

Premium Support - Background Paper

Internal Draft, Status May 26 2021¹

For the internal use of V20²

1. Background

For climate vulnerable developing countries, including the membership of the Vulnerable Group of Twenty (V20) Ministers of Finance, extreme weather exposures, catastrophe losses amplified by climate change and chronic climate risks have significant potential to reverse the economic gains of past decades and increase poverty levels.³ **While high-income countries have suffered the highest nat-cat losses in absolute terms, climate-vulnerable low-income countries have, however, sustained losses that are three to four times larger when compared to the affected share of the economy or population.**

Due to adverse humanitarian and financial impacts triggered by extreme weather and a changing climate, natural hazards present a systemic risk for large low- and middle-income developing countries such as Ethiopia, Kenya, Bangladesh and the Philippines and geographically smaller countries such as SIDS. In contrast to high income countries with typically low exposure levels and less reliance on labor intensive sectors or agriculture, climate vulnerable countries typically incur damages which affect the whole country at the same time or large shares of the economy. The relatively higher damage to GDP ratio, in turn, affects near- and long-term economic growth and development crucial for diversification, high value add production, climate-proofing critical and productive infrastructure and the development of human capital.

The more frequent and higher disaster impacts borne by vulnerable developing countries has also negative implications in terms of larger contingent liabilities for governments, protracted by missing natural disaster risk markets. The creation of micro and meso insurance solutions as well as regional risk pools can help to reduce governments' contingent liabilities. Especially for smaller economies, including SIDS, regional risk pools and regional market-building approaches are particularly relevant, as a smaller market size can present a barrier to introducing and sustaining micro and meso insurance.

Although useful, traditional financial instruments for disaster recovery such as humanitarian aid, support from multilateral organizations and self-financing from budgetary resources rarely provide financial resources quickly enough to aid rapid recovery in vulnerable and small countries. To manage financial risks from natural hazards, countries, including governments, businesses and households, can also rely on insurance to better manage financial and economic costs from natural hazards. **However, despite increasing economic damages due to natural hazards, uninsured losses constitute a major**

¹ Prepared by: Panda A, Seifert, V, Kreft S, Ahmed S.

² Note: This paper is a living document to support discussions on premium and capitalization support - including in the context of the InsuResilience High-Level Consultative Group - and takes into consideration views from a diverse range of climate vulnerable developing countries. This document will be updated continuously to facilitate considerations in the discussion on premium and capitalization support for climate vulnerable developing countries.

³ United Nations (2019): The Sustainable Development Goals Report; available at <https://unstats.un.org/sdgs/report/2020/>

portion of disaster damages in many V20 countries, pointing towards the large insurance protection gap among low- and middle-income economies.

One of the major challenges in the wider uptake of risk insurance coverage in low- and middle-income countries, including the V20 membership, is the lack of affordability. To help overcoming this challenge, premium and capital support (PCS)⁴ is being used for wider coverage and penetration of risk insurance schemes. This is especially the case for many V20 countries where the insurance protection gap is large. For example, countries such as the Marshall Islands, Samoa, Tonga, and Vanuatu during the pilot phase of the Pacific Catastrophe Risk Insurance Facility (PCRAFI) received partial premium subsidies from donor funds. However, the introduction of PCS by national governments or international donors is not without challenges of deciding on who (government/household/enterprises/insurers) should receive the support, how much, when and for how long. Successfully addressing these concerns requires greater conceptual, methodological, and practical clarity for the providers and recipients of PCS applications.

This background paper aims to assist V20 members in first, enhancing their understanding of premium support options and second of the benefits and limitations to consider when introducing premium support, and three, the potential roles and responsibilities of national governments, the international community, and the international risk industry.

2. Premium support: Why and what

2.1 Why premium support

Increasing intensity and frequency of climate hazards are a major contributor to rising losses faced by V20 economies and make visible the insurance protection gap⁵. **While sufficiently insured events are inconsequential in terms of foregone long-term macro-economic output, uninsured natural catastrophes often have large and significant negative effects on economic activity.** These include substantial direct (market and non-market) impacts such as asset and output losses and indirect (consequences of disaster over a longer period) losses. For example, the average annual wellbeing losses due to disasters in the Philippines is estimated at US\$3.9 billion per year, more than double the asset losses of US\$1.4 billion.⁶ Similarly, at the macro level, the average hurricane in the Caribbean region causes a cumulative decline in GDP per capita of 4.4 percent over seven years.⁷ Grenada in 2004, which was struck by Hurricane Ivan, ended up with debt rising from 80 per cent to 93 per cent of GDP, and Fiji in 2016 was hit by tropical cyclone Winston and cost the country 5 per cent of its GDP. Climate and disaster risk insurance provisions can support the affected population after a disaster in reducing immediate welfare losses and consumption reduction, allowing faster reconstruction by relaxing financial constraints. However, currently, most of the economic losses due to natural hazards

⁴ Broadly PCS has been defined here as any form of financial support or provision of concessional finance (inclusive of grant finance) to reduce the insurance premium and capital cost.

⁵ Underinsurance – or the protection gap - is defined as the difference between the amount of insurance that is economically beneficial— which includes some rationally chosen self-insurance and retention and the purchased insurance cover.

⁶ Walsh, B., Hallegatte, S. Measuring Natural Risks in the Philippines: Socioeconomic Resilience and Wellbeing Losses. EconDisCliCha 4, 249–293 (2020).

⁷ Acevedo MS (2016) Gone with the wind: estimating hurricane and climate change costs in the Caribbean (working paper no. 16/199 no. WPIEA2016199). International Monetary Fund <https://doi.org/9781475544763>. Accessed August 2017

in V20 countries are uninsured and underinsured. In lower income countries, the proportion of insured losses due the protection gap remains enormous, with only about 30 per cent of catastrophe losses insured globally.⁸

Usually, insurance companies increase premiums to reflect higher levels of disaster risk and to remain solvent; that is, insurance companies respond to lower levels of insurability. For many contexts – especially in V20 countries – insurability, represents a major challenge for single perils, and often translates either into prohibitively expensive insurance products, therefore curtailing the demand for insurance solutions or into insurers refraining from offering insurance products all together. And **while underinsurance arises due to several demand side and supply side conditions, affordability is the prime justification, particularly for lower-income households and micro, small and medium-sized enterprises (MSMEs).**⁹

Typically, disaster insurance entails a fiscal cost (premium), a fiscal benefit (expected payout) and a discount on the insurance premium (e.g., through donor support) which allows countries to choose more expensive insurance packages that provide better coverage and hence growth protection. Making insurance more affordable by subsidizing insurance premiums can thus help countries increase insurance coverage, while reducing premium payments. For example, the African Development Bank (AfDB)'s Africa Disaster Risk Financing Programme (ADRFi) Programme planned to support risk transfer through premium subsidies of up to 50% over a five-year period from 2018.¹⁰

There are several entry-points for governments and donors to facilitate more effective insurance markets to counter the effects of underinsurance.¹¹ Generally, public subsidies are widely used to pursue social, economic, and ecological objectives and are justified by attempting to correct market failure and behavioral biases. Yet, when providing subsidies, it is important to be clear about the objectives donors or policy makers are trying to achieve. For example, subsidies can be used to improve equity of coverage by providing previously excluded groups, such as low-income households, with better access to insurance. They can also be introduced to correct market failures such as externalities, asymmetric information or high fixed costs resulting in underinvestment in insurance. **Thus, in theory premium subsidies can be applied to address both, market inefficiencies and inequitable coverage to simultaneously overcome demand and supply challenges for optimal insurance coverage against extreme weather events.**

Depending on the target group, such as low-income households, MSMEs or governments, premium subsidies can be used at various scales. In the case of micro insurance schemes such as agricultural insurance, in many of the low- and middle-income developing countries, low-income consumers are often unable to make (annual) up-front payments resulting in micro-insurance providers not being

⁹Schanz (2018): Understanding and Addressing Global Insurance Protection Gaps, available at <https://www.genevaassociation.org/research-topics/socio-economic-resilience/understanding-and-addressing-global-insurance-protection>

¹⁰ <https://reliefweb.int/report/world/african-risk-capacity-lauds-approval-africa-disaster-risks-financing-facility-afdb>

¹¹ These include for instance the promotion of risk reduction or risk awareness, the enforcement of building codes and risk mitigating behavior and the provision of premium or capital support to enable the creation of micro and meso insurance markets.

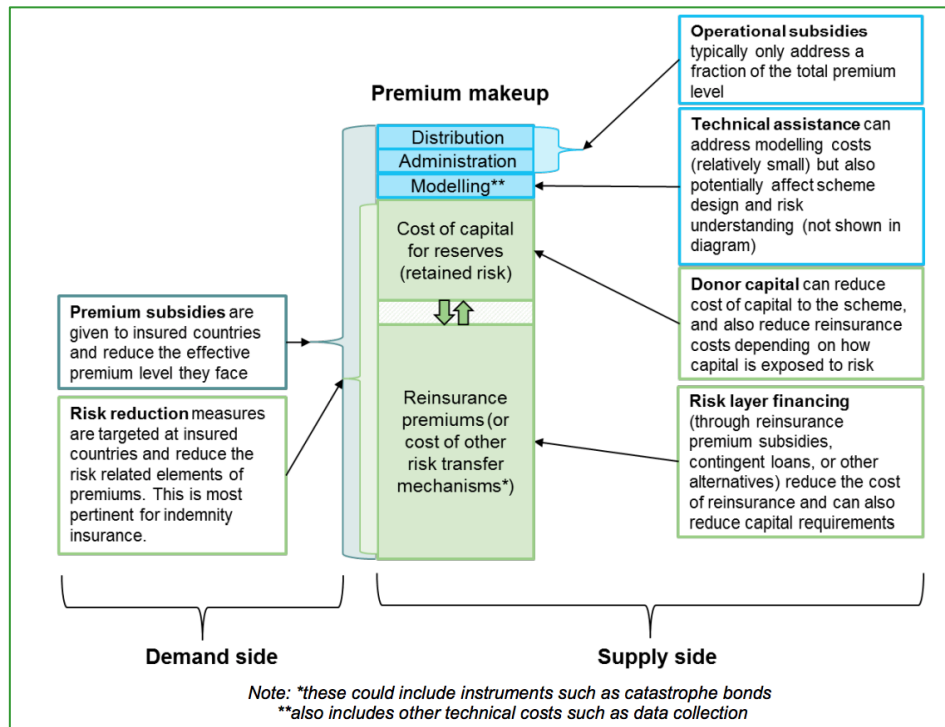
able collect enough liquidity to pay off claims particularly for catastrophic events, where losses may impact most of the policyholders. In such cases, subsidization of micro-insurance can have a huge impact on the attractiveness of insurance policies for low-income consumers by reducing the costs to a level that is affordable and build households’ resilience. Similarly, subsidies can be used to assist MSMEs in resilience efforts and develop broader MSME insurance markets by offsetting some of the initial costs of scheme set-up, administration, and reinsurance. Recently, sovereign risk pools have been understood to be helpful in bridging the protection gap by providing support to intergovernmental risk sharing through public private partnerships. **As such, these pools can also serve as one of the instruments or facilities to provide subsidies for governments with constrained fiscal space, allowing entry points for development partners to support financial resilience in a focused way.**

2.2 What: Types of premium support

To overcome the key barriers of reducing the protection gap, micro-insurance and pooling schemes have proven to be an effective vehicle for risk transfer both at national and regional levels. However, establishing such risk pools or insurance schemes for households or MSMEs, involves large upfront costs, especially for small and vulnerable economies. As mentioned above, cost-reducing interventions can be made either from the demand or the supply side.

In other words, the costs can be reduced either for the insurer or for the beneficiaries or purchasers

Figure 1: Insurance premium makeup



Adopted from: Vivideconomics. Surminski Consulting, Callund Consulting (2016).

of insurance. As table 1 demonstrates, such financial support can come in various forms, ranging from premium financing and capitalization to subsidizing operational costs or providing concessional credit.

Risk pools in particular offer several mechanisms through which donors can provide effective financial support such as premium subsidies, operating costs, or seed capital.

For example, for the first three to four years of the operations of the Caribbean Catastrophe Risk Insurance Facility, CCRIF-SPC (formerly CCRIF), the Organization of Eastern Caribbean States (OECS) Catastrophe Risk Insurance Project allowed four countries (Dominica, Grenada, St. Lucia, and St. Vincent and Grenadines) to use national and regional IDA financing to cover the cost of entrance fees and insurance premiums. Donors also are involved in providing capital injections as grant or loans, with the aim of increasing the risk retention capacity of the pool and hence reducing the insurance premiums charged to member countries over a long time.

Table 1: Set of concessional support tools

Concessional support tool	Description
Premium financing	Direct grants, repayable grants, or concessional loans to countries for a portion of insurance premiums
Capitalization	Provision of concessional capital (grants, repayable grants, first-loss, convertibles, equity, or debt, e.g., with reduced or zero interest) necessary to ensure adequate solvency of insurance vehicles
Payment of reinsurance premiums	Required for efficient reinsurance coverage of a risk pool, including coupon payments for catastrophe bonds
Subsidizing operational costs	Includes administrative, legal, underwriting, transaction, and start-up costs
Technical support and capacity-strengthening	Includes modelling, product structuring, risk know how and market development
Financing risk reduction measures	Includes measures that lead to foreseeable reductions in annual average losses and therefore savings in premiums
Concessional credit	Includes e.g., reduced interest rates for contingent credit instruments

3. Premium support for regional risk pools and micro and meso insurance solutions

While V20 members are among the most climate vulnerable countries in the world, financial protection products available to and in these countries are far from the desired level of coverage and penetration. The limited supply of climate risk insurance thus far is largely dominated by micro level insurance schemes targeting at smallholder farmers and households with more limited availability of climate-smart insurance products for MSMEs. Further, the sovereign disaster risk insurance market is still in its early stage among many of the V20 countries.

Despite the proliferation of pilots and projects on disaster risk insurance in many low- and middle-income developing countries in recent years, the scaling up and sustainability of these schemes remains challenging due to 1) dependence on a temporary subsidy (e.g., one year), 2) no engagement on financial literacy or climate risk literacy, and 3) no comprehensive approach to addressing climate risk and climate-proofing livelihoods/income/revenue (e.g., looking into protection and productivity)¹². Long term growth and scale depends on the financial viability of selling products in the given markets. For example, in some developing country markets, the underlying legal infrastructure and weak information make achieving a minimum efficient scale quite difficult. Further, there is a clear need to reduce the cost of providing and facilitating disaster risk insurance in V20 countries. **Among the intervention options available to support for risk transfer solutions (see table 1), premium subsidies are shown to be the only intervention, in principle, which can reduce the insurance price to zero for the insured because they are focused on providing financial resources to the purchasers of insurance (i.e., demand side).¹³**

3.1 Regional Risk Pools

It is increasingly being realized that in addition to supporting *individuals'* resilience to the impacts of climate change through insurance for households (or MSMEs), it is also important to expand the *scale of disaster risk insurance by covering sovereign states who would then provide social protection coverage to their most vulnerable populations*. Towards this, regional risk pools are starting to play an increasingly substantial role in providing indirect insurance to vulnerable populations in V20 countries. Currently, there are three operational regional pools: (i) CCRIF-SPC for the Caribbean countries and extended to the Central American region; (ii) the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) for Pacific countries and (iii) the African Risk Capacity (ARC) for the African Union. In December 2018, the establishment of a fourth pool, the Southeast Asia Disaster Risk Insurance Facility (SEADRIF) in Southeast Asia, has also been agreed upon. However, the operationalization of SEADRIF through enhanced uptake by eligible countries seems to be hindered by affordability issues and a lack of relevant product offerings.

For CCRIF-SPC, ARC and PCRAFI, PCS has been an integral part of their establishment and continuation. For example, capital support to the Pacific Catastrophe Risk Insurance Company (PCRIC) part of PCRAFI by the donor community amounts to USD 20.1 million to date, complemented by additional forms of concessional support for premium financing. In the case of CCRIF-SPC, Caribbean and Central American countries are eligible for premium subsidies from the World Bank's CCRIF Trust Fund. All sovereign catastrophe risk pools have benefited from donor support to start operations and to remain sustainable during their first years. Donor financing has at various stages covered start-up costs, (re)capitalization (which helps reducing the costs and the scale up of insurance), ceding risk to

¹²V20. (2019). Sustainable Insurance Facility (SIF): Solutions to Build Resilient Micro, Small, and Medium Enterprises High-Level V20 Needs and Support Assessment. Retrieved from <https://cpdcngo.org/download/v20-high-level-needs-and-support-assessment-sept-2019/>.

¹³ Vivideconomics. Surminski Consulting, Callund Consulting (2016). Final Report: Understanding the role of publicly funded premium subsidies in disaster risk insurance in developing countries. Retrieved from <https://www.vivideconomics.com/wp-content/uploads/2019/08/Final-Report-EoD.pdf>

reinsurance companies or the capital market (instead of building capital largely through donor contributions to a trust fund) and sometimes (partial) premium financing¹⁴.

The experience from the operational sovereign risk pools seems to suggest that political commitment, sound operational design and financial sustainability are important for the continuation of risk pools.¹⁵ One of the main challenges in this regard has been the lack of certainty about the payment of insurance premiums every year.

Concessional insurance (through targeted premium subsidies in the form of grant or concessional loans) can help countries secure premium financing for several years. Increasing the capital of the regional pools would help reduce costs and scale up insurance through different channels, including *lowering reinsurance costs or increasing the current coverage limit* as in the case of the recently established Global Risk Financing Facility (GRiF), which can provide co-finance for lowering the cost of risk financing mechanisms e.g., via the co-payment of insurance premiums.

Furthermore, through the PCRAFI Multi Donor Trust Fund (MDTF), for instance, the World Bank has provided more than USD 40 million in grant support for building disaster risk finance capacities in the Pacific, including through assisting PCRIC in meeting expenses not covered by premium income.

However, despite the increasing emphasis on regional risk pools, there are several challenges and gaps that need to be addressed for successful impacts of these pools. For example, many V20 countries still fall outside of the net of any catastrophe risk pools. It is therefore important to upscale the regional pools to these vulnerable countries to reduce the protection gap. Moreover, it is important not to limit the options of V20 countries and to take into consideration market context by enabling support for private sector participation, especially in public-private partnerships.

3.2 Micro and meso insurance

Micro insurance schemes in low-income developing countries have seen a rapid expansion in the last two decades, which has been largely due to the expansion of agricultural insurance schemes. Moreover, various pilots and projects have been established to further increase insurance coverage and penetration beyond the agricultural sector. For example, The Global Index Insurance Facility (GIIF) is actively involved in micro-level insurance, which insures private individuals or micro-small- and medium-size enterprises. The experience and experiments with many of these micro agricultural insurance schemes provides some ground to draw a few lessons on the role of premium subsidy at the micro scale.

Theoretically, many studies have shown that when insurance is subsidized, demand increases. For example, in the case of agricultural insurance, studies have randomized the size of premium subsidy offered to households, allowing to get a sense of the price elasticity of demand. In Ethiopia,

¹⁴ World Bank (2017) Sovereign climate and disaster risk pooling. World Bank Technical Contribution to the G20.

¹⁵ *Ibid.*

estimation¹⁶ shows a price elasticity of – 0.58, which implies that the quantity of insurance purchased falls by 0.58 per cent when the price of insurance increases by 1 per cent. **However, although insurance demand is price-sensitive, it is likely to be difficult to achieve universal coverage through subsidies alone. Despite subsidies, purchase rates remain low among lower income households and as a result, untargeted subsidies are likely to benefit richer households disproportionately.**

Furthermore, recent experiences with Index Based Insurance, for example, show the unlikelihood of scale of these schemes without increased and sustained levels of support by governments and donors.¹⁷

In the case of MSMEs, overall, there is a lack of insurance products in V20 countries, followed by lack of pilots and schemes and lack of data and evidence which limits the scope to draw any kind of conclusions on the role of premium subsidies on demand and uptake of meso schemes.

3.3 Summary of lessons learned

- (1) Concessional support has been made available in different forms to different risk financing mechanisms aiming to improve event response and minimize overall economic shocks. These include concessional debt-instruments in form of e.g., concessional IDA loans, or pre-structured emergency lending facilities for disaster relief. **Risk pooling schemes have benefited from concessional support in the form of direct premium payment for individual countries, capitalization of risk pools with grant finance or interest-free loans.** In addition, product development costs and grants for technical assistance have been programmed to advance the establishment of pools.
- (2) In the case of many micro insurance schemes, **there is a need to decide between targeted and universal subsidies and how premium subsidies will be more effective at increasing coverage among low-income populations.**
- (3) **Transitional subsidy strategies have proven to be highly effective** to promote the uptake of new technologies and approaches, which include social learning.
- (4) There are challenges and risks with premium subsidies. **Poorly designed insurance schemes might lead to moral hazard and maladaptation and public subsidy might encourage rent-seeking behavior of private actors.**
- (5) **Direct premium subsidies have the highest impact on reducing the cost of insurance** as they do not target a specific makeup of the premium, therefore likely leading to the biggest impact on premium subsidies. Other forms of support, including donor capitalization to reduce the cost of risk capital in the pool, reinsurance support, operational subsidies and general risk reduction

¹⁶ Berhane, G.; Clarke, D.; Dercon, S.; Hill, R. V.; Taffesse, A.S. 2012. *Financial innovations for social and climate resilience: Ethiopia case study*, Report prepared for the World Bank.

¹⁷ Hess and Hazell (2016), Innovations and emerging trends in agricultural insurance, GIZ

measures are likely to have less premium reducing effects. However, such support particularly in the case of V20 countries has been only temporary and short lived, sporadic and rarely systematic (individual renewals).

- (6) **While premium financing may have the highest impact in terms of insurance costs, other forms of financing may be deemed also effective in supporting scaling up and sustainability in the long run.** Other forms of support, including donor capitalization to reduce the cost of risk capital in the pool, reinsurance support, operational subsidies and general risk reduction measures, are likely to have less premium reducing effects,¹⁸ but may be better suited to enhance the viability of the insurance scheme through enhancing product design and development, distribution channels, payment systems and the like.
- (7) Building on (6), **there has been a lack of detailed quantitative analysis of impacts and effectiveness of different kinds of concessional support to risk pools** added to the fact that the number of risk pools has been low mostly in low-income countries.
- (8) In overcoming the protection gaps for key risks, **public insurance and pooling schemes have proven to be effective risk transfer schemes.** There is national good practice for different risks and public coverage needs (for example the long-standing FONDEN programme in Mexico). Established as public insurers for countries, continuous country policy renewal suggest that they are recognized as providing value for money for countries.
- (9) There are several opportunities for multilateral and bilateral institutions to support national action beyond direct premium financing. These include among others supporting regulatory capacities; support for national risk data and systems and risk reducing investments.
- (10) **Overall, levels of climate finance have been inadequate considering the extent of the crisis, unbalanced in terms of climate action objectives, and largely delivered as loans which can be a challenging to sustain for countries with growing indebtedness.** Climate realities require a substantive upscaling of climate finance in developing countries.¹⁹

4. Initial considerations on determining the type, size, and time span of premium support

Despite the numerous benefits that premium support and capitalization can bring to disaster insurance schemes, it is important to determine the types of support provided at different scales, their size and time span. Further, it is also important to realize that premium support is not the only way to increase the effectiveness and uptake of disaster risk insurance schemes. Below we mention a few of the important points that may be considered when providing premium subsidies.

¹⁸ Vivid economics. (2016). Final Report: Understanding the role of publicly funded premium subsidies in disaster risk insurance in developing countries. Retrieved from <https://www.vivideconomics.com/wp-content/uploads/2019/08/Final-Report-EoD.pdf>

¹⁹ Compare upcoming V20 Climate Finance Viewpoint

4.1 Considerations for the application context

- (1) Sustainability is essential for the long-term success of risk insurance schemes at all levels. **It is important to keep in sight the whole objective of providing premium subsidies. Subsidies to improve the equity and inclusiveness of insurance coverage may be in place for as long as there are individuals who require assistance in purchasing insurance.** The average income levels of beneficiaries should increase if insurance can generate socio-economic gains or protect livelihood opportunities. That way, it would be possible that in the long run, fewer subsidies will be needed. However, until that is the case, subsidies will be required.²⁰
- (2) While there is ground for providing premium subsidies when insuring low income and vulnerable populations which help them to migrate from more costly (meaning more detrimental for income and development levels in the long run) coping strategies during disasters, **subsidies for higher income segments may need to be approached with caution, as they can undermine efficiencies and incentives within the insurance industry and encourage beneficiaries to overinvest in risky and damaging activities.**
- (3) **In the case of micro insurance schemes, it is usually better if subsidies are made directly to the insurer to indirectly benefit individuals rather than subsidizing the premium rates paid by individuals directly.** If premium rates are to be subsidized, then it is better to do this on a proportional basis rather than establishing premium caps; and to set the levels so that the subsidized net premium for the beneficiary is not less than the pure risk premium.²¹
- (4) **Regardless of the size of the subsidy, it is important that the premium is actuarially priced and based on data experience for the population, which is targeted by the insurance and for providers of premium subsidies to strive towards fully risk reflective premiums to facilitate effective risk markets.** Such pathways are depending on national context and priorities and cannot be necessarily generalized across countries. They might also be sector specific. **By systematically pricing the premium, government subsidies can also be more easily distinguished and budgeted for.**
- (5) Successfully addressing insurability concerns on nat-cat risks, including through reduced premium rates for catastrophic risk, requires country leadership and the establishment of Public Private Partnerships (PPPs).
- (6) **At the macro scale, donor financing of insurance premiums (or through vulnerable country governments' national revenue) should consider the long-term consequences by putting a plan in place for raising government revenue, including through income generating activities by MSMEs and households, to finance such subsidies in the long run.** A long-term financing strategy,

²⁰ Hill et al (2014) Using subsidies for inclusive insurance, ILO

²¹ Hess and Hazell (2016), Innovations and emerging trends in agricultural insurance, GIZ

including an exit strategy when markets are deemed sustainable, is essential, as without this insurance will be small scale, short-lived or subject to annual fiscal budget negotiations.²²

- (7) **Reliable external support that ensures a long-term perspective for the insurance product is a precondition for the engagement of private sector actors in the market development.** Phasing out strategies need to be applied when the insured are in a position to cover premiums themselves which also results from enhanced value recognition of insurance.
- (8) In the case of regional risk pools for V20 countries, it is important to examine the risk transfer portfolios at the national level. Many governments may choose very low levels of insurance due to affordability constraints. For example, in 2017-18, Caribbean countries have insured on average some 35 percent of the estimated losses to government assets from natural hazards, leading to low sovereign protection in case of catastrophic disasters. **In many sovereigns, weak fiscal positions and competing demands on public resources typically limit their ability to buy/afford substantial disaster insurance.**
- (9) While premium subsidies can help scaling up regional insurance pools, **it is important to make risk transfer decisions in the context of comprehensive disaster resilience strategies to ensure an optimal allocation of resources between (i) risk transfer and risk retention and (ii) risk mitigation and risk reduction through climate resilient investment.**
- (10) Parametric insurance against catastrophic risk could be complemented with several other insurance options such as cat-bonds.
- (11) **A good monitoring and evaluation system that tracks the socio-economic outcomes and market development contributions of subsidies is paramount** for the success of any subsidized insurance scheme.

4.2 Challenges, limits, and opportunities

- (1) In many of V20 countries the disaster risk insurance market is new and emerging, and it is highly likely that the insurance market suffers from various inefficiencies such as asymmetries of information, externalities, and high fixed costs of operation. **Therefore, it will usually be more effective to first or at least simultaneously invest in addressing inefficiencies in insurance markets, before considering traditional premium subsidies.** Subsidizing inefficient markets through premium subsidies could lead to sustainability challenges in the long-term. However, should the premium subsidy effectively offer protection to a typically unserved or underserved segment, there may be a justification to extend the timescale to reach sustainability.

²² Equally important to note is that premium support timescales may extend due to considerations such as relative poverty defined as GNI per capita below the IDA established threshold of USD 1,185, and small economies such as SIDS.

- (2) **(Sovereign) public insurance schemes should be embedded in a comprehensive risk financing strategy.** Individual public insurance cover is an appropriate instrument for calculable risks, contributing to an ex-ante, proactive risk financing approach, which has benefits in terms of speed, costs and possible reach. However, additional last-resort sources of crisis finance are needed for hard-to-predict, dynamically unfolding events, or in cases other financing instruments fail (e.g., basis risk in parametric covers). Risk financing strategies should be embedded in an integrated risk management approach, including investment into risk reduction.²³
- (3) **There are reputational risks if climate finance profits private insurers or builds consultancy dependence on development partners** – especially if they invest directly or through subsidiaries in (or insure) fossil-intensive infrastructure; or under deliver on socio-economic outcomes or building sustainable marketplaces.
- (4) **Establishment of financing facilities that can be accessible to a diverse set of actors, including national institutions, private sector, AfDB’s ADRiFi programme, the GRiF, etc. may provide an opportunity for V20 countries for more systematic access to premium support while ensuring a maximized opportunity for competition amongst delivery partners.** Premium payments complemented with risk reducing action and technical capacity building.
- (5) There are questions around long-term debt sustainability of climate and disaster risk finance, including insurance (CDRFI) and their subsidization on the one and opportunity costs of contingency finance instruments on the other hand. **When subsidizing e.g., national micro or meso insurance schemes, vulnerable country governments may need to consider potential trade-offs when deciding on the cost and benefits of premium subsidies (e.g., supposedly reduced contingent liabilities) in the context of debt sustainability.**
- (6) **Concessional support for CDRFI has been provided mostly in loans, both in terms of contingent finance and in some instances the coverage of annual premium to the disaster pools. Both raise questions about long-term debt sustainability for countries with increasing debt obligations and especially for market-access countries (MACs) and low-income countries (LICs)²⁴. CDRFI instruments are not designed to generate future returns that can be used to service the debt, rather they can protect productive assets to protect ability to service debt.** Also there exist real opportunity costs to using highly concessional funds for disaster response and recovery instead of other development and public investment needs.
- (7) **Donor funding for premium subsidies carries the risk of dependency by countries.** To reduce the risks of donor dependency, premium subsidies open opportunities to introduce complementary activities such as climate resilient and risk reduction programmes, adaptation, and resilience investments.

²³ Clarke & Dercon (2019): Beyond banking: Crisis risk finance and development insurance in IDA19; available at https://static1.squarespace.com/static/5c9d3c35ab1a62515124d7e9/t/5cac9980e79c709b3c4458f6/1554815366372/Paper_4_Beyond_Banking.pdf

²⁴ World Bank (2021): Debt and Fiscal Risks Toolkit, available at: <https://www.worldbank.org/en/programs/debt-toolkit/dsf>

5. Potential roles and responsibilities of stakeholders

To arrive at an effective operationalization and implementation of international and national PCS interventions, the international disaster risk finance community, and specifically the members of the InsuResilience High-Level Consultative Group,²⁵ may accelerate action based on considering the measures proposed below:

5.1 V20 country governments, including the V20 members of the InsuResilience Global Partnership, may:

- (1) Mainstream climate resilience considerations into national budgeting and investment planning to support climate-resilient growth and development strategies.
- (2) In line with the above, lead on developing comprehensive disaster risk management and disaster risk finance strategies.
- (3) Determine their fiscal space in and appropriateness of expenditures in premium payments (e.g. to regional or municipal risk pools) or premium subsidies (e.g. for national micro or meso schemes), dependent on simultaneous and complementary investment in risk management, specifically risk reduction and preparedness interventions, when seeking to address climate related, macro-economic and financial risk.
- (4) Assess the long-term sustainability benefits and life spans of other forms of concessional support (including grant instruments), such as capital investments, against the direct price effects of time-bound premium financing, and when deciding upon premium financing take into account the effectiveness implications of selecting specific recipients (e.g., the insured or the insurer).
- (5) Show country demand and leadership by providing input to a phase-out strategy and ensure systematic and actuarially pricing of premiums to ensure premium support interventions help the facilitation of effective risk markets, striving towards fully risk reflective premiums, and to allow for easily budgeting and differentiation of subsidies.
- (6) Ensure that decision-making is informed by the formulation of concrete subsidy objectives, considering the trade-offs between targeted and universal subsidies.
- (7) Show country demand and leadership by ascertaining the quality of insurance schemes to prevent moral hazard and rent-seeking behavior by subsidizing poorly designed schemes and maladaptation.

²⁵ InsuResilience (2021). "Governance of the InsuResilience Global Partnership", available at: <https://www.insuresilience.org/governance/>
Note: The InsuResilience Global Partnership, is a G20+ and V20-led multi-stakeholder partnership for Climate and Disaster Risk Finance and Insurance launched at the 2017 UN Climate Conference in Bonn. It brings together more than 100 member institutions comprising governments, civil society, international organizations, the private sector and academia. The goal of the Partnership, as per its "Vision 2025", is to strengthen the resilience of developing countries and to expand financial protection solutions to 500 million poor and vulnerable people by 2025.

- (8) Show country demand and leadership by enhancing regulatory environments to enable the development and implementation of high value-add products, including through product-bundling, modified premium payment schedules, and marketing and distribution services that enhance climate risk and financial literacy.
- (9) As premium support is only sensible if appropriate complementary instruments exist, show country demand and leadership to ensure that current sovereign insurance products and other contingency instruments are constantly improved, expanded (both in terms of geographical coverage and perils) and benchmarked according to V20 risk needs, which may shift as extreme weather events become more intense and frequent.
- (10) Show country demand and leadership by contributing transparent execution for the availability, variety, and access to international premium support instruments.
- (11) Show country demand and leadership by enabling risk reduction and preparedness investments, dependent on the availability of relevant and equitable investment support to complement premium support, viewing insurance and premium support as a vehicle to build a contractual partnership that decreases the dependency on donor countries.
- (12) Show country demand and leadership by putting in place plans for raising government revenue, including through enabling income generating activities for MSMEs and households, to ensure long-term viability and security of subsidy and support interventions, if needed, and shield from fiscal budget negotiations.
- (13) Enhance targeting techniques to establish a clear differentiation of low- and higher-income segments to prevent the undermining of incentives in the insurance industry and encouraging overinvestment in risky and damaging activities.
- (14) Lead the creation of equitable, climate risk adjusted distribution criteria for international premium support and concessional finance.
- (15) Commit to and enhance the creation of national capacities for tracking, measuring and evaluation of premium support and financing interventions at all scales, responsive to commonly agreed upon evaluation criteria.
- (16) Engage with best equipped actors and the international donor community upon the feasibility of supporting the administration of an inclusive global premium support facility.
- (17) Strengthen the dialogue with the IMF on climate emergency support financing. The IMF could play a role in advising the structure of disaster finance instruments including the best premium support strategy from the perspective of safeguarding macroeconomic stability and making available support such as SDRs if deemed appropriate. Moreover, given its mandate, there may

be consideration for IMF to take more active involvement in the international arena in terms of what gaps/failures in international financial and other markets need to be filled and how.

5.2 The international community, specifically the G20+ members of the InsuResilience Global Partnership, may:

- (1) Build transparency around previous and recently provided premium support interventions to enhance the availability of data to help determining best practice and addressing knowledge gaps.
- (2) Ensure that decision-making is informed by the formulation of concrete subsidy objectives, considering the trade-offs between targeted and universal subsidies.
- (3) Assess the long-term sustainability benefits and life spans of other forms of concessional support ((including grant instruments), such as capital investments against the direct price effects of time-bound premium financing, and when deciding upon premium financing take into account the effectiveness implications of selecting specific recipients (e.g., the insured or the insurer).
- (4) Ascertain the quality of insurance schemes to prevent moral hazard and rent-seeking behavior by subsidizing poorly designed schemes and maladaptation.
- (5) Develop phase-out strategy and ensure systematic and actuarially pricing of premiums to ensure premium support interventions help the facilitation of effective risk markets striving towards fully risk reflective premiums, and to allow for easily budgeting and differentiation of subsidies.
- (6) Support the enhancement of targeting techniques and incentivizing of commitments to risk reduction and preparedness investments, in acknowledgement of the limited effectiveness of premium support strategies due to the current lack of effective insurance markets in climate-vulnerable developing countries.
- (7) Support the strengthening of national capacities to track, measure and evaluate the effective execution of premium financing and concessional support interventions.
- (8) Enable access to finance and advisory for the development and implementation of comprehensive risk management strategies, specifically, risk reduction and preparedness investments, including through but not limited to supporting the international risk industry in enabling open access to data and risk modelling and other international bodies, such as the IMF, in providing macroeconomic and - financial risk surveillance and management advisory services.
- (9) Enable access to finance and capacity-building for the development and implementation of comprehensive risk finance strategies, following a risk-layered approach, including through supporting the international risk industry in enabling open access to data and risk modelling, and premium financing.

- (10) Account for vulnerable country governments' efforts of developing and implementing climate resilient and risk reduction investment programmes in the context of limited fiscal space, relative poverty and market size context when deciding upon the provision and feasibility of premium support.
- (11) Collaborate with the country members of regional risk pools to enhance instrument appropriateness and consider complementing and supporting parametric insurance with other insurance options, such as cat-bonds.
- (12) Encourage V20 representation in implementation, specifically through prioritizing special support for country-driven solutions, including e.g., the SIF and nationally driven decision-making on the necessity, feasibility, and identification of premium support interventions.
- (13) Support capacity-strengthening through South-South and country originated activities and streamlining of international funding mechanisms in support of implementation.
- (14) Strengthen effort and emphasis on developing insurance solutions for smaller markets such as SIDS, which are increasingly exposed to climate impacts.
- (15) Modify performance metrics to include socio-economic outcomes and macroeconomic considerations, including improved ability to deal with non-financial shocks.
- (16) Support the creation of a global shield of protection through a global premium support facility, including for the climate-proofing of supply chains, using insurance as a vehicle for building contractual resilience partnerships, where premium support is provided to complement national risk reduction and preparedness aspirations and plans, dependent on the availability of relevant and equitable support for the latter.

5.3 The international risk industry, including insurers and modellers, and academia may:

- (1) Support the strengthening of national capacities and the international unification and standardization of relevant data, assessment, and climate-sensitive budgeting to create joint understanding and consensus on the identification of premium support needs, effective execution, and feasible concessional instruments (including grant-based instruments).
- (2) Enable open access to data and risk modelling and contribute capacity-building expertise for national stakeholders, including the local risk industry and governmental planning agencies, as well as private sector actors, to support the integration of a risk layered approach and options when developing national risk management and finance strategies.

- (3) Conduct and make available detailed quantitative analysis of the effectiveness of different kinds of concessional support, including through contributing to and implementing the disaster risk finance evidence roadmap currently developed by InsuResilience stakeholders.
- (4) Support the development of data and methodologies relevant for determining the value addition, cost-effectiveness, and time scales for insurance schemes to reach cost-effectiveness in relationship to determining feasibility and costing of premium support and concessional finance interventions as well as other risk management options, including risk reduction and preparedness.
- (5) Build capacities in national agencies or ensure standardization for ease of replicability.
- (6) In support of the V20-led Sustainable Insurance Facility (SIF), consider how to effectively link risk reduction, behavioral shifts, and better access to financial services, including through marketing services, distribution strategies and modified premium payment requirements, to premium support by examining MSMEs' willingness and ability to pay for insurance solutions considering changes in risk exposure and pricing over time.
- (7) Utilize machine learning and other technology options, while being sensitive to potential discriminatory biases of artificial intelligence and the lack of data feasible for application in vulnerable country contexts.

Authors: Architesh Panda (MCII Associate Project Manager), Viktoria Seifert (MCII Project Manager), Soenke Kreft (MCII Executive Director), Sara Jane Ahmed (MCII Member)

The Munich Climate Insurance Initiative was initiated as a non-profit organization by representatives of insurers, research institutes and NGOs in April 2005 in response to the growing realization that insurance solutions can play a role in adaptation to climate change, as suggested in the UN Framework Convention on Climate Change and the Kyoto Protocol. This initiative is hosted at the United Nations University Institute for Environment and Human Security (UNU-EHS). As a leading think tank on climate change and insurance, MCII is focused on developing solutions for the risks posed by climate change for the poorest and most vulnerable people in developing countries.

