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# Vulnerability, World Risk Index, & COP17 outcomes on loss and damage

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# Climate variability, climate change, & vulnerable countries

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- Context:
  - **Global change**, including increasing exposure to a variety of weather-related risks.
  - **Growing exposures**, driven largely by socio-economic change.
  - Science suggests that we may face **increasing frequency and intensity** of weather-related hazards (climate variability) in the future related to climate change….
  - We are headed into a **period of greater uncertainty**, and also opportunities
  - Special report on Extreme Events (IPCC, November 2011)

- Even without taking climate change into account, disaster risk will continue to increase in many countries as more people and assets are exposed to weather extremes.

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- Evidence suggests that climate change has changed the magnitude and frequency of some extreme weather and climate events ('climate extremes') in some regions already.

- Climate change will have significant impacts on the severity and magnitude of climate extremes in the future. For the coming two or three decades, the expected increase in climate extremes will probably be relatively small compared to the normal year-to-year variations in such extremes. However, as climate change becomes more dramatic, its effect on a range of climate extremes will become increasingly important and will play a more significant role in disaster impacts.

- High levels of vulnerability, combined with more severe and frequent weather and climate extremes, may result in some places, such as atolls, being increasingly difficult places in which to live and work.

- A new balance needs to be struck between measures to reduce risk, transfer risk (e.g. through insurance) and effectively prepare for and manage disaster impact in a changing climate. This balance will require a stronger emphasis on anticipation and risk reduction.

- In this context, existing risk management measures need to be improved as many countries are poorly adapted to current extremes and risks, let alone those projected for the future.

- Countries' capacity to meet the challenges of observed and projected trends in disaster risk is determined by the effectiveness of their national risk management system.

- In cases where vulnerability and exposure are high, capacity is low, and weather and climate extremes are changing, more fundamental adjustments may be required to avoid the worst disaster losses.

- Any delay in greenhouse gas mitigation is likely to lead to more severe and frequent climate extremes.

➢ **Source:** Headlines from the IPCC Special Report on Extreme Events, Dr. Tom Mitchell, Overseas Development Institute and Dr. Maarten van Aalst, Red Cross/Red Crescent Climate Centre

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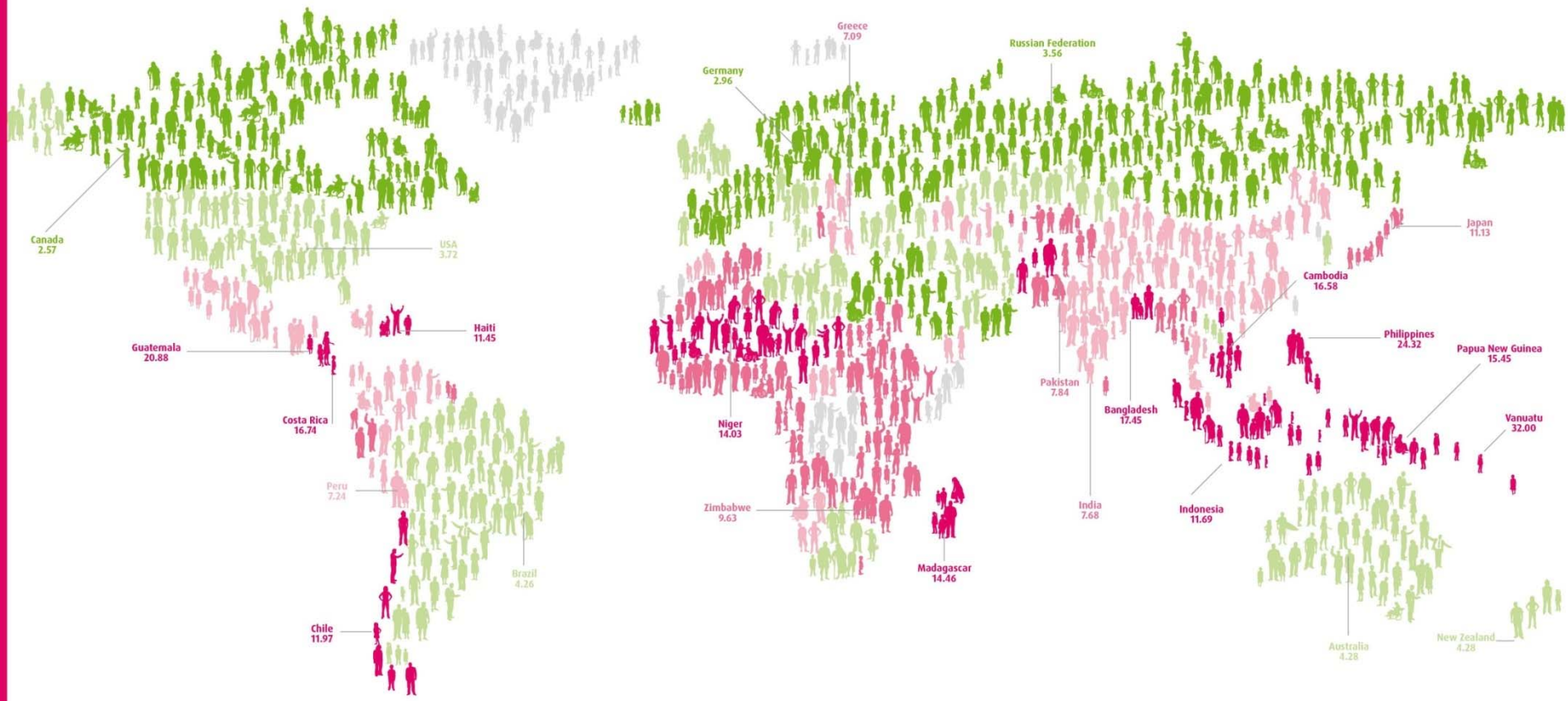
Bündnis Entwicklung Hilft

# WorldRiskIndex





| WorldRiskIndex (WRI) | | Exposure | | Vulnerability | |
|---|---|---|---|---|---|
| very low | 0.00 – 3.56 | | 0.05 – 9.71 | | 24.57 – 35.63 |
| low | 3.57 – 5.80 | | 9.72 – 11.82 | | 35.64 – 45.03 |
| medium | 5.81 – 7.71 | | 11.83 – 14.28 | | 45.04 – 53.50 |
| high | 7.72 – 11.13 | | 14.29 – 17.85 | | 53.51 – 63.32 |
| very high | 11.14 – 32.00 | | 17.86 – 56.33 | | 63.33 – 76.19 |
| no data available | | | no data available | | no data available |

Maximum value 100 %, classification according to the quantile method.

| Country | Exposure | Vulnerability | WRI |
|---|---|---|---|
| Australia | 14.72 % | 29.09 % | 4.28 % |
| Bangladesh | 27.52 % | 63.41 % | 17.45 % |
| Brazil | 9.70 % | 43.87 % | 4.26 % |
| Chile | 31.25 % | 38.31 % | 11.97 % |
| Costa Rica | 42.39 % | 39.50 % | 16.74 % |
| Germany | 11.14 % | 26.55 % | 2.96 % |
| Greece | 20.89 % | 33.94 % | 7.09 % |
| Guatemala | 38.42 % | 54.35 % | 20.88 % |
| Haiti | 15.95 % | 71.77 % | 11.45 % |

| Country | Exposure | Vulnerability | WRI |
|---|---|---|---|
| India | 12.68 % | 60.55 % | 7.68 % |
| Indonesia | 20.49 % | 57.06 % | 11.69 % |
| Japan | 39.57 % | 28.13 % | 11.13 % |
| Cambodia | 26.66 % | 62.18 % | 16.58 % |
| Canada | 9.08 % | 28.32 % | 2.57 % |
| Madagascar | 20.68 % | 69.91 % | 14.46 % |
| New Zealand | 15.73 % | 27.19 % | 4.28 % |
| Niger | 18.49 % | 75.86 % | 14.03 % |
| Pakistan | 12.27 % | 63.84 % | 7.84 % |

| Country | Exposure | Vulnerability | WRI |
|---|---|---|---|
| Papua N. G. | 23.26 % | 66.41 % | 15.45 % |
| Peru | 15.08 % | 47.99 % | 7.24 % |
| Philippines | 45.09 % | 53.93 % | 24.32 % |
| Russian Fed. | 9.07 % | 39.27 % | 3.56 % |
| Zimbabwe | 14.30 % | 67.33 % | 9.63 % |
| Vanuatu | 56.33 % | 56.81 % | 32.00 % |
| United States | 12.00 % | 30.98 % | 3.72 % |

Data: Source UNU-EHS, based on the PREVIEW Global Risk Data Platform, CReSIS, CIESIN and global databases; detailed information at www.WorldRiskReport.org

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FCCC/SBI/2011/L.35/Add.1

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**Subsidiary Body for Implementation**
**Thirty-fifth session**
**Durban, 28 November to 3 December 2011**

Agenda item 8
**Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate to enhance adaptive capacity[1] – Activities to be undertaken under the work programme**

# Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate to enhance adaptive capacity[1]

## - Activities to be undertaken under the work programme

**Draft conclusions proposed by the Chair**

**Addendum**

**Recommendation by the Subsidiary Body for Implementation**

The Subsidiary Body for Implementation, at its thirty-fifth session, decided to recommend the following draft decision for adoption by the Conference of the Parties at its seventeenth session:

**Draft decision -/CP.17**

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# Opportunities for rethinking & innovation, transformation, & implementation

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- National level
- Meso level
- International level

# Vulnerable Countries & Loss & Damage Initiative

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- High Level Side Event with Government of Bangladesh
  - 5 December 2011
  - Pavilion Hotel, Durban
  - Refreshments served
- **Chief Guest:** Honorable Minister Dr Hasan Mahmud, Ministry of Environment and Forests, Government of Bangladesh
- **Chair:** Mr Mesbah ul Alam, Secretary, Ministry of Environment and Forests, Government of Bangladesh

# Reward for change

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- Governments can leverage the potential of concepts contained in the World Risk Index by recognizing the management of Loss & Damage as an integral part of Adaptation. This will increase protection of individuals & the economy, reduce weather impacts & foster sustainable development.

- In co-operation with regional, national & international actors, solutions that account for the multiple factors in loss & damage have the potential to provide tangible results for the most vulnerable countries & soften the blow of climate-related disasters.

# Thank You

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