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InsuResilience GlobalPartnership

POLICY BRIEF

Linking climate risk insurance with shock-responsive social protection

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Climate change is already affecting the most vulnerable around the world – by 2030 it could result in an additional 100 million people living in extreme poverty (Hallegatte et al., 2016). The poor and vulnerable are often least able to prevent, cope with and adapt to climate impacts and stand to lose more overall in extreme weather events. Linking insurance with social protection systems could enhance households' and communities' ability to absorb climate shocks, and improve their ability to reduce and manage risk, and reduce poverty. However, while climate risk insurance and social protection are increasingly recognized as tools to help vulnerable communities and households to cope with climate shocks, the scope for enhancing climate resilience by linking these instruments has not been explored at length. Drawing from emerging experiences, this policy brief examines the opportunities and challenges that arise.

Food and Agriculture Organization of the United Nations
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Anticipate, Absorb, Reshape

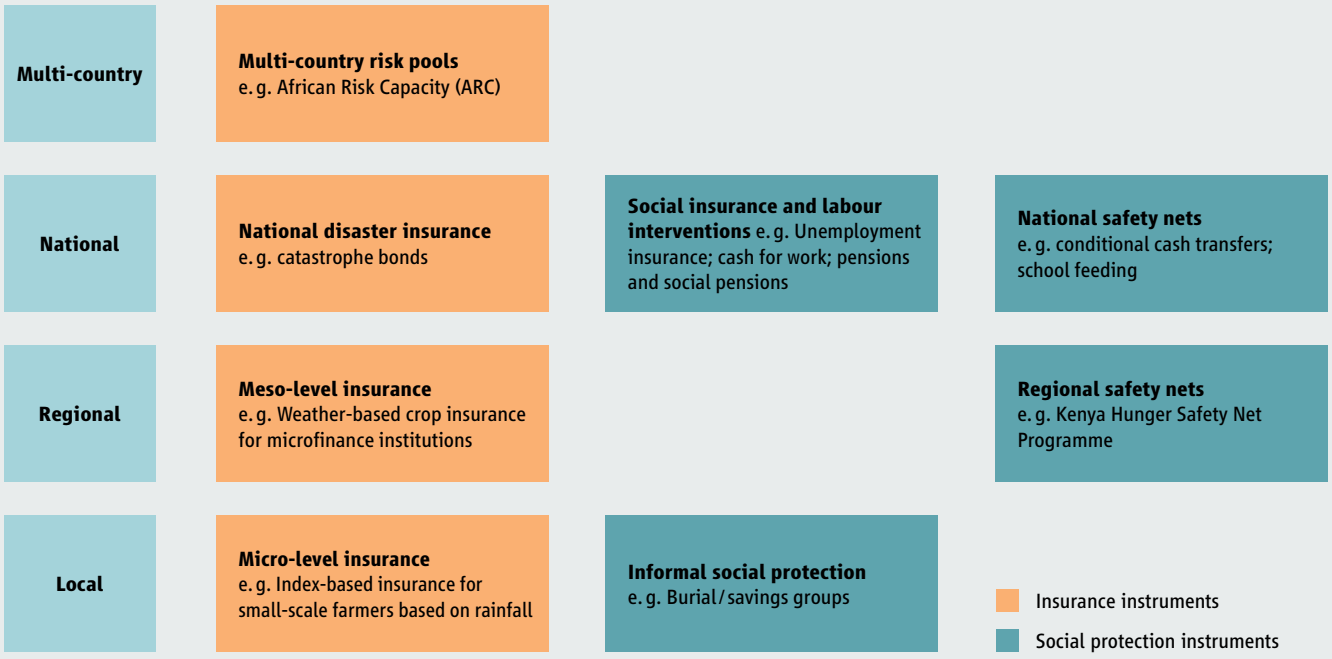
What are climate risk insurance and social protection?
How can they support people and communities in coping with climate impacts?

Climate risk insurance is a risk transfer solution that aims to protect individuals, businesses and countries against the negative impacts of extreme weather events that are becoming more frequent and more severe due to climate change. Climate risk insurance can operate at a range of levels from macro to micro scales (see Figure 1). Well-designed climate risk insurance schemes can help people, businesses and countries manage the impacts of climate-related shocks in different ways:

- Timely and reliable insurance payouts, sometimes even before a shock unfolds, can enable households to protect their livelihoods and avoid resorting to negative coping strategies. For example, coverage from an index-based livestock program in Kenya (IBLI) led to an estimated reduction of 25–36 % in the likelihood of distress livestock sales (Schaefer and Waters, 2016).
- Insurance can help governments to protect their balance sheets, as it provides rapid liquidity for immediate post-disaster relief. For example, Dominica received a payout of US$ 9 milllion from the Caribbean Catastrophe Risk Insurance Facility (CCRIF) only 14 days after hurricane Maria struck in 2017. In comparison, it often takes weeks or months for humanitarian aid to arrive in a country following a disaster.
- Climate risk insurance can provide incentives to invest more in the insured assets during non-payout periods, encourage risk reduction and catalyze risk assessment to identify vulnerabilities. For instance, farmers insured by ACRE Africa in Kenya, Rwanda and Tanzania invested 19 % more and earned 16 % more than their uninsured counterparts (Schaefer and Waters, 2016).

FIGURE 1

Insurance and social protection instruments by level



There are however limits to insurance as a tool to manage climate risks. While the poor and vulnerable are often most impacted by climate-related shocks, they are also often unable to access insurance and other market-based instruments, unless premiums are subsidized or other supporting measures are provided. In addition, insurance is generally more suitable for weather events that occur with low frequency but high intensity. Covering the impacts of weather-related events that occur with very high frequency, such as recurrent excessive rainfall leading to floods, would mean disproportionately high insurance premiums.

Social protection refers to a wide set of policies and programmes that aim to reduce poverty, inequality and vulnerability. Social protection includes safety nets or social assistance, social insurance, labour market interventions and social services. While safety nets most commonly integrate climate-sensitive features, this policy brief covers a broader range of social protection instruments. Social protection programmes have been shown to effectively support communities and households in dealing with chronic vulnerability and poverty (FAO, 2016). Growing evidence also shows that 'climate smart' or 'adaptive' social protection programmes can help absorb the impacts of climate shocks by providing direct support to affected populations and by preventing some of their negative consequences (Ulrichs and Slater, 2016). Moreover, social protection could help people anticipate and prevent shocks as well as increase adaptive capacity to deal with future climate risks (Costella et al., 2017; Peters and Pichon, 2017).

'Shock-responsive' social protection can help people manage the impacts of climate shocks. While most social protection is designed to support households experiencing 'idiosyncratic' shocks (i.e. on a micro-level), resulting from individual life cycle events such as a loss of employment or illness, shock-responsive social protection focuses on covariate shocks, such as droughts or floods, that affect a large proportion of the population simultaneously (O'Brien et al., 2018). To be shock-responsive, social protection programmes need to be designed to respond flexibly in the event of an emergency and to be scaled up rapidly.

Nevertheless, social protection systems are generally not set up to deal with catastrophic losses and may be less effective at protecting against prolonged adverse trends, such as sea level rise. If shocks become too frequent and intense, social protection programmes such as safety nets are likely to become inefficient and livelihood changes are needed (Hallegatte et al., 2016).

Insurance and social protection are part of the toolbox available for managing climate risk, and as such, provide complementary approaches that can be implemented in a coordinated manner. Figure 1 illustrates the range of insurance and social protection instruments available at different levels. Figure 1 illustrates the range of insurance and social protection instruments available at different levels from multi-country to local. Each instrument has its comparative advantages depending on the risks being addressed, the target population and the local context. Given these comparative advantages, examination on how these instruments could be best linked can ensure more effective and flexible assistance to vulnerable populations.

How can linking **climate risk insurance** and **social protection strengthen climate resilience**?

Insurance and social protection can be elements of a comprehensive risk layering approach. 'Risk layering' refers to the process of separating risk into tiers that allow for more efficient financing and management of risks (World Bank, 2012). Financial instruments and risk prevention and reduction measures should be chosen on the basis of frequency and severity of events. For weather-related risks which happen often but which are less severe, preventative and risk reduction measures may be the most cost-effective option, while the more severe and less frequent risks could be transferred to private and public insurance markets (Schaefer et al., 2016). Social protection and insurance can be layered in multiple ways, with some of the options highlighted below.

Layering insurance and social protection can help address different risks faced by a household. R4, a rural resilience initiative in Africa, integrates a microinsurance product for the poor into social safety nets. The program enables poor farmers to access crop insurance by participating in risk reduction activities and a cash-for-work programme. Insurance therefore becomes accessible even for people who would otherwise not be able to afford the insurance premium. While the insurance protects farmers against extreme climate events, activities under the cash-for-work programme help them build assets and invest in natural resources management. Participating households also benefit from livelihoods diversification and access to financial services, in the form of microcredit and savings, that can enable them to better respond to other economic and social stresses.

Hybrid products combining insurance and social protection can support poverty reduction in the face of climate change. World Bank modelling suggests that social protection mechanisms with an insurance component for vulnerable people, funded partially by the beneficiaries themselves, have a greater impact on economic growth and poverty reduction than in-kind transfer mechanisms that are fully funded through public budgets (Carter and Janzen, 2015). The relative gains brought about by this type of scheme of insurance-augmented social protection increase with climate change, as people who purchase the insurance product tend to invest more into productive activities ('risk reduction dividend'). If climate change becomes too severe, however, such a mechanism loses its ability to stabilize the extent and depth of poverty (Carter and Janzen, 2015). More implementation experiences of such schemes are however needed to substantiate these findings.

Climate risk insurance and social protection can be layered as complementary risk management products to target different groups within a community. While, for relatively wealthier households, market based insurance can offer efficient protection against climate shocks, these can be prohibitively expensive for the poorest households, for whom well-targeted safety nets would be a more appropriate solution (Hallegatte et al., 2016). For instance, under the Kenya Hunger Safety Net Programme (HSNP) and Kenya Livestock Insurance Programme (KLIP) which operate in four counties of Northern Kenya, the most vulnerable are served by the safety net and the better-off individuals are targeted by livestock insurance. This risk layering approach ensures that vulnerable people, who are not eligible for social protection programmes (e. g. because their income is slightly higher), receive support during a major shock to prevent them from slipping (back) into poverty. Similarly, microinsurance can also be used to top up social protection benefits for participating households in times of crisis.

Linking social protection and climate impact insurance not only enables the poorest and most vulnerable to access economic instruments for risk smoothing but also creates entry points for economic inclusion of these groups. This might help overcome structural barriers to participation in markets, increasing the opportunities for many in these groups to become more productive, ultimately reducing their exposure and vulnerability to climate risks.

Climate risk insurance can serve as a contingency financing mechamism for governments to temporarily scale up shock-responsive social protection in anticipation or response to a shock. The options for scaling up social protection include vertical expansion, increasing the value or duration of benefits such as cash transfers to existing beneficiaries, and horizontal expansion, increasing the number of beneficiaries flexibly to include additional people affected by a crisis (O'Brien et al., 2018). Climate risk insurance could support the expansion of social protection platforms during emergencies by providing rapid contingency funds for scaling up.

At the micro-level, layering enables delivering additional benefits to program beneficiaries affected by the shock, as well as identifying and enrolling new beneficiaries that have been made eligible because of the shock. For example, the Productive Safety Net Program of the government of Ethiopia utilised disaster risk financing and insurance tools to enhance its capacity to respond during extreme events and allowed Ethiopia to increase the number of food assistance beneficiaries (Schaefer and Waters, 2016).

BOX 1

Kenya Hunger Safety Net Programme

The Kenya Hunger Safety Net Programme (HSNP) provides regular cash transfers to the poorest households in four of the most drought-prone counties in Northern Kenya. The programme was designed with the specific objective of being able to act as a scalable safety net in times of crisis, such as during droughts or floods. For this reason, all households in the four counties were registered, with bank accounts opened for all of them. In addition, HSNP is creating the infrastructure for any other Government body or donor to deliver emergency (or regular) cash transfer payments.

Both HSNP and the above-mentioned Kenya Livestock Insurance Programme (KLIP) use an emergency scale-up mechanism that is based on satellite data. Satellite images monitor vegetation cover and payments are triggered before the impact of drought on crop and livestock become too severe. The two programmes benefit from shared data and methodology, helping them to increase the accuracy of the vegetation index and lowering the administrative costs of implementation.

BOX 2

Absorbing Climate Impacts Contest: Proposals combining climate risk insurance and social protection

In 2018, the UN Climate Resilience Initiative A2R and the InsuResilience Global Partnership sought innovative solutions combining climate risk insurance with social protection in a contest organised with the MIT Climate CoLab.

The Judges' Choice Winner was a proposal by ClimateRe, a Swiss consultancy specialised in the development of innovative risk management approaches in vulnerable communities. Their proposal envisages to enhance climate resilience of smallholder rice farmers in Nepal by coupling crop insurance with value chain development and climate change adaptation. The rice value chain development employs a cash-for-work approach and the two-tiered insurance scheme (with micro-level community managed insurance and meso-level group risk insurance) allows farmers to pay premiums through in-kind contributions instead of cash.

The general public could also vote for their favourite proposal. The winner of the Popular Choice vote was a proposal by the Mahila Housing Sewa Trust, an association that aims to empower women in poor communities in India to upgrade their housing conditions. Their proposal seeks to tap women's habit of saving to manage climate-induced risks through an innovative chit fund combined with microinsurance.

At the macro-level, social protection could be financed through payouts from sovereign risk pools, and delivered through existing social protection schemes. For example, governments joining the African Risk Capacity (ARC), a sovereign risk pool for African Union member states, have to develop a contingency plan showing how they will use the money if they receive a payout following a drought. Many of these contingency plans utilize the institutional architecture of existing social protection systems for distributing payouts, as insurance payouts can only deliver positive impacts on the livelihoods of beneficiaries where reliable mechanisms for translating payouts into rapid assistance are available. The Operation Plan of Mali for the African Risk Capacity, for example, intends to use ARC payouts to expand its national cash transfer programme in response to major drought (Republic of Mali, 2015). This scale-up has not been tested in practice, as Mali has not yet been eligible for a payout from ARC.

In many countries, social protection systems have established or are in the process of establishing sophisticated targeting and registration mechanisms for beneficiaries. Climate risk insurance could capitalize on this to effectively reach its target group. Social protection programmes often rely on large-scale, long-term systems that reach significant sections of the population and utilize increasingly more sophisticated methods for targeting and registering the most vulnerable beneficiaries in order to best deliver benefits and manage information. Insurance programmes can benefit from this data and information to identify their target group and more rapidly deliver assistance following a payout. In addition, access to existing social protection programmes with scale can help reduce operational and premium costs, and to improve value for beneficiaries (Solana, 2015).

Insurance can also strengthen social protection systems by bringing important risk assessment skills. On a macro-level, hazard models produced by risk pools can lead to a greater understanding and modeling of natural hazards among participating countries, helping them to be better prepared for major events. On a micro-level, if covered by social protection, people may have better means to reduce their exposure to climate risks and thus enhance their eligibility for insurance or improve the cost-effectiveness of an insurance product.

What are the challenges in linking climate risk insurance and social protection?

The coverage of social protection systems remains low, with many 'adaptive' social protection systems still nascent. Social protection coverage remains particularly low in Asia and Africa, some of the regions where the poor are most exposed to climate-related shocks (Costella et al., 2017; OPM & itad, 2017).

Insurance and social protection have different target groups. To make an insurance product sustainable in the long run, it is important that beneficiaries pay at least part of the insurance premium in order to foster greater risk awareness. Insurance may thus not be an appropriate solution for the poorest populations. Combining macroinsurance solutions where the government pays for a premium with social safety nets can be more appropriate when trying to target the 'bottom of the pyramid' poor.

A key challenge for climate risk insurance and social protection is to strike a balance between providing rapid support following a (climate) shock and precisely targeting those most in need. Case studies from Ethiopia and Malawi show that the cost of a drought to households can increase from zero to about $50 per household if support is delayed by four months, and to about $1,300 if support is delayed by six to nine months (Clarke and Hill, 2013). While this highlights the need for quick delivery of initial support, effective targeting of assistance is key for the ultimate impact and cost-effectiveness of schemes. Targeting specific households or vulnerable groups is however time consuming and difficult, often because of the lack of data, low administrative capacity, and political economy factors (Coudouel et al., 2002).

Climate risk insurance and social protection schemes need to ensure they provide the right incentives for risk reduction and investing in long-term adaptation to climate change. While poorly designed social safety nets can reduce the incentive for people to quickly adapt and change occupation or activity in the face of climate change (Chambwera et al., 2014), climate risk insurance schemes also need to be designed to incentivize risk reduction and resilience building. One option for doing so is the use of risk reduction measures as a pre-requisite for entry to the relevant scheme or as a way to reduce premiums in the case of insurance.

As climate change increases the intensity and frequency of extreme weather events, there may come a time when some risks become so severe that insurance becomes too costly. Slowly developing and foreseeable events or processes that happen with high certainty, such as sea level rise, glacier melt and desertification, are already uninsurable and will need to be addressed by other risk management measures. Similarly, from a humanitarian standpoint, it can be more sensible to invest in adaptation and risk reduction measures for frequent events instead of solely relying on social protection mechanisms to mitigate the negative impacts of shocks.

Conclusions

Social protection and climate risk insurance are complementary instruments that respond to different types of shocks, and thus provide protection for regularly occurring events as well as for less frequent and more intense shocks. Insurance cannot finance annually occurring events, nor does social protection provide sufficient coverage for exceptional events. A layered approach is therefore helpful to ensure both basic security and protection from major shocks.

Given the low coverage of social protection in climate vulnerable regions, there is a need to advocate for social protection systems that are scalable and shock-responsive. On a national level, there is a strong case for integrating social protection instruments into an overall disaster risk financing strategy as part of a layered approach. Increased implementation experience will also help shed light on how to overcome the challenges in linking social protection with climate risk insurance.

Combining insurance with broader social protection measures is one option to enhance the ability of vulnerable communities to absorb climate impacts. This can foster economic and financial inclusion of vulnerable and poor populations with positive effects on social stability and resilience. Integrated and flexible strategies for managing climate risk are however needed, with a range of measures appropriate for different types of shocks and stresses and affected populations.

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