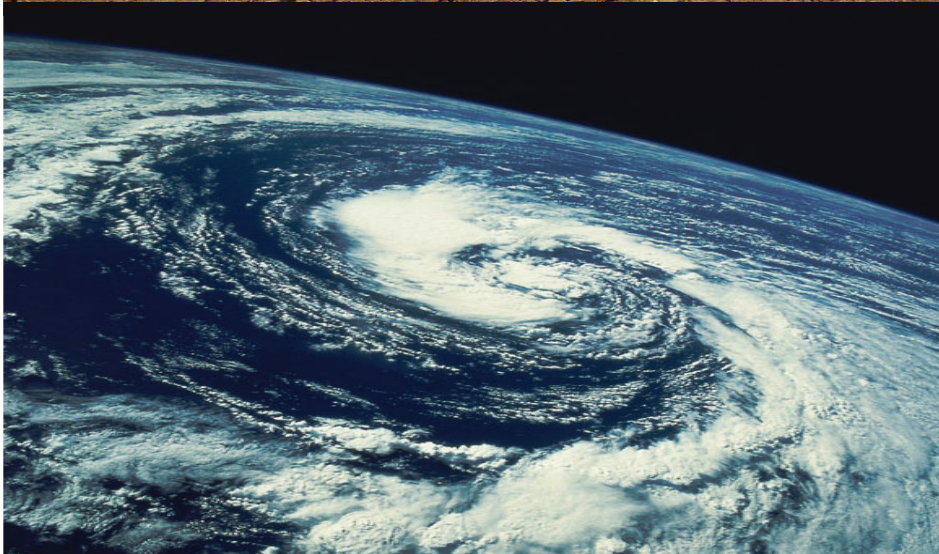
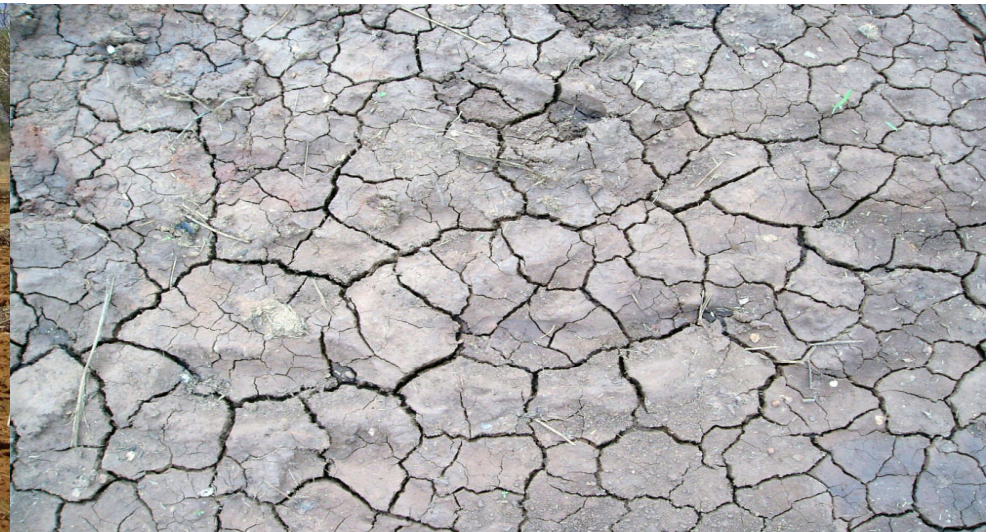


Climate Change Adaptation and Food Security

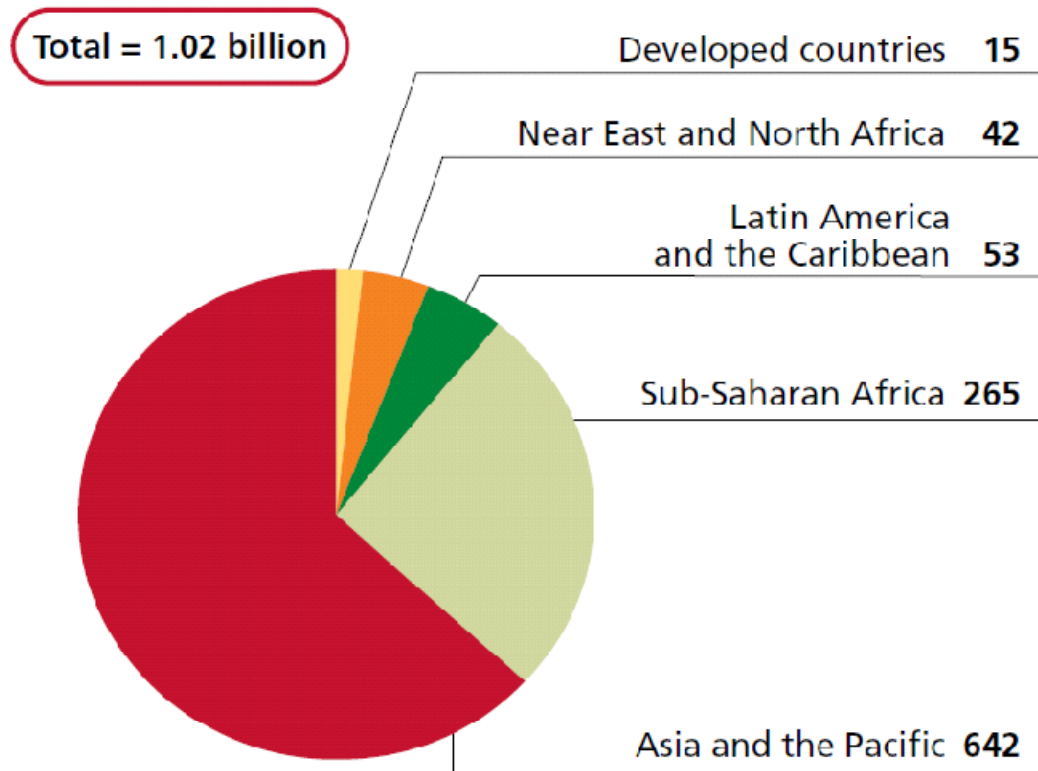


Food Insecurity in 2009

Worldwide 1 of 7 humans suffers from undernourishment



Undernourishment in 2009, by region (millions)



Source: FAO.

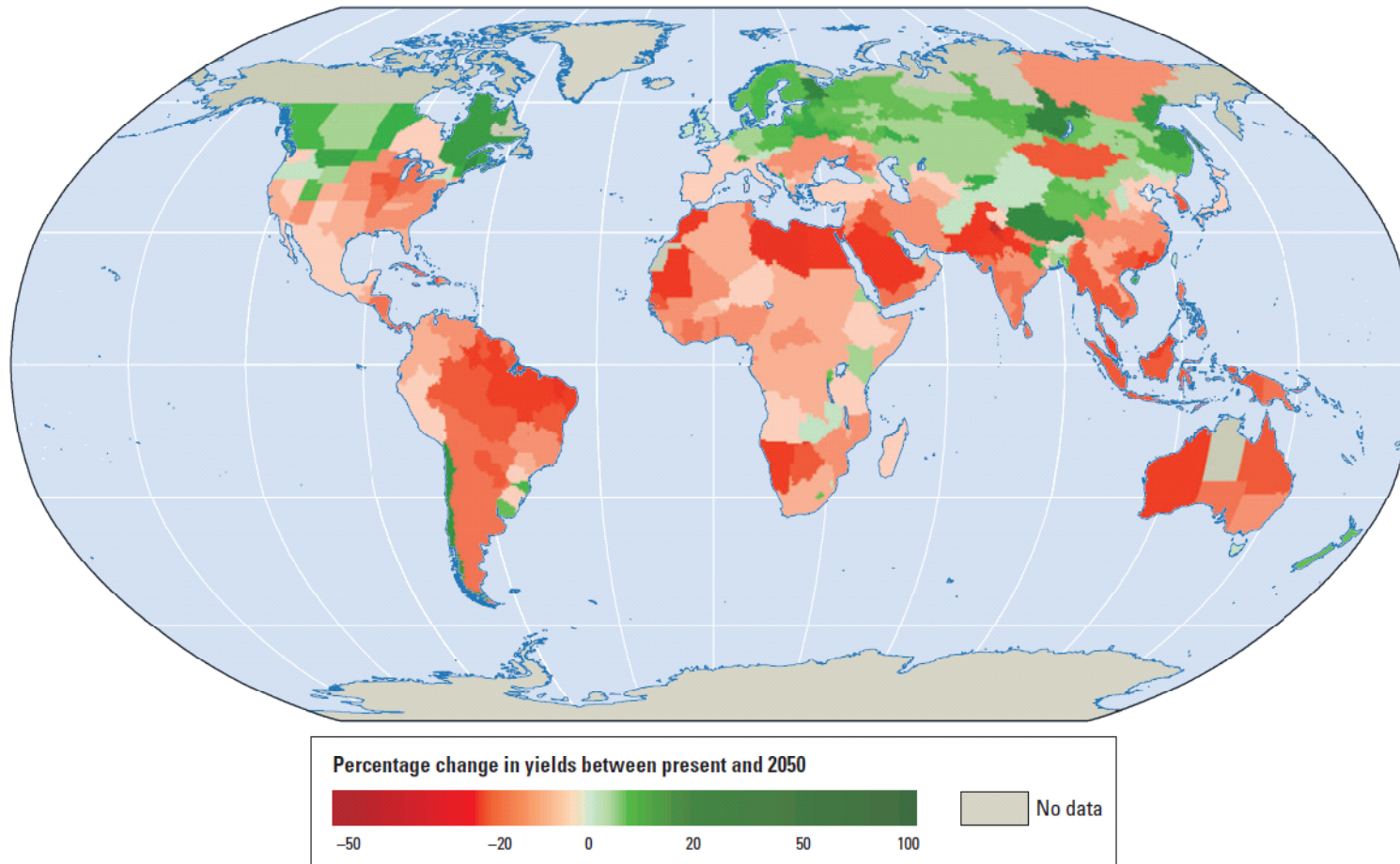
FAO 2009

Predicted Depression of Agricultural Yields by 2050

Climate change hits poor regions particularly intensely



Map 3.3 Climate change will depress agricultural yields in most countries by 2050 given current agricultural practices and crop varieties



Source: Müller and others 2009.

Note: The figure shows the projected percentage change in yields of 11 major crops (wheat, rice, maize, millet, field pea, sugar beet, sweet potato, soybean, groundnut, sunflower, and rapeseed) from 2046 to 2055, compared with 1996–2005. The values are the mean of three emission scenarios across five global climate models, assuming no CO₂ fertilization (see note 54). Large negative yield impacts are projected in many areas that are highly dependent on agriculture.

World Bank 2009

Reducing risk factors

according the Hyogo Framework for Action



DRR strategies integrated with Climate Change Adaptation

Food security for resilience

Land use planning and building codes

Sustainable ecosystems and environmental management

Rural development plans considering DRR

Vulnerability reduction with diversified income options

Protection of critical public facilities

Welthungerhilfe intervention sectors

mainly in rural areas in developing countries



Water catchment

Promotion of adapted agricultural practices and land use

Mitigation of GHG – emissions
(CO₂, CH₄, N₂O)

Reforestation, management of protected areas and buffer zones, biodiversity



Project design and implementation



Risk assessment taking into consideration:
meteorological (and tectonic) hazards
vulnerability and resilience of the local population

Linking traditional knowledge with prognosticated changes

Awareness raising and capacity building (on local level)

Selection and application of approved practices of rural development and natural resource management for adaptation to a changing climate

Dissemination of innovative practices

Climate related impact monitoring

Networking and scaling up of best practices

Challenges and Requirements



Fighting hunger and poverty requires climate friendly technologies and agricultural policies

It's necessary to link climate change adaptation with rural development and disaster risk reduction

Risk assessment and climate proofing require time and expertise

Provision of funds for CCA has to be additional to the Official Development Assistance (ODA)

Access to climate funds for NGO

Thank you for your attention!

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