DISASTER RISK AND READINESS FOR INSURANCE SOLUTIONS
A novel assessment tool for low to lower middle income countries (InsuRisk Assessment Tool)
As indicated in the conceptual framework (Fig. 1), each of the five components is represented by key factors (e.g. poverty, social protection, universal health coverage, etc. for social vulnerability) for which a set of underlying indicators and datasets is considered in the assessment.

One key innovation of the concept presented here is the systematic consideration of a country’s readiness to accommodate insurance solutions. The overall readiness of a country consists of three modules: (i) individual readiness, (ii) the enabling political environment to attract the insurance industry, and (iii) the current development status of a country’s insurance market.

In order to provide answers to these questions, the InsuRisk Assessment Tool comprises five key components, displayed in Figure 1: (1) climate and disaster risk, (2) short-term coping capacity, (3) residual risk, (4) long-term prevention strategies, and (5) readiness for insurance solutions. Following the latest definition of the Intergovernmental Panel on Climate Change (IPCC 2014), disaster risk results from the interaction of hazardous events (here: climate-related and other natural hazards) with the vulnerability of exposed elements (here: people, agricultural land/ economic production, and infrastructure). Coping capacity refers to the capacity of individuals and governments to cope with hazardous events, and hence reflects the short-term capacity to reduce disaster risk to a certain level of residual risk. In contrast, the availability (or lack) of preventive strategies, such as disaster risk reduction (DRR) strategies, preparedness plans or National Adaptation Plans (NAPs), does not directly influence climate and disaster risk or residual risk today, but rather reflects a country’s strategic will to manage potential risk in the long-term.

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RESULTS

Figure 2 contrasts the residual risk of a country (Fig. 2, upper panel) against its readiness to accommodate insurance solutions (Fig. 2, lower panel). The index scores of these two components of the InsuRisk Assessment Tool are divided into five groups of countries of equal size (quantile method). Brighter colours represent lower index scores, while darker colours indicate higher index scores for both components, respectively. The figure shows that countries with a particularly high level of residual risk include, for example: Madagascar, Afghanistan, Myanmar, Haiti, Ethiopia and Papua New Guinea.
CONCLUSIONS & OUTLOOK

Following consultations on the InsuRisk prototype and its indicative outcomes at COP 23 in Bonn in 2017, an updated version will be developed taking inputs from InsuResilience partners and stakeholders into account. The updated version will allow for an interactive online use. In perspective, there is great potential to extend the tool’s scope and forms of use (e.g., by considering new high-quality data sets, by including further indicators on coping capacities or by linking the tool and its underlying indicator set to SDG reporting, etc.). As the InsuResilience Secretariat is currently setting up a Monitoring and Evaluation system, the InsuRisk Assessment Tool can also make a valuable contribution to the monitoring of InsuResilience partner countries’ vulnerabilities and insurance market development status at aggregated level. By assessing changes in the tool’s five key components and their underlying indicators on a regular basis (e.g., every three years), potential changes in vulnerability or readiness for insurance solutions can be identified in a systematic manner.

The innovative analysis provides guidance for the selection of potential target countries under the G7+ InsuResilience initiative. Countries characterized by both high vulnerability and high readiness for insurance solutions include, for example: Papua New Guinea, Rwanda, Eritrea, Angola, Mozambique, Burkina Faso, and Zambia, etc. In stark contrast, countries with high vulnerability but low readiness include countries such as Congo, Niger, the Central African Republic (CAR) and Chad.

With regards to InsuResilience’s focus on vulnerable countries and insurance solutions, Figure 3 juxtaposes a country’s vulnerability level with its readiness for insurance solutions (individual readiness, enabling environment and the current state of insurance).

This figure thus allows for developing country profiles and clusters according to their overall vulnerability and readiness for insurance solutions. This assessment allows tailoring support for insurance solutions according to the specific needs of a country.

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**Fig. 3**: Country profiles contrasting vulnerability and overall readiness for insurance solutions. Countries in the upper-right corner of the graph can be characterized by both (i) high vulnerability and (ii) high readiness for insurance solutions.
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