



# Insurance and climate risk

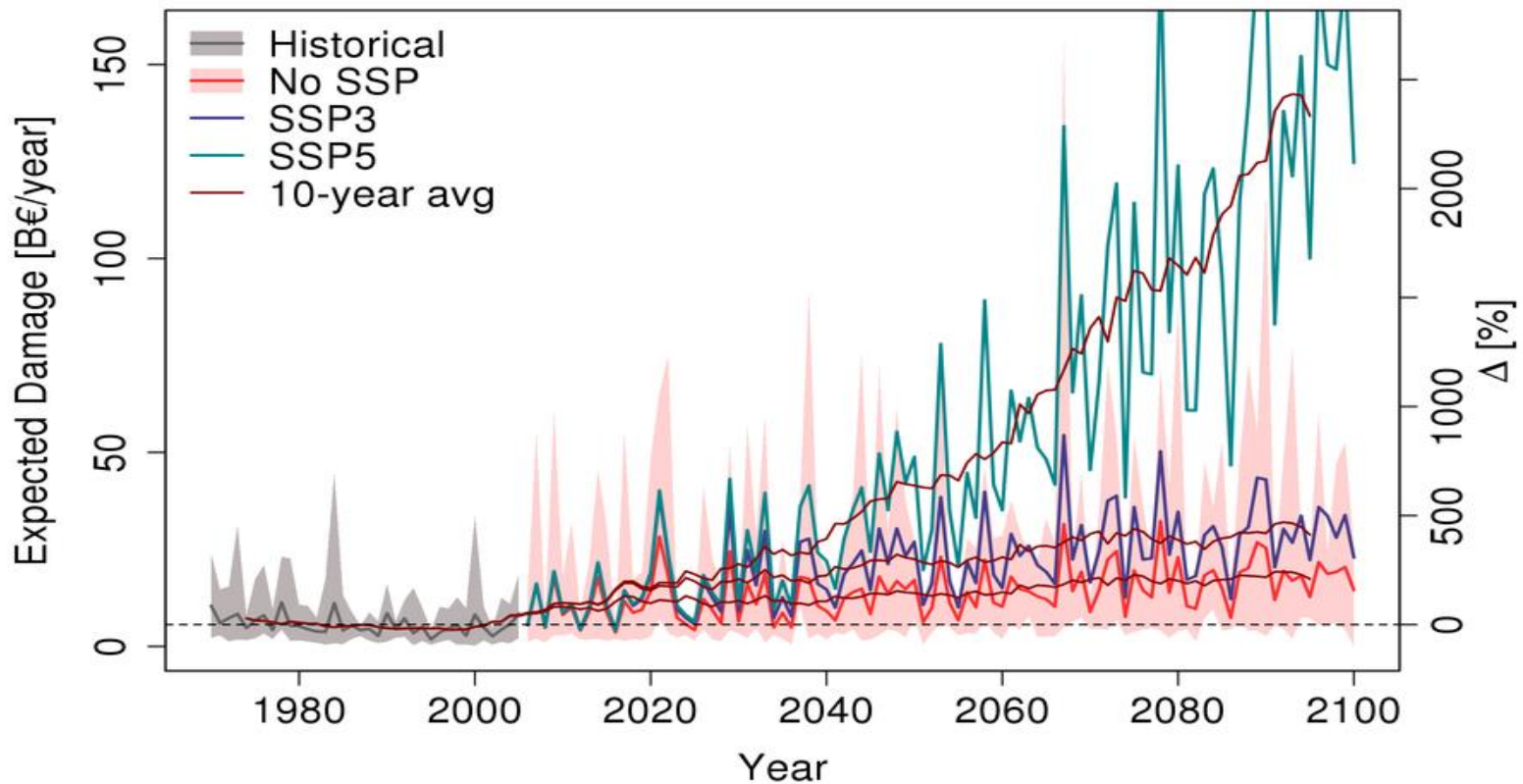
How to make insurance part of adaptation to climate change

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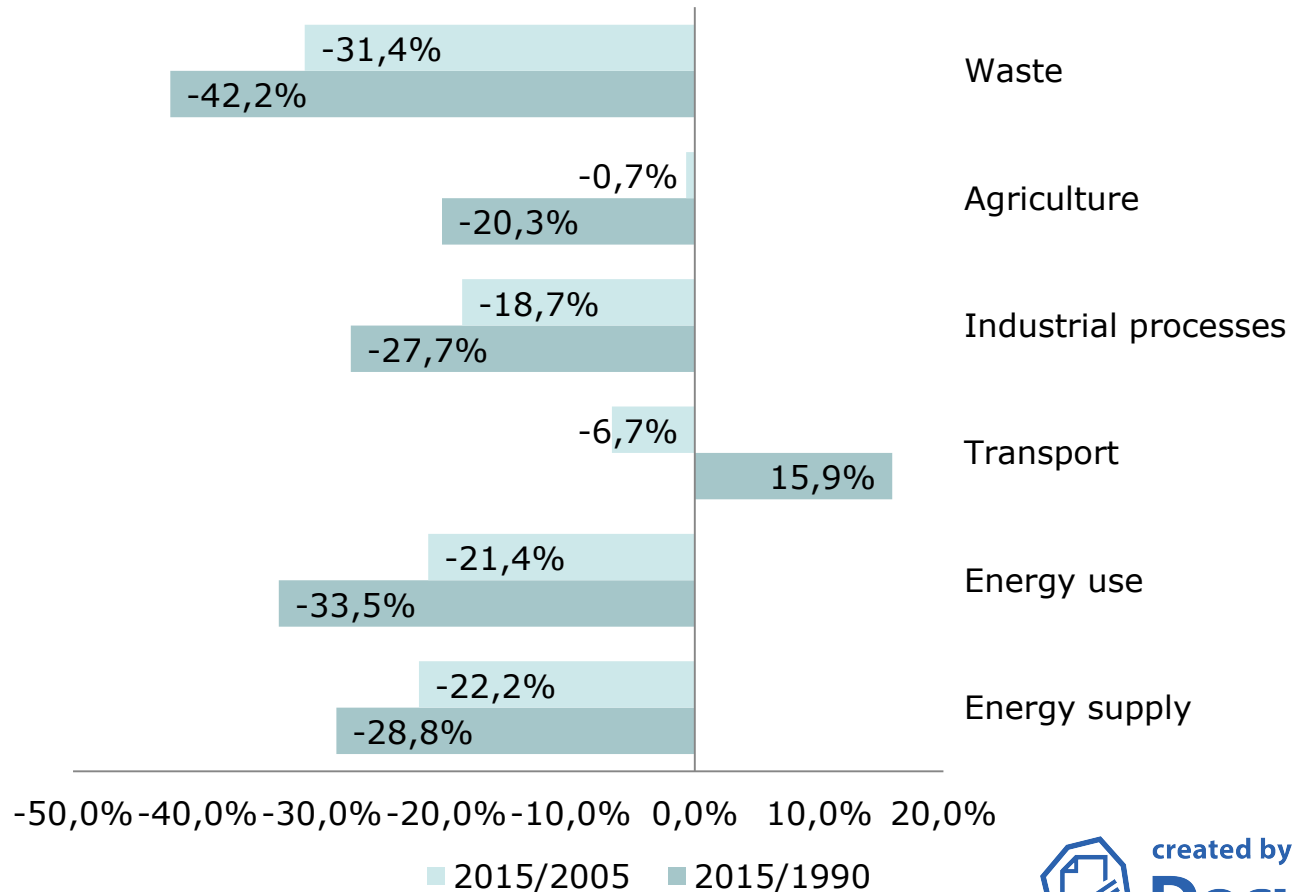


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# A figure for warming up



## Historical change in EU-28 greenhouse gas emissions by sector

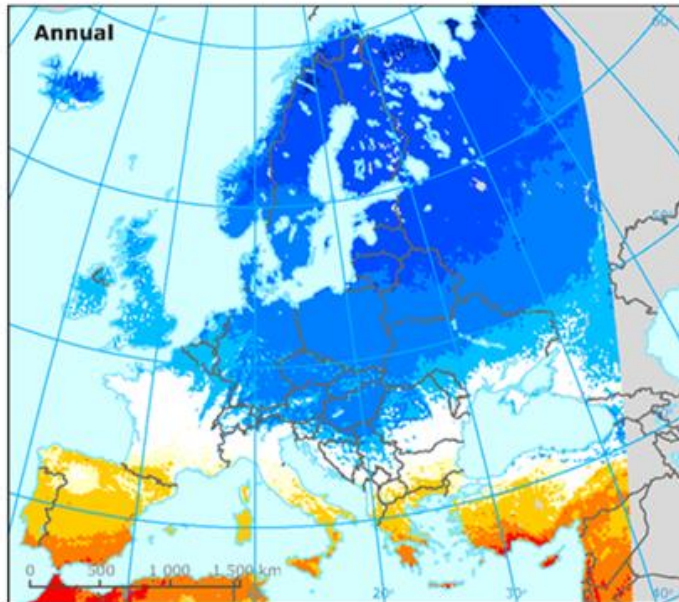


# Adaptation

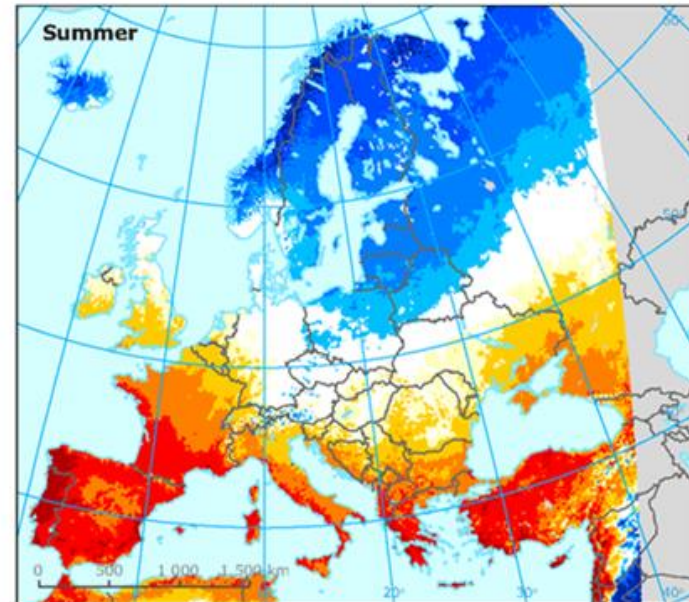


Projected changes in mean annual and summer precipitation (%) in the period 2071-2100 compared to the baseline period 1971-2000

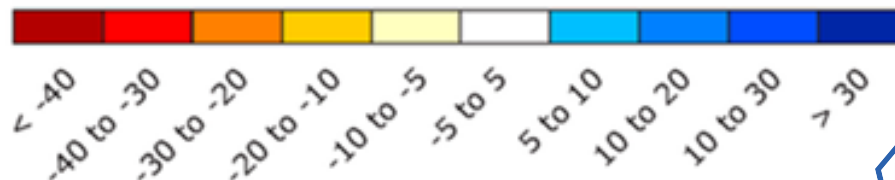
Annual

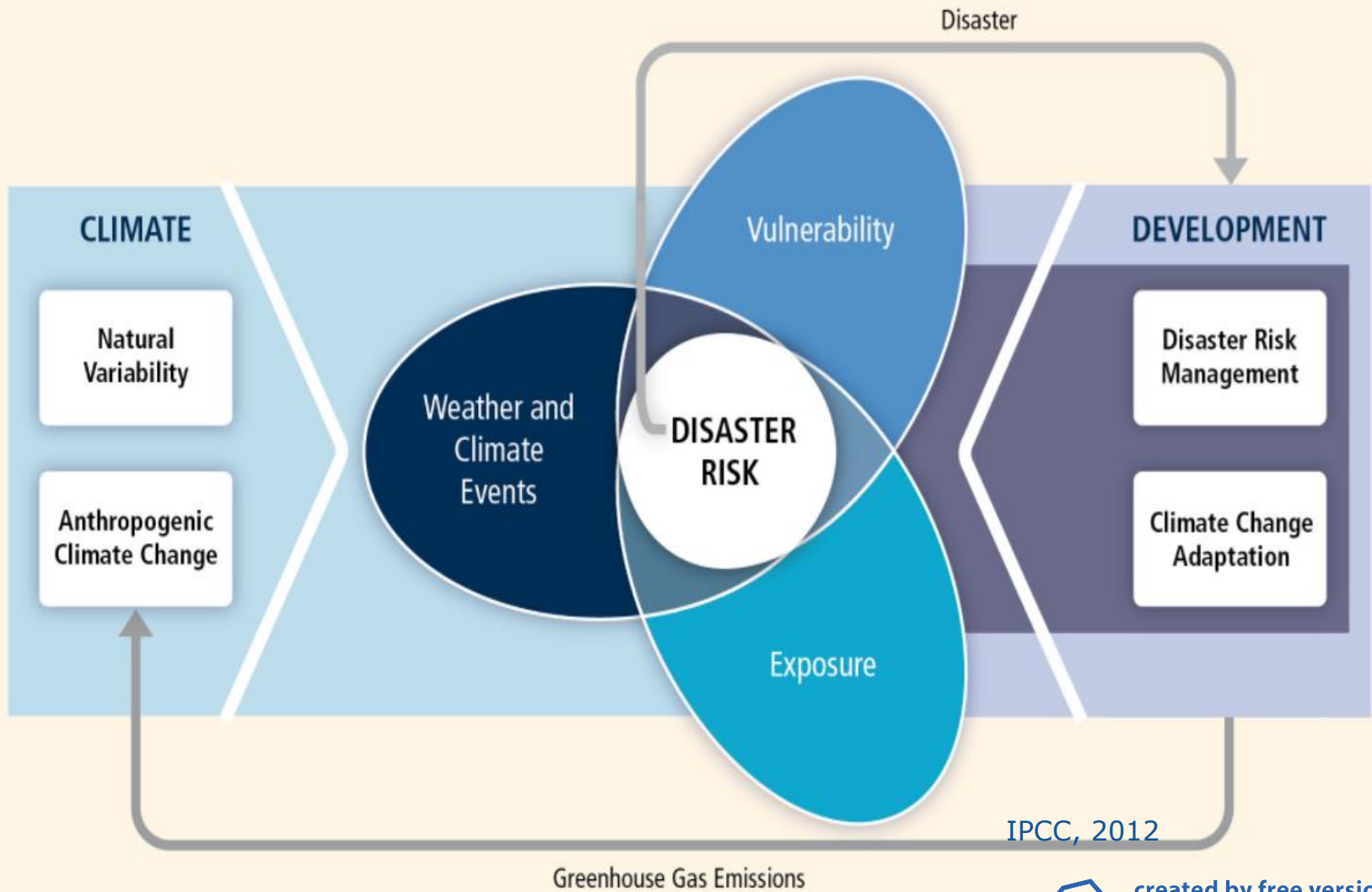


Summer



Projected change in annual and summer precipitation (%)





## ***EU Adaptation Strategy***

### **1. Promote action by all Member States**

- ✓ Encourage all MS to adopt **adaptation strategies**
- ✓ Access to **funding** to help them build resilience
- ✓ Launch voluntary adaptation initiative for cities and municipalities

### **2. Make EU-level action 'climate-proof'**

- ✓ Further integrate climate adaptation needs into key vulnerable sectors: **agriculture**, fisheries, energy,
- ✓ Make infrastructure more resilient
- ✓ Integrate **insurance** in disaster risk management

### **3. Make decision-making better informed**

- ✓ Address knowledge gaps through research
- ✓ Climate-ADAPT web portal

# Ways to think about adaptation

- The language of the CAP

## ***Stability***

Where does adaptation to climate change come in?

# CAP measures and adaptation

Prevention and restoration of

- damage to forests from **forest fires**,
- natural **disasters** and catastrophic events, including parasite infestations and diseases
- threats from **climate change**...



# CAP measures and adaptation

- **Insurance**
- **mutuals for climate events**
- **income stabilisation...**

Directed to adaptation: less than 2% of total climate related expenditure

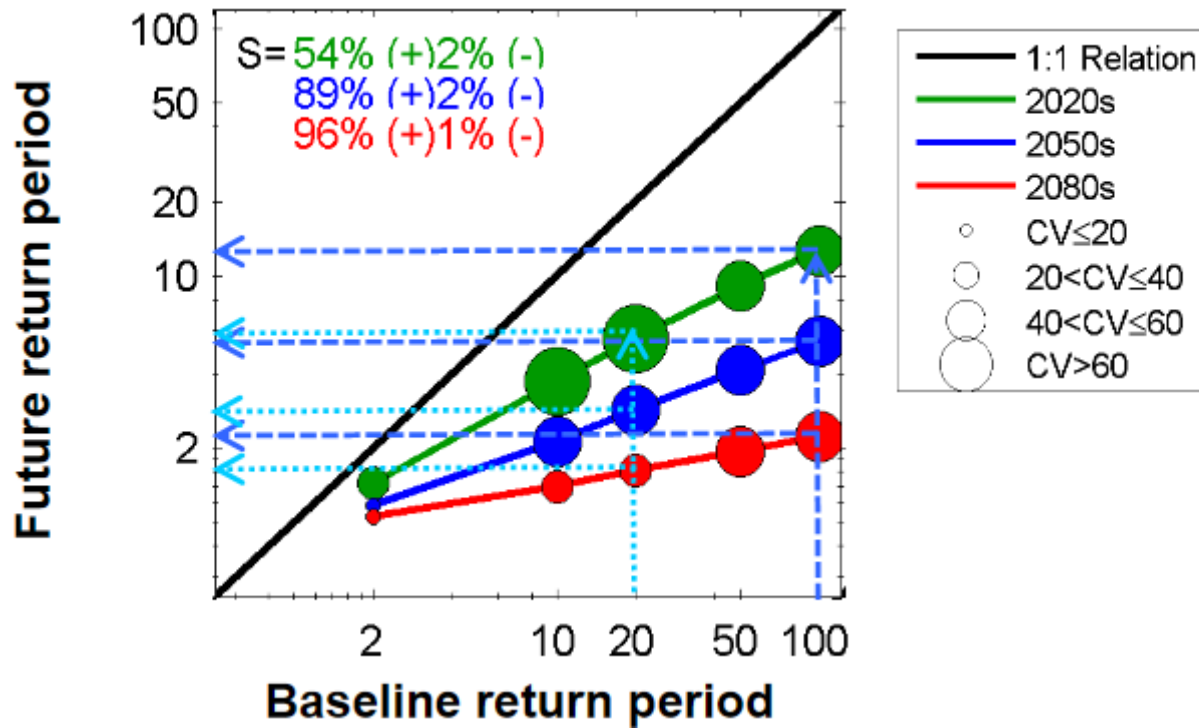


# External study

Insurance of weather and climate-related disaster risk: Inventory and analysis of mechanisms to support damage prevention in the EU



# What is insurance to climate change?



## In short:

- Climate change influences risk pricing
- Climate change introduces the far horizon
- Consequences of climate change increase damages

Risks should be avoided!

# Study set-up

## How can insurance incentivise risk reduction?

- Under which conditions does insurance work well?
- How can we apply good practice all over the EU?
- Covering both private property and agriculture  
Focus on agriculture.

# Risk management objective

Depends on the expectations of governments, insured parties or insurers.

## Solidarity

- Achieve **maximum coverage** in order to evenly distribute risk.

## Climate risk management

- will **increase risk awareness** and provide incentives to increase **resilience** through **adaptation** measures.

# Some good practices

- Government collaborates with insurers to **control** and **distribute** EU subsidies.
- Insurers receive **data** on several factors (i.e. area, type of crops, yields) to develop more suitable insurance products.

# Some good practices

- **Government acknowledges calamity caused by abnormal variations by ministerial decree.**
- **Intensity of a natural climatic agent (drought, flood, frost, etc.)**



# Some good practices

- To be insured a farmer must meet certain **pre-set conditions** regarding their vulnerability to extreme events, setting vulnerability to an **acceptable level**.
- **Bonus-malus**

# What works for agriculture?

The use of insurance against **multiple risks** (with a focus on yield insurance)

Requirements to insure **all cultivated land**

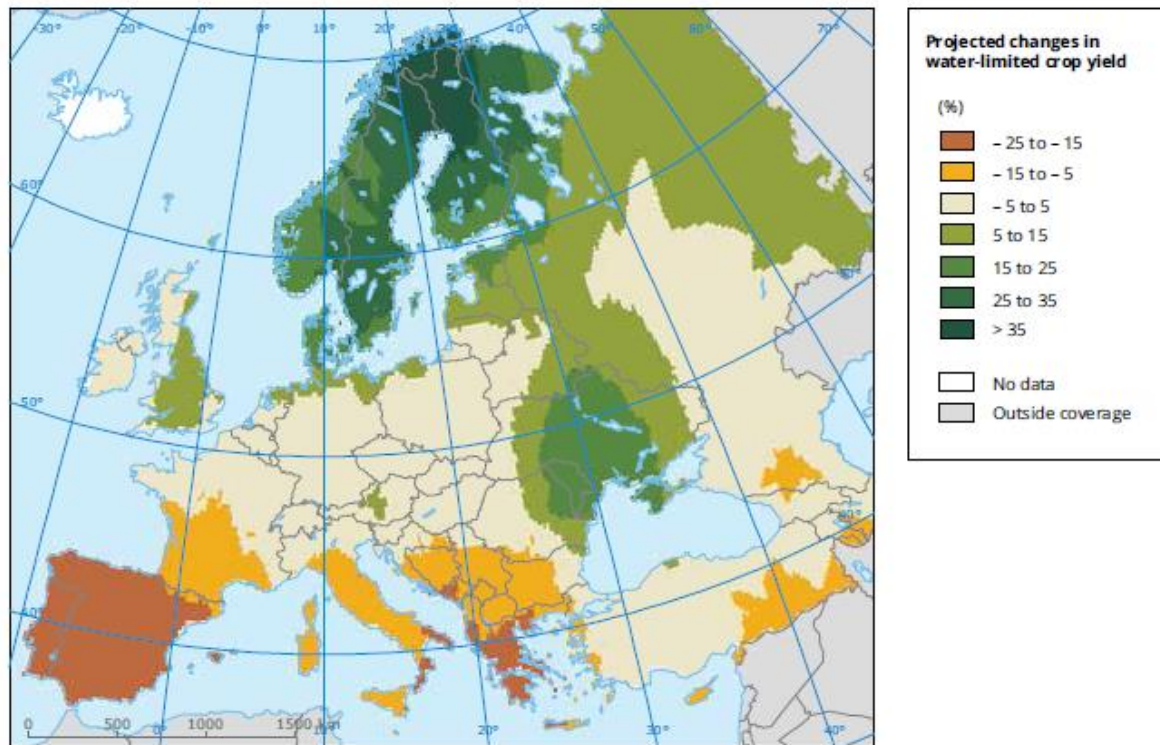
**Premium subsidies** to direct investment in **multi-risk policies**

**Pool-like structures or public reinsurance** for specific time-bound risks, such as frost and droughts

A tradition of **collaboration** between the public and private sector risk managers

# Projected yield changes for 2050

Map 5.13 Projected changes in water-limited crop yield



**Note:** The map shows the mean relative changes in water-limited crop yield simulated by the ClimateCrop model for the 2050s compared with the period 1961–1990 for 12 different climate model projections under the A1B emissions scenario. The simulation assumes that the irrigated area remains constant, and the results combine the response of the key crops wheat, maize and soybean, weighted by their current distribution.

**Source:** Adapted from Iglesias et al., 2012 and Ciscar et al., 2011.

# Evaluation of the adaptation strategy

**Online public consultation starts in December!**

Check out

[https://ec.europa.eu/info/consultations\\_en](https://ec.europa.eu/info/consultations_en)