Climate Risk Insurance

Considerations for Operationalizing Micro- and Meso-level Premium Support

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The Pacific Insurance and Climate Adaptation Programme aims to improve the financial preparedness and resilience of Pacific Islanders towards climate change and natural hazards through the development and implementation of market-based meso- and microinsurance schemes. The programme will offer an option for the national and subnational governments to consider subscribing to a 'macro to micro' scheme, which allows government-level insurance policies to pay out to individuals to support the most vulnerable segments. Fiji, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu and other Pacific Small Island Developing States will be covered under the multi-year programme.

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Executive summary

Climate change disproportionately affects vulnerable populations in the Global South, and climate risk insurance (CRI) is a mechanism to enhance their financial resilience. However, a substantial insurance protection gap persists, particularly at the micro and meso levels – for individuals, small entrepreneurs, communities and others – due to factors such as affordability constraints, limited awareness, low trust in financial institutions, and underdeveloped markets.

Premium support is a financial intervention that can help address some of these challenges. It aims to reduce the cost of insurance for beneficiaries, improve insurance uptake and demonstrate the value of CRI, thereby catalysing market development and fostering a deeper understanding of insurance benefits among beneficiaries and insurers. By subsidizing premiums, premium support can help to overcome demand-side barriers and encourage the uptake of CRI in new markets. This paper examines the key considerations for operationalizing effective premium support schemes for micro- and meso-level CRI.

Drawing on literature review and stakeholder consultations, the paper identifies four critical dimensions for designing and implementing premium support.

1. **Clarifying the roles and ownership in implementing premium support:** Defining the roles of various stakeholders, including governments, the private sector and the development community, is crucial for effective implementation. National governments play a central role in facilitating premium support, signalling their commitment to protecting the most vulnerable and addressing market inefficiencies, while the private sector contributes expertise and resources.
2. **Ensuring the sustainability of premium support:** Ensuring the long-term viability of premium support schemes requires careful planning. This includes defining clear objectives, establishing multi-year commitments and developing strategies for a gradual phase-out of support, while demonstrating the value of CRI to ensure a sustainable supply and demand for CRI solutions.
3. **Reaching the most climate-vulnerable:** Effective targeting mechanisms are essential to ensure that premium support benefits the intended beneficiaries. This involves socioeconomic (including considerations of equity, gender and disability), geographic and behavioural targeting strategies, and consideration of data availability.
4. **Maximizing the transparency of premium support:** Transparency in the design, implementation and monitoring of premium support schemes is vital for fostering trust, accountability and learning. This includes clearly communicating objectives, funding sources, eligibility criteria and performance.

This paper provides insights and considerations for policymakers, donors, insurance providers and other stakeholders involved in developing and implementing premium support schemes. By addressing these key dimensions, stakeholders can work towards creating more effective and sustainable solutions that enhance the climate resilience of vulnerable populations.

The dimensions and key considerations under each dimension are summarized and visualized in Figure 1.

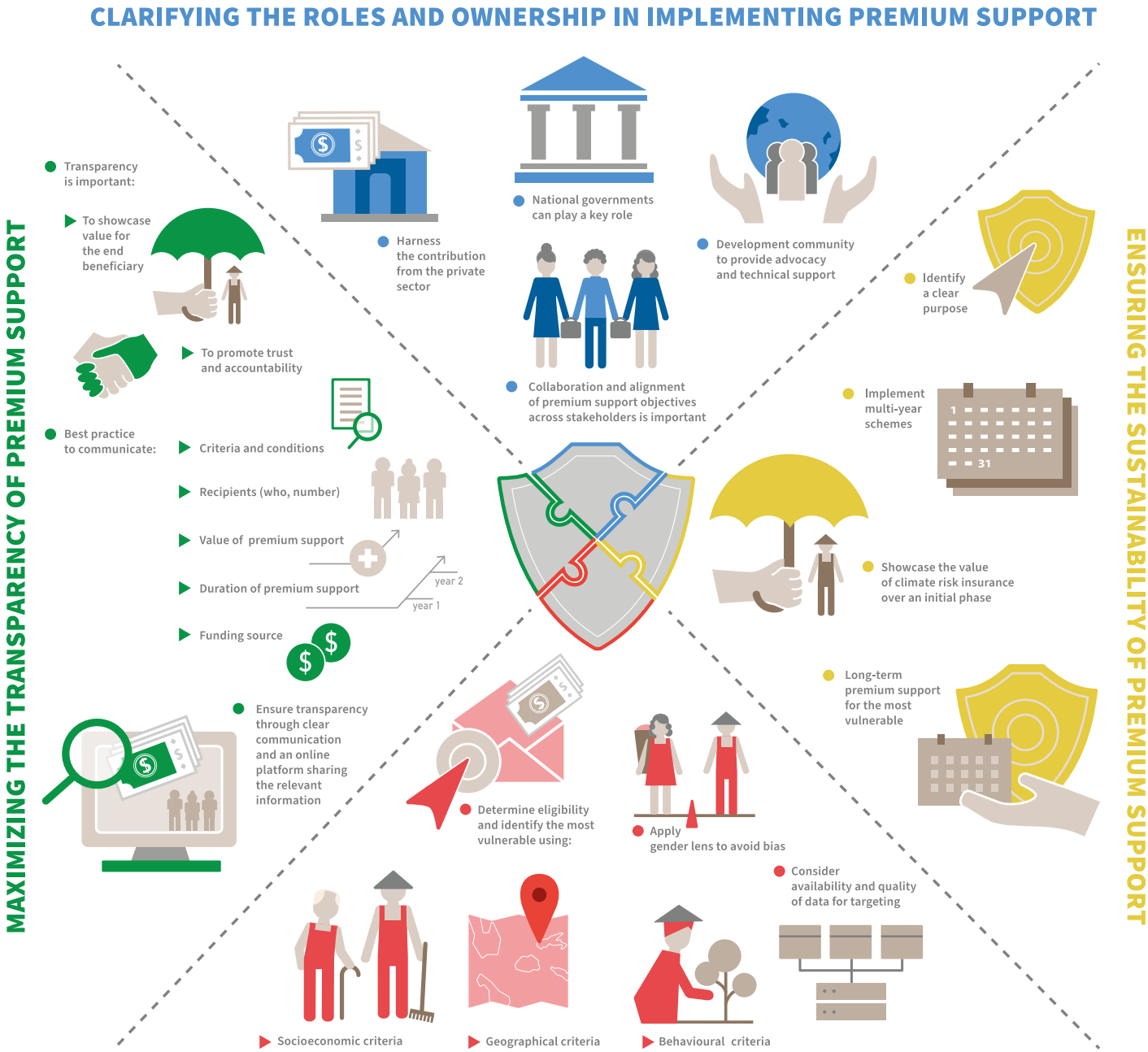

Figure 1. The four key dimensions and their associated considerations for designing and implementing premium support. Source: Authors

1. Introduction

Climate risk insurance (CRI) solutions can strengthen the financial resilience of individuals and households against climate risks, helping to protect livelihoods and enabling faster recovery from the adverse effects of climate change at the micro (individual), meso (institutions) and macro (government) levels. Insurance schemes can be a tool for risk reduction and for recovering livelihoods, particularly in the face of extreme weather events, if they are designed around the needs of poor and climate-vulnerable individuals (Schaefer and Waters, 2016) and do not provide disincentives for risk reduction (Surminski and others, 2016).

Despite the increasing availability of CRI options since the early 2000s, a large insurance protection gap persists, especially for the most vulnerable and poor populations. Although the reasons for this persistent protection gap are complex and context-specific, underdeveloped CRI markets and affordability concerns among the poorest and most vulnerable play important roles.

A range of concessional support tools exist. These include direct premium support or premium financing, provision of concessional capital for insurance providers, the payment of reinsurance premiums, subsidizing operational costs, technical support, capacity-strengthening, financing risk reduction measures and concessional credit.

Premium support refers to the partial or full subsidy of insurance premiums. This paper focuses on direct premium support, which is the allocation of financial resources to help beneficiaries pay for their insurance premiums. Ensuring the efficiency of such an intervention requires a thorough analysis of the insurance premium's price structure to avoid funding operational inefficiencies (e.g. expensive delivery channels) or undue high margins. There are also indirect premium support programmes, which cover, for example, insurance product development or outreach and distribution costs; these indirectly lower premiums by covering underwriting expenses that otherwise would be priced into the gross premium.

Premium support can help address and overcome these insurance market inefficiencies and affordability concerns and reduce existing inequalities in protection through improved access to CRI. In doing so, premium support contributes to the resilience-building effect of climate and disaster risk finance and insurance (CDRFI) solutions.

In a review of 18 insurance schemes, Schaefers and Waters (2016) found that CRI can increase the resilience of the poor and vulnerable, and identified seven distinct factors ("Pro-Poor Principles for Climate Risk Insurance") that they consider important to make CRI schemes solidarity-oriented while addressing equity concerns. These factors are: comprehensive needs-based solutions, client value, affordability, accessibility, participation, sustainability, and enabling environment.

Methodology

The information in this paper was gathered through a mix of desk research, including peer-reviewed and grey literature, and consultations with private and public stakeholders. These consultations involved individual expert interviews and two online workshops with 63 participants in total: one held on 30 August 2023 with Pacific stakeholders and the other on 5 September 2023 with stakeholders from other time zones. Additionally, the authors conducted their own analyses. Through these consultations and exchanges, arguments emerged around four key dimensions covering different elements that define and constitute a premium support scheme and how it should be operationalized. These dimensions (Figure 1) constitute the backbone of this paper.

In recent years, donors and the international community have acknowledged the significance of premium support. The perspective on premium support has shifted from a 'no-go' to an essential enabler for inclusive disaster risk finance (Bertram and Chowdhary, n.d.). However, the premium support schemes for CDRFI instruments have primarily been focused on macro- or sovereign-level insurance offerings. This paper seeks to focus on a less-studied and discussed topic: the setting up of premium support for micro- and meso-level CRI schemes.

While there is still little literature to provide detailed best practice guidance on how such premium support schemes should be designed to maximize their effectiveness and impact, we discuss the key considerations for operationalizing micro- and meso-level premium support and the persisting knowledge gaps to be addressed.

Summarizing discussions with the Vulnerable Twenty Group of Ministers of Finance of the Climate Vulnerable Forum (V20) and Munich Climate Insurance Initiative (MCII), the InsuResilience Global Partnership (IGP) published a set of five SMART Premium and Capital Support Principles (Toepper and Stadtmueller, 2022). These principles apply to all premium support levels. This paper does not propose a different set of principles, but highlights and discusses the considerations needed to operationalize premium support at the micro and meso levels. The focus of this paper is the implementation of CRI premium support.

2. Why premium support?

Climate risk insurance aims to strengthen the financial resilience of individuals and institutions in coping with climate risks. However, a large insurance protection gap persists despite the growing availability of climate risk insurance solutions globally, including in least developed countries (LDCs) and Small Island Developing States (SIDS).

The protection gap describes the difference between the amount of insurance that is economically beneficial, and the amount of insurance coverage purchased. The global protection gap was estimated at 67 percent in 2023 (Mahul and Iyahen, 2024), and progress in reducing the protection gap has been particularly slow in low- and middle-income countries. Based on a review of relevant empirical literature and his own assessment, Schanz (2018) found that the root causes of the protection gap in frontier and emerging markets are affordability, awareness, trust, culture, behavioural biases, transaction costs, and institutional obstacles and shortcomings.

Affordability concerns, lack of awareness and financial literacy, lack of trust in financial institutions, and "uninsurability" concerns are common obstacles that continue to hinder the widespread use of financial risk transfer solutions among the most vulnerable households and institutions. This is where premium support comes in. Premium support can, directly and indirectly, address access and affordability concerns and thereby help close the insurance protection gap.

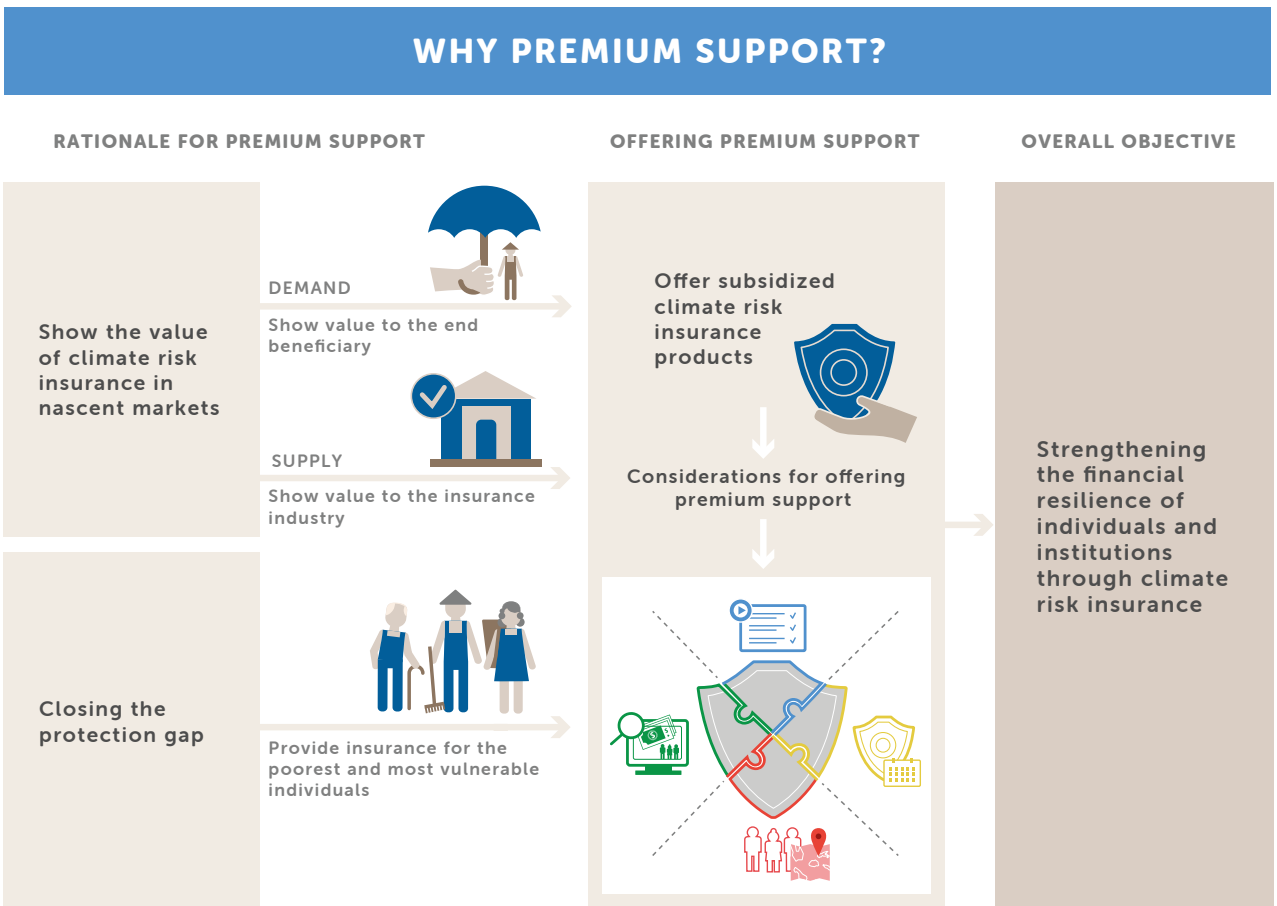

Figure 2. Why premium support? Source: Authors

A decreased premium – lower insurance cost for policyholders – increases affordability and can serve as a catalyst demonstrating the value of CRI to the whole market.

On the *demand side*, end beneficiaries such as smallholder farmers are disproportionally affected by the effects of extreme weather. For some of the most vulnerable and poor individuals, CRI is their first contact with the formal financial system. Receiving insurance at a lower, subsidized price over an initial period of one or more years can help recipients experience the benefits of CRI (payouts after extreme weather events) and how it works before potentially being asked to pay the full premium in subsequent years.

By subsidizing premiums and facilitating greater demand for CRI in new markets, insurers (*supply side*) also learn about the value of offering these products and how it can help them open new markets and reach new target segments. A larger customer base further diversifies the exposure for insurers, thereby helping to make it a viable business case for them to offer CRI.

The expectation is that, after subsidization, insurers and reinsurers will scale up their offer and operations. With the same argument, Schanz (2018) calls, among other things, for a multi-stakeholder approach to closing the insurance protection gap in frontier and emerging markets through subsidized programmes offered through public–private partnerships.

Premium support should also be considered in the wider policy context, since there are other potential barriers to insurance development beyond affordability (Vivideconomics and others, 2016). In this respect, premium support is most appropriate when demand-side barriers, such as lack of affordability, lack of awareness, culture, and lack of trust, are the key obstacles to insurance uptake.

3. Considerations for operationalizing micro- and meso-level premium support

Having shed light on what premium support is and presented the reasons for providing premium support for CRI solutions, the remainder of this paper discusses the considerations and aspects to think through when implementing micro- and meso-level premium support. The focus is on operationalizing premium support and the ideal interplay of public and private actors to do so successfully. The question of where funding can and should be coming from is not the subject of this paper, apart from the acknowledgement that the funding source for sustainable premium support needs to be clear.

Collating arguments from the literature and consultations with the CDRFI community, four dimensions emerge that enable categorization of the considerations for operationalizing premium support for micro- and meso-level CRI solutions. These considerations aim to guide stakeholders in how to design and implement an efficient and fair premium support scheme (see also Figure 3).

1. **Clarifying the roles and ownership in implementing premium support** – What roles can, do and should different stakeholders play in implementing premium support given their position and leveraging their capabilities? Who should take ownership in initiating and organizing premium support?

2. **Ensuring the sustainability of premium support** – How can premium support best be structured and organized to implement sustainable and longer-term schemes? What are the considerations to think through when determining the amount of premium support, its duration and the development of premium support over time?

3. **Reaching the most climate-vulnerable** – How can we ensure premium support targets those most vulnerable to climate risks? What are the considerations for operationalizing the targeting?

4. **Maximizing the transparency of premium support** – What information is it important to communicate transparently when implementing premium support over time – to the recipients of premium support and the wider CDRFI community? How do you ensure that the target group is aware of available and provided premium support?

The four dimensions are all interconnected, and this paper discusses each of them in turn, drawing upon macro-level experiences that are also applicable to micro- and meso-level CRI solutions and including considerations that have emerged from the first initiatives that implemented premium support at the micro or meso levels.

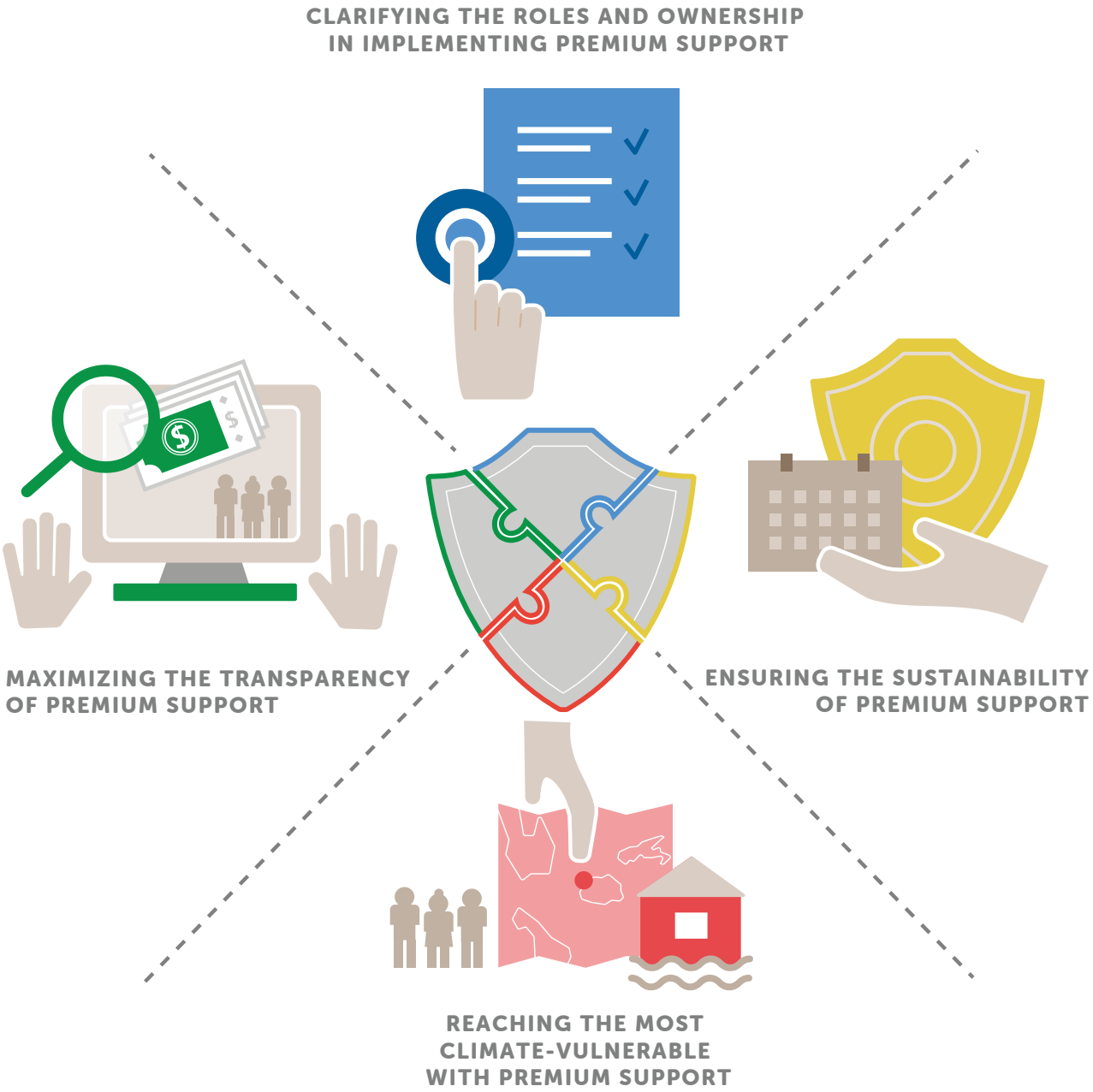

Figure 3. Dimensions to be considered in operationalizing premium support. Source: Authors

Clarifying stakeholders' roles and ownership in implementing premium support

To effectively and sustainably provide premium support for micro- and meso-level CRI programmes, robust stakeholder engagement is required, where all involved parties engage in communication, collaboration and exchange that is based on trust. The stakeholder consultations and workshops that led to the development of this policy paper highlighted the various roles of different stakeholder-actors in the ownership, initiation and organization of premium support schemes.

These stakeholders are government institutions, especially the insurance regulatory authority, the insurance industry, the financial sector, donors, development banks, the development community, non-governmental organizations (NGOs), philanthropic organizations and others engaged in strengthening financial resilience against climate risks and closing the insurance protection gap. Each of these actors has unique capacities and mandates and can significantly contribute to building the resilience of the most vulnerable by offering and implementing premium support.

National governments as key actors in facilitating premium support

Similar to the discussion regarding premium support at the macro level, which has been extensively researched (Surminski, 2014; Toepper and Stadtmueller, 2022; Scott and others, 2022), analyses of key actors and expert consultations revealed the central role of national governments in vulnerable countries in terms of ownership and facilitation of premium support at micro and meso levels.

The national governments of the most vulnerable and low-income countries are the ultimate owners of risks, as the negative impacts of climate change on micro and meso levels have macro-fiscal implications (Aligishiev and others, 2022). Hence, governments must prioritize ex-ante financing as part of a holistic climate change adaptation strategy. Against this background, state institutions should build capacities to play a key facilitating role in setting up premium support schemes for CRI. By taking the leading role, governments and their insurance regulatory authorities can signal their dedication to protecting the most vulnerable against climate shocks. Additionally, national governments are best positioned to allocate and channel resources to target the most vulnerable in their country, reach scale and ensure equitable access to protection against climate risks.

Moreover, governments are well positioned to address insurance market inefficiencies before considering traditional premium subsidies (Hill and others, 2014). Whether addressing regulatory challenges (Noordhoek and others, 2022), encouraging market competition, or contributing to awareness and financial literacy strategies (OECD, 2023), addressing these inefficiencies can safeguard the sustainability of CRI schemes in the long term. By taking ownership, governments can foster long-term commitment, resource allocation and policy coherence, making CRI one of the central components of a nation's resilience-building efforts while helping to close the insurance protection gap.

Insurance industry and the wider private sector

Next to the national governments of vulnerable countries, private sector engagement is crucial in addressing challenges caused by climate change, and several initiatives and facilities have been established to involve private firms in climate-resilient development in line with the Paris Agreement and the 2030 Agenda (UNFCCC, n.d).

Private sector stakeholders, such as insurance and reinsurance companies and brokers, can play a vital role in helping to address and adapt to climate change and its related risks through engaging in premium support programmes for CRI. Through their expertise, they can contribute by developing analytical tools and refining risk assessment models; creating affordable, sustainable insurance products; cooperating with policymakers to promote market-driven risk adjustments and advocating for climate resilience (OECD, 2023). In some sub-Saharan African countries, insurance providers tend to take core roles when implementing premium support programmes (World Bank, 2024), which has aided the scalability of these programmes.

The insurance industry's role becomes particularly crucial during the phase-out stage of premium support, when the funding is over, especially if the objective is to enhance CRI uptake at micro and meso levels. When premium support is being phased out, the insurance sector remains central in upholding demand by ensuring transparent communications around ending the premium support. However, it is also important to balance harnessing the resources and expertise of the private sector and safeguarding against profit-driven motives that may compromise the scheme's social objectives or jeopardize the affordability of CRI solutions for the most vulnerable.

Besides actors in the insurance industry, other private sector players can contribute to operationalizing premium support in several ways. Insurance and reinsurance companies, development banks, brokers and multinational companies can finance adaptation through insurance by providing funding for premium support. Meanwhile, private sector players such as the tech industry, risk modelers, hazard data providers and mobile network operators can contribute to premium support schemes by providing data and technological and payment solutions. Leveraging the technological expertise of these actors can reduce the overall cost of insurance premiums and make insurance more affordable for vulnerable populations, as shown by the rise of digital financial services provided through mobile money in parts of Africa and South-East Asia.

Although different private sector actors can meaningfully contribute to closing the insurance protection gap, their current engagements are often limited to philanthropic, corporate social responsibility (CSR) contributions or – as Seifert and Lindberg (2012) found – to distinguish themselves from the competition. Such engagements can support addressing the protection gap but often lack sustainability and significant impact because of their limited scope and duration.

Roles of other actors for ensuring transparent, fair and impactful premium support

Engaging neutral and independent actors in establishing CRI programmes is essential for ensuring transparency, fairness and effectiveness. The development sector, donors, foundations and NGOs play pivotal roles in this respect.

The development sector and intergovernmental organizations often lead the process and subsidize CRI programmes in the most vulnerable countries (see Case study 1). However, such programmes always have limited time frames (years of engagement). Moreover, the priorities of donors and funding allocations can shift. This is one reason to consider enhancing the leadership role of national governments, as presented above, where the development sector provides technical assistance to design and implement such programmes while also building the capacity of government institutions.

Another key consideration regarding the role of donor countries or institutions is to ensure accountability through fund transparency, monitoring and evaluation of the schemes, along with supporting the creation of standards for these. In this process, local NGOs and CSOs can also contribute by advocating for transparency, inclusion of vulnerable communities, and raising awareness about CRI to strengthen resilience.

Considering the above, the importance of collaboration between various actors (as described in Case study 1) – including government, insurance providers, private sector aggregators and donors – in setting up successful premium support programmes for CRI is critical.

Ownership and responsibilities should align with the nature of the scheme and its objectives while keeping in mind the goal of providing affordable insurance coverage to vulnerable population segments.

Case study 1: PICAP support for social welfare beneficiaries

Since 2021, the Pacific Insurance and Climate Adaptation Programme (PICAP) has collaborated with Fiji's Ministry of Women, Children and Social Protection to introduce a climate risk insurance product for social welfare beneficiaries. This specific insurance product aims to gradually protect the entire population covered by the national social protection system through a macro-to-micro insurance mechanism. The insurance contracts are made with the policyholder individually and, when payouts are triggered, they are directly transferred to the respective social welfare beneficiaries. During the first year of implementation, WFP funded the initial 275 social welfare beneficiaries. During the 2022-2023 cyclone season, the Fiji government took ownership and covered the premium for 2,000 beneficiaries. For the 2024-2025 cyclone season, the Reserve Bank of Fiji has provided premium support for another 2,000 beneficiaries. International budgetary support and development assistance were used respectively. The Fiji Government is committed to scaling the scheme and supporting more beneficiaries yearly. This is subject to annual discussions and the renewal of funding commitments.

Clarifying the roles and ownership in implementing premium support: Key considerations

- **National governments can play a key role** – National governments are well positioned to lead premium support schemes, ensuring equitable access to CRI for the most vulnerable and addressing market inefficiencies.
- **Harness contributions from the private sector** – Apart from the insurance industry, financial resources, expertise and capacities of additional private sector players can be harnessed to develop affordable CRI products and establish sustainable premium support schemes.
- **Development community to provide advocacy and technical support** – The development sector is crucial for promoting transparent, fair and impactful premium support by channelling subsidies, technical assistance and capacity-building support.
- **Collaboration and alignment of premium support objectives across stakeholders are important** – Ownership and the distribution of responsibilities among different stakeholders should align with premium support schemes' objective of prioritizing affordable and sustainable insurance coverage for vulnerable populations.

Ensuring the sustainability of premium support

Financially sustainable provision of premium support for CRI that is viable for the long term is central to reaching the objectives of the premium support schemes – whether it be building insurance markets, ensuring the long-term viability of insurance solutions or safeguarding the most vulnerable. This section explores key considerations for sustainable premium support, including identifying a clear overarching objective, developing multi-year schemes and showing the value of CRI. Tailoring the strategy to align with the purpose of premium support is essential for effective implementation.

Defining the precise purpose and objective of premium support for a given context

As discussed in the Introduction, the rationale for providing premium support at micro and meso levels can be twofold: increasing insurance uptake and safeguarding the most vulnerable (Panda and Surminski, 2020; Toepper and Stadtmueller, 2022). Thus, it is critical to recognize that the sustainability considerations for achieving these objectives can differ significantly. Consequently, the strategy for implementing and structuring premium support programmes should be tailored to align with their overarching objective, whether primarily focused on increasing insurance enrolment or safeguarding the most vulnerable.

Premium support should have a well-defined purpose, targeting specific market issues or equity gaps while having effective exit plans or sustainable financing strategies (Hill and others, 2014). Inadequate premium support structures can potentially disrupt the efficiency of entire insurance mechanisms (Hazell and Varangis, 2020).

Stakeholder consultations have emphasized the importance of establishing a comprehensive framework during the initial stages of a premium support project. This framework should – in its objectives, risk log and risk mitigation strategies – articulate a clear strategy for the gradual phase-out of support, delineate the support structure for premiums and specify the duration of subsidy assistance. The overarching goal is to facilitate a smooth transition as the insurance market supply and demand mature. By carefully planning the phase-out process, such frameworks should aim to foster sustainability in the market, ensuring that the insurance landscape can evolve gradually as it becomes more robust over time.

Importance of multi-year (longer-term) premium support commitments and schemes

Case study analysis and the stakeholder consultations showed that to ensure its continued success and achieve its objectives (whether enhancing insurance uptake or protecting the most vulnerable), multi-year commitments from premium support providers are key. This stability in funding and long-term outlook for CRI schemes creates a more secure environment for key engagement of stakeholders (MCII, 2021). Additionally, multi-year programmes increase the likelihood of the full insurance experience, including payouts, before a phase-out.

To increase insurance uptake or to help the CRI market develop, a structured framework must be established to determine the duration of premium support (Panda and Surminski, 2020; Toepper and Stadtmueller, 2022). Continued premium support may be necessary for the most economically disadvantaged and vulnerable communities. In such instances, premium support schemes must include a strategy to sustain and finance assistance in the long term.

The eligibility for sustained assistance could be linked to poverty indices or household income levels. Premium support could be offered longer term to households below a given threshold, ensuring that the poorest and most vulnerable receive the necessary support. Once a household surpasses this threshold, the subsidy mechanism would cease, reflecting an adaptive approach that aligns with the economic progression of the supported households (this is further discussed in the section Reaching the most climate-vulnerable with premium support).

The challenge of ensuring long-term commitment to subsidy provision can be observed in different projects. For instance, after providing premium support for an initial pilot, funding from the national government became uncertain for the PICAP's shock-responsive social protection component in Fiji. Discussions for continued support happen on an annual basis to ensure that premium support is accounted for in the national annual budget.

Examples such as PICAP, where long-term premium support for CRI solutions cannot be guaranteed, can undermine the value of the scheme, even before the first payouts have been disbursed to beneficiaries. Moreover, the fluctuation of government administrations could impact the continuity of such support. Hence, to ensure the sustainability of premium support for the most vulnerable, sources for multi-year premium support should be identified from the beginning, and commitments should be made accordingly with a long-term perspective. Long-term support could also be guaranteed if premium support is included in national disaster risk finance or climate finance strategies.

Showcasing the value of CRI through premium support

Developing sustainable insurance products presents challenges and opportunities (Nogueira and others, 2017). Challenges include adjusting premium pricing or limiting coverage in high-risk areas where climate risks are likely to increase. Practitioners need to strike a balance when developing CRI schemes. On one hand, these schemes should stay affordable and provide payouts with sufficient frequency to sustain policyholders' interest over time. On the other hand, insurers should be able to offer the products without incurring losses. The sustainable implementation of CRI schemes hinges on ensuring all stakeholders derive added value through provision, acquisition or premium support.

One way to effectively implement premium support and make insurance sustainable is by offering bundled insurance products and establishing a partial subsidy of the premium payment. According to OECD (2015), CRI may be expanded by combining it with other insurance policies, such as life or fire insurance, which makes these solutions more appealing for the end-beneficiary and can help sustain uptake. CRI products can also be linked with savings accounts. An illustrative example of bundling insurance and of beneficiaries paying part of the insurance premium is the World Bank's recent Horn of Africa project. The DRIVE project (see Case study 2), which targets pastoralists, outlines a plan to offer partial premium support for up to five years. The project integrates a drought index insurance product with savings accounts to ensure sustainability (World Bank, 2022).


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Case study 2: De-risking, Inclusion and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE)

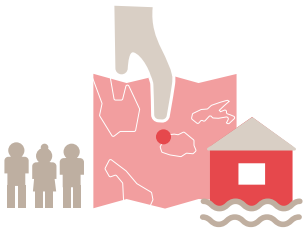
The project De-risking, Inclusion and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE) aims to improve the resilience and sustainability of the livestock sector in the East African countries of Djibouti, Ethiopia, Kenya and Somalia. Led by the World Bank and the reinsurance company ZEP Re, the project aims to commercialize livestock production and enhance climate resilience. According to the project partners, 60 per cent of the overall budget will be allocated to the premium subsidy.

Pastoralists are expected to contribute to the costs of the services provided, and each project country will select the level of premium support to ensure demand and economic sustainability. The project will support a transition to progressively higher coverage of the premium costs by the beneficiaries over time. Additionally, the drought index insurance is linked to a savings account. The pastoralist groups will be incentivized to save in a savings account rather than in cash, with the project providing a performance-based savings bonus if participants save a certain amount.

To ensure long-term sustainability and showcase the value of CRI, a strategic approach can involve proposing a gradual transition away from premium support as done by the DRIVE project (Case study 2). As supported vulnerable communities progressively enhance their resilience and adeptness in implementing effective risk management practices, they can gradually assume a more significant portion of the insurance premiums. This transition empowers communities to actively participate in their risk mitigation efforts, fostering a sense of ownership and accountability. Furthermore, by gradually shouldering a larger share of the financial responsibility for insurance, communities contribute to building sustainable demand for CRI. This, in turn, ensures that the insurance ecosystem remains viable and responsive to their evolving needs over time.

Ensuring the sustainability of premium support: Key considerations

- **Identify a clear purpose** – What is the overarching objective of the premium support provision? It is important to clarify and define the purpose and objective.
- **Implement multi-year schemes** – Establish medium- to long-term premium support through multi-year instead of single-year or one-off commitments.
- **Showcase the value of CRI over an initial phase** – Premium support should help showcase the value of CRI for beneficiaries and new CRI providers over an initial phase to build insurance markets with a sustainable supply of and demand for CRI solutions and adapted to the needs of the most vulnerable.
- **Long-term premium support for the most vulnerable** – For the poorest and most vulnerable communities, premium support may be needed on a continued basis without a clear phase-out strategy. In these cases, premium support schemes need a strategy for financing and maintaining support in the future.



Reaching the most climate-vulnerable with premium support

To reach the most climate-vulnerable individuals and communities with premium support, stakeholders must develop and implement a targeting strategy that addresses the structural obstacles to adopting CRI faced by marginalized groups. Yu and Aleksandrova (2021) highlight that supply-side main barriers include "underdeveloped rural finance markets and unavailable reinsurance mechanisms", while on the demand side, the affordability of insurance products is the main issue.

Targeting for maximum premium support efficiency

In 2018, Oxfam estimated that disasters resulting from natural hazards push approximately 26 million people into extreme poverty each year, driving increasing inequalities (Hillier, 2018). Studies show that the demand for insurance products is price-sensitive: demand increases as premium prices decrease (Hill and others, 2014). However, as subsidized schemes tend to attract wealthier households, intentionally targeting vulnerable individuals may be necessary (Hill and others, 2014), particularly with limited financial resources. Consequently, policymakers must set up targeted premium support schemes that enable low-income individuals to access and afford CRI and promote greater equity. To reach its goal and avoid an unintended increase in economic inequalities, a premium support scheme must include a precise targeting strategy that considers the hurdles that would prevent vulnerable groups such as low-income individuals, women, people with disabilities and the elderly from purchasing insurance products.

This section presents three ways to target and identify premium support beneficiaries. The following subsections discuss socioeconomic targeting, geographic targeting and behavioural targeting.

Socioeconomic targeting of premium support

The socioeconomic approach aims to identify the most vulnerable by providing different tiers of support to categories of policyholders, determined using criteria such as profession (economic sector), company size, income, gender or disability.

Premium support may aim to favour the uptake of CRI within a specific economic sector. For example, within the framework of the Caribbean Oceans and Aquaculture Sustainability faciliTy (COAST) project, the World Bank and the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) target fisherfolk and the fisheries sector in Grenada and Saint Lucia. Similarly, the World Bank targets pastoralists within the framework of the DRIVE programme to facilitate livestock trade.

Alternatively, the socioeconomic targeting approach can be applied by providing premium support to micro-, small and medium-sized enterprises (MSMEs) in climate-vulnerable sectors. MSMEs represent about 90 per cent of all businesses globally and more than 50 per cent of employment (Ganne and others, 2022). According to the V20-led Sustainable Insurance Facility, "*Worsening climate-related natural hazards will further drag down economic productivity and resilience if the MSME sector does not have adequate insurance protection and investment capacity*" (Seifert and Ahmed, 2021). Hence, protecting these MSMEs can significantly strengthen the resilience of the economy at large. Most countries have a clear definition of which enterprises constitute MSMEs in their economies and have lists that facilitate reaching them and offering them access to subsidized CRI solutions.

Climate risk insurance premium support can also be provided by income level: individuals earning below a set income may benefit from lower premium prices. Premium support can also be considered an adjustable instrument that would adapt to each policyholder's financial situation, such that an increase in income would decrease a policyholder's premium subsidy. The feasibility of such a measure is up for debate: monitoring the evolution of the financial situations of thousands of clients remains a challenge. This would require extensive data collection in collaboration with banks and microfinance institutions (which likely possess granular information on individuals' financial profiles) and other private and public entities (government ministries, cooperatives, companies, etc.), and continuous data analysis. Gathering data on informal workers would be even more difficult as they may not have access to formal financial services or appear on official social registries. This lack of access to national safety nets hinders informal workers' post-hazard recovery. Their inclusion in premium support schemes is crucial as they also make up most of the workforce in many countries. Catering only to individuals with access to formal jobs and financial services could deepen existing inequalities.

Premium support targeting also has a gender aspect: extreme weather events affect women and men differently and tend to widen the financial gender gap. Women are more likely to lose income as their livelihoods are linked more closely with natural resources or work from their homes, which may be damaged or destroyed. Moreover, their caring burden may increase in such a context (Dudley and others, 2023). Consequently, the social norms preventing women's access to CRI should be studied to create gender-responsive subsidy schemes. In 2023, the Adrienne Arsht-Rockefeller Foundation Resilience Center (Arsht-Rock), in partnership with the Self-Employed Women's Association (SEWA), an Indian trade union, and the impact insurtech company Blue Marble put in place a gender-focused premium support scheme to launch the Extreme Heat Income Insurance. This parametric insurance product helps Indian women working in the informal sector recover wages lost as a result of climate-driven extreme heat events. It is designed to trigger payouts to replace beneficiaries' income during a heat event. In the pilot phase, the programme will pay the entire premium (Henrich-Koenis and Dabrowski, 2023).

Gender and social inclusion are cross-cutting issues. They should, therefore, be considered regardless of the targeting method and beyond targeting throughout the design, implementation and phase-out of premium support schemes.

Case study 3: The PICAP–UN Women-led premium support scheme targeting women cooperative members

UNCDF Pacific and UN Women signed a partnership agreement in December 2022 to offer parametric microinsurance to beneficiaries under the Women's Resilience to Disasters (WRD) and Markets for Change (M4C) projects in Fiji. The partnership aims to develop better financial preparedness for Pacific women facing climate change and natural hazards, leveraging PICAP to achieve faster post-disaster recovery, rebuilding of livelihoods and improved resilience levels. The project covered 14 communities and involved 400 Fijian women beneficiaries from November 2022 until the end of 2024, providing a 50 per cent premium subsidy in the first year and a 25 per cent premium subsidy in the second year. This gradual reduction of the premium subsidy aims to ease women's access to weather index insurance and ultimately reach long-term adoption of this product among Fijian women farmers. This subsidy scheme is implemented alongside financial and insurance literacy training.

Operationalizing the socioeconomic targeting

The socioeconomic approach may be implemented by extending pre-existing social protection mechanisms, combining public safety nets with private micro or meso insurance products (see Case study 1). Yu and Aleksandrova (2021) argue that creating synergies between weather index insurance and social security systems can help farmers face various risks, from extreme weather events to slow onset processes such as land degradation or the loss of ecosystem services. The expansion of the social protection system can be achieved in different ways. In a joint report (O'Brien and others, 2018), Oxford Policy Management (OPM) and the Overseas Development

Institute (ODI) define the vertical expansion of social protection as "*the temporary increase of the value or duration of an intervention to meet beneficiaries' additional needs (i.e. a top-up). ... For such top-ups to be relevant, the program, or programs, must have good coverage of the disaster-affected area and also of the neediest households. ... Non-beneficiaries who are affected will, of course, miss out, so must be reached by other means*". According to the same report, "*Horizontal expansion is the temporary inclusion of a new caseload into a social protection program, by either extending geographical coverage, enrolling more eligible households in existing areas, or altering the enrolment criteria. This expansion is the premise of on-demand enrolment onto poverty-targeted programmes, for example, during economic shocks, i.e., where anyone who has temporarily fallen into poverty can be enrolled*." In this respect, the premium support provided to the Fijian social welfare beneficiaries can be considered a vertical expansion of the social protection system: social welfare beneficiaries can benefit from an additional layer of protection through a subsidized parametric insurance policy. This premium support scheme, therefore, strengthens beneficiaries' financial preparedness and resilience in the face of extreme weather events by complementing the support provided by the social protection system.

Expanding the social protection system by mainstreaming CRI products through premium support requires leveraging lists kept by government ministries and agencies, cooperatives and NGOs. These include lists of social welfare beneficiaries, informal establishments, food voucher beneficiaries, cooperative members and industry associations. These data sources can be combined for broader coverage and precision. OPM and ODI (O'Brien and others, 2018) have identified five criteria to determine the suitability of databases: *"relevance (what variable they contain), completeness (how many records they have), currency (how up to date they are), accessibility (who can use them) and accuracy (data quality)".*

Nevertheless, socioeconomic categories can be flawed. Consequently, some individuals may consider that they have been excluded from the subsidized scheme for no valid reason. For example, some premium support schemes exclude farmers involved in commercial value chains to focus on those who do subsistence agriculture. One might argue that making premium support available to the first category of farmers could also be relevant, given that those who farm for business will tend to want to insure their crops. Additionally, it would increase the overall number of insured farmers and thus strengthen the country's resilience.

The specificities of the income of vulnerable individuals, such as seasonality, condition their ability to afford insurance premiums. Income seasonality could be addressed through product bundling. Hazell and others (2021) argue that "*it is often better to market subsidized insurance through intermediaries that can create bundled packages, such as an FSP [financial service provider], farmer cooperative, or agribusiness.*" Subsidized CRI could be paired with single repayment loans, that is, loans that can be reimbursed in one instalment at the end of a season.

The interactions between formal and informal financial markets and methods of coping with risk also influence the design of the premium support scheme. Clarke and Dercon (2009) mention the importance of considering how insurance provision should relate to informal insurance schemes. They recommend building on informal insurance systems such as self-help groups and funeral societies to distribute formal financial products that complement the informal insurance offer and relying on them to target poor individuals. Therefore, premium support beneficiary lists could be established in collaboration with these informal local groups.

Geographical and climate-vulnerability-based targeting of premium support

The geographical targeting of premium support consists of providing support according to the degree of exposure and vulnerability to climate change: individuals located in the zones most affected by climate change get the most support. This method can be used at the global level (to select countries) or within a country (to determine eligible regions) in contexts where CRI can be considered an option given the hazard spectrum and severity. For example, the Uganda Agriculture Insurance Scheme is a public–private partnership between the Government of Uganda, represented by the Ministry of Finance Planning and Economic Development, and the private sector. It provides a weather index insurance product that covers droughts and excessive rainfall. Within this framework, the Ugandan Government subsidizes premiums by 50 per cent for small-scale farmers located in non-high-risk areas and by 80 per cent for those in disaster-prone areas. However, it should be noted that these subsidized premiums are available for a set list of crops and livestock breeds only (Uganda Agriculture Insurance Scheme, n.d.).

The geographical targeting method can also generate perverse effects. For example, Ben-Shahar and Logue (2015) observed that in the United States of America, excessive risk-taking and real-estate overdevelopment in storm-prone coastal areas have led to such perverse effects – a risk that must be taken into consideration.

Operationalizing geographical and climate-vulnerability-based targeting

The geographical targeting of premium support requires access to data from satellite imagery, weather stations and rain gauges. However, individuals' and communities' abilities to recover from extreme weather events are not solely dependent on hazard exposure but rather a reflection of their overall vulnerability. The United Nations Office for Disaster Risk Reduction (2017) defines vulnerability as "*The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards"*. This targeting approach, therefore, requires cross-referencing hazard- and vulnerability-related data so that regions that are both poor and highly exposed to hazards can benefit from the premium support scheme.

Behavioural targeting of premium support

Müller and others (2017) highlight that the implementation of weather index insurance can cause maladaptive environmental effects, including unsustainable agricultural practices such as choosing to focus on cash crops instead of crop diversification. This tends to impact the rural poor significantly, as their livelihoods depend strongly on ecosystem goods and services. Yu and Aleksandrova (2021), therefore, recommend integrating a comprehensive environmental impact assessment throughout index insurance scheme design, implementation and evaluation.

Within the premium support scheme, incentives are needed to encourage insured households or institutions at the meso level to initiate risk reduction and climate change adaptation activities and counter unintended negative impacts on the environment, such as land degradation and water pollution stemming from an increased use of fertilizers and pesticides and shifts to cash crops (Yu and Aleksandrova, 2021). This could be achieved by linking insurance premiums to climate-smart agriculture practices, or activities such as coral reef restoration, mangrove planting and building reinforcement. Policyholders undertaking such activities could benefit from reduced premiums (Wason and others, 2020). For example, the 2014 U.S. Farm Bill only provides crop insurance subsidies to farmers who do not cultivate converted wetland or highly erodible land without an approved conservation plan (Müller and others, 2017). Such a measure could encourage ecologically responsible behaviours and may also help reduce insured losses.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Operationalizing the behavioural targeting

Behavioural targeting would require an extensive monitoring and evaluation system, which would in turn increase the costs of the premium support scheme, and reduce the amount allocated to subsidies and consequently the number of persons able to purchase insurance. How to ensure that the conditions linked to behaviour are verified, and which stakeholders would pay for this, remain open questions. Furthermore, this method may lead to increased inequalities between those who have the financial means to adopt such behaviours and those who do not.

Reaching the most climate-vulnerable with premium support: Key considerations

- **Targeted premium support in a context of resource constraints** – In a context of limited financial resources, policymakers may favour targeted premium support over universal one for the sake of equity.
- **Determine eligibility and identify the most vulnerable to receive premium support** – Identifying the most vulnerable to receive premium support can be based on different eligibility criteria or a combination of criteria:
  - Socioeconomic criteria (gender, disability, profession, income, company size)
  - Geographical and vulnerability criteria (regions more affected by climate change get the most support)
  - Behavioural criteria (policyholders taking risk reduction measures receiving support).
- **Apply a gender, social and disability inclusion lens to avoid bias** – Premium support targeting must be considered through a gender lens to benefit men and women equally. For any targeting decision, gender and social inclusion implications should be assessed (the choice of recipients from a certain sector or mapping may lead to an inherent bias).
- **Consider the availability and quality of data for targeting** – Premium support targeting relies on the availability and quality of information and data sets (list of beneficiaries and satellite imagery).

Maximizing the transparency of premium support

The smooth running of a premium support scheme depends on stakeholders' ability to collaborate effectively in the long term and learn from previous schemes. In this respect, communication and access to information are particularly important.

Why should premium support schemes be transparent?

Transparency can be defined as "*Clear, open and accessible disclosure of plans, processes, decisions and actions*" (Swithern, 2023). Transparency fosters trust: stakeholders are more inclined to trust each other when information is clear, easily accessible and regularly updated. Within the framework of premium support schemes, transparency enables the subsidy provider's accountability, which can be defined as "*being responsible for using power and resources properly, taking into account the views of those affected by decisions and actions, and being able to be held to account for the consequences of those decisions and actions*" (Swithern, 2023). This aspect is particularly important for donors who must abide by the legal obligation to report the use of funds to the taxpayer. U4 Anticorruption Resource Center and Transparency International highlight that the risk of corruption is heightened in the wake of a natural disaster. They state that "*shining a light on the inner workings of index-linked policies is the single easiest way to tackle the risk of corruption at the policymaking level" (Hewitt Jones, 2018).*

Moreover, a lack of information about premium prices might lead to an inaccurate evaluation of the insurance product's value by beneficiaries. For example, farmers unaware that they are buying insurance at a lower price may not anticipate the price increase and, consequently, may be unable or unwilling to keep purchasing the insurance product after premium support is phased out.

On the supply side, insufficient information can also lead to free-riding behaviours: unscrupulous actors may not use the subsidy for its intended purpose and may, therefore, undermine the premium price reduction.

What should be communicated?

Within a transparent premium support scheme, the information relating to key premium support features is easily available to the donor and recipient institutions, beneficiaries and the public. One could argue that transparency conflicts with the need for confidentiality, as companies can leverage publicly available information to rise above their competitors. To strike a balance between transparency and business confidentiality requirements, stakeholders who design, initiate, finance and operate a scheme could communicate the following elements:

1. The objective of the premium support scheme
2. The funding source
3. Methods used for selecting both individuals who will benefit from reduced premiums and the insurers that sell subsidized products
4. The percentage of premium the subsidy covers, and the method used to determine that. The total budget allocated to the scheme
5. The duration of the subsidy
6. The total number of beneficiaries reached.

How to ensure the transparency of premium support schemes

The scheme owner must set up a robust monitoring and evaluation system and tailor its communication strategy to local contexts to ensure wide dissemination of the scheme's key features. Low levels of financial literacy, financial inclusion and insurance awareness are all contextual elements that influence communication about insurance products and premium support schemes. Clarke and Dercon (2009) recommend relying on informal mutual assistance groups to raise vulnerable people's awareness of formal insurance. Furthermore, Matias and others (2018) point to the crucial role of community-based organization leaders, as they can convey messages relating to insurance knowledge efficiently. Therefore, premium support awareness-raising could be integrated into financial education activities rolled out at the community level. Such a measure would foster a better understanding of the scheme and its acceptance by the market.

Finally, access to information could be facilitated through an online platform hosted by an institution that would be a neutral convener. The online platform would gather the above-mentioned key features of micro- and meso-level premium support schemes set up around the globe in a single place, making it easier to access for stakeholders and the public at large.

Case study 4: InsuResilience Investment Fund (IIF) Premium Support Facility (PSF): Scaling up a new index rainfall crop insurance product for small-scale farmers in Colombia

Crezcamos, a microfinance institution in Colombia, introduced an index rainfall insurance crop product for small-scale farmers in 2020. The product was developed jointly with the Columbian re-insurer ProAgro and is offered to (small-scale) agricultural loan clients of Crezcamos.

To get clients used to this new insurance product, Crezcamos mobilized premium subsidy resources from two partners and created a transparent subsidy programme that (i) clearly allocated the available subsidy amounts and (ii) communicated the existence of the subsidy to their clients as well as future costs of the respective insurance cover. The programme started with a pilot season with a limited sample of 2,000 clients to allow learning on how best to explain the product to the farmers. For the roll-out, highly detailed projections were elaborated to show the allocation of (the three different)[1] subsidy sources over a period of three years.

After each of the two agricultural seasons, Crezcamos prepared a detailed report that broke down the number of clients (per income group and per sales cycle) and reported the allocation and uptake of the policies and their subsidy level, plus any insurance-relevant events and adjustments to the product after initial roll-out and first payout experiences.

1 Finagro, a state-owned financial institution, which offers subsidized insurance product to Colombian agricultural producers, the IIF PSF and Crezcamos itself with a small contribution.

Maximizing the transparency of premium support: Key considerations

- **Why should premium support schemes be transparent?** – Transparency is important:
  - To showcase value for the end beneficiary
  - To promote trust and accountability, enable learning and an enhancement of the scheme over time, and mitigate industry free-riding.
- **What should be communicated? – Best practice is to communicate:**
  - The objective of the premium support scheme
  - The funding source and total budget
  - Criteria and conditions for the provision of premium support
  - The value of premium support (percentage of premium and total budget for premium support)
  - Recipients of premium support (number of beneficiaries reached)
  - Duration of premium support commitment.
- **Ensuring transparency in premium support schemes – Transparency requires:**
  - A clear monitoring and evaluation framework
  - Clear public communication with beneficiaries
  - An online platform sharing relevant information and aggregating information on premium support schemes worldwide.

4. Way forward

Building upon existing work and evidence, this paper explores the rationale and pivotal considerations for implementing premium support for CRI at micro and meso levels. Through literature analysis, case studies and engagement with the CDRFI community, four interconnected dimensions – clarifying the roles and ownership, ensuring sustainability, reaching the most vulnerable and maximizing transparency – are thoroughly analysed.

Recognizing the current limitations in providing definitive design guidance, this paper offers diverse stakeholders a framework of key considerations for operationalizing premium support. As the landscape of premium support schemes evolves, further research and evidence-based learning are essential. To translate the insights presented into meaningful impact, stakeholders should prioritize a collaborative approach, focusing on the practical application of these four dimensions.

Moving forward, the CDRFI community can leverage these considerations, among others, to inform the design and implementation of effective, pro-poor premium support schemes, contributing to strengthening climate resilience.

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