

Submission by Munich Re to the invitation of the Standing Committee on Finance (SCF) for inputs related to its 2016 forum on “financial instruments that address the risks of loss and damage associated with the adverse effects of climate change”

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Munich Re welcomes the outcomes of the 21st Conference of Parties as well as the opportunity to contribute towards developing financial instruments that address the risks of loss and damage associated with the adverse effects of climate change.

Issues to be addressed

Even if the global community follows the path of decarbonisation (abandoning fossil fuels), the risks from weather-related natural hazards will, in all probability, continue to increase. This is because CO₂ has a mean residence time in the atmosphere of approximately 100 years and contributes to global warming throughout this period. The frequency and intensity of severe weather events – torrential rainfall and heatwaves in particular – have already increased in many regions over the past few decades.

Our data shows that low-income countries are particularly vulnerable to the effects of climate change. More poor than rich lives are lost, both in absolute terms and as a percentage of population.

Moreover, material losses that cannot be repaired or replaced because of insufficient funds lead to a lasting loss of prosperity.

According to Munich Re’s NatCatSERVICE, approximately **850,000 people lost their lives between 1980 and 2014 as a result of weather-related natural catastrophes worldwide**. Of these, 62% (527,000) lived on less than US\$ 3 per day (income groups in accordance with the World Bank definition), and are therefore counted among the world’s poorest people. As a proportion of the world population, however, this group represented only around 12% in 2014. For the next-highest income group (daily income of up to approx. US\$ 11), the rate drops considerably but still shows a disproportionately high mortality rate from weather catastrophes among low-income sections of the population.

Fatalities from severe weather events worldwide 1980–2014: 850,000



Income groups according to the World Bank definition

- 62% countries with low annual incomes (≤US\$ 1,005)
- 14% countries with lower-middle annual incomes (US\$ 1,006–3,975)
- 11% countries with upper-middle annual incomes (US\$ 3,976–12,275)
- 13% countries with high annual incomes (≥US\$ 12,276)

World population in 2014
7.2 billion



- 12%
- 57%
- 15%
- 16%

Sources: Munich Re NatCatSERVICE, World Bank

In our assessment, the reasons for this are clear: what pushes up the numbers of victims **is a lack of information on preventive measures and a lack of financial resources to adapt to natural hazards**. Adaptation options vary depending on the region and hazards involved, but there are two main categories:

1. Ex-ante preventive measures taken ahead of a catastrophe in order to mitigate losses. These include early warning systems, but also structural precautions and land-use regulations.
2. Ex-post measures to deal with the consequences of loss, including humanitarian aid and financing schemes. These help to overcome the economic impact of a disaster and pave the way for repair and reconstruction efforts, thereby developing resilience.

At the G7 summit in Elmau in June 2015, the member states agreed to launch a climate insurance initiative (InsuResilience), highlighting the importance of financial risk transfer concepts, particularly for emerging and developing countries. The objective of InsuResilience is to give an additional 400 million people in emerging and developing countries access to insurance by the year 2020 to protect themselves against weather-related catastrophes. This will either be organised on a macro level with insurance cover for entire countries (indirect insurance of the population), or on a micro level with insurance policies for individual persons (direct insurance of the population).

If structured well, insurance solutions not only create incentives to take preventive measures (by way of knowledge transfer and/or deductibles), but also represent an effective tool to finance claims burdens. If the public and private sectors are to overcome the immense financial impact of such disasters, it is imperative to soften their long-term impact on the economy. To this end, the introduction of climate insurance solutions promotes the construction of robust social and economic structures, thereby developing resilience.

Public-private partnerships are required

If the G7 target is to be attained, the affected countries will have to adopt the necessary regulatory measures and participate financially in the project. The additional provision of international aid or ramp-up support from climate funds, such as the Green Climate Fund (GCF), also constitutes a promising solution. **This is the only way to develop lasting (i.e. sustainably financed) insurance schemes in developing countries and emerging markets that enable people to better adapt to the new risks resulting from climate change.** Climate insurance solutions could become a textbook example for cooperation between the public and private sectors as well as rich and poor countries, provided that the roles of the individual cooperation partners are clearly defined based on the competences and resources of each:

- The public sector should define the legal and regulatory framework and the socio-political aims. The establishment of weather databases, the development of publicly accessible risk information systems, and knowledge building among the population can also be supported at both national and international levels.
- The insurance industry would be ideally suited to help with the development and implementation of climate insurance solutions. To this end, it could provide expertise, risk models, best practices from other countries and, most importantly, risk capital. Risk-commensurate premiums need to be charged for the mechanism to function in a lasting and stable manner. Only then will pricing adequately reflect the loss potential and create an incentive for people to take measures that reduce the risk.

In the past, diverging views between the private and public sectors often presented insurmountable obstacles in the realm of risk financing that made it impossible to develop insurance schemes in less developed countries. But there is a growing awareness that it is precisely these countries that have the most urgent need to adapt to the consequences of climate change.