Risk management solutio and tools as a response to t adverse effects of clima chan

Lessons from the UN Global Assessment Report on Disaster Risk Reduction GCCA+ Global Learning Event, Brussels

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GAR in the last 5 years

- Statistics of downloads

Report	2012	2013	2014	March 2015 to July 2015
GAR09	~27,000	~20,000	~23,000	N/A
GAR11	~48,000	~58,000	~33,000	N/A
GAR13	--	~90,000	~120,000	N/A
GAR15 + pocket GAR	--	--	--	~170,000
Total downloads	**~75,000**	**~170,000**	**~178,000**	**~170,000**

- GAR09, GAR11 and GAR13: 4 languages (English, French, Spanish, Arabic)
- GAR15: 6 languages (+ Russian, Chinese)
- Pocket GAR15: 7 languages (+Japanese)
- + 30 GARs launches

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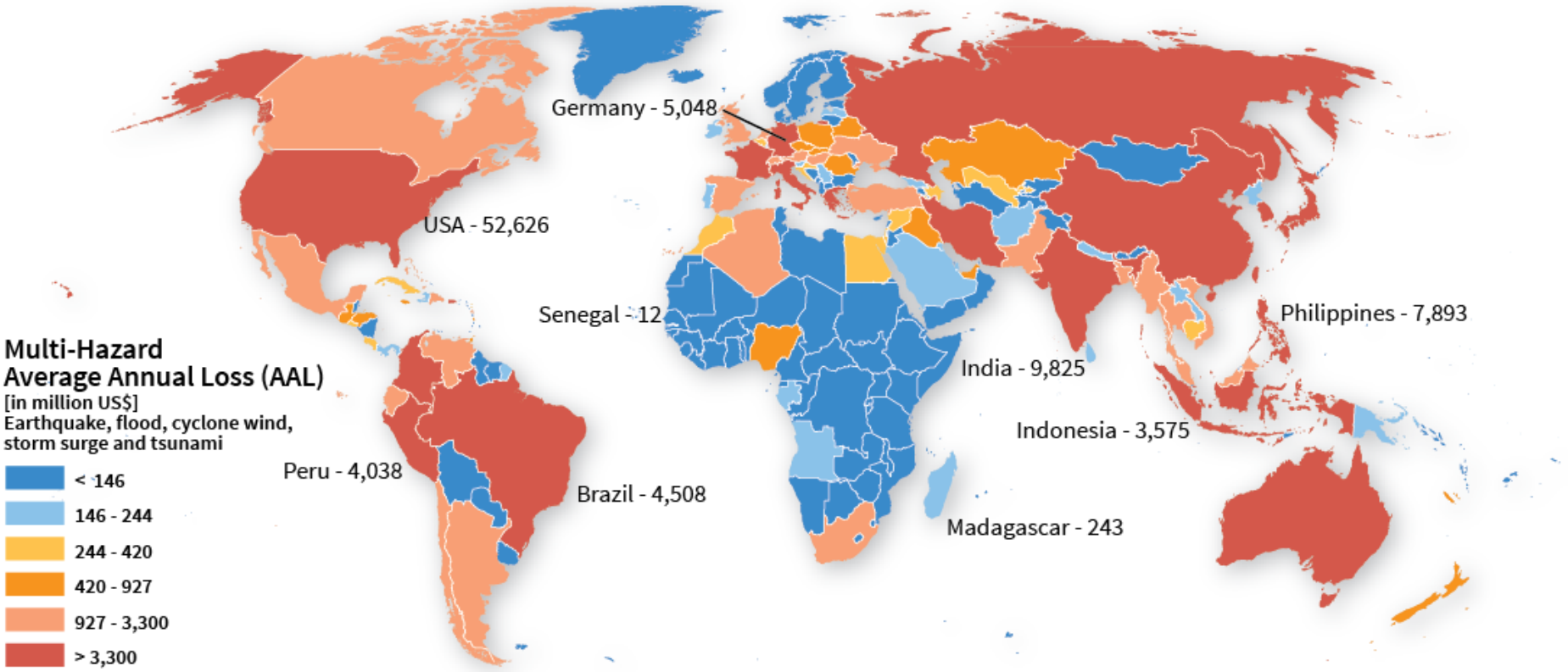
- **12 Technical partners with direct contributions**
- **6 Hazards are covered**: flood, earthquake, cyclone wind and storm surge, tsunami, volcanic eruption, drought
- **Probabilistic Hazard modeling of 5 hazards at global scale**
- **Probabilistic risk modeling using CAPRA software**
- **Same arithmetic for all hazards and territories enables comparison**
- **Datasets and results including national risk profiles will be openly available**
- **Tangible Earth platform**

Global Risk Model

A risky world



Expected future disaster losses annualized over the long term

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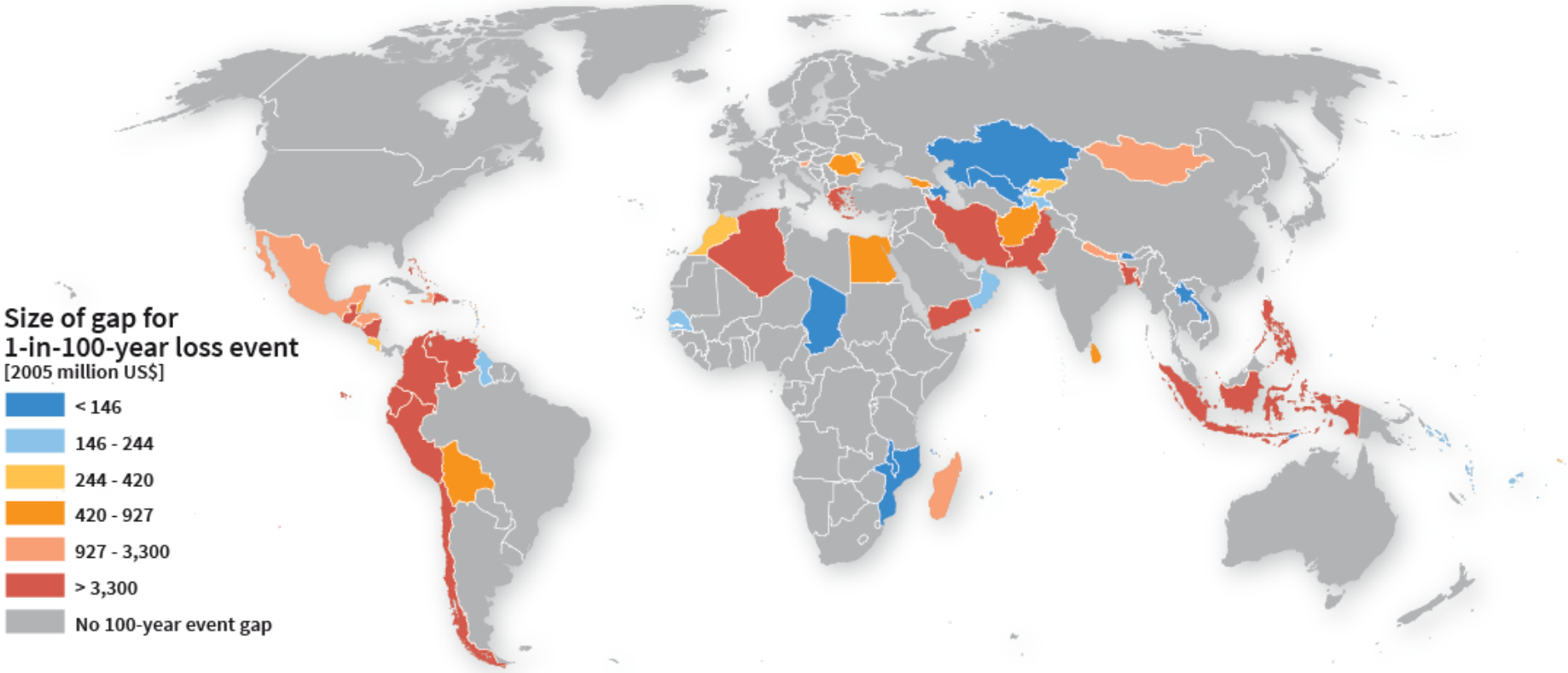
Fiscal resilience challenged



Potential financing gaps for a 1 in 100 year loss

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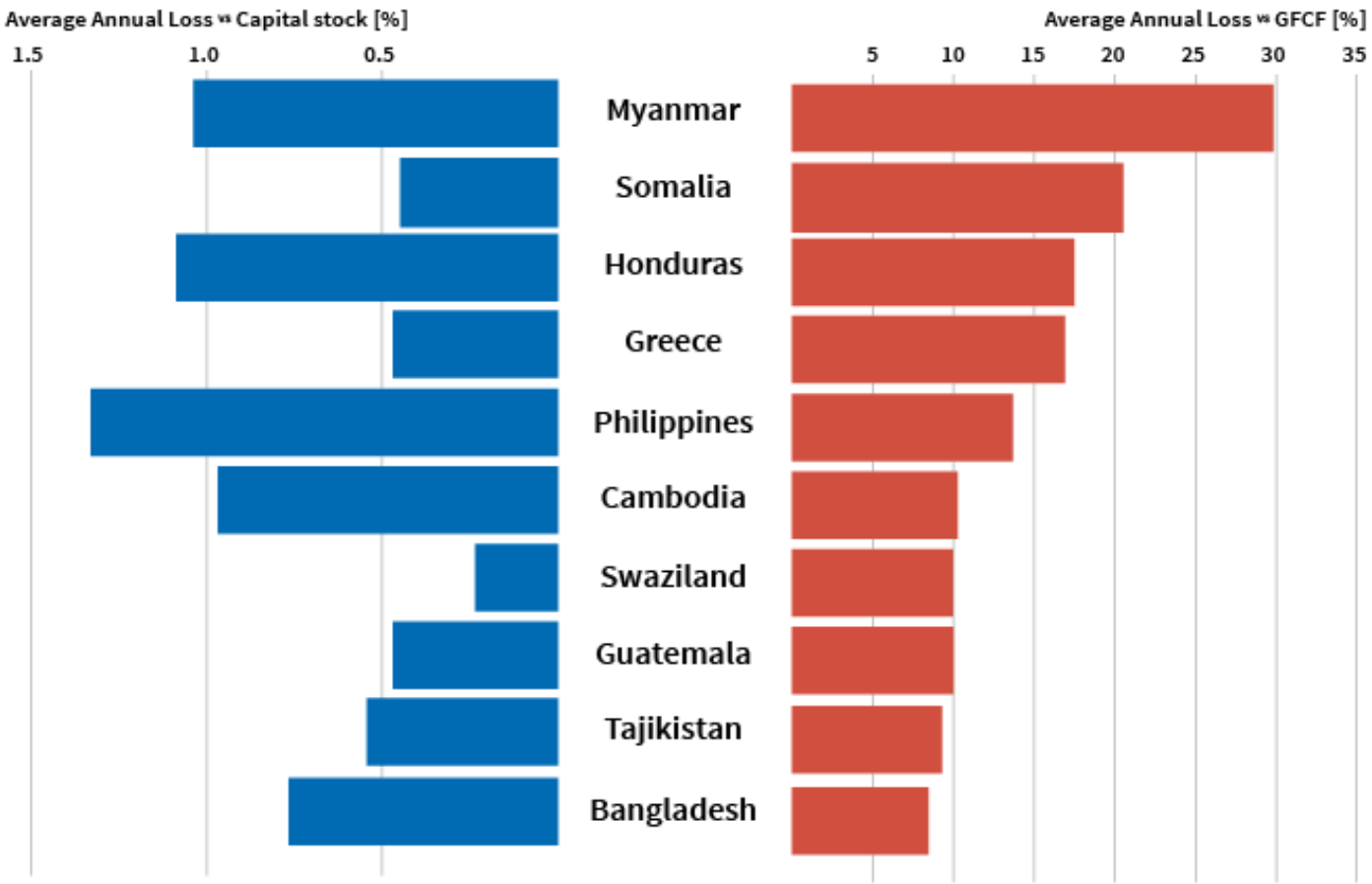
An opportunity cost for development



The risk to social progress, stability and economic development

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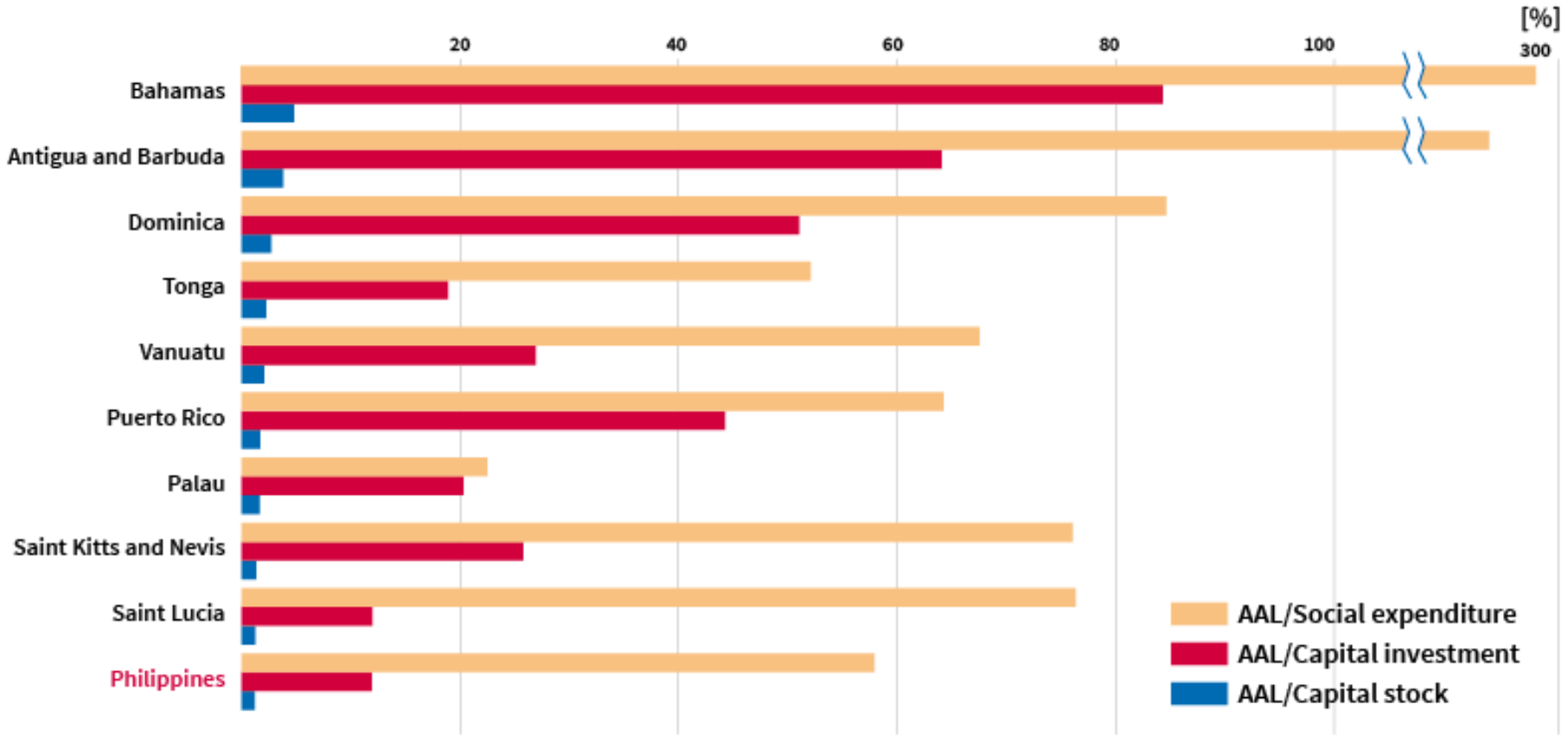
SIDS: an existential threat



Average annual loss as a proportion of social expenditure, capital investment and capital stock: top 15 countries

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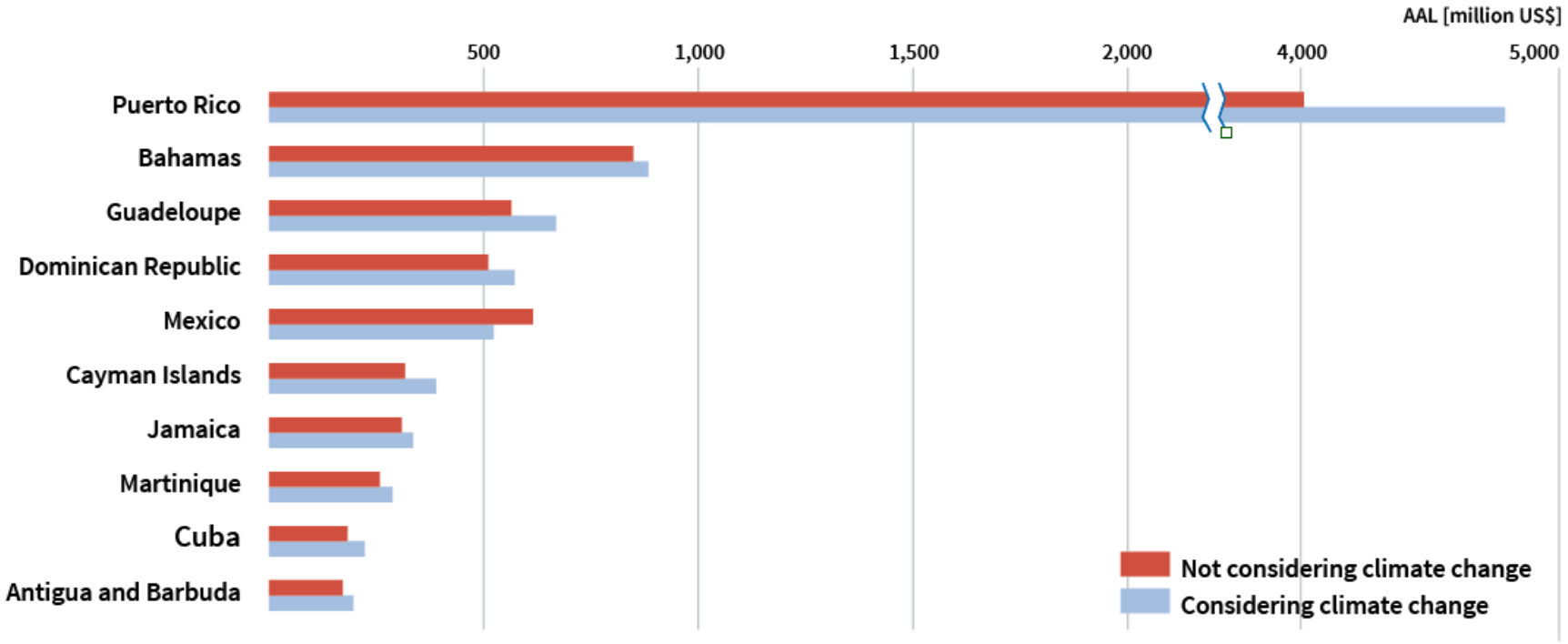
Climate change magnifies risk



Total increase of AAL with climate change to 2050 = US$ 1.4 billion

The increase in annual average loss due to wind damage in the Caribbean by 2050 as a result of climate change

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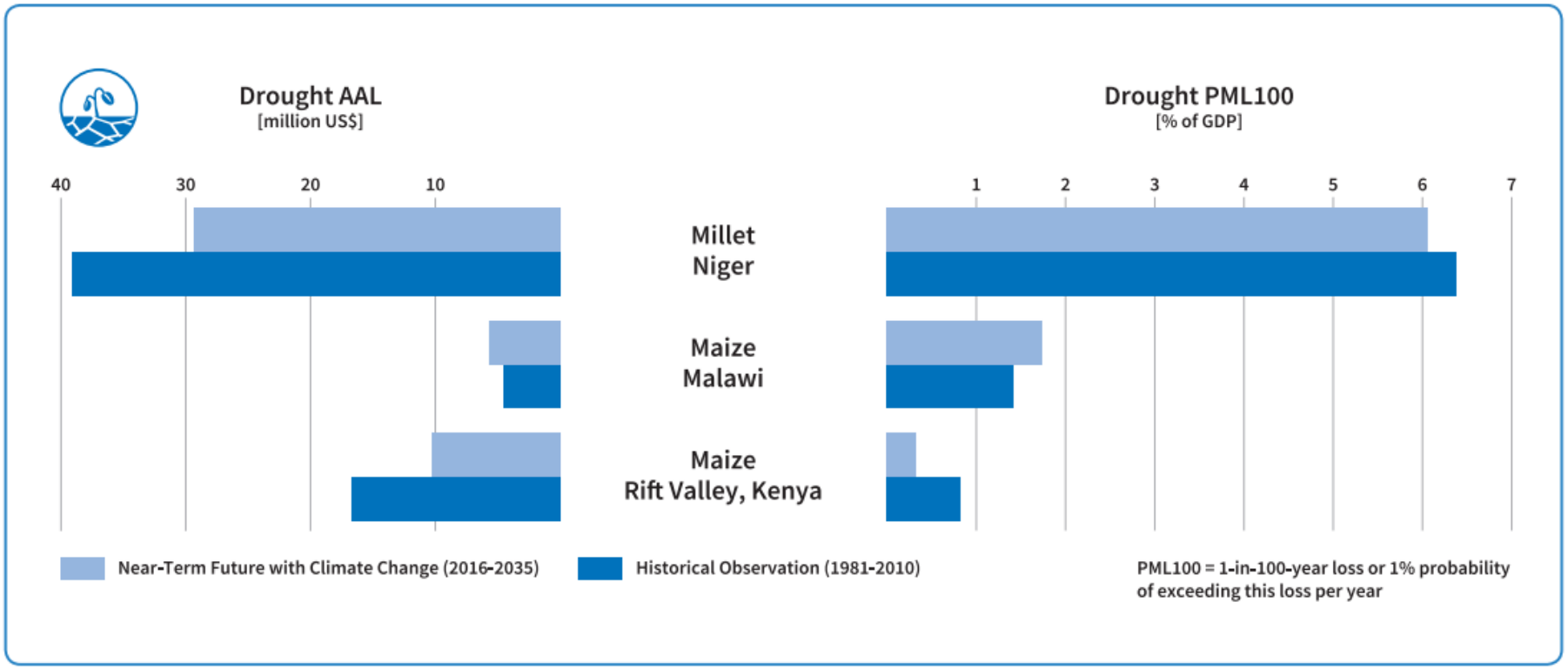
Climate change in agriculture drought



(Source: Jayanthi, 2014.)

Total amount of AAL and PML of 100 year of mean return period with and without climate change

The increase / decrease in annual average loss due to agricultural drought in the Niger, Malawi and Kenya by 2035 as a result of climate change

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The future of the global risk model of GAR15

- ***GAR Atlas: the Hidden Veins of Global Disaster Risk.*** Launch May 2017 at the Global Platform for DRR, Cancun.
- Improvement of the global exposure information
- **Global probabilistic risk assessment of the agriculture sector: 2017 - 2020**
  - Drought, flood, wind
  - Agricultural losses
  - Impacts on food systems, national and local economies
  - Global impacts on markets and food security, complex systems modelling

This scoping meeting is the first step of that process.

Thank you

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