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CREATING SYNERGIES
between macro and micro
level insurance

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Discussion Paper: Creating synergies between macro and micro level insurance

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Acronyms

ARC	African Risk Capacity
ASP	Adaptive Social Protection
CRI	Climate Risk Insurance
DRF	Disaster Risk Finance
DRM	Disaster Risk Management
GFDRR	Global Facility for Disaster Reduction and Recovery
HSNP	Kenya Hunger Safety Net Program
IBLI	Index Based Livestock Insurance
KLIP	Kenya Livestock Insurance Program
MFI	Microfinance Institution
NGO	Non-Governmental Organization
PPP	Public Private Partnership

Introduction and summary

The DRM community has been advocating for integrated and complementary DRF approaches. In spite of this, macro and micro insurance schemes have struggled to find areas of common support. Theoretically, linkages could lead to process and resource efficiencies, ultimately enhancing the effectiveness of DRM strategies. Being aware of the importance of this issue, the InsuResilience Secretariat has deemed it essential to foster reflection on this topic through a session at the Microinsurance Conference held in Lusaka during November 6-8, 2018. This discussion paper elaborates on some of the ideas discussed during the preparations and the event, and reflects on the challenges faced by policymakers, practitioners and the private sector when developing comprehensive risk transfer approaches. Additionally, these ideas are complemented with insights from the literature. Lastly, this paper provides guidance on how these linkages could be furthered in the future.

Key Messages

- 1** The roles of macro and microinsurance in DRF strategies differ, but need to be jointly considered through stakeholder dialogue if countries wish to exploit the benefits of disaster risk transfer.
- 2** There are multiple policy instruments (such as targeting mechanisms, cash transfer, subsidies or resilience building programs) that can articulate synergies.
- 3** The path to the integration of instruments is not strictly desirable, and can only be achieved through a steady process of institutional development that allows harmonization in the use of data, models and targeting of beneficiaries.

Effectively managing climate related risks requires a comprehensive set of approaches and tools that are applied in an iterative manner. The disaster risk management cycle includes activities in the following areas: risk prevention; management of residual risk; preparedness; response; and rebuilding and reconstructing. Climate risk insurance (CRI) is one of the many tools available to policymakers in the field of climate disaster risk management and finance, and it has been argued that it can play a role in the different risk management areas¹. The correct use of insurance requires precise risk assessments, a risk layering approach and complementary actions to address the underlying causes of risk². Lastly, the design of contracts or the selected entry point for insurance are determinants of the expected impact. In the following, this paper discusses elements in the process that seek to exploit complementarities that make different insurance modalities (macro and microinsurance) work more effectively.

General background

Disaster Risk Finance refers to a set of financial instruments that “aim to increase the resilience of vulnerable countries against the financial impact of disasters and to secure access to post-disaster financing before an event strikes, thus ensuring rapid, cost-effective resources to finance recovery and reconstruction efforts”³. It includes a wide range of financial instruments: reinsurance, insurance catastrophe bonds and swaps, contingent credit, reserve funds, budget reallocation or assistance from international donor funds. Areas for the disbursement of funds are reconstruction of key infrastructure, emergency assistance or government services.

Indirect insurance refers to schemes in which the intended beneficiaries do not hold the insurance policy, although they may contribute to the premium payment. With **macroinsurance**, the policyholder is a public entity, which pays for an insurance premium on behalf of vulnerable populations/ population segments. The payout can serve multiple purposes such as the maintenance of government services and cash flows, funding of pre- and post-disaster operations and targeted assistance⁴. In some instances, payouts are articulated through prearranged disaster contingency plans and distributed to beneficiaries using channels such as social protection programs. **Direct insurance** refers to schemes in which the ultimate beneficiaries pay the premium to the insurer and receive a payout in the case of an event; this is the case of **microinsurance**. In these instances, the insurer markets the insurance product directly to the customer or through a myriad of distribution channels offering targeted services, such as microfinance institutions (MFI’s), cooperatives, NGOs or mobile companies.

Macro- and microinsurance schemes can both apply **index insurance** mechanisms. “Index insurance pays out benefits on the basis of a predetermined index (e.g. rainfall level) for loss of assets and investments, primarily working capital, resulting from weather and catastrophic events⁵.” The use of a pre-arranged index allows quicker payout as it avoids a complex claim settlement process. On the negative side, index insurance may lead to basis risk, if the net transfer from the insurance contract is not perfectly correlated with the policyholder’s net loss⁶, meaning that payouts may not match the real loss suffered by the policyholder.

Stakeholder consultative processes

It is widely acknowledged that the development of comprehensive DRM strategies requires consultative processes and further collaboration of stakeholders. Through country vulnerability assessments, the identification of DRF gaps and subsequent institutional assessments, areas of collaboration can be identified. These analyses precede the development of synergistic approaches. Processes such as those triggered by country DRF assessments initiated by the GFDRR, or the drafting of contingency plans for disaster management conducted under the guidance of the ARC, aim at creating a conducive political environment to attain these synergies. ARC has supported several African countries in developing their early disaster response plans and strengthened their technical capacities in improved drought risk quantification^a. Such a dialogue between national and regional policymakers, international agencies, civil society and the private sector can be an ideal platform for the development of tailored insurance solutions, from the macro to the micro level.

Identification of relevant programs

Governments should identify adequate vehicles to provide targeted support through insurance. Payouts at the macro level usually support emergency relief protocols and social protection programs. In some instances, payouts have been used to scale up (vertically and horizontally) cash transfer mechanisms, which are part of livelihood strengthening programs targeting households in conditions of extreme vulnerability. Social protection programs, such as BRAC’s Ultra-poor graduation⁷ or R4⁸, have been very effective in building livelihood resilience of targeted households. Gradually, these programs are starting to include different modalities of subsidized microinsurance,

^aAt present the ARC has paid out drought risk insurance worth US\$36 million, supporting 2.1 million people in four countries.

such as life and health or weather index products. Embedding microinsurance in social protection programs in the form of PPP's is an effective way to address the affordability challenge for low-income populations^b. On the side of microinsurance, sectoral approaches, such as livestock and agricultural insurance have been successful in incentivizing productivity investments and providing coping mechanisms to households⁹.

Social Protection Programs

Social protection programs are deemed a suitable vehicle to enhance the preparedness, coping and adaptive capacities of vulnerable households. The term **Adaptive Social Protection (ASP)** refers to an integrated approach that aims to address the exacerbated socioeconomic vulnerabilities of populations living under climate risks. ASP lays at the intersection of social protection, DRM and climate adaptation programs. The underlying idea is that poverty and the exposure and susceptibility to climate shocks and stresses are intertwined, and need to be addressed in a joint manner. A key characteristic of ASP programs is the ability to be scaled up to reach more beneficiaries (horizontal upscaling) or increase the regular support to beneficiaries when climate stressors occur (vertical upscaling). Integrating safety nets for low income segments with risk prevention and climate adaptation activities that reduce exposure and susceptibility becomes an effective approach to build the long term resilience of vulnerable populations. To illustrate this, the R4 combines community asset strengthening activities, such as the creation and maintenance of nurseries or water diversion and retention structures, with insurance.

Risk layering and defining expected outcome

When allocating resources for specific DRF instruments, governments^c establish what their preferred source of funding for different types of damages is, in terms of their frequency and severity. Whereas risk retention can be cost-effective for frequent and low impact events, contingency finance and risk transfer are preferred for less frequent and more severe events¹⁰. Risk transfer is intended to offer coverage in moderate to low frequency type of events. However, from the policymaker perspective the ultimate purpose and role of macro and micro insurance schemes differs. Macroinsurance serves

^b Efficiencies can be gained through the provision of infrastructure for data generation, public reinsurance services, product or service innovation through private competition. These issues are revisited throughout the paper.

^c The same reasoning can be applied to individuals

mostly humanitarian purposes and aims at minimizing the short term negative impacts of climate related disasters, providing states with the immediate budget resources to undertake complex emergency operations, as well as restoring the functionality of critical infrastructure. In addition to providing rapid cash transfers that cushion the effects of climate shocks to individuals, microinsurance offers the possibility of ex-ante protection, thus unlocking livelihood pathways. Lastly, there are instances where payouts to individuals are not sufficient to provide access to goods (i.e. food or seedlings) critical for their recovery in the aftermath of an event. In those cases, governments can secure these with funds from macroinsurance payouts, and make them available through local markets.

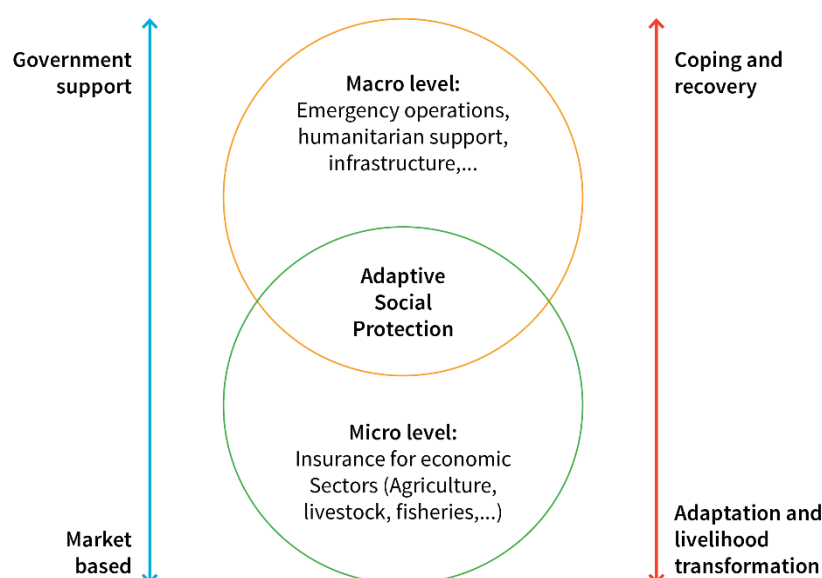


Figure 1: Governance and role of insurance in resilience building

Effective targeting and key vulnerabilities

The type of support received by different household groups to deal with climate risks needs to be adapted to the respective hazard exposure and livelihood profiles. For example, the poorest households may require regular cash transfers and asset strengthening interventions, which are supplemented during climate shocks. For better off, yet vulnerable, households support maybe required to enhance market access or financial inclusion. Northern Kenya provides an example of how different instruments and programs can be combined to address different vulnerabilities. The Kenya HSNP program provides cash transfers that are scaled up through DRF to increase support to existing beneficiaries and, expand the coverage to new beneficiaries¹¹. Moreover, it has been argued that

poorer and vulnerable households stand to benefit from insurance payouts in different ways, enhancing their food security and their asset management strategies respectively¹². By targeting vulnerable households in the same areas where HSNP operates, KLIP deliberately aims at excluding regular HSNP beneficiaries. However, in case of extreme drought conditions, HSNP cash transfers are scaled up to reach vulnerable households (who may also be covered under KLIP). In practice, the issue of double targeting may pose a serious challenge for implementation partners. This risk should be minimized with strong data collection mechanisms and information sharing between different government agencies.

Technical and operational aspects

There are other relevant technical aspects that can exploit synergies across levels apart from targeting mechanisms. Another aspect that could lead to the collaboration of insurance schemes from both levels is the shared use of models and data. However, this can be challenging due to different needs in terms of model calibration, trigger parameters and data resolution. Therefore, the adequacy of these options needs to be contrasted with the data and capacity availability for each context. Similarly, both approaches will require capacity building at the level of governments, private sector, civil society and people themselves. At different levels, this will facilitate a better understanding of how insurance works, enhancing the transparency and stakeholder participation in such schemes. Transparency can lead to building greater trust in the schemes, which is vital to creating long-term, sustainable insurance solutions¹³. Both insurance levels can benefit from using similar distribution channels, for instance mobile banking has enhanced financial access in remote areas. Cash transfer programs make use of mobile based payment systems^d and airtime bundles are used in other contexts to pay for insurance premiums¹⁴. At the micro level, in the event of a major disaster, it can be a viable option for sovereign risk pools to fill in for providing credit guarantees for microfinance loans. Lastly, the greatest degree of integration could be achieved if payouts were integrated, as has been the case in IBLI Mongolia. This livestock product was divided into two layers, with a commercial tranche for moderate to large livestock losses, and a social safety net for catastrophic losses through a PPP for reinsurance¹⁵. In the suggested scenario, the catastrophic layer in the microinsurance contract would be covered with the payout from the state held macro policy.

^d Kenya is a paradigmatic example in the extended use of mobile money. The HSNP uses biometric smartcards to secure mobile banking payments.

This form of subsidy would require the harmonization of hazard models between the insurance levels, and can potentially lead to the reduction of the premiums paid by insurance clients¹⁶.

Enhanced access through premium support

It has been argued that climate risk microinsurance needs to be embedded in public programs or receive some form of premium support to effectively reach the most vulnerable households¹⁷. In many instances, premium support for macro and micro products has been provided through donor funding or national budgets. In the case of microinsurance, even in the presence of premium support, CRI has faced low uptake levels in terms of the number of active policyholders. For example, since 2016 KLIP has provided insurance payouts to more than 18,000 beneficiaries (livestock keeper households) for a total amount of US\$ 7.0 million¹⁸, and it has done so through partnerships with local insurers and a fully subsidized product^e. R4 partners with local insurers to provide insurance, facilitating the access of low income individuals through a community work program with an estimated coverage of over 98,000 farmers during the 2018/19 season^f and payouts amounting to US\$ 2.4 million since 2011¹⁹. Both programs aim at gradually phasing out subsidies by introducing co-payment modalities and income generation strengthening. Furthermore, to foster competition and innovation, KLIP has introduced a performance based subsidy system, whereby insurers are eligible to receive premium support based on their correlated market share. It can be argued that the allocation of public resources to both insurance levels may seem conflicting, especially in a context of budget constraints. However, a risk layering approach to DRF and the use of public programs can create an environment to leverage public and private resources. This can be complemented by progressively introducing payments from end users where deemed possible^g, thus advancing the financial sustainability of the system.

Institutional landscape

Stable DRF strategies are needed to guarantee sound emergency protocols and predictable social protection programs. Having worked out a DRF strategy can be a catalyst for the development of an

^e KLIP subsidy covers up to 5 TLU of livestock, additional units insured are covered by individuals.

^f This information has been updated by the World Food Program based on data available on February 19, 2019.

^g Examples are targeted full subsidies, subsidy thresholds and co-payments. R4, for example, intends to gradually foster the payment of premiums.

enabling environment for the implementation of comprehensive DRM strategies. Coordination across different government agencies and sectors, and administrative levels is paramount to complement DRF with other DRM measures. Thus, smallholders or pastoralists stand to benefit the most if safety net and insurance programs are combined with capacity building for drought management and broader programs for resource access and market development. The promptness of claims settlement inherent to index insurance (both macro and micro) has a multiplier effect on the ability of governments and households to cope with the adverse effects of climate shocks. Depending on the context, local and regional governments may have competencies that could require their participation in the delivery of these programs, be it as service providers or through financial contributions. The pooling of resources for data collection and exchange of information are deemed critical for efficient targeting.

The implementation challenge

It is, however, necessary to recognize that in reality these processes are affected by the prevailing political realities and institutional complexities. Cooperation between ministries may be vitiated by power struggles or partisan interests. The lack of resources at the national and local levels, as well as the insufficient institutional coordination, may limit the development of these recommendations. Likewise, the volatility of budget items can negatively influence the development and stability of these programs. It is for this reason that the recommendations in this article are intended to be an indicative guide of elements that must be considered when developing the synergies of an integrated DRF strategy. In order to promote exchange knowledge and the advancement of innovative approaches, it is essential that practitioners at the national and local levels find platforms to elaborate on the lessons learnt in their work.

Conclusion and outlook

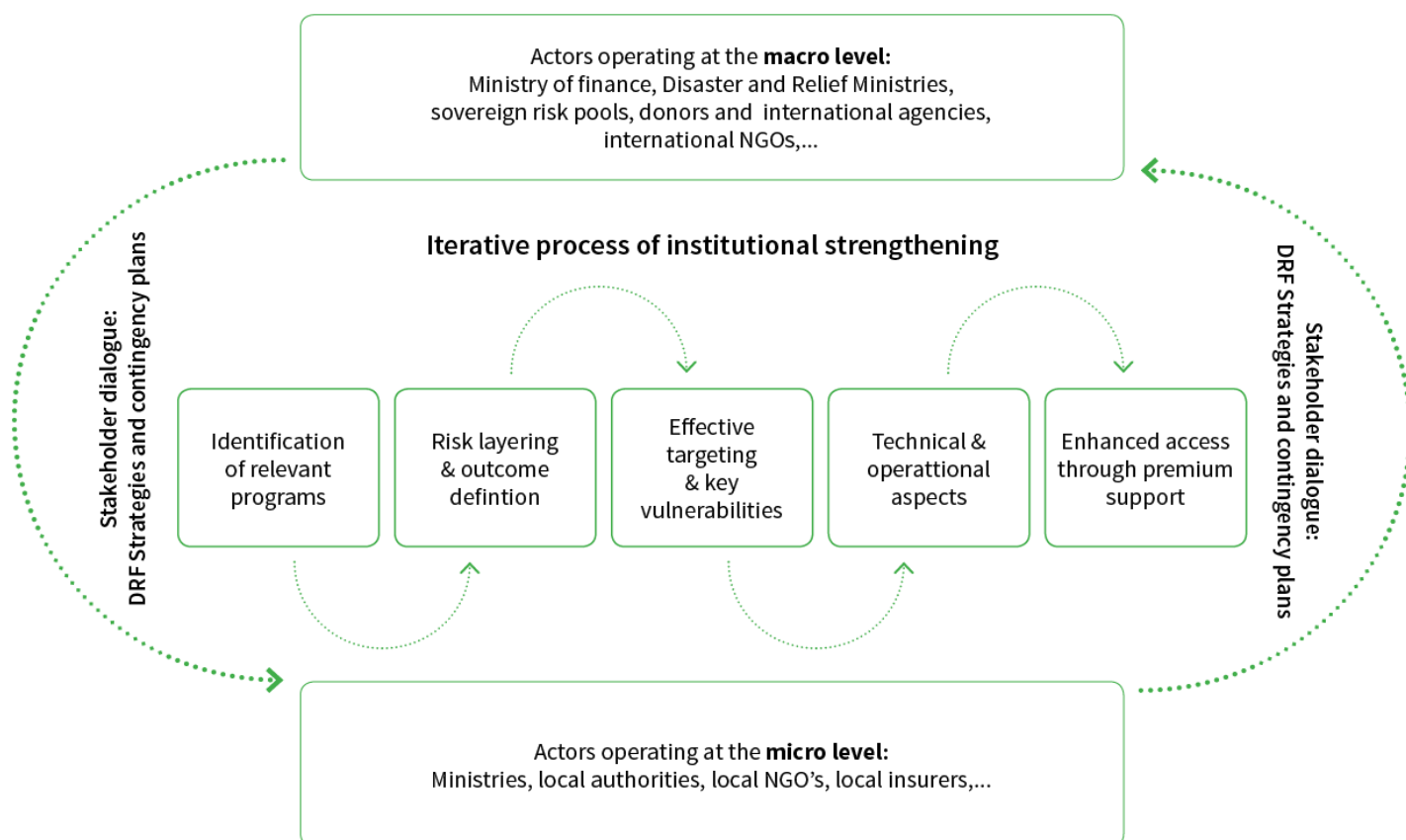


Figure 2: Synergy creation process

In this discussion paper, we have stressed the importance of considering the different modalities of insurance^h to better manage climate risks, increasing protection and promoting long term resilience among individuals and communities. Synergies should be worked out, if possible, at the product planning and design stages. If the objectives pursued by the two types of insurance are complementary and there are mechanisms in place that can facilitate coordination, both types of insurance can reinforce each other. Furthermore, the ability to further create synergies between multi-level insurance approaches will depend on the extent to which social protection programs and their target mechanisms are developed. Macroinsurance practitioners and DRM policymakers should view microinsurance as a tool to lean on in order to plan, develop and implement comprehensive DRM strategies that go beyond coping with emergencies. In a DRF mix, microinsurance provides climate risk protection to vulnerable groups, but furthermore can catalyze livelihood transformations

^h In addition to climate macro and microinsurance, mesoinsurance is an alternative institutional approach to develop insurance schemes through the use of aggregators (municipalities, microfinance institutions, cooperatives,...) as policyholders.

through incentives to invest in productive activities, assets and inputs. It can also be a tool through which sovereign pools can contribute towards the development of scalable social protection. For insurance companies, this offers an opportunity to develop innovative products that cater to the needs of a group that had previously been excluded from insurance markets. In order to be successful, continuous multilevel (with a special importance on the national level) stakeholder dialogue and collaboration is required. The InsuResilience Global Partnership offers such venue at the international level, and strives to promote these processes at the regional and national levels in order to close the protection gap.

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About MCII

The Munich Climate Insurance Initiative was initiated as a charitable organization by insurers, research institutes and NGOs in April 2005 in response to the growing realization that insurance solutions can play a role in adaptation to climate change, as suggested in the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. This initiative is hosted at the United Nations University Institute for Environment and Human Security (UNU-EHS). It is focused on bringing solutions for the risks posed by climate change to poor and vulnerable people in developing countries. MCII provides a forum and gathering place for insurance-related expertise applied to climate change issues.

Website: climate-insurance.org

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