



## World-wide risks through extreme weather events

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Climate change (CC) as a scientific problem is global. The impacts of CC, however, differ greatly locally and regionally and have to be analysed on a small scale. Local impacts of climate-change catastrophes are comparable with impacts of other natural disasters. Hurricanes in Haiti have similar impacts as an earthquake or tsunami at the same location.

Extreme weather events differ regionally, and the impacts resulting from them are local; an avalanche in Greenland represents a different risk for man from an avalanche in the Alps.

A differentiation between global CC and extreme weather events is important for several reasons:

- global CC, such as increasing GHG concentrations and average temperatures, and raising sea levels, are according to the IPCC report partly man-made; this means they can probably be influenced by mitigation measures and resulting losses can possibly be recovered through litigation action,
- extreme weather events, such as storm surges and hailstorms, I consider to be acts of God. They can be influenced through adaptation, i.e. man adapting himself to the risks in the sense of loss prevention; nobody is responsible for resulting losses.

This differentiation also makes sense in an insurance perspective; it means that:

- impacts of Global CC are foreseeable and gradual and thus not insurable;
- extreme weather events, which are sudden and unforeseeable, are insurable if frequency and severity are within the range of insurability.

The impacts of extreme weather events are influenced by a number of local factors. These include preventive measures (wind and earthquake resistant buildings and infrastructures), technical and organisational vulnerabilities and societal resilience (climate-resilient communities), behaviour and pre-event information of the populations concerned.

A judgement of the impacts of extreme weather events needs to distinguish between economic losses and insured losses. For uninsured losses, at least in industrialised countries, the governments of nation states may play the role of 'insurance without premium'.

The impacts of extreme weather events are influenced by preventive measures of the potential victims and political instances as much as by the weather events themselves. Insurers can help to reduce the hazard potential of extreme weather events by collaborating with their customers as well as with political authorities.