Financial Aggregation Blueprints for Urban Climate Infrastructure - Annex 3: Municipal Pooled Insurance Blueprints

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CITIES CLIMATE FINANCE LEADERSHIP ALLIANCE

CLIMATE POLICY INITIATIVE

URBAN INFRASTRUCTURE INSURANCE FACILITY

1. CONTEXT

Latin America is the world's most urbanized region, with 80% of the population living in cities. Cities in Latin America and the Caribbean are vulnerable to a range of climate hazards – including heatwaves, drought, flooding, and tropical storms. Despite growing risk from increasingly frequent and severe threats associated with climate change, cities lack access to risk-transfer mechanisms like parametric or indemnity insurance for climate-related hazards. This leaves cities reliant on municipal budgets or emergency transfers from central governments to pay for disaster response and recovery when shocks occur, which can lead to delays in getting financial support to those affected by disasters and can put a strain on budgets, forcing governments to move finance away from operational expenditure related to priority services and longer-term capital expenditure.

2. CONCEPT

The Urban Infrastructure Insurance Facility (UIIF) aims to provide ten cities in Latin America and the Caribbean with a pooled insurance facility providing tailored insurance products and a regional risk pool to manage climate risks and support disaster risk management. The UIIF is in its initial stages and is expected to be operational in 2025.

Financed by KfW Development Bank on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the UIIF is implemented by ICLEI - Local Governments for Sustainability. As a pioneering initiative, it will use ICLEI's cities network to aggregate the insurance demand from Latin American municipalities and establish a regional insurance pooling facility backed by reinsurance. This setup aims to help insurance companies spread their risks among cities with different vulnerabilities and capacities to respond to climate hazards, enabling them to hedge their risk against high payouts to individual cities and offer them lower premiums.

ICLEI and partners are currently selecting participating cities, designing the financial mechanism of the pooled insurance financial mechanism, and designing the technical specifications for insurance policies in the UIIF's participating cities.

3. INSTRUMENT MECHANICS

Setting up and operating the UIIF will follow three stages[1]:

Stage 1: Cities and hazard selection

1 This section outlines the preliminary design for the UIIF, which is subject to change as ICLEI tests the initiative's feasibility over the next years.

- **Cities selection**: 10 cities will initially be selected for the UIIF – cities will represent the region's diversity in terms of physical and urban environments and exposure to different climate hazards.
- **Climate hazard selection**: Cities will decide the climate hazards they want to be insured against - ICLEI and partners will provide technical studies to help cities understand each hazard's frequency and potential losses.

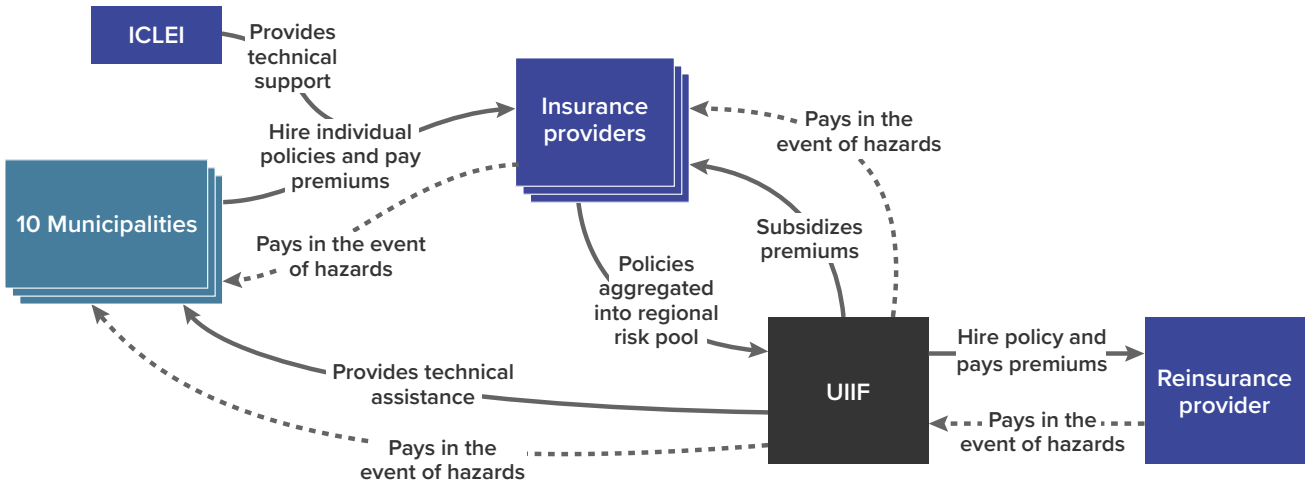
Stage 2: Insurance buying and capacity-building

- **Insurance selection**: Cities will select individual policies from local primary insurance companies.
- **Premium payment**: Cities will pay annual premiums, partially subsidized by UIIF, for up to 3 years.
- **Insurance pooling**: With support from a specialized agency, all insurance policies will be aggregated into a regional insurance pool (UIIF), which will buy a group policy on reinsurance markets and pay premiums to an international reinsurer.
- **Capacity-building**: UIIF will help cities strengthen their disaster risk reduction and disaster risk management policies, strategies, and actions for more comprehensive risk management strategies for pre-, during-, and post-disaster response.

Stage 3: Climate hazard response

- **Insurance payments**: Primary insurance companies will make payments to cities affected by the hazard following the hired insurance policy[2].
- **Reinsurance payments**: If a certain number of individual policies deliver payments, the reinsurance company will pay UIIF, which will compensate cities and primary insurance providers.

Figure 1: Proposed structure of the UIIF pooled insurance.



2 Most likely, policies will have parametric thresholds (e.g. a certain amount of rainfall, flooding, damaged infrastructure from a tropical storm, etc.), which will automatically trigger payments.

4. EXPECTED IMPACT

UIIF is expected to have the following impact:

- **Insured population:** 7.5 million vulnerable people covered by insurance.
- **Insured infrastructure:** EUR 100 million (USD 109 million) worth of insurance coverage.

5. KEY TAKEAWAYS

Although ICLEI and its partners are still implementing UIIF, some key takeaways from their experience already emerge. This section divides takeaways into "Challenges" and "Success factors."

5.1 CHALLENGES:

- **Lack of examples to learn from.** As a first-of-its-kind, ICLEI and its partners must spend significant resources developing and fine-tuning the instrument mechanics to ensure it is fit for purpose and capable of attracting the right mix of municipalities as well as private insurance and reinsurance companies.
- **Developing cities' shared vision and political will**. Developing UIIF requires bringing together a diverse range of cities strongly committed to enhancing climate resilience with a shared vision and understanding of disaster risk management strategies and actions. Selecting, training, and engaging these cities requires time and financial resources from UIIF.

5.2 SUCCESS FACTORS:

- **City network leadership in selecting cities and cities' commitment.** Due to its long-term leadership and understanding of the region, ICLEI is well-positioned to bring the right mix of municipalities committed to fighting climate change (e.g., diversity in the physical and urban environments and climate vulnerability) to participate in the pooled insurance and engage them throughout the process.
- **Support for climate hazard selection:** One of the activities that will be carried out as part of UIIF's operation is the technical support provision by ICLEI and partners to cities to help them understand their vulnerability to different hazards and their potential impact. This activity is expected to strengthen cities' awareness and knowledge of their exposure to climate hazards, equipping them with essential tools to negotiate insurance products with primary insurance providers.
- **City officials' capacity-building.** Another activity foreseen in UIIF operations is the training of city officials to help cities enhance their disaster risk reduction and management policies. Building officials' capacity is expected to improve municipalities' responses to climate hazards, increasing the effectiveness of the insurance products provided through UIIF.

FURTHER READING:

1. ICLEI (2022). Urban Infrastructure Insurance Facility. Available at https://iclei.org/UIIF/

MUNICIPAL RISK POOL IN SOUTH AFRICA'S WESTERN CAPE

1. CONTEXT

South Africa's Western Cape Province is vulnerable to various climate hazards, particularly flooding. The expected urban damage from flooding in the Western Cape is estimated to be USD 66 million annually, with 19,000 people affected annually (Pillay, 2020). As a result of climate change, the IPCC predicts that the frequency and intensity of flooding in Southern Africa will increase in the future (CDKN 2022). When disasters strike in South Africa, municipalities rely on emergency transfers from the central and provincial governments to fund emergency management. These payments often take too long to be sanctioned and released, hindering the ability of local governments to provide emergency support to citizens.

2. CONCEPT

The Municipal Risk Pool in South Africa's Western Cape (MRPWC) pooled insurance facility aims to provide 5 or 6 municipalities with parametric coverage against flooding. The Western Cape Provincial Government implements MRPWC in partnership with the University of KwaZulu-Natal, the International Development Research Centre, the Munich Climate Insurance Initiative, and Germanwatch. Still, at the design stage, MRPWC is expected to become operational by 2025 once final approval from participating municipalities is granted.

As the world's first sub-sovereign pooled insurance facility, MRPWC will be a special-purpose company owned[3] and managed by municipalities to share a pool of financial resources to provide funding for emergency management when a flooding disaster occurs. MRPWC will essentially operate as a co-owned insurance company providing policies to co-owning municipalities. By spreading the financial risk across the group of municipalities, the facility will be able to offer premiums lower than those negotiated individually by private companies.

Donor funding will be used for the initial capitalization and may also be used to subsidize premiums for municipalities in the initial years of operation.

3. INSTRUMENT MECHANICS

Once municipalities are selected, and the company is established, setting up and operating the MRPWC will follow two stages[4]:

3 Municipalities co-owning the company will be Board Members and operations will be led by dedicated technical and management staff responsible for day-to-day operations, risk modelling, underwriting and investment management.

4 This section outlines the preliminary design for the MRPWC, which is subject to change as it develops over the next years.

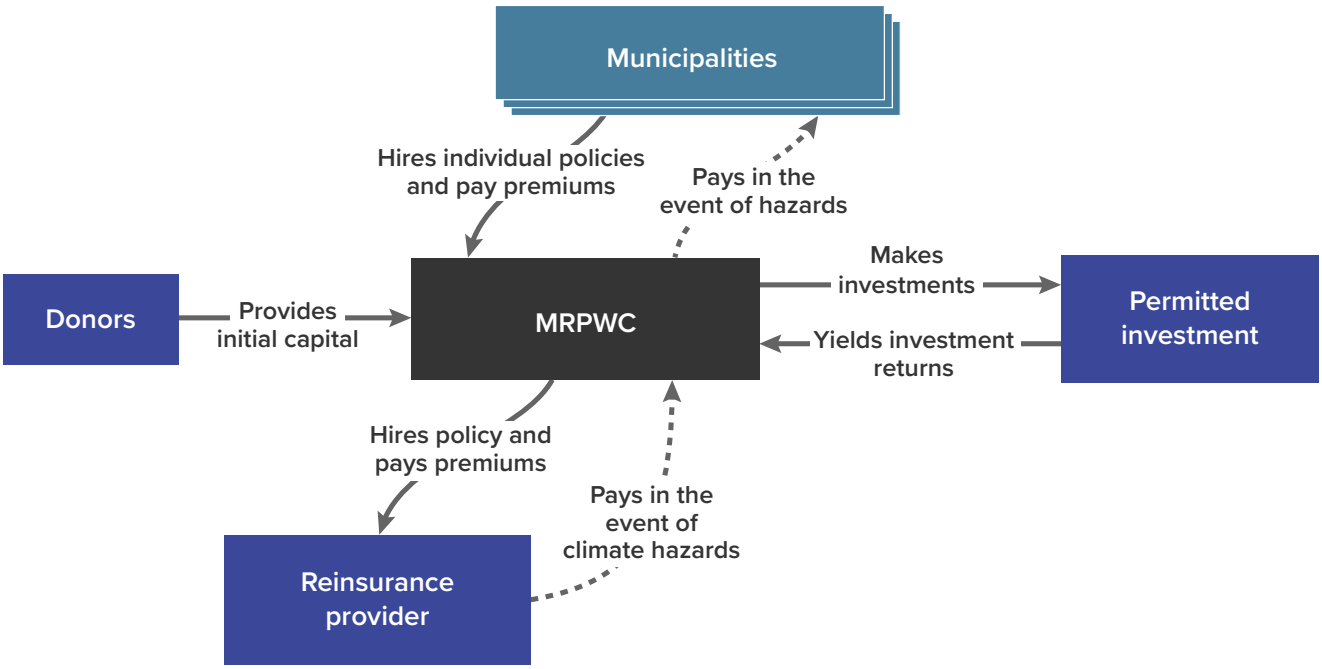
Stage 1: Insurance modeling and payment

- **Cities' flooding analysis**: Partners will model the likelihood of floods at different degrees of severity in each municipality (e.g., 1 in 15, 1 in 50, or 1 in 100 years) and classify them with a standard measurement to be used for comparison when floods occur (e.g., rainfall depth) to trigger insurance payment.
- **Insurance buying**: Municipalities agree to buy policies from MRPWC, paying annual premiums, which donors could partially subsidize.
- **Investment**: MRPWC will allocate the money from premium payments in permitted investments for return in order to grow its capital reserves.
- **Reinsurance**: MRPWC will purchase reinsurance coverage to pass some financial risks to the private market.

Stage 2: Climate hazard response

- **Insurance payments**: MRPWC will make payments to cities affected by flooding following the hired insurance policy – as it will provide parametric insurance, it is expected that finance will be suitable for early-stage disaster response (e.g., shelter, water, sanitation, and food) rather than longer-term reconstruction efforts.
- **Reinsurance payments**: The reinsurance company will pay MRPWC to compensate it for its transfers to municipalities.

Figure 2: Proposed structure of MRPWC's pooled insurance.



4. EXPECTED IMPACT

The specific impact metrics for the MRPWC have not yet been finalized. Nevertheless, it is expected to increase local technical knowledge on disaster risk reduction and management for municipal officials and enhance collaboration amongst regional and municipal governments in the Western Cape.

5. KEY TAKEAWAYS

Although Western Cape Provincial Government and its partners are still implementing MRPWC, some key takeaways from their experience already emerge. This section divides takeaways into “Challenges” and “Success factors.”

5.1 CHALLENGES:

- **Unsatisfactory enabling environment conditions.** Given the innovative nature of the MRPWC, its implementation under South African law is uncertain. A detailed participatory process is undertaken to understand the political and legal procedures required to establish the instrument. This process takes time and requires political commitment from regional and municipal leadership.
- **Expensive premiums.** Under the MRPWC, premium subsidies will be needed to ensure municipalities can participate in the instrument in the long term, as cities often face stretched budgets and competing priorities for municipal investment.

5.2 SUCCESS FACTORS:

- **Regional government leadership and city commitment**. Commitment and leadership from the Western Cape Provincial Government in establishing the pooled insurance facility play a significant role in engaging cities within the region and selecting the right mix of cities to participate in the financial instrument.
- **Partnerships with specialized institutions**. Collaboration between the Western Cape Provincial Government and the University of KwaZulu-Natal, the International Development Research Centre, the Munich Climate Insurance Initiative, and Germanwatch is expected to play a vital role in overcoming challenges and successfully designing and implementing MRPWC.

FURTHER READING:

1. CDKN (2022). The IPCC’s Sixth Assessment Report: Impacts, adaptation options, and investment areas for a climate resilient southern Africa. Available at https://cdkn.org/sites/default/files/2022-03/IPCC%20Regional%20Factsheet_Southern%20Africa_Web.pdf
2. Pillay (2020) Investigating the complementarity between risk pooling schemes and microinsurance products in extending coverage to the most vulnerable. Available at https://tdri.or.th/wp-content/uploads/2020/04/AFFP-Final-Report.pdf

3. IDRC (2022). Investigating the feasibility of municipal risk pooling as an adaptation finance measure. Available at https://www.idrc.ca/en/project/investigating-feasibility-municipal-risk-pooling-adaptation-finance-measure

4. Western Cape Government (2019). Western Cape Government piloting new climate change tool. Available at https://www.westerncape.gov.za/eadp/news/western-cape-government-piloting-new-climate-change-tool