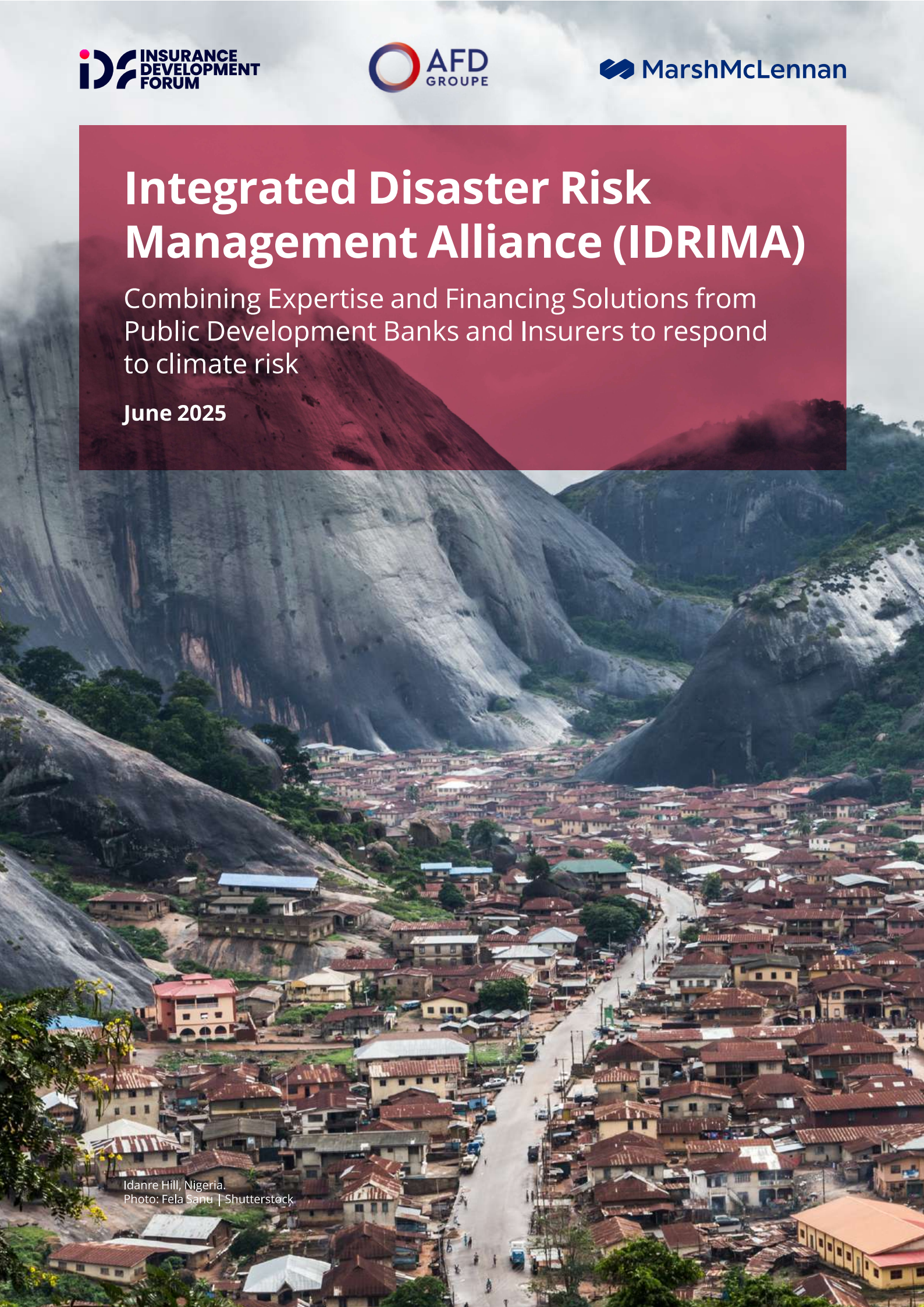
Integrated Disaster Risk Management Alliance (IDRIMA)

Combining Expertise and Financing Solutions from Public Development Banks and Insurers to respond to climate risk

June 2025



Idanre Hill, Nigeria.
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Contents

Introduction

Climate risk has always been present, but is intensifying. Nearly half of humanity lives in places that are highly vulnerable to climate impacts (IPCC, 2022) and in 2024 alone, extreme weather events around the world set unprecedented records, displaced millions and killed thousands (UNDRR, 2024). Record-breaking global temperatures led to catastrophic consequences, including severe drought from southern Africa and the Zambezi basin to the Amazon and La Plata (Toreti *et al.*, 2024). The need to build resilient infrastructure, to fund adaptation, and to respond to crises has never been greater. In tandem, rapidly growing economies in developing countries require expanded infrastructure to grow sustainably and continue expanding and pursuing the services they provide to their populations. These twin challenges require increased funding, easy access to capital and greater liquidity in times of crisis. Development institutions, public banks and the insurance industry all have a key role in meeting these needs.

Both developed and developing countries are susceptible to the negative impacts of climate change, but developing countries are often the most exposed to climate risk, due to a combination of location and of reduced infrastructure resilience, and are more likely to be underinsured (Lloyd's, 2018). Regions with particularly high human vulnerability to climatic hazards include West-, Central- and East Africa, South Asia, parts of South America and Small Island Developing States (IPCC, 2022). From 2010-2020, human mortality from climate risks was fifteen times higher in vulnerable regions, compared to areas of low vulnerability (*ibid*).

These challenges are being recognized internationally, as highlighted by a number of commitments, declarations and new initiatives to improve understanding and identify necessary action. The Paris Agenda for People and the Planet called for financial innovation to foster resilience for climate risk (Élysée, 2023). Two key aspects have emerged. Firstly, there is an increased mainstreaming of resilience and adaptation into development programs, for example in infrastructure, health and agriculture. Secondly, financing of interventions now focuses on a much wider timeframe: prior, during and after extreme weather events. This is in addition to the international context of the Loss and Damage (L&D) agenda, which has also rapidly gained traction in climate negotiations and is now recognized as the third pillar of climate action alongside mitigation and adaptation.

Despite growing interest and political advancements, an opportunity remains for Public Development Banks (PDBs) and Development Finance Institutions (DFIs) to more systematically integrate considerations of climate risks and risk reduction across their operations. Strengthening this integration would enhance access to funding, facilitate capital mobilization, and improve liquidity during crises - critical elements in a world where the demand for resilient infrastructure, climate adaptation, and essential services has never been greater and will only increase. In 2023, KFW and Agence Française de Développement (AFD) released a joint paper showcasing the importance for accelerating innovation on financial tools and response to climate risks, as well as DFIs' contributions to the Adaptation–Disaster Risk Management–Loss and Damage continuum, which has since been echoed by International Development Finance Club (IDFC) members.

The insurance industry is increasingly recognizing and helping to mitigate the financial and non-financial impacts of intensifying climate risks. In addition to protecting people and businesses, insurance can provide essential protection to capital at risk as well as provide guidance on how to reduce risk impacts, supplementing the important work of lending institutions, which include PDBs, DFIs, national governments, and supranational agencies (herein collectively referred to as 'lenders'). These lenders are already mainstreaming climate in their thinking, and various schemes (see **Examples of successful collaboration**) show the benefits of this thinking in protecting loan recipients.

Combining lenders' financial backing and experience in generating innovative solutions with the insurance industry's growing climate risk transfer portfolio has great potential to provide strengthened security for lenders and borrowers alike. Recognising the need for increased innovation in the context of intensifying climate risks, this paper aims to:

- **articulate the need for increased insurer engagement** in development finance lending
- **detail the benefits for all parties** – lenders, the insurance industry and recipients – of increased collaboration
- **provide examples of successful engagements** between lenders and insurers, in combining expertise and financial solutions, and articulate the key learnings from these
- **help lenders and the insurance industry navigate the challenges** that can hinder collaboration
- **provide concrete next steps** for lenders and the insurance industry to work together with confidence

Context: Unequal vulnerabilities and climate risk in loan portfolios

While the insurance sector possesses deep-rooted knowledge of climate risks and its impacts, coverage of sovereigns, sub-sovereigns and private institutions is still decidedly uneven between the Global North and South. This trend has been apparent for some time, with the average percentage of direct losses with respect to GDP almost twice the size in low-income countries compared to high-income countries (SEADRIF, 2019). First and foremost, the most economically vulnerable and climate-exposed populations globally are typically those with the greatest 'underinsurance', or lack of coverage (International Actuarial Association, 2019; World Bank, 2023). This coincides with the focus of DFIs which centres around having a long-term positive impact in these geographies.

The integration of climate risk into the thinking of financial institutions varies. One arena in which this disparity is clear is amongst credit rating agencies and their incorporation of climate parameters into their rating methodologies (e.g. Moody's, 2019), with leading credit rating agencies reporting different stances on the degree and accuracy of climate-related default risks (Bernhofen *et al.*, 2024) and many considering physical risk but not wider national-scale adaptation or resilience measures[1]. While most ratings agencies take direct physical risk into account, aspects such as risk reduction and adaptation measures, overall insurance levels and national adaptation plans are considered less commonly. This inconsistency of climate risk integration not only highlights the varying levels of awareness and responsiveness within the financial sector but also underscores the urgent need for a more unified approach to assessing and tackling climate-related financial risks.

The financial consequences of climate risk on loans could be substantial, potentially leading to significant downgrades in sovereign credit ratings and increased borrowing costs. A landmark study in 2021 modelled the effects of climate on sovereign credit ratings using different future climate scenarios (RCPs[2]) (Klusak *et al.*, 2021). In a high emissions scenario (RCP 8.5), the research projected that the credit rating of 63 out of the 108 nations included would fall by 2030, with an additional 17 downgraded by 2100. Additional interest payments on loans associated with these downgrades could cost national treasuries up to USD 205 BN per year by the end of the century. This contrasts with a low

1 Transition Pathway Initiative's ASCOR tool does incorporate countries' adaptation measures (2024).

2 RCPs, or Representative Concentration Pathways, forecast atmospheric greenhouse gas concentration over time. The most extreme, high emissions scenario is RCP8.5, while RCP2.6 mirrors the commitments of the Paris Agreement in 2015, requiring large-scale mitigation efforts to reduce greenhouse gas emissions.

emissions scenario (RCP 2.6), where credit ratings would not be expected to fall in the short term, and the increase in interest payments would be only 10% of the expected increase associated with RCP8.5.

The need for increased collaboration between lenders and the insurance industry is therefore clear:

- **Countries in the Global South are most exposed** to climate risks, and this exposure will only increase (e.g. Ngcamu, 2023; Adom, 2024).
- **This high degree of exposure, currently under-insured, leads to acute financial risks in exposed countries**, especially under high emissions scenarios, and comes at a time when high levels of sustainable development must be maintained (e.g. Battiston *et al.*, 2021). Particularly exposed countries need to consider investment in risk reduction to maintain current financing costs, as well as reducing impact of climate disasters today, credit and financing institutions need to incorporate benefits from adaptation on future climate risks.
- **Climate risk is increasingly incorporated into rating methodologies** for sovereign debt and private loans, putting pressure on the credit rating of these highly exposed countries and potentially restricting access to finance (Klusak *et al.*, 2021).
- **The protection gap between and within countries of the Global North and South requires urgent attention** (e.g. Swiss Re, 2024). This must occur without leaving developing countries stuck in a cycle of loan dependence, with limited means of repayment, if a climate peril were to strike major infrastructure.

Current lender and insurance collaboration

For lenders looking to underwrite loans or indeed make investments in developing countries, insurers and brokers are a natural partner. Insurance[3] has traditionally come in two principal forms in this process – credit insurance for the loan provider, and some form of property and liability insurance for the borrower. The importance and efficacy of these types of coverage should not be underestimated. They are key to the lending process, and will continue to be so in the future. However, in the context of rising climate risks, there is a growing need for innovative approaches to the combination of financing and risk transfer as well as incorporating risk reduction measures.

Insurance for the recipient can take various forms. Marsh's Risk Landscape for the Transition Report (Marsh McLennan, 2024) gives a full description of how insurance can support infrastructure investment, and some of these coverage types have direct analogies in sovereign lending. Coverage for risks such as natural catastrophe, input volatility, supply chain disruption and revenue fluctuations – all risks caused or readily exacerbated by climate change – is available, and these can play a central role in making projects investible.

However, this type of insurance can sometimes be an afterthought or relegated to a contractual box-tick, where the contract requires insurance be purchased as a mandate for the debt they have taken on. This can on occasion be unsuitable or costly, and not reflective of the true risk to the asset, especially as climate risks intensify. Coverage may also not be monitored regularly by the loan provider, allowing for insurance to lapse over the operational lifetime of the asset. Even if purchased with sufficient coverage, long claim adjustment times can create uncertainty around liquidity, and may lead to repayment delays, restricting access to finance. Further, even if suitable products or easily implementable risk reduction measures exist, late engagement with insurers can mean the window to implement them has passed.

There is a long tradition of using insurance for finance, such as through export guarantees and political risk coverage. Credit insurance for lenders is beginning to be used more by multilateral development banks, who have traditionally used other banks and governments for guarantees (IDB, 2023). This insurance allows lenders to optimise their balance sheets, further crowd in private capital, and ultimately to expand their lending portfolios (Global Trade Review, 2024). The peril-inclusive nature of credit insurance is also a significant strength, allowing for comprehensive risk coverage across a diverse range of risks.

However, while a key tool for financiers of all types, insurance of this type does not fully solve the issues caused by climate risk intensification, for four core reasons:

- Firstly, it **does not protect the loan recipient or ensure that the underlying infrastructure project is completed** – the insured party is the lender, not the recipient of funds. This means that the asset, which could otherwise potentially provide revenue, generate employment, improve access to key amenities such as sanitation, power or healthcare, is substantially delayed or not completed. This can have cascading consequences for the local economy.
- Secondly, it **requires default or non-payment to operate**, which comes with inherent damage to the counterparty's credit rating. This can lead to reduced access to finance, either through refusal to lend or more stringent repayment terms, preventing further necessary investment in developing communities.
- Thirdly, those **financial protections are put in place during the asset construction period but rarely covers the full credit term** and never the operating lifetime of the asset, which is of importance for the asset holder.

3 MDBs also engage in other non-insurance risk transfer methods such as synthetic securitisation. A full account with analysis of financial impacts is given in Risk Transfer Efficiency for MDBs (Risk Control, 2024).

4 Prohibitively expensive to purchase insurance or coverage limited to such a high degree that the asset/project/loan may not be fully protected.

- Fourth, efforts to reduce the impact of future climate risks are not integrated at an early stage and can increase the cost of insurance over the lifetime of the project.
- Lastly, it is **priced to take into account all default reasons**, without particular focus on climate risks. This lack of attention to climate risk may not be sustainable, as perils intensify, and may result in loans being seen as 'uninsurable'[4]. There are analogies elsewhere in the insurance industry: in the UK, the Flood Re scheme allows flood risks to be ceded to a Government-backed pool, and is a key part of ensuring the insurability of homes in areas at a high risk of flooding. Analogously, removing or explicitly pricing and covering the "climate part" of counterparty default risk, where possible, may prove to be necessary to allow continued credit underwriting for geographies and asset types particularly vulnerable to climate perils.

It is clear that credit insurance and traditional property and liability insurance are vital to the lending process, and there is no desire to remove or displace them, given their benefits. However, they are not the full picture, and there is the need to think differently about how to increase protection for all parties, which will require increased collaboration between the insurance industry and lenders.

"Can we help countries with debt when they are affected by disaster to get better terms? We just give them a pause [on debt repayments] - we need to give them some insurance so that they don't have to pay, not just postpone [the debt]"
- Ilan Goldfajn, President, IDB[5]

The case for deepening collaboration

There is a clear need for further work to protect access to finance, to provide further awareness of—and protection for—climate-linked catastrophes in the Global South, and to promote sustainable development. As mentioned, the core insurance offers of credit insurance and of property and liability insurance are key parts of the lending process, but intensifying climate risks and increasing scrutiny of the effects of these risks on creditworthiness mean that there is scope for innovation in this area.

The insurance industry have a rich history of financial innovation, and a wealth of climate and risk engineering expertise, as well as experience in forecasting, modelling and pricing risk. Capitalising on this expertise through closer collaboration presents a real opportunity to provide increased protection to lenders and loan recipients. Public banks, for their part, bring sizeable liquidity and deep client relationships in-region including end-insured KYC[6], knowledge of regional considerations and nuances, and access to large-scale financing programs. For lenders, the insurance industry represents an opportunity for improved risk management, knowledge sharing and synergies – risk engineering, transaction risk management, catastrophe analysis. For the insurance industry, engagement with lenders allows them to benefit from DFIs' and PDBs' unparalleled understanding of developing markets and access to a diverse range of projects. Working together more closely, therefore, has the potential to provide a range of expertise and solutions to strengthen in-region resilience against climate risks.

5 Inter-American Development Bank; comments given at the Hamburg Sustainability Conference, October 2024

6 Know-Your-Customer: customer and client vetting procedures.

Table: potential benefits of increased collaboration

Loan recipients

- **Increased certainty of finance:** Building risk transfer and risk reduction incentives into the lending process can increase certainty of securing finance and access more attractive interest rates and terms.
- **Better disaster risk management and awareness:** The underwriting and risk analysis process increases awareness of disaster risk and key mitigants, building resilience.
- **Embedding climate risk analysis in early-stage of infrastructure projects:** Closer and earlier collaboration with the insurance industry allows projects to be built "resilient-first", with resilience included by design, through the build and operational phase.
- **Capacity building:** Working through the process of scoping and procuring bespoke insurance builds capabilities in recipient organizations, encouraging further uptake.

Lenders

- **Encouraging better financial infrastructure:** Increased use of novel insurances and integration of risk engineering advice will come with a co-benefit of increasing overall literacy of risk, risk management and risk transfer in developing countries.
- **De-risked transactions and infrastructure projects:** Innovative risk transfer complemented with guidance on risk reduction efforts will lead to increased completion rates and improved operational lifetimes and increased climate resilience of critical infrastructure in developing countries, a key aim for mission-driven lenders and public institutions.
- **Increased likely solvency of loan recipients:** Higher solvency levels will allow further lending and contribute to overall financial strength of counterparties in developing countries.
- **Improved risk management and awareness:** The analysis for risk transfer allows better understanding of overall risk profiles, a key step towards building climate resilience.
- **Encouraged climate resilience building:** Highlighting potential climate risks in more detail and execution of risk reduction measures encourages quick wins and building climate resilience as standard.
- **Learn from private sector:** Insurers' and brokers' interactions with public and private sector lenders allow them to share lessons learned and best practice from across the lending ecosystem.

Insurance community

- **Increased risk diversification:** Accessing developing economies allows the insurance industry to increase the geographical and sectoral diversity of their risk profile.
- **Sustainability-linked lending:** Support for developing countries, especially key resilient infrastructure and clean energy projects, will allow insurers to meet their internal targets for support of Sustainable Development Goals or sustainability targets while increasing likelihood of sustainable returns with reduced climate disaster risks expsoures.
- **Market access:** Working closely with lender networks in new ways will allow access to some of the fastest growing economies with lower levels of competition than established markets.
- **Policy dialogue access:** Working more closely in developing markets allows the insurance industry to be more closely involved in policy dialogues, further promoting increased uptake of insurance while improving long term claims & loss management through risk reduction efforts.

Examples of successful collaboration

There are several compelling reasons for closer collaboration between the insurance community and lenders. Here, we highlight examples and draw lessons learned from successful innovation and collaboration between the insurance industry and public bodies, with a focus on climate risk and innovative financing. The case studies below draw from a series of interviews conducted with development banks and the insurance industry, supplemented by document reviews and desktop research.

Shock Resilient Loans (SRLs)

Key parties involved

KfW Development Bank, West African Development Bank (BOAD), Munich Re, African Risk Capacity (ARC), Frankfurt School of Finance and Management (FSFM)

People work in the fields by the sea, in Lome, Togo. Photo: EiZivile | Shutterstock

Project background and description

Shock Resilient Loans (SRLs) have been designed by KfW on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) as an innovative financing instrument to avoid debt spirals caused by climate disasters and to help maintain fiscal resilience. Sovereign loans intended for investments are bundled with insurance coverage (BOAD, 2024). In the event of a climate disaster, the insurance takes over payment obligations (principal and interest) for the underlying sovereign loan portfolio for up to two repayment periods. Thus, rather than making debt repayments after a disaster, borrowing countries can instead spend scarce resources on emergency relief and reconstruction activities. Countries are therefore less likely to need to take out additional loans following a disaster, protecting them from over-indebtedness and are also less likely to need to make emergency budget cuts that could limit their citizen's access to essential services or undermine development gains (Sikand *et al.*, 2024). The countries thus become more fiscally resilient.

The instrument is currently being piloted with BOAD, which provides subsidised SRLs to member countries for investments in climate change mitigation and adaptation as well as in health resilience infrastructure.

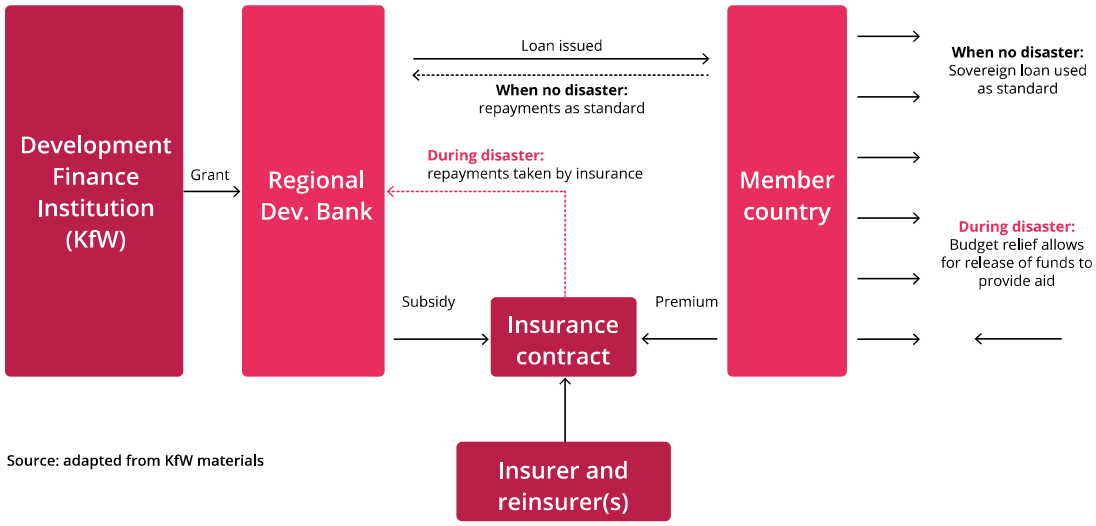
continued

Impact

The pilot began in August 2024 with a USD 350 MN loan portfolio for Benin, Côte d'Ivoire, Senegal and Togo. In October 2024, the payout was triggered for the first time by torrential rainfall in Togo. As a result, ARC paid USD 6.9 MN to BOAD to cover Togo's next two loan repayments, which freed up Togo's funds for recovery and reconstruction after the flood event and continuing its development path (The Insurer, 2024).

Key learnings

- The first implementation of the scheme was successful, and has provided liquidity for Togo in a disaster context, proving the scheme's efficacy.
- Considering the number of parties involved and an overall lack of familiarity with the new product, contractual arrangements for Shock Resilient Loans were complex and multi-year, requiring a large time investment from all parties.

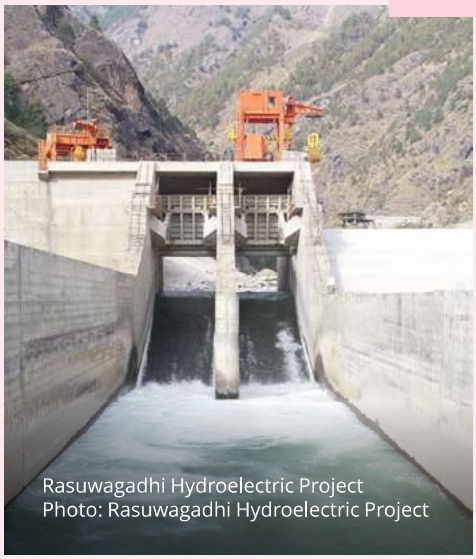


Source: adapted from KfW materials

Nepalese Hydroelectric Dam Project

Key parties involved

A consortium of lenders (IFC, ADB, AIIB, KEXIM, KSURE, CDC, FMO, PROPARCO and OFID[7]), Nepalese Ministry of Energy and Department of Electricity Development



Rasuwagadhi Hydroelectric Project
Photo: Rasuwagadhi Hydroelectric Project

Background and description

Sustainable infrastructure is one of the areas with the greatest potential for insurer/lender collaboration moving forward, as it represents a direct pathway toward development for emerging economies. Some examples of collaboration already exist in this space. In Rasuwa on the Trishuli River in Nepal, construction began in September 2021 of a 216MW greenfield run-off-river hydroelectric dam (NWEDC, 2024). Nepal is situated on an active earthquake fault line, as demonstrated during the devastating Kathmandu earthquake of 2015, and therefore adequate insurance coverage was required as a prerequisite to the dam's construction.

The dam is protected with a layer of earthquake parametric insurance[8], which the lenders to the project required to be in place in order to invest. The payout was to be triggered once the earthquake shaking intensity reached a particular threshold[9] at the project site, which is assessed by a neutral, established third party for validation purposes and to avoid false readings (Swiss Re, 2023).

Impact

If a sufficiently strong earthquake struck and the payout was triggered, USD 180 MN of damage would be covered and lenders would be spared a large loss on their investment.

Key learnings

Despite earthquake not being an explicitly climate-related peril, the case study offers valuable lessons:

- As disaster could strike as early as the construction phase, the example emphasises the importance of early involvement by insurance companies in sub-sovereign infrastructure projects in both covering the asset, providing risk reduction and risk engineering advice (even during construction phases) and enabling lenders to feel confident providing finance.
- Insurance coverage, however, must extend beyond the construction phases of infrastructure projects and into operational phases to avoid the double burden of loss of asset revenue and debt repayment obligations.

7 IFC (International Finance Corporation); ADB (African Development Bank); AIIB (Asian Infrastructure Investment Bank); KEXIM (Export-Import Bank of Korea); KSURE (Korea Trade Insurance Company); CDC (Groupe Caisse des Dépôts); FMO (Dutch Entrepreneurial Development Bank); OFID (OPEC Fund for International Development).

8 Though earthquake parametric insurance is not directly associated with climate-related intensification, earthquake profiles are similar to that of extreme climate perils, albeit they are typically less frequent.

9 The shaking intensity threshold was based on 'shake-maps' provided by the United States Geological Survey after major earthquakes.

Uruguayan Risk Transfer Mechanism

Key parties involved

World Bank, Administración Nacional de Usinas y Transmisiones Eléctricas (UTE, Uruguayan state hydropower company), Government of Uruguay, Swiss Re, Allianz

Background and description

Uruguay has previously had a high dependency on hydropower, representing up to 90% of its energy production in some years, even if energy diversification has taken place more recently (Low Carbon Power - Uruguay, 2025). In the early 2010s, its reliance on hydropower rendered it vulnerable to pricing changes, particularly under uncertain future climate scenarios. A dry year meant that Uruguay relied upon the importing of crude oil and electricity from Argentina and Brazil, which drained the national budget. In 2012, water shortages caused the costs of supplying electricity to reach a record of USD 1.4 BN, ahead of UTE's original projections of USD 0.95 BN (Artemis, 2013).

The proposed solution used parametric insurance, with the payout triggering once the water level falls below a pre-determined point, based on daily rainfall data captured from 39 weather stations. The value of the trigger was dependent on drought severity and a six-month daily average of crude oil prices. The payout was intended to purchase alternative energy to make up for hydropower shortages, which reduces budget uncertainty and is easily replicable for other renewable sources.

Impact

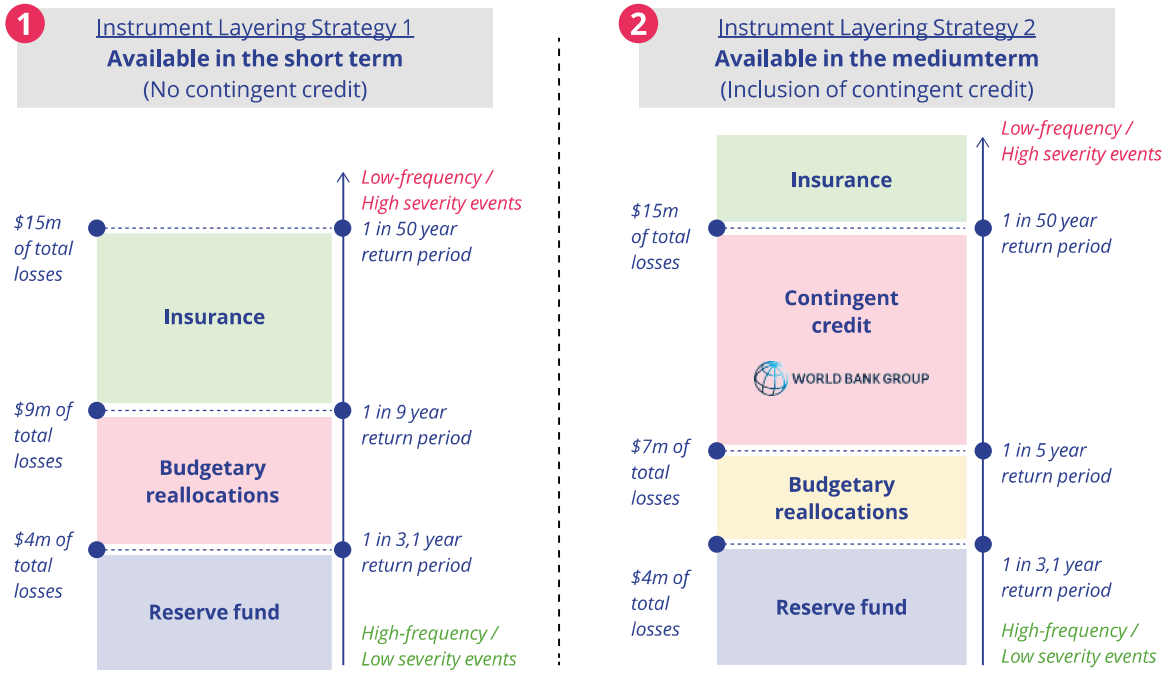
This scheme represented the largest ever energy risk transfer to protect from drought risk, totalling a USD 450 MN weather and oil price insurance agreement for UTE (World Bank, 2015). The energy company was insured for 18 months: the period from January 1st 2014 to June 30th 2015. It helped to smooth potential price volatility and prevent price shocks being passed to end consumers.

Key learnings

- The use of two combined metrics, water levels and oil prices, shows how insurance products can be tailored to meet the exact needs of clients, in this case transferring the knock-on risk of high oil prices during low generation.
- Initial conversations began in 2009, and the solution was executed in late 2013, highlighting the long development and sales cycle for such large and complex transactions.

"Combining protection against the risk of drought and high oil prices is something that works particularly well for hydropower companies, and it's the first time we have seen a public utility use this type of tool. This transaction is a good example of how we can focus our financial and technical expertise, combined with experiences in other countries, to deliver solutions that meet specific client needs." - Madelyn Antoncic, Vice-President and Treasurer of the World Bank

Value for Money (VfM) analysis of a sovereign insurance solution for the Government of Lesotho



Overview of a possible risk layering strategy for Lesotho in the short and medium term.
Graphic: AXA Climate (2023)

Key parties involved

World Bank, AXA Climate, Government of Lesotho

Background and description

The Government of Lesotho mandated the World Bank to develop a disaster risk financing strategy to protect micro, small and medium enterprises (MSMEs) against severe drought. AXA Climate first developed a drought risk model and prototype macro-level parametric insurance product linked to the financial impacts of droughts to MSMEs. This prototype insurance product was then evaluated alongside the various sovereign financial tools that Lesotho has access to, to find the optimal layering of instruments that was most cost efficient. The tools evaluated included: budget reallocations, contingent credit, humanitarian aid, parametric sovereign insurance, and commercial borrowing.

continued

Impact

- The project provided Lesotho with risk-informed disaster risk finance layering strategies for different drought return periods. This supported policy decision making by indicating at what return period it was most cost efficient to integrate insurance.
- A prototype of a suitable parametric insurance product was developed, which would be fit to cover the funding gaps identified in the study of disaster risk financing strategies.
- Additionally, local capacity was strengthened through targeted training sessions conducted for the Ministry of Development Planning and Finance (MoDPF). The risk layering tool was provided open source to the Government to enable them to update parameters and autonomously adjust the modelling in future.

Key learnings

- Agriculture-related MSMEs by far face the greatest drought risk, in comparison to other sectors such as textile and hospitality which are more exposed to severe water scarcity events. The financial compensation to MSMEs should thus vary per sector.
- A layered financing approach combining budget reallocations, reserve funds, as well as contingent credit and insurance was recommended for more cost efficient drought management.

IDRIMA (Integrated disaster Risk Management Alliance)

Key parties involved

IDF members (insurance, reinsurance, broker) ; Utilities (energy, water, infrastructures) and public banks ; AFD Group

Background and description

The alliance between the AFD Group and the IDF, called IDRIMA, aims to promote collaboration between the insurance industry and DFIs in offering tailored and comprehensive risk management solutions against climate risks. The ambition is to combine expertise and financial solutions in order to provide sovereigns, sub-sovereign-like municipalities, state-owned utilities and banks with comprehensive climate risk analysis, advice and response to their protection needs.

Under IDRIMA, the IDF and AFD Group collaborate to identify one-off initiatives aimed at testing the feasibility of different joint solutions (grants, loans, assets financing and default protection and risk transfer mechanisms) aimed at strengthening resilience. Under the IDRIMA initiative, the AFD Group identify, based on its portfolio and country expertise, different operational cases to collaborate on with interested IDF members.

IDRIMA is supporting:

- **Policy Dialogue:** better integrating insurers' expertise into policy dialogues, offering insights on DRR measures.
- **Default Protection Cover:** investigate ways to design and offer protection against sovereign and sub-sovereign defaults in the event of major climate events.
- **Public Asset Financing and Protection:** test utilities' appetite for portfolio-level protection for priority assets against climate risks and financing premiums for protection implementation.

Impact

- A targeted 8-10 pilots will be developed in the next few years to demonstrate how to better combine expertise and financial solutions from PDBs and (re)insurance actors.
- Strategic infrastructure will be better protect and public utilities more resilient.
- Public Development banks will be able to provide they clients with resilient debt clause.

"Signed at the IDF Summit 2024, the IDRIMA Initiative is a unique strategic partnership that aims to strengthen the long-term resilience of sovereigns, sub-sovereigns and public utilities in the Global South, to the impacts of climate disasters. The AFD Group and IDF members will join forces to provide climate risk assessment and comprehensive financial and risk transfer solutions to contribute to bridging the adaptation finance and protection gaps of the AFD clients." - Céline Boulay, Expert Climate Disaster Risk Finance and Insurance, AFD Group

Climate Resilient Debt Clauses (CRDCs)

Nassa, Bahamas.
Photo: Nicolai Lehner Birk | Shutterstock

Key parties involved

World Bank, Caribbean sovereigns, multilateral and bilateral development banks

Background and description

A concept designed by the Inter-American Development Bank (IDB) and later adopted by the World Bank, the mechanism is designed to support vulnerable countries where climate change-related extreme weather has a disproportionately negative effect (World Bank, 2024). These countries include:

- IBRD and IDA Small State Economies[10]
- Members of Small States Forum[11]
- Small Island Developing States as defined by the UN[12]

Following a natural disaster, CRDCs help maintain a country's economic stability by allowing governments to allocate resources directly to recovery efforts, rather than repaying debt (UK Government, 2023). Initially, the IDB was the only MDB to offer a form of CRDC in its lending (UK Export Finance, 2023).

continued

10 There are currently 78 sovereigns eligible to consider IDA resources – eligibility is based upon GNI per capita being below an established threshold (USD 1335 as of fiscal year 2025) (IDA, 2025).

11 This includes 50 sovereigns (World Bank, 2025).

12 This includes 57 sovereigns (United Nations, 2023).

The principle underpinning CRDCs is that sovereign debt repayments on loans are paused if a climate parameter is breached. They are designed for low frequency, high severity events (World Bank, 2024). Additional interest (i.e. interest on interest) is still applicable, but any deferred interest is usually segregated within the original loan balance.

Applicable climate parameters are currently limited to:

- Tropical cyclones/hurricanes, where reported maximum sustained windspeed must be 178km/h over a one-minute average, or 160km/h over a ten-minute average
- Earthquakes must have a reported moment magnitude of greater than or equal to 7.0, and the reported depth less than or equal to 175km
- Significant damage of greater than or equal to 10% of the country's GDP that does not fulfil the above triggers. The assessment of damages is conducted by the World Bank's 'Global Rapid post-disaster Damage Estimation' (GRADE)[11] approach, with results produced within two weeks after a disaster (USAID, 2024; Gunasekera *et al.*, 2018)

If a borrowing country is hit by a natural disaster, it then must declare a national emergency and submit a request to the World Bank to exercise payment deferral of up to two years. The World Bank will consider if any of the triggers have been met and then activate the CRDC if required.

CRDCs are offered to new loans by eligible countries or existing loans with a remaining repayment period of higher than five years. The feature can be activated once per loan life at any point between the first loan payment until five years before the final loan repayment.

Impact

The clauses have already been implemented in some eligible Caribbean islands through the World Bank. Agence Française de Développement has since then adopted Climate Resilience Debt Clauses for some specific countries.

Key learnings

While the parametric triggers employed activate a loan clause, as opposed to an insurance policy, their construction still affords valuable lessons:

- Technical considerations must be balanced with political realities when establishing fair parametric measures. In other words, it is important to consider the specific circumstances of a country when constructing the climate parameters in the trigger.
- Though CRDCs are free to eligible borrowers, they do still require additional interest payments for the deferred loan, highlighting the requirement to balance consideration of the benefits of risk transfer and affordability.
- If climate modelling is limited in some countries, there is a suggestion to use non-quantitative metrics in place of modelled parameters. For example, the declaration of a national emergency could be used as a threshold. These "soft triggers" show a wide range of potential parametric structuring options, whether in insurance, loans or other instruments.

11 This is a remote, desk-based damage assessment that can be deployed soon after a disaster, using innovative hazard risk modelling (Gunasekera *et al.*, 2018).

De-Risking, Inclusion and Value Enhancement (DRIVE) of Pastoral Economies in the Horn of Africa

African woman transporting fresh water
Photo: Riccardo Mayer | Shutterstock

Key parties involved

World Bank, ZEP-RE, Governments of Ethiopia, Somalia, Kenya and Djibouti

Background and description

Livestock is the main source of livelihood for many in the Horn of Africa and climate change is already affecting pastoralist ways of life across the continent, with drought leading to livestock either dying or being sold at low prices. A drought that causes a pastoralist to lose half of their livestock can take up to 10 years to recover from, leading to reductions in welfare, nutrition, and income. Beginning in June 2022, the World Bank secured USD 360.5 MN in funding to improve the resilience of pastoralists in four countries – Djibouti, Ethiopia, Kenya and Somalia - across the Horn of Africa (World Bank, 2025). It builds upon existing drought insurance projects in Kenya (Kenya Livestock Insurance Program) and Ethiopia (Satellite Index Insurance for Pastoralists) (Disaster Risk Financing & Insurance Program, 2017; World Food Programme, 2019; Robakowski and Roberts, 2024).

continued

The DRIVE programme uses World Bank funding to provide an affordable and commercially viable mix of financial products and services that include parametric insurance, savings and (contingent) credit to pastoralists.

The project is split into various components, with funding provided to the governments of Ethiopia, Somalia, Kenya and Djibouti via either loans or grants:

- Component 1: Involves targeting pastoralists organized within livestock production groups. The rationale is to demonstrate to pastoralists the benefit that insurance (e.g. livestock index insurance) can provide in stabilising livestock production levels during drought. The suggestion is that pastoralists will then be more likely to contribute toward the cost of insurance, with the premium initially being subsidised.
    - In Somalia, this approach was implemented by ZEP-RE. (World Bank, 2022).
- Component 2: Connecting pastoralists to markets by upgrading livestock value chains and facilitating cross-border trade. In Somalia, this was implemented by an existing Project Implementation Unit (PIU) under the SCALE-UP[13] project (World Bank, 2022).

Impact

To date, more than 470,000 pastoralists in the region have been covered by the index-based livestock insurance product since the October 2022 rainy season. The product protects pastoralists from the effects of drought caused by delayed rainfall onset during the long rains (March start) and short rains (October start) each year. By December 2024, 3 million pastoralists and their dependents were covered, including over 10,000 individual pastoralist groups.

Key learnings

- De-risking through collaboration can involve a suite of different financial products and services to support pastoralists in managing their climate-related risks.
- Continuous monitoring and evaluation on both components is key to ensure the pastoralists and their groups benefit from the proposed financial products and services.
- Effective project implementation requires improved financial literacy enabling the pastoralists to make informed decisions on the financial services available to them.
- DRIVE's diverse partnerships have not only facilitated knowledge exchange and enhanced operational efficiency but have also enabled economies of scale, optimized resource utilization and expanded the project's impact.

13 See https://moci.gov.so/scale-up-project/" for more information.

National Agriculture Development Program, Democratic Republic of Congo (DRC)

Key parties involved

World Bank, AXA Climate, Autorité de Régulation et de Contrôle des Assurances (ARCA), Mayfair Insurance DRC, Activa Assurances RDC, Global Pionner Assurance, Rawsur, Société Financière D'assurance, Société Nationale D'assurance, SUNU Assurance ZEP-RE, World Food Program (WFP).

Background and description

The National Agricultural Development Program (PNDA) is one of the most ambitious agricultural modernization initiatives in Africa. Led by the Ministry of Agriculture of the Democratic Republic of Congo with technical and financial support from the World Bank, it aims to benefit hundreds of thousands of farmers in its first phase, with a total budget of approximately USD 1.5 BN over 15 years covering 15 provinces. Its pilot phase focuses on three provinces (Kasaï, Kasaï-Central, and Kwilu) and nine territories.

The PNDA notably aims to modernize agricultural practices to improve farmers' income and food security. For this purpose, farmers will receive technical packages (i.e. a combination of seeds, inputs, equipment, and guidance) designed to boost yields. The program will cover the extra cost of these packages compared to traditional farming methods.

To protect farmers from climate-related risks, the PNDA plans to provide compensation in case of drought or excessive rainfall through a parametric insurance product. This product will ensure quick payouts to farmers, covering the additional cost of technical packages, thus allowing them to reinvest in modern production practices for the next season.

Impact

The main impact of the project is to protect approximately 385,000 farmers for two agricultural seasons each. The insurance premium will be fully covered by the program for the first four years, funded through a USD 20 MN grant from the Global Risk Financing Facility (GRiF, now the Global Shield Financing Facility). Additionally, for non-climate-related shocks, another budget line from the World Bank — the Credit Emergency Response Component (CERC) — could be activated to support farmers.

An additional impact of the project is the capacity-building of seven local insurers in parametric insurance. The insurance product was developed collaboratively with these seven insurers as well as the insurance regulator ARCA, regional reinsurer ZEP-RE, the World Bank, and the WFP. Based on options presented by AXA Climate, collective decisions were made, and the regulatory authority (ARCA) later accredited the product.

Key learnings

- It is possible to design an insurance product covering two risks: drought in the first part of the season, excess rainfall in the second part.
- Involving the insurance regulatory authority early on helps streamline the product approval process.
- To reach scale, it is efficient to embed parametric insurance into pre-existing programs, notably to benefit from economies of scale in product distribution which enhance its sustainability.

AFD capital support to ZEP-RE

Woman harvesting cultivated seaweed in the shallow, clear coastal waters of Zanzibar, Tanzania
Photo: EcoPrint | Shutterstock

Key parties involved

ZEP-RE (public-private owned reinsurer) and AFD (a French State-owned PDB/DFI)

Background

ZEP-RE is a public-private reinsurer historically anchored in Eastern Africa. In recent years, the entity developed a strategy to diversify its activities both by sector – exploring agriculture and infrastructure, and geographically – willing to deliver coverage and impacts in Western Africa.

In order to allow such extension of activities, AFD provided ZEP-RE with EUR 10 MN Tier-2 debt financing, with specific characteristics allowing the reinsurer and its rating agency to qualify it as a quasi-equity.

In addition, AFD provided a EUR 0.3 MN grant earmarked for implementing a technical assistance programme for supporting a capacity-building initiative to four insurance supervisors in Eastern and Southern Africa (Tanzania, Malawi, DRC, Zimbabwe).

Impact

- This financing augmented ZEP-RE's capacity to take on climate risks, both through infrastructure insurance and by developing agriculture microinsurance index products.
- Capacity building made insurance supervisors better equipped to encourage an increased insurance penetration rate in their jurisdictions, particularly for the most vulnerable communities, and to stress-test climate and epidemic shocks on the financial stability of the insurance sector.

Key learnings

- PDBs and (re)insurers can have aligned mandates when it comes to promoting financial inclusion and enhanced resilience to climate/shocks.
- PDBs can use innovative financial instruments such as Tier 2 facilities in order to provide funds to (re) insurers in need of capital.

Flood Insurance for Target Cities in Argentina (FITCA) Scheme

Floods in San Antonio de Areco, Buenos Aires, Argentina
Photo: Wirestock Creators | Shutterstock

Key parties involved

InsuResilience Solutions Fund, Hannover Re, SCOR, Guy Carpenter, La Segunda Cooperativa de Seguros, City Government of La Paz, Tres Arroyos, Nogoyá and San Jorge

Background and description

Argentina is highly vulnerable to river flood events and this is only likely to increase. In 2016, Argentina experienced a series of floods that affected over 10 million people, but there were no pools of emergency funding available to manage the immediate- and longer-term impacts of the disaster (InsuResilience, 2023). While the Argentinian government has developed some physical flood alleviation strategies, these have not progressed significantly. Instead, the FITCA scheme proposes an index-based insurance product.

Concentrated in La Paz, Tres Arroyos, Nogoyá and San Jorge, the insurance in question covers riverine and/or flash flooding, with data obtained from weather stations or satellite data, and the municipalities themselves are the policyholders.

Impact

The project was estimated to be implemented from the period February 2023 to August 2025, with a grant totalling over EUR 580K. The rapid nature of the payouts mean that swift disaster recovery assistance can be provided to vulnerable populations (International Cooperative and Mutual Insurance Federation, 2025). The expected beneficiaries of the scheme, based on submission documents, were 148,445 by the project's completion (InsuResilience, 2023).

Key learnings

- Insurance can be presented as a capital enabler, rather than simply a necessity – in other words, using insurance as a way of providing reassurance to investors that if disaster were to strike, their investment (repayments) would be protected. Similarly, the insured cities have the confidence that they would receive adequate funds for post-disaster reconstruction.

Practical considerations

As the examples show, there are many different project and loan types in which innovation from the insurance industry and lenders can work together successfully. In this section, we outline practical considerations for bankers and investment officers when looking to engage with the insurance industry for collaboration opportunities.

Insured party and customer access

The insured party can either be the lender or the finance recipient. Both can be attractive options, depending on the specifics of the risk and the desired outcome. When **insuring the lender**, insurers can benefit from a mature risk appetite, high levels of experience in procuring insurance, and a potentially higher budget for risk transfer. When **insuring the loan recipient**, the lender can play the role of distribution channel or facilitator between insurer and client and allow the insurer to benefit from existing client relationships, local understanding and insight into current customer needs. The insurer can also benefit from bringing in risk reduction and adaptation measure advisory services. Both approaches come with distinct benefits and should be considered.

Type of collaboration

Most collaboration types detailed in this whitepaper take one of three forms – default mechanisms, infrastructure protection or revenue protection:

- **Default mechanisms**, such as Climate Resilient Debt Clauses or Shock Resilient Loans, are a natural extension of insurers' work with credit insurance, interacting with a loan or other financial instrument to provide an extra layer of security for lender, beneficiary, or both.
- **Infrastructure and asset protection**, such as the Nepalese Hydroelectric Dam project, works to protect against and reduce risks to the assets through integration of risk reduction measures during build and operational phases of a project. These assets can be highly concentrated, such as renewable energy facilities, or highly distributed, as in the case of farmer and pastoralist protection, which effectively protect the "asset" of country- or region-wide crop and livestock levels.
- **Revenue protection**, such as the Uruguayan Risk Transfer Mechanism, seeks to cover the asset owner during periods of low production against lost revenue (or, in the case of Uruguay, the need to replace the lost production with another source). These products, as well as integration of risk reduction measures (also improves certainty of returns for lenders), a natural consideration for renewable energy projects where output can be directly correlated with climate-influenced factors such as rainfall, can be used to provide increased certainty of returns for lenders.

However, these are not hard and fast categories, and certainly not the only types of products and protection that the insurance industry and lenders could work on together. Ample opportunities exist beyond these, **and all options should be considered**, using lessons the insurance industry have learned from their work across countries and industries. Parametric insurances can go beyond asset protection, reacting to extreme weather preventing tourism through a footfall index, effectively covering an element of transition risk. Contingent loan products, with an automatic right to take out financing, can be developed to meet the needs of developing countries, with insurance helping to reduce credit risk. Products that hedge against unfavourable exchange rates or commodity prices (such as the oil price-linked payout in the Uruguay case study) can be invaluable to removing downside risk. Further, the insurance industry and development banks can work together more closely on their asset base, using insurer capital to support development through direct investment. Lastly, the insurance industry can help build more climate resilient assets, increasing the likelihood of loan repayment and more sustainable financial returns through integration of risk reduction and adaptation advice through their risk engineering capabilities.

"Innovation isn't about coming up with a completely new idea – it's about finding something that works in one area and using it somewhere else" - Interviewee

Insurance type

For infrastructure and asset protection, the key choice in determining the type of insurance is between **indemnity** and **parametric** insurance:

	Indemnity-based insurance	Parametric-based insurance
Definition	Compensates the insured for actual losses incurred, based on the value of the loss at the time of the claim	Provides predetermined payouts based on specific triggers or parameters, such as weather events, rather than the actual loss incurred
Benefits	Well-understood "traditional" product Loss estimated in the field and adjusted face-to-face Provides opportunities for direct consideration of implemented risk reduction measures as part of risk pricing methodology	Limited moral hazard Very fast payout calculation and disbursement Reduced management costs
Challenges	Moral hazard Costly loss adjustment and management Risk management is a pre-requisite	Risk of misalignment between event and loss incurred (basis risk) Requirement for granular data Unfamiliar product
Examples	Disaster Response Emergency Fund	Nepalese Hydroelectric Dam Project DRIVE program

Both indemnity and parametric insurance have important roles to play in development finance applications.

Parametric insurance is a natural fit for loans – its pre-agreed triggers and fast payouts allows liquidity injection and a focus on the incident itself. It allows tailoring to individual countries or project cases based on risk profiles. However, it relies on accurate, reliable and well-calibrated parameters (such as rainfall, river levels or maximal windspeed) and a high degree of expertise to set up.

Indemnity insurance ("traditional insurance") also has an important role to play. Accurately pricing indemnity insurance for assets requires a high level of risk and vulnerability analysis, especially for complex assets with both property damage and business interruption risk. Going through this analysis process, and the pricing of insurance, aligns incentives between lender and recipient and encourages better risk management practices.

Amount of capital provided

Low:

Medium:

High:

Definition		
Small loans may not attract sufficient interest from insurers to achieve scale and diversification, but can be a great first step to establish an underwriting process with smaller stakes.	Bundling together smaller loans into a portfolio is an attractive proposition. The portfolio effects allow for control of the total likely exposure, while presenting a large enough volume of premium to justify new product development or approaches.	At sovereign- and sub-sovereign level, risk transfer needs to take into account systemic default risks, and economic shocks. This scale is attractive to insurers, and larger institutions are likely to have a better understanding of available insurances, which can reduce the learning curve required.
Collaboration benefits		
Incubation	Diversification	High volume

Source of funding for premium

A key consideration for loan recipients, especially those with limited balance sheets, is how to fund insurance premiums. Lenders should consider the following options:

Insurance premium grants: The fact that insurance acts as an enabler for projects or assets being successfully built and operational means that it can be an attractive proposition to lenders to target their grant portfolios to insurance, as a "multiplier" of the impact of their loans. As discussed in Rethinking Premium Support (Centre for Disaster Protection, 2024), programs should be prepared to prove the efficacy of donated premiums, be transparent at all stages about how funds are used, and – in the case of sovereign lending especially – shift decision-making autonomy to the financing recipient however the sustainability of premium support should always be questioned.

Interest rate concessions: Where insurance or risk reduction measures create an appreciable reduction in default risk, lenders could reduce interest rates accordingly, leading to a marginal increase or even a decrease in overall lending cost for those recipients with increased insurance and increased investment in risk reduction. Resilience bonds where interest rate is adjusted after measurable investment in risk reduction could provide long term cheaper financing

Recipient out-of-pocket expense: Recipients of finance may have means to pay for insurance premium without concessions or grants. Some recipients may see value in paying for premium out-of-pocket, especially when cost-benefit analysis shows tangible benefits for all parties.

Challenges to increased uptake

As highlighted, there are several challenges to increased collaboration between the insurance industry and lenders, and to adoption of innovative risk financing instruments. These include:

- **Lower levels of risk maturity:** Lenders, borrowers and asset managers in developing countries may have lower levels of risk maturity, especially for asset types which may be being deployed in the country for the first time. This may mean that risks are underestimated or not fully controlled, leading to risk transfer being more expensive. This is both a challenge to increased uptake, and a compelling reason to involve the insurance industry earlier and their risk engineering capabilties to better understand those specific risks and how to mitigate them. Using the risk engineering capabilities of insurers and brokers will allow greater risk awareness and control.
- **Lack of funding for insurance premiums:** Tight budgets, challenged liquidity, lack of product familiarity and competing demands for funding can mean that the availability of premium funding is low. As previously outlined (in **Practical considerations**), the insurance industry and lenders should look to all sources of funding, as well as giving credit where possible for reduced overall loan risk due to insurance. Investments in risk reduction measures early on can help maintain premium stability in the face of increasing climate risks and help manage premium financing requirements.
- **Product complexity:** Insurance can be a complicated instrument, and parametrics or custom products even more so. Education is a challenge, especially when a complex product has to be explained and then relayed within organisations to Board members or elected officials for approval. Long product development cycles can be stop-start as members leave institutions or Governments change. There is no silver bullet for this – insurers will have to become comfortable with a dual role as educators as well as underwriters. The success of the case studies highlighted in this paper shows that this is possible to do successfully, but even in some of these the lack of financial literacy for recipients prevents full realisation of a project's ambitions. Insurers should make sure to give adequate time and importance to product education (for example, the work done by the Insurance Development Forum), and in some cases become comfortable with longer sales cycles, especially in tripartite discussions between insurer, lender and recipient.
- **Timings:** There is often a mismatch between project timelines, loans, and the standard insurance sales cycle. This disparity becomes even more pronounced for large-scale climate infrastructure and public sector projects, where long origination and approval cycles can be less attractive for underwriters, who typically prefer fewer than 18 months between initial engagement and inception. This is not just an issue for insurers. Municipalities can be hesitant to adopt cat bonds as they typically take longer than an election cycle to fully implement, for example. Some of this may be resolved by mutual education, but there is clearly more to do when it comes to streamlining project timelines, bringing in risk engineering capabilties of the industry in early and creating innovative products that fit the political context of the recipient.

"[New product development] takes a long time - whatever time you think it'll take, double it and you're still underestimating" - Interviewee

- **Lack of common language:** Similar to 'Product complexity', banking, government, and insurance have advanced and technical vocabulary, with some terms even having clashing meaning. Factors as simple as a different interpretation of a 'non-frequent' return period for a climate peril can complicate pricing and misalign project expectations. Even among MDBs a degree of translation is required when attempting to more closely integrate climate risk into lending. To collaborate effectively, simplified – or at least unambiguous – language in discussions is paramount for bridging the communication gap.

"When it comes to climate risk and its likelihood, insurers and development institutions speak a different language" Interviewee

The path forward

"Risk transfer should not be seen as a cost, but as a benefit" - Interviewee

The need for increased collaboration between the insurance industry and lenders is evident, and there are concrete examples of how this can be done successfully, as well as clear learnings and challenges that must be navigated. Moving forward, the insurance industry and lenders should:

Adopt a common language: The insurance industry and lenders should work closely to increase their understanding of each other's products and terminology. Even terms like "capacity" can mean very different things depending on context – adopting a common language and avoiding terms such as "parametric insurance" in favour of lending-focused terms like "Liquidity instrument" can increase mutual understanding and shorten product development and implementation times.

Strive for mutual education: Even when adopting a common language, complex insurance and risk transfer takes time to scope, design and approve. National governments and other project stakeholders also have their own priorities to consider when adopting new products. It is therefore critical that the insurance industry, lenders, and recipients look to educate each other throughout the project cycle so that the partnership is less of a transaction and more of a mutual learning process to improve future engagements between the public and private sectors.

Position climate risk transfer as investment protection, not a cost: When unfamiliar with insurance, it is easy to perceive it solely as a non-essential cost, particularly in the Global South where parliamentary budgets may be tighter and where priorities may be in other places. However, risk transfer solutions should instead be positioned as growth enablers – they give the policyholder greater understanding of their risk exposure and risk management efforts and the security that their asset is protected through integration of risk reduction measures and the lender comfort that potential natural hazards will not prevent a return on investment.

Engage early and embrace change: Lenders should look to involve the insurance industry early within loan processes, allowing mutual understanding of the specific circumstances for each placement and loan recipient. This gives time for capacity building, tailoring of solutions and incorporation of insurance-friendly design benefits and risk reduction measures. Equally, insurers should embrace a longer sales cycle than normal to adapt to political and practical constraints.

Aim for commercial sustainability: While development banks will have different remits to the private sector, schemes should be built with a path to commercial viability in mind, to allow schemes to be expanded, replicated and grown. This should be a design consideration from the outset, especially for projects that will require ongoing support from the private sector.

Blend loans and grants to prove insurance benefits: With limited grant budgets and an increasing requirement for infrastructure financing, lenders should look to incorporate the wider set of insurance capabilities, such as risk reduction and risk engineering, earlier on in the process to improve financial returns in the face of increasing climate risks and use grants for insurance premiums to supplement loans, making their available loan capital go further and maximising its benefit for recipient countries.

Embed risk management into lending: Lenders and borrowers should use early and proactive engagement with the insurance industry to build the highest standards of risk awareness and risk reduction into asset management, using the risk engineering expertise offered by the insurance community to ensure future insurability and bankability of new asset development.

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