



Global Shield
Financing Facility

**Disaster Risk Financing
& Insurance Program**



Measuring Progress: Lessons from the World Bank's Climate and Disaster Risk Finance and Insurance Program

February 2025



Photo: Quang Nguyen Vinh / Pexels



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Acknowledgements

The team acknowledges the support from the World Bank Disaster Risk Financing and Insurance (DRFI) program in the development of this brief, in particular Olivier Mahul (Global Manager, Climate Finance Mobilization, WBG) and Sumati Rajput (Senior Financial Sector Specialist, Disaster Risk Financing and Insurance Program, WBG) for their guidance and technical review and Sonal Chinchwadkar (Extended Term Consultant, Disaster Risk Financing and Insurance Program, WBG) for support with design and communications. The team would also like to thank the Global Shield Secretariat (previously known as the InsuResilience Secretariat), with whom the Global Shield Financing Facility program has regularly engaged in the last few years.



About this brief

This document summarizes learnings and insights related to measuring both interim results and longer-term impact of climate and disaster risk finance and insurance (CDRFI) programs. The findings are based on the World Bank's CDRFI work over the past decade, and both World Bank staff working in the disaster-risk-finance space and external practitioners may find these learnings useful when designing and evaluating their own programs.

Development practitioners widely agree that the long-term objective of CDRFI programs is to optimize the amount of pre-arranged finance that is in place to address the negative impacts of disasters, while steadily investing in risk reduction measures. Nonetheless, they often find it challenging to measure meaningful progress along the path towards this goal. Why? One reason is that disaster risk finance instruments are long-term investments, both in terms of resources and time. These instruments require a high level of technical expertise to develop and use, and they most often tend to be supplemented by ongoing awareness-raising and capacity building to demonstrate their potential value to partner governments. Many practitioners may struggle to choose indicators that adequately measure and convey interim progress prior to the instruments being in place and providing financial coverage.

Measuring the aggregate results of a CDRFI program with a global portfolio of projects operating across different contexts is even more challenging. Whether and how to set portfolio targets at the outcome level is likely to generate intense discussion. Outcome-level targets are good proxies for the kind of transformative impact any CDRFI program would aspire to achieve; they can also create high expectations among stakeholders and are often hard to meet in countries where the sociopolitical context changes regularly. In these environments, setbacks are expected but cannot be planned. Careful consideration of when and at what level to set targets (i.e., output versus outcome) will help create a more nuanced assessment of a CDRFI program's progress.

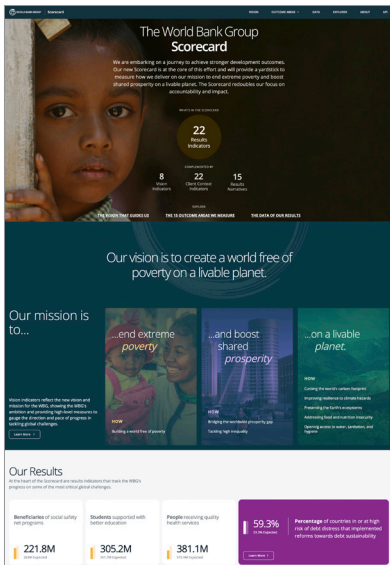


The World Bank's **DRFI program**

Disaster Risk Financing & Insurance Program



The World Bank's program work is mainly implemented through lending operations, with trust funds supporting and co-financing select program components. The two main multi-donor trust funds supporting this work are the [Risk Finance Umbrella](#) (RFU) and the [Global Shield Financing Facility](#) (GSFF). Both funds support the expanded use of climate and disaster risk finance in low- and middle-income countries, and most lessons in this brief are drawn from work carried out with GSFF and RFU support. RFU funding covers analytical and advisory services that facilitate a government's uptake of financial protection solutions. GSFF unlocks grant financing to help design financial protection solutions as part of larger World Bank lending operations, covering many of the costs associated with putting in place new financial instruments, including any premiums. The GSFF serves as one of three financing vehicles for the Global Shield, a joint G7/V20 initiative to strengthen the financial protection and resilience of vulnerable countries and people. Both GSFF and RFU support knowledge sharing and aim to contribute to CDRFI policy dialogue.



The DRFI program contributes to the World Bank’s climate change agenda, the objectives of which are outlined in its 2023 Evolution Roadmap. Indeed, several indicators in the World Bank’s recently updated [Corporate Scorecard](#), which tracks performance at the corporate level, measure the performance of climate-change-related initiatives. Through its work, the DRFI program expects to advance progress in meeting WB Corporate Scorecard targets for climate resilience, financial inclusion, and gender equality. Corporate indicators of direct relevance to the DRFI program’s work include *millions of people with enhanced resilience to climate risks, millions of beneficiaries of social safety net programs, and millions of people and businesses using financial services*. The scope and work of the World Bank’s DRFI program are highly relevant to generating progress and results under these indicators.



Photo: Curt Carnemark / World Bank

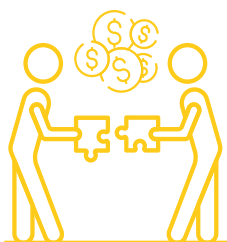


A theory of change for building financial resilience

During their engagements over the past ten years, governments and World Bank experts repeatedly identified three long-term changes that can help set countries on the right path toward greater financial resilience.



First, including disaster risk finance planning in macroeconomic policy and budget cycles ensures governments are properly accounting for their risks and addressing them using the appropriate financial instrument.



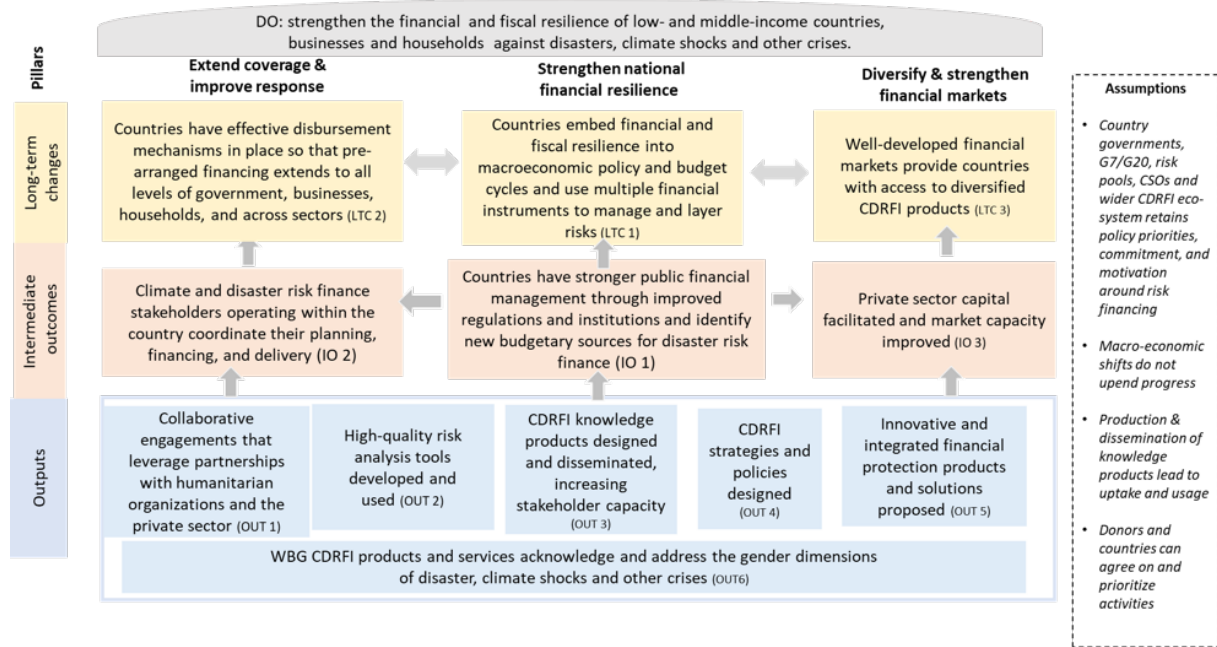
Second, the greater number of effective disbursement mechanisms a country has in place, the easier it is to expand financial coverage and distribute emergency funds across all levels of government, as well as to target vulnerable sectors, businesses, and households.



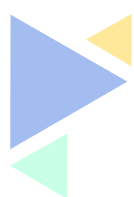
And, finally, low- and middle-income countries benefit when they have access to a broad range of affordable financial products.

Addressing any underlying gender inequalities and incorporating gender considerations into project design and implementation will further assure meaningful progress in all areas.¹ Figure 1 summarizes an illustrative CDRFI program theory of change that articulates these long-term goals and depicts the pathways for creating positive change.

FIGURE 1. THEORY OF CHANGE FOR A CDRFI PROGRAM



¹ See: *Incorporating Gender in Disaster Risk Financing and Insurance (DRFI) Projects: A Practical Guide*. <https://www.financialprotectionforum.org/publication/incorporating-gender-in-disaster-risk-financing-and-insurance-drfi-projects-a-practical>



Maintaining flexibility and relevance in a theory of change



A theory of change and the associated results framework need to evolve over time to remain relevant since the program context shifts and assumptions change. For example, government or donor priorities may evolve, necessitating a change in program scope; or global events, such as the COVID-19 pandemic or war, may make it nearly impossible to achieve targets that once seemed reasonable. In addition to frequently reviewing the theory of change and its underlying results indicators, four principles have thus far helped the World Bank and its partners address the challenges of gauging the impact of their climate disaster risk finance and insurance programs.

1. Look at trends as well as targets

At the program or portfolio level, the decision whether to set targets for outcome and impact indicators needs to be weighed carefully against what is realistically within the program's direct sphere of influence. For example, if



the outcome-level indicator is to put in place a new financial instrument, the timeframe for doing so can be prolonged significantly if there is a change in government or political leaders are unable to pass necessary regulations. Focusing on a defined target at the portfolio level such as “*five financial instruments will be in place by year two*” does not provide a thorough enough picture of everything that is happening at the project level. While tracking the number of active instruments each year is important, without the additional detail and context, missed targets may lead to frustration among stakeholders and the possibility of the withdrawal of support for the program. Rather than using a target, a program might consider describing trends across the portfolio of projects as an alternative way to communicate impact. Examples of trends include looking at whether there has been an increase in the number of instruments put in place over the life of the program or overall amount of financial protection provided.

2. Be clear and consistent when tracking beneficiary data



A common measure of impact for a CDRFI program is the total number of people or households covered by the financial instruments in its portfolio. This indicator is a data point used by many donors and global platforms, including the Global Shield, and it can help assess the relative impact of different financial instruments. However, some instruments are designed so that payouts go directly to governments (in the form of increased budget) or to businesses or to replace lost assets such as buildings or power grids. If the payouts to governments flow directly to households as an emergency cash transfer, calculating the number of people who have benefited is straightforward enough. If the funds are used for other forms of relief, such as repairing damaged infrastructure, it is less clear how many people benefit. Further, until an instrument is placed, the data points used to calculate beneficiaries are likely to be unknown. For example, the traditional way to estimate the number of people protected by a partial portfolio credit guarantee requires knowing the number of businesses covered by the guarantee and the average number of employees in each business – elements that remain unclear until the partial portfolio credit guarantee is operational.

The World Bank has collaborated with the [InsuResilience Global Partnership for Climate and Disaster Risk Finance and Insurance](#) to develop a standard methodology for estimating beneficiaries in such situations, bringing greater consistency to results monitoring among members of the Global Shield platform.² In the early stages, when instrument

² Paper on estimating beneficiaries is forthcoming.



design has not yet been finalized, potential beneficiaries are estimated by dividing the potential maximum payout of the proposed instrument by the historical average relief costs per person for that country or region.³ As instrument design progresses, the calculation is refined to account for variations in instrument type (i.e., risk insurance, partial portfolio credit guarantee, contingent credit, etc.). This guidance may be particularly helpful for other CDRFI programs that fund upstream analytical work. Using the same calculations would allow them to track progress in line with international standards and give credit to essential preparatory work done in the early stages of developing financial instruments.

3. Expand the definition of financial coverage



A second common measure of impact for a CDRFI program is the total amount of financial coverage in US dollars provided by the financial instruments in its portfolio. Much of the financial support provided by the GSFF and RFU funds activities that precede the actual placement of a financial instrument. As such, in any given year the amount of active financial coverage provided by their portfolios can be quite small. To better measure and communicate progress, the World Bank’s CDRFI program now reports financial coverage across its portfolio in three categories: potential coverage for instruments still under development, active coverage where financial protection is in place and providing coverage but has not yet triggered, and actual coverage where instruments have triggered and paid out. Partitioning coverage in this way allows the World Bank to more accurately assess whether its CDRFI programming is progressing.

4. Leverage qualitative data to unpack the ‘why’



Combining quantitative indicators with qualitative data sheds light on why one program component worked—or did not—and provides the kind of rich information that allows others to replicate a program’s success. To that end, the GSFF and RFU annually collect qualitative information via team surveys. For instance, project teams are asked open-ended questions about the nature and extent of collaboration with humanitarian agencies and approaches to increase gender sensitivity in product design and delivery. GSFF is also

³ The average relief costs per person per country or region are based on historical data and provided by InsuResilience Secretariat.

developing detailed 'project histories' that will be updated annually and demonstrate how teams are addressing risks and barriers to progress. Both trust funds finance case studies that delve deeper into the dynamics of designing and operationalizing a financial instrument and that provide practical guidance on how to overcome challenges and avoid pitfalls. For instance, GSFF recently produced three CDRFI gender case studies⁴. The lessons learned from these efforts will be made publicly available as they are completed.

4 <https://www.financialprotectionforum.org/publication/third-northern-uganda-social-action-fund-nusaf-3-integrating-a-gender-equality-lens> and <https://www.financialprotectionforum.org/publication/de-risking-inclusion-and-value-enhancement-of-pastoral-economies-in-the-horn-of-africa>. and <https://www.financialprotectionforum.org/publication/lesotho-competitiveness-and-financial-inclusion-project-integrating-a-gender-equality>



Photo: Aalok Atreya / Unsplash

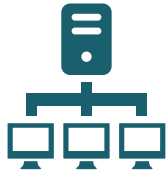


Using a results framework to monitor and communicate progress



Table 1 below summarizes the World Bank's CDRFI results framework by pillar and result area that may be used as inspiration and a blueprint for others. It is structured to capture data that we have found project implementors can realistically and accurately collect across a broad range of countries and contexts. The framework uses the convention of capturing any *design* work—models, policies, or tools—at the output level and *adoption* of these work products at the intermediate outcome level. Doing so accounts for the years of preparatory work that may be required before a financial instrument becomes active. The World Bank has greater direct influence on achieving outputs while the partner government has more influence on whether medium- and long-term outcomes are met. For instance, at the output level, the World

Bank can ensure that a high-quality risk model is designed. At the intermediate outcome level, however, the World Bank has less influence over whether that model is adopted or accepted by the government. And at the long-term change level, it is the government's decision to use the product and the reinsurance markets' acceptability of the product that allows for product placement. There are many factors and actors that enable or hinder successful implementation of financial solutions. And these need to be well understood when assessing the progress and impact of these solutions.



The GSFF and RFU trust funds currently use those indicators that are most relevant to their respective program. Both programs collect all their data annually since some indicators better represent a snapshot of progress each year while others are more useful as aggregate data collected over the lifetime of a program.





The results framework uses this symbol [♀] to denote whether a product or service being tracked includes a component to address gender inequalities and/or provides sex-disaggregated data. Incorporating gender-related indicators at all levels of the theory of change contributes to longer lasting and more meaningful corrections in gender inequality, benefiting an economy by covering all its citizens equally.



PILLAR 1: Strengthen National Financial Resilience





Result	Indicators
 <p>Countries embed financial and fiscal resilience into macroeconomic policy and budget cycles and use multiple financial instruments to manage and layer risks (LTCI)</p>	<p><i>Indicators for a given reporting period</i></p> <ul style="list-style-type: none"> • Total number of financial instruments providing coverage in current fiscal year (disaggregated by budgetary versus market-based mechanisms) • Number of new (or renewed) instruments providing coverage in the current fiscal year • Number of instruments triggered (made a payout) in current fiscal year <p><i>Historical indicators</i></p> <ul style="list-style-type: none"> • Total number of instruments put in place over the life of the program • Total number of instruments triggered over life of the program
 <p>Countries have stronger public financial management through improved regulations and institutions and identify new budgetary sources for disaster risk finance (IO 1)</p>	<ul style="list-style-type: none"> • # of countries that have adopted new or improved public financial management processes as a part of program engagement [☞⁵] • Number of countries that have adopted legal or regulatory reform legislation needed to activate/place the instrument as part of program engagement?☞ • # of key pieces of legislation adopted to enable placement of an instrument ☞ • Number of countries who have adopted a DRF strategy as a result of program engagement☞



5 ☞ this symbol is used to denote whether the product or service specifically includes a component that addresses gender. For instance, in the case of a policy or regulation, it means that the policy has a section that addresses gender. For a training on CDRFI it would mean that the training includes a module on gender. For a model or analytics product that the creators have considered modeling gender differences, or that disaggregated data is considered.

PILLAR 2: Extend Coverage and Improve Response



Result	Indicators
 <p>Countries have effective disbursement mechanism in place so that pre-arranged financing extends to all levels of government, businesses, households, and across sectors (LTC 2)</p>	<ul style="list-style-type: none"> • <i>Active notional coverage</i>⁶: Number of beneficiaries (individuals) covered by active/placed pre-arranged financial mechanisms in the current fiscal year ☹ • <i>Potential notional coverage</i>: Estimated number of beneficiaries (individuals) who will have coverage once instruments under design become active ☹ • <i>Actual Beneficiaries</i>: Number of beneficiaries (individuals, households or businesses) who have received payouts from pre-arranged financial instruments in the current fiscal year ☹ • Number of new or improved sector-specific (e.g. infrastructure, water, social protection, etc.) pre-arranged financing instruments in place and operational • Number of financial instruments triggered in the current FY that have paid out within the agreed timelines • Number of financial instruments triggered in the current FY that worked as designed⁷
 <p>Climate and disaster risk finance stakeholders operating within the country coordinate their planning, financing, and delivery (IO 2)</p>	<p><i>Coordination with humanitarian organizations</i></p> <ul style="list-style-type: none"> • % of projects that directly contribute to increasing humanitarian resources and capacity • Number of program-supported projects where CSOs/humanitarian agencies are included in the design of the instrument ☹ <p><i>Improved disbursement mechanisms</i></p> <ul style="list-style-type: none"> • Number of new or improved disbursement mechanisms designed with support of program engagement ☹ • Number of rules/triggers designed that clarify when and how funds are disbursed with support of program engagement







6 Note, the term notional is added to indicate that we calculate an estimate of individuals covered by the instrument even though the protection priority may be state budget or assets.

7 The team is developing a methodology/checklist by instrument type which will allow more detailed measurement of whether an instrument performed as planned (e.g., paid within timeline parameters, audit conducted, etc)

PILLAR 3: Diversify and Strengthen Financial Markets



Result	Indicators
 <p>Well-developed financial markets provide countries with access to diversified CDRFI products (LTC 3)</p>	<ul style="list-style-type: none"> • Total amount of (re)insurance capacity that countries have leveraged (in US\$) (e.g. sum insured, cat bond coverage) by program-supported instruments in current fiscal year • Total value in USD of pre-arranged financing in place in current fiscal year from program-supported instruments. • Total value in USD of pre-arranged financing expected to be in place in the next fiscal year • Number of countries where domestic insurance market has the capability to insure product
 <p>Private sector capital facilitated and market capacity improved (IO 3)</p>	<ul style="list-style-type: none"> • Total amount in USD of private capital facilitated
 <p>Collaborative engagements that leverage partnerships with humanitarian organizations and the private sector (OUT 1)</p>	<ul style="list-style-type: none"> • Number of financial/advisory support grants provided to CSO/humanitarian agencies (Transfers Out) • Total value (USD) of grants to CSO/humanitarian agencies (Transfers Out) • Percentage of DRF diagnostics supported by program that address the capacities and potential contribution of CSO and Humanitarian partners ∅ • Number of CDRFI events organized that include multiple types of stakeholders ∅
 <p>High-quality risk analysis tools developed and used (OUT 2)</p>	<ul style="list-style-type: none"> • Number of analytic products developed or improved with program support (by status) ∅ • Number of countries where government counterparts have been trained on the use or application of a risk model supported by the program ∅ • Number of new (or improved) analytic products completed over life of trust fund

Result	Indicators
 <p>CDRFI knowledge products designed and disseminated, increasing stakeholder capacity (OUT 3)</p>	<ul style="list-style-type: none"> • Number of CDRFI knowledge products produced and disseminated ☐ • Number of people trained ☐ • Number of country workshops/trainings conducted that inform DRF products ☐ • Percentage of people trained reporting improved knowledge ☐ • Number of CDRFI-related events where WBG staff participated/presented • Number of DRF diagnostics supported by the program by status (e.g. planned, completed, approved) ☐ • Number of WBG corporate documents/publications to which the project team provided input
 <p>CDRFI strategies and policies designed (OUT 4)</p>	<ul style="list-style-type: none"> • Number of countries where program is supporting the development/improvement of a DRF strategy by status ☐ • Number of countries where program is supporting the drafting/improving of a legal or regulatory amendment by status ☐ • Total number of DRF strategies supported by the program ☐ • # of key pieces of legislation the program is supporting to enable placement of an instrument (planned or under draft) ☐
 <p>Innovative and integrated financial protection products and solutions proposed (OUT 5)</p>	<ul style="list-style-type: none"> • Number of projects in the program portfolio by project status as of the close of the fiscal year • Total value of program portfolio by project status as of close of fiscal year • Total volume of WB lending informed by [program] contributions/support • Number of budgetary mechanisms under design (or under consideration) Number of budgetary mechanisms under design (or under consideration) • Number of market-based mechanisms under design (or being considered)
 <p>WBG CDRFI products and services acknowledge and address the gender dimensions of disaster, climate shocks and other crises (OUT 6)</p>	<ul style="list-style-type: none"> • Number of global public goods and knowledge products produced that include gender dimensions of CDRFI • Number of gender-CDRFI events/trainings delivered • Number of internal gender trainings/courses delivered related to CDRFI





This brief was prepared by the World Bank's Disaster Risk Finance and Insurance Program. To learn more about the program and its work with World Bank client countries and other partners building financial resilience against climate disasters or other crises, visit <https://www.worldbank.org/en/programs/disaster-risk-financing-and-insurance-program> or contact GSFF_Secretariat@worldbankgroup.org.