



# The Development Impact of Risk Analytics

## Executive Summary

## Introduction

The need for the **Development Impact of Risk Analytics** report became clear at the UN Climate Action Summit in New York in September 2019, which saw some fundamental shifts in risk policy:

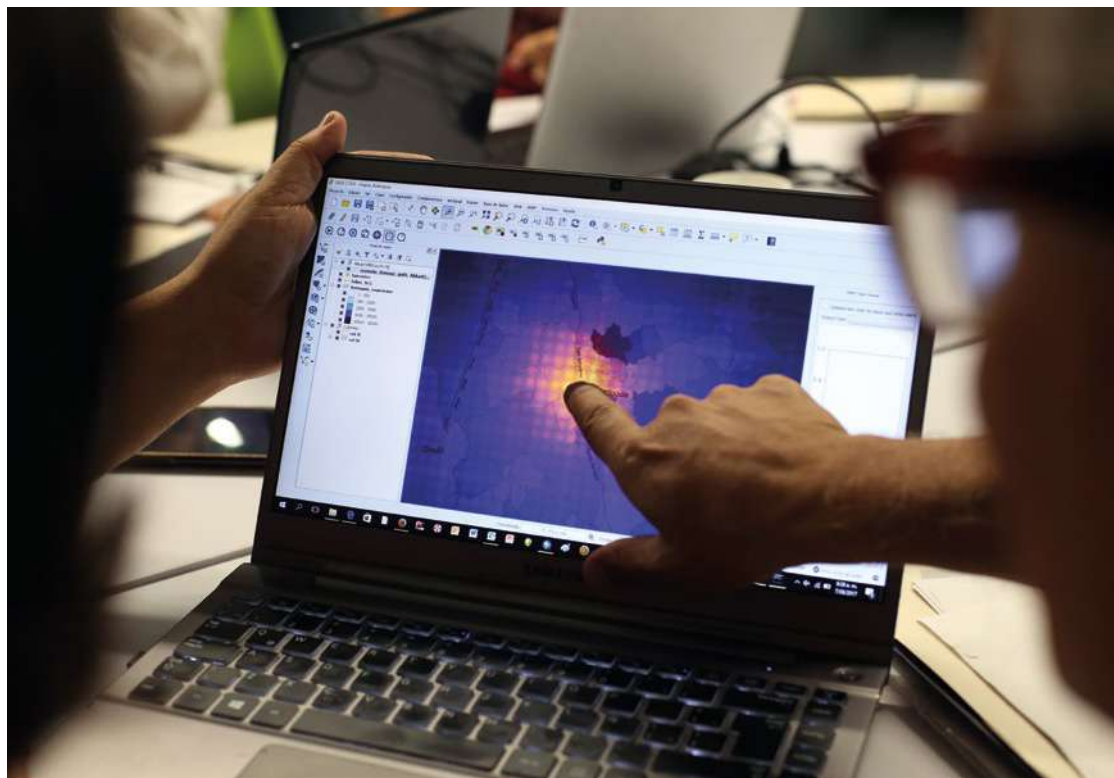
- › For the first time, themes of climate risk prevention, reduction and financing received as much attention as the reduction of greenhouse gas emission.
- › Focus moved further towards *ex-ante* investment in risk management and transfer, rather than traditional *ex-post* emergency responses to disasters.
- › More value than ever was attached to public-private collaboration in this agenda, at both strategic and operational levels.

Risk understanding is an essential foundation for progress in all these policy areas. The authors of this report are united in the view that the ability to analyse risk should be shared more widely than it currently is, particularly for public sector decision-makers and other risk owners in climate-vulnerable countries. This can be achieved through cross-sector partnership, use of already available open source technology and the application of open modelling principles.

Consistent with its messages, the paper is the result of a truly collaborative effort, including contributions from private sector companies, UN offices, development agencies and specialists, humanitarian organisations and academia. The report's key objectives are:

- › To demonstrate the value of quantitative risk understanding to the achievement of the UN Sustainable Development Goals.
- › To describe the benefits and challenges of building capacity for quantitative risk insight at country and city levels.
- › To illustrate necessary future developments, including the application of risk analytics to unmodelled impacts, and the integration of gender considerations in risk management.
- › To offer practical recommendations to make this both possible and effective through joint application of cross-sector strengths and resources.

Readers are asked to review the paper's full recommendations and consider how they might contribute to this growing movement for the democratisation of risk insight.



OpenQuake training workshop Medellin, Colombia 2017  
Photo: Universidad EAFIT

# Executive Summary

## Risk insight is the foundation on which risk prevention and resilience programmes are built.

The good news is that the key ingredients for widespread risk understanding already exist - the science, the computing, the satellite and ground data, the indigenous knowledge, and most of all innovative multi-disciplinary methodologies of risk understanding developed over the last three decades.

Yet the world has been unable to move away from a continuous cycle of disaster-respond-rebuild-repeat. Systemic flaws are blocking the flow of risk insight to the risk owners on whom vulnerable communities rely for protection.

The challenge for all sectors and governments is to move from managing disasters to managing the risk itself. Risk information is power and yet so much of the resource and science it is built on resides in the global north.

There is plenty of evidence that the private sector can bring substantial help to the problem of scale, in risk understanding, sustainable investment and risk transfer. For example over the last 20 years the re/insurance industry has paid out almost US\$1,100 billion of losses (US\$55.0 billion per year, on average) following catastrophic events.

While significant protection gaps persist, private sector expertise in analytics and risk management can help to close that gap. Public sector, private companies, academia and civil society must work together to create standards, share research and adopt replicable best practices.

Above all an inclusive, collaborative approach to modelling risk will reinforce local ownership. This will lead to improved policy outcomes and more targeted operational programmes.

## Summary points and recommendations from this report:

### 1. A strategic approach to risk:

The ambition for any country has to be system level, multi-hazard assessment of risk at national level, drawing all responses to risk into an overall plan.

### 2. Empowerment:

Risk owners should be empowered through a partnership approach in developing national capacity in risk analysis. Empowerment must include women's participation at all stages in the process.

### 3. Collaboration:

Public-private partnership should be at the heart of the risk assessment process in development.

### 4. Open modelling principles:

Donor governments, foundations and climate funds should encourage adoption of a **minimum set of open modelling principles** in development programmes. Cost should not be a barrier to entry to understanding risk.

### 5. Development of a scale for assessment of risk analytics capacity.

Risk owners should have access to a framework and advice to assess the maturity of their risk function, and select a pathway to developing it according to the risk questions they face. Availability of a 'starter-pack' of global models and data accessible on open platforms would be a major contribution.

### 6. People-centric metrics:

Data must be disaggregated to enable a gender focus and programmes specific to the vulnerable and/or financially excluded.

### 7. Risk education and communication:

The risk message doesn't resonate with an authority or community unless it is understood and they have clear ownership. Planning in risk capacity building must include provision for sustainable risk education and communication programmes.

## KEY CALL TO ACTION

The creation of a public-private partnership to accelerate the use of risk analysis for decision making in vulnerable countries, at scale.



## Timing

A number of factors suggest that acting on the recommendations in this report now is more important than ever. These include:

- a. The time to galvanise political will is during and after a crisis. Global public and political attention to risk has not been this high for a very long time. There is a genuine will to be proactive and not to be on the back foot again. The time to lock risk awareness and understanding into national processes is **today**.
- b. The UNFCCC 26th Conference of the Parties (CoP26) is on the horizon and the link is increasingly being made between climate risk and other risks, including pandemic, both in terms of causal links and the compounding of impacts. The build-up to CoP26 offers the necessary mechanism to bring the proposed change to the attention of donors, foundations and development partners.



**Contact**

Nick Moody, Editor  
[nick@ceruleanconsult.com](mailto:nick@ceruleanconsult.com)

Ian Branagan, Chair, IDF Risk  
 Modelling Steering Group  
[idb@renre.com](mailto:idb@renre.com)

[www.insdevforum.org](http://www.insdevforum.org)