing (still right now) with existing resources, under existing constraints, if we really worked at it"; and potentiality is "this is what we *ought* to be doing by developing our resources and removing constraints, although still operating within the bounds of what is already known to be feasible" (Beer 1972; p. 207). The interventionist needs to work on their implementation model with these active considerations to continually optimize resource allocation and control systems within the operating infrastructure of the scheme so that it is viable in the environment it exists in.

Sustenance and Phase-Out

MIA endeavours to enable a sustainable scheme in the community and transition out after building adequate capacities in the system. It also focuses on building characteristics in the system that will enable it to be agile and adaptive to changing requirements on the ground. In this phase, MIA undertakes the primary responsibilities of scheme membership enrolment and capacity building. This phase includes the last three steps: Scheme Enrolment, Handholding and Phase-Out.

MIA undertakes significant community mobilization to heighten enrolment of membership in the scheme. Individual family outreach, awareness building and facilitations through SHGs are undertaken. Some methodologies for breaking the ice and engaging with the community have already been discussed earlier in this paper that be used for this phase as well.

Focusing attention to the intent of capability building to enable a sustainable system and phase-out, specific approaches can bring in valuable perspectives; these include Scenario Planning and Drama Theory.

There may be various situations the system will have to encounter after launch. These may include severe drop in re-enrolment rates, acts of violence and theft, serious case of transmittable diseases in the community, etc. Such circumstances may also call for structural changes in the delivery model or scheme structuring. These may call for expert help from MIA even after MIA moves out, and the community needs to be aware of such contingencies. For the scheme to be self-sustaining, it has to be made future-ready by building capacities for it to react to adverse situations. Often these situations may not even be adverse, but certain cases that the scheme has to deal with may be quite complex.

Scenario Planning is about considering challenges and constraints that may encounter the community in the short, medium and long terms. Situations that are most uncertain and liable to create the most impact need to be specifically articulated (Williams 2008). Here, a specific assumption-rating tool from a systems methodology, Strategic Assumption Surfacing and Testing (SAST) can be leveraged to agree on which scenarios could be most probable. SAST was developed by Mason and Mitroff (1981) to enable managers to deal with complexity; they call such situations "wicked problems" where issues are multidimensional, interconnected and uncertain. The interventionist may facilitate stakeholders to surface the possible assumptions from their perspectives and use a simple tool with two axes and four quadrants representing degrees of
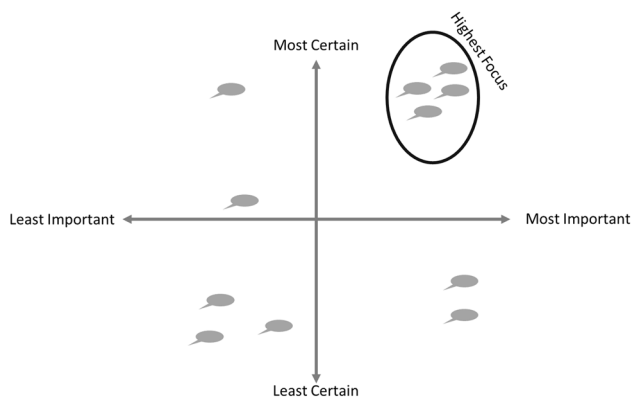
Fig. 1 Example of an assumption surfacing chart

"importance" and "certainty" of their own assumptions of the likelihood of an event to occur. Assumptions and probabilities clustering in the high-importance and high-certainty zone need to be focused on with high priority.

A simple assumption surfacing chart is represented for reference in Fig. 1.

Leaders in this space Van der Heijden (1996) and Heyer (2004) talk of five steps for effective scenario planning. The approach starts with identifying the issues that may arise and that need agreement. This is referred to as the focal issue. This is followed by identifying some of the driving forces—societal, political and economic, among others—that directly impact the focal issue. Once this is understood, those issues forces need to be identified that are within the span of control, and those that are completely outside one's span of control. Appropriate cautions and contingencies need to be worked on. Critical uncertainties are then identified that are at the macro- or policy level, beyond the scope of the community. Based on all the above considerations, finally scenarios are fleshed out.

Once the Scenario Planning is completed, it is about exposing the community to these scenarios in a simulated environment and give the members real-time feedback on how they have handled the same. This can be facilitated by the learnings from Drama Theory that proposes studying problem situations and articulating resolutions through the use of enactments, as in a drama. Here, the problem context is seen as a story plot and the participants as actors. The plot is amplified by introducing planned or unplanned events, and the actors are observed on how they react to the same. Levy et al. (2009) articulate the sequence:

1. The scene is first set with the context and story plot; individual actors and roles are identified.
2. The build-up of the story happens as a usual plot develops and the story is built towards the specific situation aimed at.

3. The climax arrives towards the end of the plot where unfinished decisions/resolutions are exposed.
4. The final part is the decision, where the way forward is agreed upon by the actors themselves or in discussion with the onlookers for the benefit of shared learning.

Scenario Planning and Drama Theory can be used jointly, where the former is applied to identify futuristic circumstances and the latter is used as a capability building tool to generate awareness and enable decision making skills.

Reflections

We would like to propose that CST can be a powerful approach for the MIA micro-insurance implementation model, from a community engagement standpoint.

In this section, we will offer a reflection of the highlights for the relevance of CST for community engagements in micro-insurance. The CST mindset brings about a consideration of wide ranging philosophical and practical considerations that enables the interventionist to focus on the betterment and emancipation of the ultimate "beneficiary". Heavily drawn from Kant, Ulrich aptly conceptualizes the understanding of systems as "referring to the totality of relevant conditions on which theoretical or practical judgements depend, including basic metaphysical, ethical, political, and ideological a priori judgements" (Ulrich 1983; p. 21). Therefore, a system is always to be regarded critically as its boundaries are always changing based on judgements of the parties involved and affected in/by the system. Hence, the importance of the system is to be flexible and agile.

Select approaches and methodologies recommended in this paper may support the interventionist to work towards the same by virtue of their philosophical underpinnings and handy tools for application.

In the case of SSM, the intervention itself becomes a process of "inquiry" that lends the benefit of approaching the situation as a learning system where the best solution can never be arrived at one go, but becomes an iterative process to enable learning and evolution. This being the case, there is greater fuel for the system to be more agile and sustainable.

A heuristic inquiry led by CSH will constantly push the interventionist to unearth stakeholders and/or perspectives that would have been earlier regarded "profane" and not even considered due to a vantage point that the "sacred" space would have unquestionably imposed. Therefore, CSH provides a platform to "sweep in" considerations and implications that can enable setting up of a system that is more inclusive, engaging, ethical, and sustainable.

Table 1 Conceptual framework for the application of CST in micro-insurance

Phase	Core objective	Recommendation	Anticipated benefit
Appreciation and problem structuring	Understanding the on-ground realities and establishing trust with the community	Soft Systems Methodology	Thrives on embracing and absorbing flexibility in the most fundamental level in understanding the situation with diverse perspectives. Driven by the spirit of understanding and accommodating different human activity systems, SSM prepares the system to be resilient and agile right in the design stage. Through the learning character ingrained into SSM, it enables the system to embrace an approach that is on the continual look-out for betterment by incorporating change in a positive and agile manner
Product modelling and set-up	Research-led scheme structuring, aligned catering to the community needs	Critical system heuristics	Enables explication of the core, intermediary and peripheral roles stakeholders play in the system, and the articulation of both stated and unstated community dynamics. Helps understand the context in a detailed manner with the appreciation of both internal and external flexibilities, which helps in creating a resilient and sustainable product model
		Viable system model	Operating in the insurance space, it is essential for the system to be viable and predictable to ensure fairness and consistency. VSM does exactly this. Well-defined loops and relationships between sub-systems ensure flexibility to be curated and channelized effectively. This enables addressing maturity of the system at an evolved level to effectively navigate through processes, interfaces, actors and strategy
Sustenance and phase-out	Building on-ground operational capability in the community and enabling a sustainable scheme	Scenario planning	Crafting contingencies by considering challenges and constraints that may encounter the community and the scheme in the short, medium and long terms. Scenario planning is based on the understanding that change is the only constant and that flexibility is a must for the approach undertaken to be able to react and respond to change. Flexibility is at the heart of Scenario Planning
		Strategic assumption surfacing and testing	Directing focus on the most probable assumptions and scenarios to make scenario planning more effective, hence giving a direction to uncertainty and flexibility. This leads to enhanced performance of the system in the wake of continual change
		Drama theory	Awareness generation, capability building and enabling decision making skills towards building a system that is future-ready. This addresses the requirement of capability building and learning of actors to make them more equipped to operate in a changing system

VSM makes the scheme implementation model more robust drawing references to the concepts of actuality, capability and potentiality. The interventionist is encouraged to incorporate enablers in the scheme's audit system to ensure that any underutilization of resources is promptly spotted and the scheme members are constantly looking for opportunities to make the system more efficient and effective.

Finally, both Scenario Planning and Drama Theory can be leveraged towards building a system that is future-ready. These approaches can also contribute immensely towards facilitating strong engagements with the communities. Scenarios can be built in participative ways with the community. Tools like rich pictures (discussed earlier in this paper) can be used to portray them in more user-friendly ways. Community members can be involved again to enact the roles, therefore enhancing their understanding of the situations by exposing them to a near-real portrayal.

The following Table 1 attempts to capture the recommendations and anticipated benefits if the above framework were to be followed.

In the above table, we have attempted to present a conceptual framework for the application of CST in micro-insurance, based on learnings from the MIA model, bringing in the elements of flexibility and agility at the core of the system.
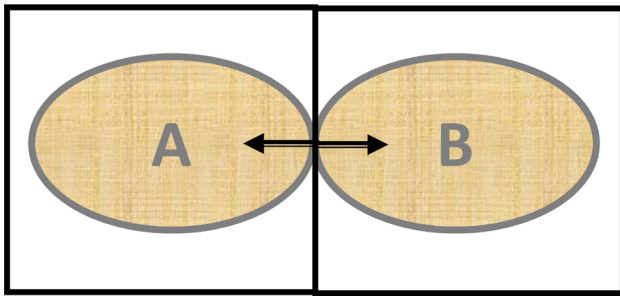
Fig. 2 Different techniques for different parts of the problem situation. (Reproduced with permission from Sushil 1994: p. 641)

The framework proposed above thrives on the concept of flexible integration of methodologies and tools to achieve set goals optimally in different stages of the MIA implementation model. The authors have proposed two different types of integration here (Sushil 1994):

1. Both-ways integration: which is about different techniques for different parts of the intervention. It is clear that in the proposed framework, different parts have specific objectives and the methodologies/tools proposed are aligned to the serving the respective objectives (Fig. 2).

2. Submerging with identity: which is about using a technique completely as a sub-set of a larger technique purely to optimize the effectiveness of the latter, yet retaining the distinctiveness of the former. The use of SAST within Scenario Planning in third phase of the proposed framework is an example of the same (Fig. 3).

Benefits of applying the framework

Following are some of the anticipated benefits from three standpoints—ethical, operational and sustainability—of this application.

- *Ethical standpoint* CST constantly pushes the interventionist to be open to perspectives, be conscious of
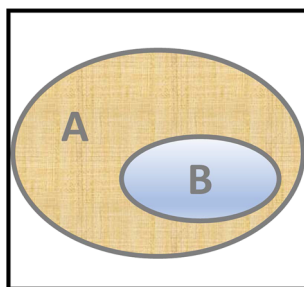

Fig. 3 Submerging with identity. (Reproduced with permission from Sushil 1994: p. 641)

hidden agenda, and be accommodative of divergent worldviews. A methodology like SSM will not only enable the interventionist to be open to diverse viewpoints, but will provide them with the right structure to be open in an effective manner. "'Action to improve' based on finding accommodations" (Iles and Sutherland 2001) is one of the main principles behind the SSM methodology. CSH, on the other hand, will help the interventionist question the system itself—it's fundamental definition of boundaries. Ulrich's conceptualization of systems is heavily drawn from Kant, where he says that Kant "understands it [systems] as referring to the totality of relevant conditions on which theoretical or practical judgements depend, including basic metaphysical, ethical, political, and ideological a priori judgements" (Ulrich 1983; p. 21). Judgments are challenged through the set of twelve powerful questions, and the result is the founding of a social infrastructure that is stronger, more robust and ethical.

Select systems methodologies discussed above help, not only with creating the mindset of ethical considerations and strive towards accommodation; they also provide the interventionist with the adequate flexibility, tools and methods to enable the same. Hence, from an ethical standpoint, it is not just about the outcomes that such tools provide, it is also the process of inquiry that they promote; "improvement" in the situation remain the core of the change process.

- *Operational standpoint* VSM, a methodology inspired by the functionalist school of thought, brings in predictability and control in the system. It clearly delineates the multiple decision points in the organization's structure and lays the foundation for operational processes to be efficient and effective introducing a systemic maturity in a state of constant evolution. It also leads the interventionist to think of previously non-existent functions that will enable operations to be more balanced and resilient. The whole system becomes more standardized enabling ease of understanding for the owners of the system.

The Assumption Surfacing tool and approaches like Scenario Planning and Drama Theory are also introduced. They support the interventionist and target stakeholders to collectively and objectively visualize contexts and prepare themselves aptly to face the same. The environment in which the organization operates is dynamic and boundaries are constantly evolving. These tools and approaches help the organization to be more agile and resilient.

Use of systems approaches like the ones proposed above is expected to bring in greater operational advantage to the micro-insurance scheme model.

- *Sustainability standpoint* The above discussion clearly leads to convey that following a CST mindset for micro-insurance model deployment from a community engagement standpoint will enable MIA schemes to be more sustainable in the long run. Feedback plays a critical role here. To understand the interplay between communities and micro-insurance schemes better, a critical perspective needs to be undertaken so that pre-set boundaries are proactively critiqued, established mindsets are constantly questioned, and prescriptive approaches are challenged towards greater agility and flexibility. CST brings in an intersection of both the functionalist and interpretive perspectives and takes this forward towards a higher order of evolution, informed with the value of justice and inclusion. Here, a higher order of participation is referred to. Tracing to Brett (2003), this is about brining people to the centre stage to take control of themselves and their surroundings rather than being the subjects. This is about mobilizing intellectual resources of the people to make decisions with available resources—decisions that affect their lives for the current and future times.

It is important to note here that the conceptual framework of the application of CST for micro-insurance deployment model is only a proposal at this stage. Its strength and practicality need to be assessed, and the only way to do this is by applying it to a new scheme that MIA adopts.

A complete picture of—both conceptual and practical—will only be possible to be witnessed once the implementation is carried out on-ground.

Conclusion

In this paper, we have worked towards building a conceptual framework for the application of critical systems thinking (CST) for micro-insurance deployment, with a focus on community engagement, with reference to the Micro Insurance Academy (MIA) implementation model. The element of flexibility has been woven through the concept and the framework, being an integral part for the effective functioning of the system. We began by defining micro-insurance and introduced the criticality of robust community engagements for schemes to be successful. We then introduced CST and lead a discussion on how it could shed light for creating a more robust perspective for community engagement. We drew references from a case from MIA and relied on experiences from one of the authors for his engagement in the RES-RISK scheme. We then introduced a three-phase structure to the MIA implementation micro-insurance model and deliberated on how

specific systems tools and methodologies can be of value for every phase. The paper concludes by creating a proposed conceptual framework for the application of CST in the micro-insurance implementation model, from a community engagement perspective.

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Key Questions

1. At an epistemological level, what could be the nodes of intersection between holism (brought in by systems thinking) and flexibility?
2. At an application level, can a model like this be taken to other models of micro-insurance that may not be community-based?
3. At a critical level, how much flexibility is feasible in the financial sector?

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