Fact Sheet 3

Strengthening Financial Resilience in Agriculture
Knowledge Exchange Series Part 2

Disaster Risk Financing Solutions for Climate-resilient Livelihoods in the Agricultural Sector

Session 3: Lessons learned and impact of meso-level index-based insurance and credit solutions

About 3.83 billion people rely on agrifood systems for their livelihoods, of which 2.36 billion live in Asia and 940 million in Africa (FAO, 2023). Growth in the agriculture sector is two to four times more effective in raising incomes among the poorest as compared to other sectors (World Bank, 2015). This session will discuss lessons learned from implementing meso-level index-based insurance and credit solutions for agriculture and livelihood protection across Africa, Asia, and Latin America. The session will draw lessons from the experience of financial services providers on factors that enable sustainable scale-up of meso-level solutions. It will also interrogate evidence on the impact of meso-level solutions in enabling and facilitating private capital to the agricultural sector.

Disaster Risk Financing & Insurance Program
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Definition of Macro- / Meso- / Micro- Level Index Insurance

Index-based insurance is a flexible risk transfer/insurance instrument that can be offered at different levels, from individuals to firms and regional or national governments. These three levels generally determine the type of policyholder and the geographic scale of coverage—the extent to which the insured benefits depend on its purpose. Figure 1 describes and compares the characteristics and objectives of the three levels. Table 1 compares the advantages and disadvantages of each to enable practitioners and policymakers to consider practical trade-offs when designing programs.

Macro-level

Tailored to the needs of a macro-level actor, typically a sovereign[1] regional government or an entity with a developmental or humanitarian mandate. The primary objective for sovereigns is budget protection and securing immediate access to emergency funding. Under a macro-level policy, the government is the insured policyholder responsible for the premium payment (See Figure 1). Often, donors and international development institutions provide premium co-financing[2], and the government receives a lump-sum payout to meet the cost of emergency post-disaster response; the government may also set payout rules to distribute money to affected households.

Meso-level

Designed to protect firms or businesses exposed to climate and natural hazard risks. These include financial institutions (Micro Finance Institutions (MFI), banks, cooperatives[3]) or agricultural enterprises (agro-processing companies, contract farmers, and input suppliers. The financial institutions use the product to manage climate-related credit risk in their lending portfolios. In contrast, agricultural enterprises manage climate-related production risks in their contract farming or agribusiness portfolios. These are sometimes referred to as "risk aggregators."[4]

Micro-level

tailored to protect households or individuals, typically smallholder farmers[5]. The farmer is the policyholder and receives the insurance payout. Farmers may or may not be grouped within farmers' organizations that serve as aggregators to ease distribution by improving access and reducing transaction costs.

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[1]As discussed in webinar 4 of part 1, insurance is a more economical option for managing infrequent risks that have a severe impact. One of the fundamental principles of DRF is that it is more cost-effective to use insurance within a layered approach consisting of budgetary instruments, contingency reserves, and contingency credit.

[2]Examples include the AfDB for policies through ARC as well as the WBG for CCRIF policies, PCRAFI and SEADRIF policies.

[3]May be both a financial intermediary and an agricultural intermediary.

[4]This definition excludes micro insurance products sold through farmer organizations or cooperatives, which aims to improve access and reduce transaction costs. For more on distribution aggregation please refer to Part 1 webinar session 7.

[5]As discussed in session 1 of this knowledge series, different segments of farmers, based on their existing vulnerabilities, require different financial solutions and often insurance is more beneficial as part of a comprehensive risk management approach (Fact sheet 1, p5).

Box 1: Clarification of definition of meso-level insurance

We define meso-level insurance as risk transfer instruments used by financial or agricultural firms for risk-management purposes to safeguard soundness of the financial agreements and marketing arrangements in place between them and their clients who are farmers (Miranda & Mulanga 2016). This excludes aggregation for distribution of micro-level insurance; for example, when local NGOs or community-based organizations purchase insurance on behalf of farmers and payouts are directly delivered to individual farmers.

An example of meso-level solution for an agribusiness intermediary

PRAN Foods, the largest agro-processing firm in Bangladesh uses weather index insurance to protect its operations from a shortfall in the supply of cassava due to extreme cold and excess rain. PRAN sources cassava through a contract farming scheme covering over 7000 acres. When triggered, payouts from the insurer help PRAN cover the deficiency in local supply of cassava. In case payouts exceeds liquidity needs, part of the payout is distributed to farmers as a bonus cash, aiming to create awareness about the benefits of insurance (Yasmin & Kurian 2022)

Figure 1: Description of the characteristics and objectives of macro-, meso-, and micro-level solutions

Type of Insurance	Who is Policyholder	Needs met/ Objectives	Mechanisms of the solution
Macro	National/regional government Developmental or humanitarian mandate	Protect national budget against climate shocks and disasters Social protection and food security Immediate liquidity to increase speed and reduce cost of emergency disaster response	Farmer ← payout ← Government or development organization (Government sets the payout rules to individual farmers) → premium → Insurer; Insurer → payout → Government or development organization
Meso	Financial institutions (MFIs, banks, cooperatives) Agricultural enterprises (agro-processors, administrators of contract farming schemes)	Protect loan portfolios against defaults Ensure business continuity Provide recovery lending to borrowers Improve risk management Protect business operations against yield shortfall May protect contract farmers (when part of payout shared with farmers)	Financial institutions (May use payouts internally to mitigate portfolio risks, which supports farmers indirectly) → premium → Insurer; Insurer → payout → Financial institutions Farmer/ borrower → Non-financial Intermediaries; Non-financial Intermediaries ← payout ← ; Non-financial Intermediaries → premium → Insurer; Insurer → payout → Non-financial Intermediaries
Micro	Individual farmers May be grouped in farmer organizations	Immediate liquidity in event of climate shocks and disasters To increase investments in productivity	Farmer → premium → Insurer; Insurer → payout → Farmer

Source: Authors adapted from DRFA Part 1 webinar Session 7
https://www.financialprotectionforum.org/sites/default/files/Agri%20DRF%202%20-%20Webinar%201_Fact%20Sheet.pdf

Why macro- and meso-level?

Macro and meso-level insurance products can offer several benefits compared to micro-level policies. Overall, a single policy covering thousands of loans, small-scale farmers, or households has lower transaction costs, spreads risk, and creates sustainable volume quickly, which is more attractive for insurance companies and therefore, stimulates insurance supply. On the other hand, micro-level solutions can be better tailored to farmers' needs and directly influence risk behavior ex-ante and ex-post. However, these require substantial investments, and as discussed in Webinars 1 and 2, basis risk remains a challenge. Basis risk is much more manageable for a firm or government than an individual farmer. In the case of downside basis risk, an individual farmer will be worse off and may have to resort to negative coping strategies to survive [6].

Table 1: Comparison of macro-, meso-, and micro-level solutions

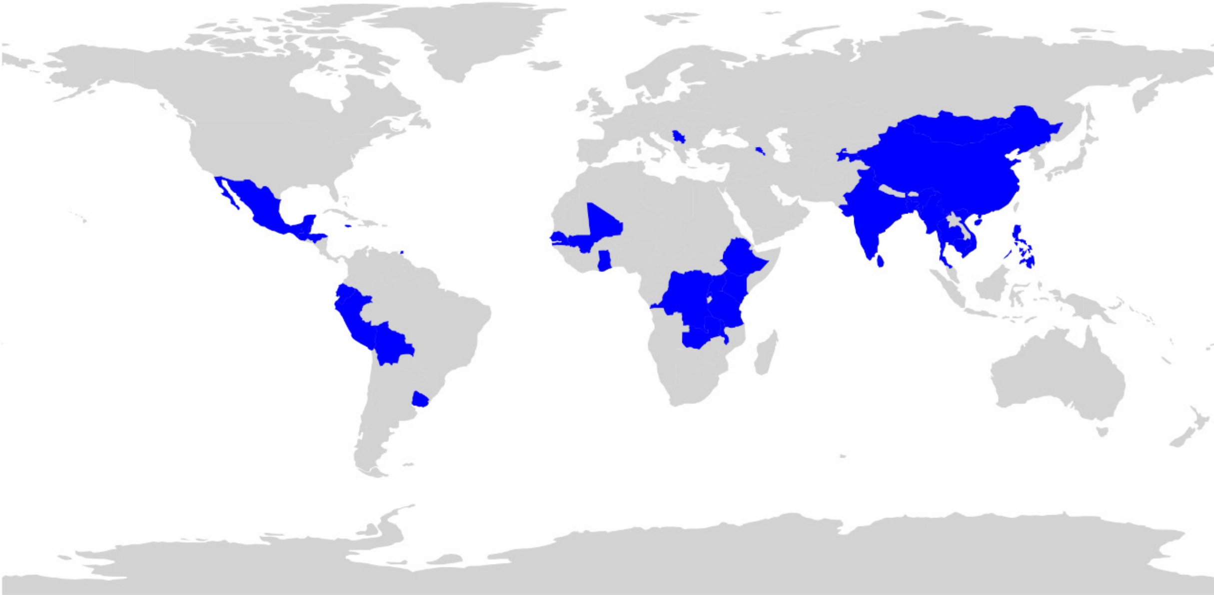
	Meso-level	Micro-level
Outreach	Financial protection can reach hundreds or even thousands of small poor farmers directly or indirectly under a single policy	Limited
Affordability	More affordable premium due to reduction of sales and operational costs e.g., marketing and promotion, underwriting and claims processing	Less affordable premium due to high retail costs
Basis Risk	Basis risk may be reduced compared to micro insurance	• Downside basis risk is a huge concern to farmers, which diminishes welfare compared to position without insurance • Upside basis risk is a concern for insurers, which increases overall costs
Supply of insurance	The scale and spatial spread of meso insurance may allow for sufficient business volume and more viable terms compared to micro-level	Less attractive to local and international insurers
Liquidity	Intermediary may indirectly provide liquidity by restructuring loan or deferring the repayment of the borrowers.	Direct payouts provide farmers liquidity to cope with the shock immediately
Supply of credit	May protect lenders' portfolios and improve risk management options, which increases their willingness and abiliti to lend	Farmer may use policy in place of collateral to gain access to credit
Certainty and timing of payout	Intermediaries receive a payout as soon as the policyholders of micro-insurance do, but the benefit for the borrowers varies depending on how the intermediaries use the payouts.	• Farmers have more certainty over payout • Arrival of payouts may be faster • May be more objective/transparent than when payouts are distributed by aggregator
Behavioral changes	Limited	• Farmers may be confident to invest knowing they will be protected in the event of a disaster, which may increase productivity' and welfare • Farmers may be motivated to improve ex ante risk management measures

Source: World Bank

[6] As discussed in session 1 of this knowledge series, the basis risk is the biggest disadvantage between index-based insurance compared to traditional indemnity insurance (Fact sheet 1, p8).

The global landscape of meso-level solutions

Figure 2: Identified meso-level index insurance schemes (including pilots and discontinued programs)



Source: Authors based on Global Parametrics, ADB, and Yasmin & Kurian 2022

Table 3: Global portfolio of meso-level solution products and programs

Country	Details of Products	Policyholder	Insurer/Reinsurer (Service Provider)	Status
Cambodia (2021 to date)	Debt financing arrangements against natural disasters	Chamroeun (an MFI in Cambodia)	EMF Enabling Microfinance Foundation/ Natural Disaster Fund (NDF)	
Philippines (2021 to date)	WII against hurricanes and typhoons to protect loan portfolios	Local cooperatives	CLIMBS Life and General Insurance Cooperative	105 cooperatives 81 provinces covered
Tanzania, Malawi, and Rwanda (2020 to date)	WII against drought and excess rain to hedge against loss of yield and provide loan repayment forgiveness to the smallholder farmers	One Acre Fund	Natural Disaster Fund (NDF)	4.5 million farmers indirectly covered
27 countries [Africa/ Latin America/Asia /Middle East/ Eastern Europe] (2018 to date)	A multi-peril index covering earthquakes, tropical cyclones, drought, floods and excess rain	VisionFund's micro finance network	African and Asia Recovery Disaster Insurance Scheme/ Natural Disaster Fund (NDF)	MFIs in 27 countries with 1 million active borrowers of which 67% are women

Country	Details of Products	Policyholder	Insurer/Reinsurer (Service Provider)	Status
Bangladesh (2015 to date)	WII against cold spell and excess rainfall to protect Cassava contract farming scheme from yield shortfall.	PRAN Foods (agrofood processing)	Green Delta Insurance Company	Over 7000 acres covered. Reported to be ongoing
Indonesia (2013 - date)	Earthquake index insurance (EQII) product to protect the loan portfolios of the MFIs lending to microenterprises and traders	Financial Institutions	PT Asuransi MAIPARK Indonesia – a specialist catastrophe reinsurance company Developed in collaboration with GlobalAgRisk and then Aon Benfield	Ongoing
Bangladesh (2010 – 2015)		Local MFI Manab Mukti Sangathi (MMS)	Pragati Insurance Company and Swiss Re Developed with support Oxfam and Swiss Development Corporation	10 villages and 1660 households covered Suspended in 2016 due to lack of premium support Resumed and expanded to 2 more districts and 5000 households in 2017
Haiti (2011 - 2013)	Portfolio protection of MFI and property protection of MFI's clients against earthquake and hurricane	Local MFI Fonkoze	Local insurer Developed in partnership and supported by specialized reinsurer Microinsurance Catastrophe Risk Organisation (MiCRO)	Discontinued. Lessons informed current generation of catastrophe solutions in Central America. A total of USD $8.8 million in claims following Hurricane Sandy and Tropical Storm Isaac[7]
Jamaica, Saint Lucia, Grenada, Belize, Trinidad & Tobago (2011)	WII against extreme wind speed and rainfall to protect loan portfolios	Financial institutions	Munich Climate Insurance Initiative /Munich Re	Unconfirmed
Malawi (2007 to date)	Rainfall Index to protect portfolio of banks that lend to growers of tobacco	Opportunity International Bank of Malawi and Alliance One (a local Tobacco trader)	Insurance Association of Malawi (IAM)	Ongoing but has not achieved scale
Peru (2009)	WII against extreme rainfall and flooding from El Niño Covering individual loans	COPEME (association of microfinance institutions)	La Positiva reinsured by PartnerRE	Discontinued due design leading to high incidence of anti-selection
Vietnam (Developed in 2008)	Flood index for portfolio protection and business continuity of agricultural bank	Vietnam Bank for Agriculture and Rural Development.	Bao Minh Insurance corporation reinsured by Paris Re. Developed with support from Asian Development Bank and the Ford Foundation	Contract covering 14% of maximum possible loss of US$1m Not taken up likely due to then availability of public funds for recapitalization
Kenya, Ethiopia and Mali (2007)	Rainfall index and NDVI based insurance for maize farmers	Millennium Villages Project	Local insurers Developed in partnership with IRI and Swiss Re	Experimental product transacted in three MVP villages in Kenya, Ethiopia and Mali in 2007

Source: World Bank team created based on Global Parametrics, Yasmin & Kurian (2022) and Hellmuth et al, 2009.

Note: IRI = International Research Institute for Climate and Society

[7] The payout enabled Fonkoze to forgive outstanding loans, offer new loans and provide borrowers a US$125 payout.
https://www.artemis.bm/news/micro-natural-disaster-microinsurance-facility-was-triggered-in-haiti-by-isaac/

Evolution and theory of change on the impact of meso-level solutions

Meso-level solutions are expected to increase the resilience of FIs lending to the agricultural sector as well as the resilience of smallholder farmers through ex-ante factors (improved risk management and lending before shocks) and ex-post factors (lending when shocks happen and supporting the continuity of farming livelihoods). See Figure 2 for the theory of change.

At the Firm Level

Meso-level solutions play a vital role in risk management and financial sustainability. After an event (ex-post), meso-level insurance can help FIs to protect their portfolios against widespread default due to climate-related shocks. The insurance payout can help FIs mitigate losses associated with defaults or enable FIs more flexibility in managing delinquencies, or provide liquidity to prevent potential defaults. Without this solution, FIs often have to apply for refinancing from their parent company or cease lending. Before an event (ex-ante), meso-level solutions can encourage FIs to increase lending to farmers by transferring some of the risks off their balance sheets, reducing collateral requirements, and expanding the range of loans (term and type). Meso solutions may create more subtle outcomes, which compounded increase the supply of credit and, by so doing, lower costs per loan and enhance farmers' credit demand.[9]

At the Farmer Level

The benefits of the meso-level solutions may trickle down to the farmer level, but this varies depending on the product type and extent of direct benefits. If meso-level insurance results in a payout to the farmer, it enhances their ability to manage immediate or short-term shocks. FIs might also use meso-level payouts to restructure loans, leading to an immediate increase in net liquidity, further supporting farmers. Therefore, careful consideration is needed when implementing meso-level insurance products to ensure they align with the long-term interests of both firms and farmers.

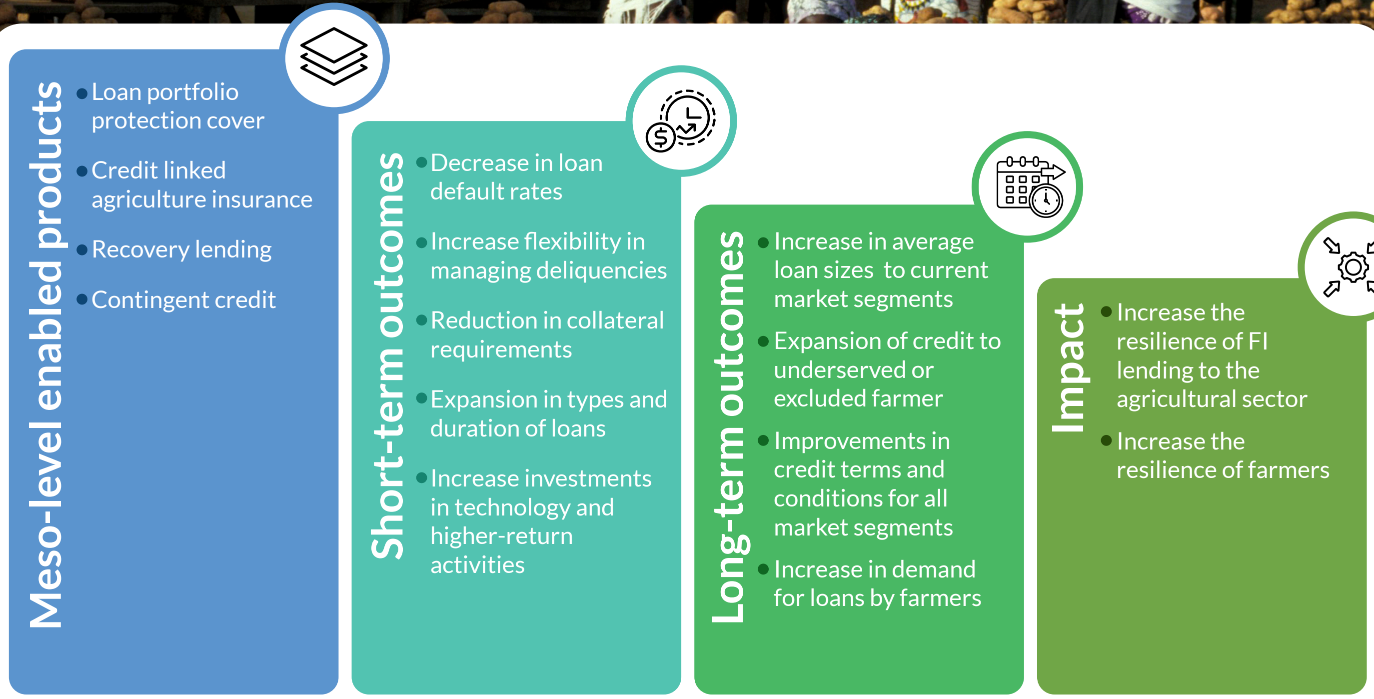
Loan portfolio protection cover
insurance payout to FI based on performance of portfolio with no immediate payout to the farmer. The farmer may need more liquidity to cope soon. Still, loan restructuring or forgiveness at FI will decrease the default risks for farmers and help them maintain a healthy credit status, which is a medium to long-term benefit for both FI and farmers.

Credit-linked agriculture insurance
insurance payout to FI linked to individual loan. The insurance payout amount remaining after settlement may be paid out to the farmer. In addition to maintaining a farmer's creditworthiness, this provides liquidity for the farmer to cope immediately.

Recovery lending or contingent credit[10]
capital injection or loan to the FI, which enables the FI to provide an additional loan for the farmer to continue farming operations immediately. The initial outstanding loan amount may be deferred for a limited period or restructured with the recovery loan for repayment. Depending on the source of capital, the recovery loan may be more lenient.

[9]Unlocking Smallholder Credit: Does Credit-Linked Agricultural Insurance Work?
[10]Combines aspects of traditional microcredit and index insurance

Figure 3: Theory of change of meso-level solutions



Source: Authors

Emerging Evidence

Although global experience with meso-level index insurance and credit is relatively limited, and there is a need for more empirical research on the impact, there is emerging evidence of the potential benefits of the products.

Profitability

- In Bangladesh, a large-scale trial on contingent credit found that branches of a microfinance institution (BRAC) offering contingent credit[11]experienced a more stable portfolio, increased profits, reduced missed payments, and increased borrowing overall (Lane 2022a, Lane 2022b, Lane 2022c).
- In Bangladesh, BRAC branches that offered contingent credit had a 4-percent increase in net revenue per borrower compared to locations that did not, with the highest improvements in repayments observed among clients that had borderline credit scores.

Supply of credit

- A randomized control trial in northern Ghana found that combining index insurance with agricultural loans increases the likelihood of farmers receiving credit; in other words, loan approval increased by 15 to 21 percentage points. The impact is more significant when the loans were bundled with meso-insured loans, indemnifying the lender in the event of a drought, and allowing the funds to be used to settle the farmer's debt, compared to the loan bundled with micro-insured loans (Mishra et al., 2020).

[11]Emergency Loan that provided pre-approved households a line of credit in the event of a flood. The loan provided up to 50 percent of the principal amount of a client's last regularly approved loan regardless of the outstanding loan amount.

Demand for and access to credit

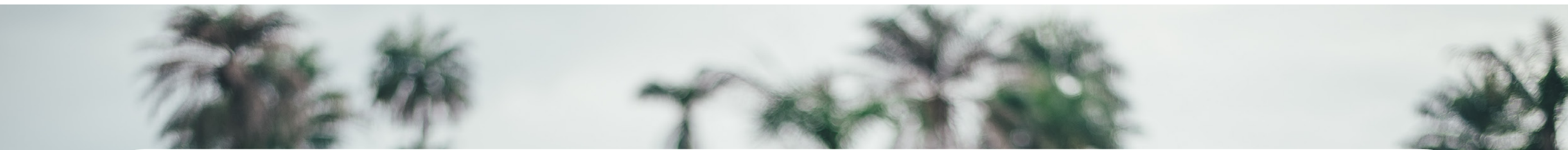
- In Bangladesh, the large-scale trial with BRAC on contingent credit found increased overall borrowing: clients pre-approved for the contingent credit were 11 percent more likely to take a conventional loan.

Agricultural productivity

- In Bangladesh, the large-scale trial on contingent credit found that borrowers preapproved for contingent credit in the absence of a flood increased their productivity by 31 percent.[12]

Resilience

- In Bangladesh, the largescale trial on contingent credit found that borrowers had higher levels of consumption after flood-related losses,



CASE STUDY 1:

VisionFund African and Asian Resilience in Disaster Insurance Scheme (ARDIS)

VisionFund International is a microfinance group established by World Vision in 2003. It comprises a network of Microfinance Institutions (MFIs) in more than 30 countries. ARDIS was established in 2018 to enable active risk management, increase access to finance, and provide recovery lending to farmers within Vision Funds's MFIs network. At inception, ARDIS covered 690,000 families, totaling up to 4 million people in 6 countries in Africa and Asia.[13] It has grown significantly since then and is considered the world's most extensive non-governmental climate insurance program. As of 2022, ARDIS operates in 27 of VisionFund's countries, including 11 in Africa, 7 in Latin America, 6 in Asia, and 3 in Middle Eastern and Eastern European[14] countries, covering 1 million active borrowers.

Concept of Recovery Lending

- Recovery lending is a financial approach to support households and communities affected by disasters or unexpected shocks. It allows Microfinance Institutions (MFIs) to continue lending during the recovery phase while providing flexibility in managing existing loan agreements. This model is essential for MFIs that may face credit risks, liquidity constraints, and solvency issues in the aftermath of a disaster, where there might be pressure to quickly collect on existing loans and reduce new lending due to perceived higher risks.

[12] ibid

[13] Kenya, Malawi, Mali, Zambia, Cambodia and Myanmar
https://www.visionfund.org/newsroom/smallholder-farmers-now-have-climate-insurance

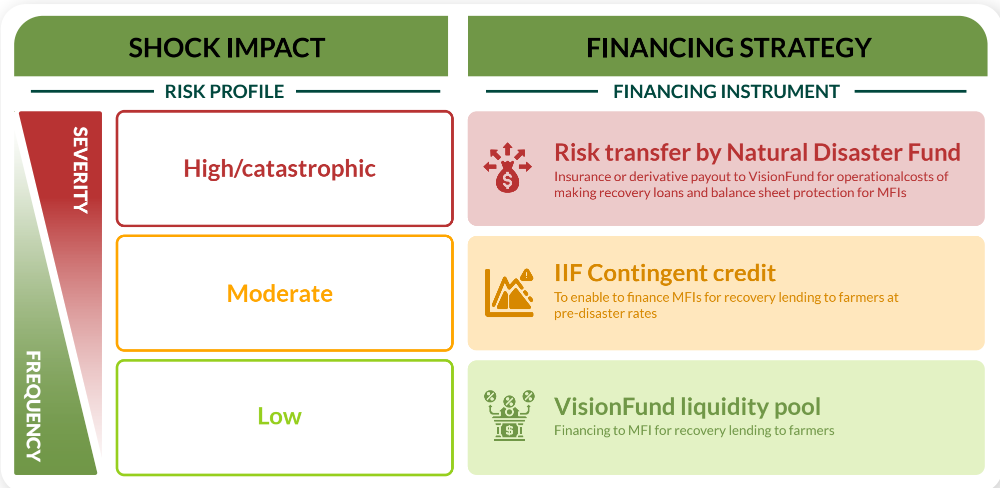
[14] Armenia, Serbia, and Bosnia

- VisionFund pioneered recovery lending in the Philippines following Typhoon Haiyan in 2013. In the aftermath of the disaster, the organization distributed more than 4,600 recovery loans. A survey of clients revealed that 96 percent found the loans beneficial in rebuilding their livelihoods, and nearly half, 49 percent, reported that they had recovered entirely due to the assistance provided by the loans.[15]
- Following successful proof of concept in the Philippines, the recovery lending program expanded to other countries. In 2015 and 2016, the scheme was activated in Kenya, Malawi, and Zambia to respond to drought and flooding events associated with El Niño. VisionFund offered recovery lending to 14,500 families, amounting to $3.3 million. Clients repaid 97% of all loans, and 89% of clients indicated that they had experienced a reduction in the adverse impacts of the disaster and some recovery.
- Building on these track records, ARDIS expanded and integrated the recovery lending model across VisionFund's client base, many of whom are women in the agricultural sector. Loans typically range from $70 to $300 and are provided in the event of natural hazards or extreme weather, including earthquakes, tropical cyclones, droughts, and excess rain.

The three-stage risk-layering approach of ARDIS

- The ARDIS deploys the unique three-stage risk-layering approach (Figure 4) in collaboration with Global Parametrics and the InsuResilience Investment Fund (IIF). As soon as the defined insured event is determined based on weather data from external providers (e.g., satellites), financing is triggered in three stages one after the other: 1) VisionFund Liquidity Pool, 2) IIF Contingency Credit, and 3) Risk Transfer by the Natural Disaster Fund (NDF), managed by Global Parametrics and funded by FCDO.

Figure 4: ARDIS risk layering approach.



Source: Authors based on interviews and https://www.insuresilience.org/news/visionfund-launch-of-the-largest-non-governmental-climate-insurance-programme-for-african-asian-smallholder-farmers/

[15] https://www.visionfund.org/newsroom/uk-government-awards-grant-el-nino-response
[16] The figure is as of June 2017. https://www.visionfund.org/newsroom/recovery-lending-africa
[17] Since its establishment in 2018, ARDIS has made 5 payments under the derivatives for flood, drought and tropical cyclone windstorm. https://www.globalparametrics.com/news/ardis-entering-its-5th-year-reflections-successes-and-its-future/
[18] A global Impact Investment Advisory Company specializing in Microfinance and Access to Energy see https://enabling.ch/

CASE STUDY 2:

The Climate Resilience Enhanced Debt (CRED)

CRED is a climate risk facility developed by Global Parametrics and Enabling Qapital (EQ) in 2021. The facility is a contingent credit and recovery lending structure designed to integrate parametric risk transfer with debt financing to build the resilience of MFIs participating in EQ's Enabling Microfinance (EMF) Fund to climate, weather, or catastrophe risks. This blended arrangement enables access to emergency risk capital, ensuring business continuity for the microfinance lender (EMF Fund) and financial institution's business recovery-based lending program and clients.

Cambodia was chosen as the initial CRED recipient country because it is one of the world's most vulnerable nations to environmental risks. Chamroeun, an MFI in Cambodia, was chosen for the first CRED funding. When specific conditions are met, the EMF Fund releases pre-arranged financing. This emergency funding allows Chamrouen to provide borrowers the financial support they need to keep operating under challenging conditions, speeding up their recovery and enhancing their resilience.

The EMF Fund buys corresponding risk coverage from the Natural Disaster Fund (NDF) to mitigate potential losses from these CRED loans. In severe climate incidents that activate emergency loans, the EMF can transfer the payout from the NDF, reducing the burden on Chamrouen by lowering interest rates or forgiving the loan principal.

CRED uses a risk layering approach consisting of different debt instruments, which limits complexity in regulation and structuring compared to a solution that requires debt and insurance.

What factors have enabled the scale-up of meso-level solutions?

This section lists vital factors that have enabled the scale-up of solutions from the experiences of financial services providers, data services, and other firms in developing and implementing meso-level solutions worldwide.

- The innovative design of context-specific insurance products
- Positive experience of payout in the event of a shock
- Better understanding by financial institutions of the impact of climate shocks on borrowers
- Public-private partnerships with strong collaboration between FIs, local insurers and reinsurers, technical support, and premium subsidies from international development organizations.
- Advances in satellite imagery technologies, climate science, and risk modeling enable a better understanding and management of climate risk.

[19] EQ's EMF Fund, a private debt fund established in 2008 invests in microfinance institutions (MFI) in emerging and frontier markets to foster financial inclusion and shared prosperity. It currently reaches over 400,000 micro-entrepreneurs globally, 12 million micro borrowers, of which 71% are female.

[20] https://enabling.ch/sustainability-report/cred/ and https://www.artemis.bm/news/global-parametrics-links-climate-risk-transfer-to-microfinance-funding/#:~:text=The%20CRED%20product%20provides%20a,risks%20of%20Enabling%20Qapital's%20clients

[21] Interview with Global Parametrics

[22] ibid

- Significant learnings from the 1st generation of index insurance programs (many of which failed and were discontinued).
- A stronger focus on resilience (better risk management before and continuity of financial services after a shock) ensures business continuity and protects livelihoods (beyond household food security).
- Improved access to capital at a lower cost across the financing chain through last-mile financial institutions.

Conclusions and the future of meso-level solutions

- Meso-level index insurance only accounts for a small fraction of global index insurance premiums; as of 2016, meso-level index insurance premiums are estimated to be 11% of total agriculture premiums globally. However, meso-level index credit solutions are emerging and may be catalytic for mobilizing climate finance into the agriculture sector.
- Meso-level index insurance has attracted limited interest from financial institutions, with slightly more interest from agro-input dealers, contract farming operations, etc. This may be driven by the limited impact of climate shocks on NPLs as farmers resort to selling assets (and other negative coping strategies) to repay their loans. Therefore, further studies on long-term impact are needed, including borrower retention following shocks.
- Banks prefer traditional collateral to insurance and are more interested in purchasing credit guarantee cover against moral hazard or comprehensive default rather than narrow climatic risk default.
- Financial institutions need more training on climate risk management alongside more relevant tools to enable FIs to interpret the latest climate science and continually refine their risk modeling approaches.
- There is a need to harness lessons from the first generation of products to increase technical, operational, and financial efficiencies.

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Work Sheet 3:

Lessons learned and impact of meso-level index-based insurance and credit solutions

Test your knowledge and record your insights through this easy, DIY worksheet!

Drawing on your understanding of the content in this fact sheet, attempt the following activities.

Activity 1: A list of statements about Index-based insurance are given below. Identify if the statements are true or false.

#	Statement	True	False
1	Index-based insurance is offered at two levels – individuals and national governments.		
2	Agricultural enterprises use index-insurance to manage climate-related risks in their lending profiles.		
3	Macro and meso-level insurance products can offer several benefits compared to micro-level policies.		
4	A single policy covering thousands of loans, small-scale farmers, or households has lower transaction costs.		
5	Basis risk is much more manageable for an individual farmer than a firm or government.		
6	In micro-level insurance beneficiaries have more certainty of payout as compared to micro-level.		
7	Outreach of meso-level insurance is high as it can reach a large number of farmers directly or indirectly under a single policy.		
8	Payouts for micro-level index-based insurance policies can be slower than for meso-level policies.		

Activity 2: Match the types of index-based insurance to the type of policyholders.

Type of insurance	Write # here	#	Type of policyholders
Macro-Level		1	Individual farmers or grouped farmer organizations
Meso-Level		2	Financial or agricultural firms
Micro-Level		3	National/regional governments or organizations with humanitarian or developmental mandate

Activity 3: Reflections

[1] These are my top two take-aways from this fact sheet.

[2] Here are two concepts or ideas that I would like more information about.