

Risk Finance Analytics

Supporting risk-informed decision making for
a wide range of crises and disasters

Why is financial protection important to reduce poverty and increase shared prosperity?



Financial Losses from natural disasters continue to rise. Developing countries and their low-income populations experience the greatest impacts.

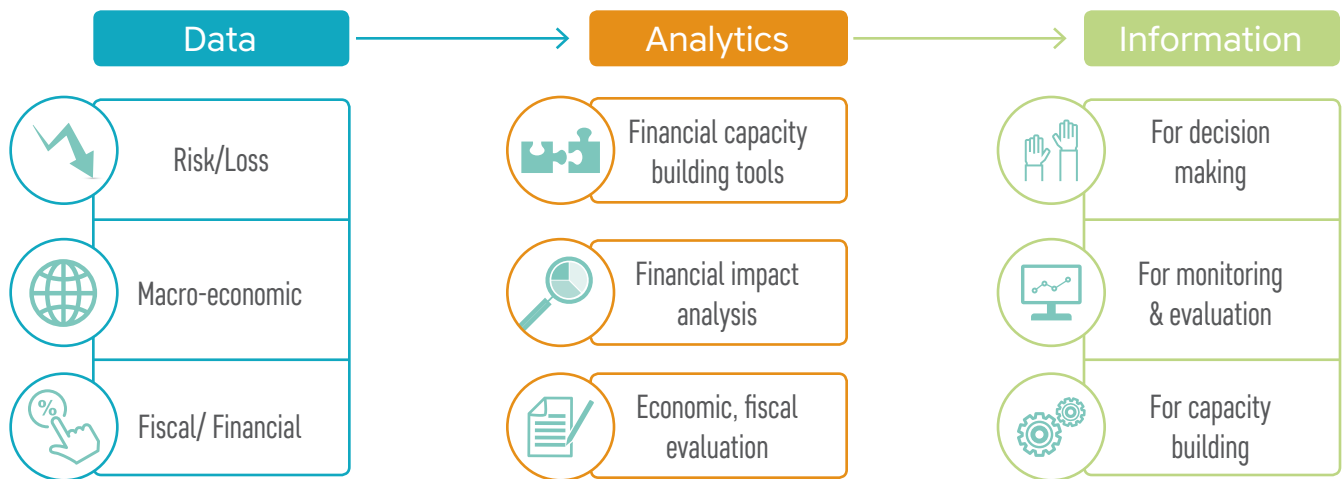


The Disaster Risk Finance and Insurance program (DRFIP) leads the dialogue on financial resilience as a component of the WBG's support to vulnerable countries on better managing disasters and climate shocks.

What we do

The Disaster Risk Finance and Insurance Program (DRFIP), through its **Disaster Risk Financing Analytics (DRF Analytics)** function, aims to strengthen the financial management of climate and disaster shocks by providing quantitative financial and economic analysis and tools for risk-informed decision making.

Analytics bridges the gap between disaster risk data and risk-informed decision making. Catastrophe risk data and information lay the foundation to design and implement protection solutions against natural disasters. Data needs to be aggregated, refined and analyzed in order to inform decision-making processes. Analytics translates technical data into usable information to facilitate risk-informed decision making.



How we support governments

Governments, donors, and development partners are increasingly in need of high-quality analytics to proactively manage the financial costs of climate and disaster shocks. DRF Analytics empowers stakeholders to take risk-informed financial protection decisions, based on sound financial and economic analyses. This is achieved by employing DRF Analytics in **three focus areas**:

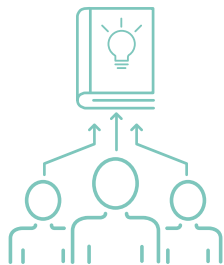
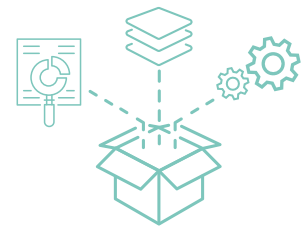


Quantitative financial information and tools customized for clients

DRFIP works with governments to design and develop customized analytic information and/or tools tailored to a country specific context. These are then delivered as part of a broader Disaster Risk Finance capacity building package. Some examples in which governments use these tools include: designing sovereign and agriculture insurance programs, defining and quantifying the cost of scalable social protection mechanisms, and selecting coverage for catastrophe risk insurance, among others.

Economic and statistical methodologies for Disaster Risk Finance

Proven methodologies and standardized approaches are essential to conduct DRF analytics work. DRFIP leads the development of required economic and statistical methodologies to support risk-informed decision making. For example, a new framework to evaluate sovereign Disaster Risk Finance strategies has been developed to strengthen our work with clients and partners.



Policy dialogue and the establishment of good practices

There is an increasing demand from governments and development partners for support in building financial resilience against climate risk and natural disasters. As losses from natural disasters continue to increase, so does the need to understand the development impact of these costs. DRF Analytics supports knowledge sharing and capacity building among development practitioners and national stakeholders.

Examples of how we support governments and development partners:



Analyze the potential fiscal costs and fiscal gaps resulting from climate and disaster shocks



Evaluate and monitor different combinations of risk retention financial instruments (e.g. a reserve fund) and risk transfer instruments (e.g. insurance)



Assess and evaluate alternative structures for risk transfer products that best suit financial protection strategies



Evaluate the fiscal cost of a subsidised insurance program or a scalable social protection program, including how costs might change with alternative coverage or product design



Evaluate reinsurance proposals from the private sector



Evaluate the potential cost savings from pooling sovereign or subnational risk



Evaluate the capital requirement for establishment and/or maintenance of a catastrophe risk pool

Impact

PHILIPPINES

DRFIP supported the adoption of a national Disaster Risk Finance strategy in the Philippines in 2015. The DRF Analytics function provided financial and economic analysis to support decision making for the second World Bank contingent line of credit (CAT DDO) approved for the Government of Philippines in December 2015. Should a disaster strike, the CAT DDO provides the Philippines with a US\$500 million contingent line of credit to help manage the financial impact. Design and evaluation of a sub-national insurance program in the Philippines is being supported by the DRF Analytics function through aggregation and evaluation of sub-national catastrophe risk data and delivery of quantification financial and economic information and customized analytics tools. In 2017, the DRF Analytics informed the design of a catastrophe risk insurance program providing US\$206 million in coverage against losses from major typhoons and earthquakes to national government assets, and to 25 participating provinces against losses from major typhoons.



KENYA

DRFIP supported a livestock insurance program in Kenya which provides insurance cover to 14,000 farmers in Kenya. In February 2017 GBP1.7 million was paid to 12,000 pastoralists – an average of nearly GBP140 per household – to compensate for the last seasons drought. The DRF Analytics function supported the development of quantitative tools to assist in capacity building. The tools allow decision makers to assess the fiscal cost of the Kenya Livestock Insurance program and provides insights into the key financial drivers of the program.



Partnership with the European Union and GFDRR

In December 2015, European Union and the Disaster Risk Financing and Insurance Program of the World Bank, through the Global Facility for Disaster Reduction and Recovery (GFDRR), signed a partnership on DRF Analytics in order to help improve the understanding and increase the capacity of governments to make informed decisions on DRF based on sound financial analysis.

The project expects to catalyze the uptake of innovative risk identification, assessment, and financing tools within the development policy frameworks and agenda of several middle-income and low-income countries. The DRF Analytics function of DRFIP is generously funded by the European Union and brings together the fields of insurance, risk management, catastrophe risk modelling and development economics together with academic disciplines such as economics, actuarial mathematics, statistics and finance.

The World Bank Group's Disaster Risk Financing and Insurance Program is within the World Bank's Finance, Competitiveness and Innovation Global Practice. As a leading provider of analytical & advisory services on disaster risk finance, it helps governments, businesses, and households manage the financial impacts of disaster and climate risk without compromising sustainable development, fiscal stability, and well-being.

Olivier Mahul
omahul@worldbank.org

Antoine Bavandi
abavandi@worldbank.org

DRF Community of Practice / Capacity Building
Kaavya: kashokkrishna@worldbank.org

www.worldbank.org/drfi
www.financialprotectionforum.org

Disaster Risk Financing
& Insurance Program

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 **GFDRR**
Global Facility for Disaster Reduction and Recovery