

# Food Insecurity & Climate Change

This poster shows the relationship between climate-related events and vulnerability to food insecurity in developing and least-developed countries. Present-day vulnerability to food insecurity is shown on the map at the bottom of the poster. Future projections are shown for a range of scenarios of different future global greenhouse gas emissions and adaptation levels. These show that with both adaptation and mitigation, it is possible to successfully tackle the impact of climate change on future food insecurity.

## LOW EMISSIONS

- No adaptation
- Low emissions

- High adaptation
- High emissions

## HIGH EMISSIONS

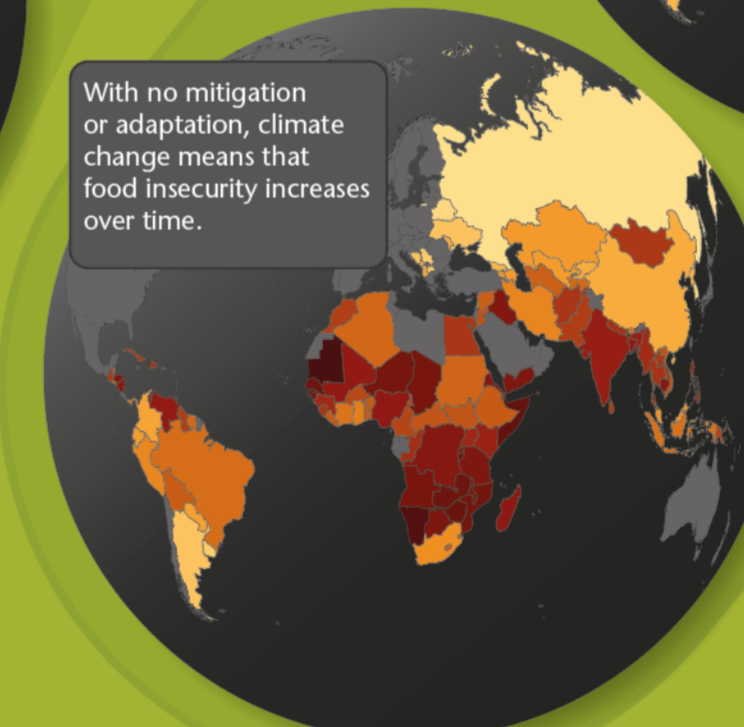
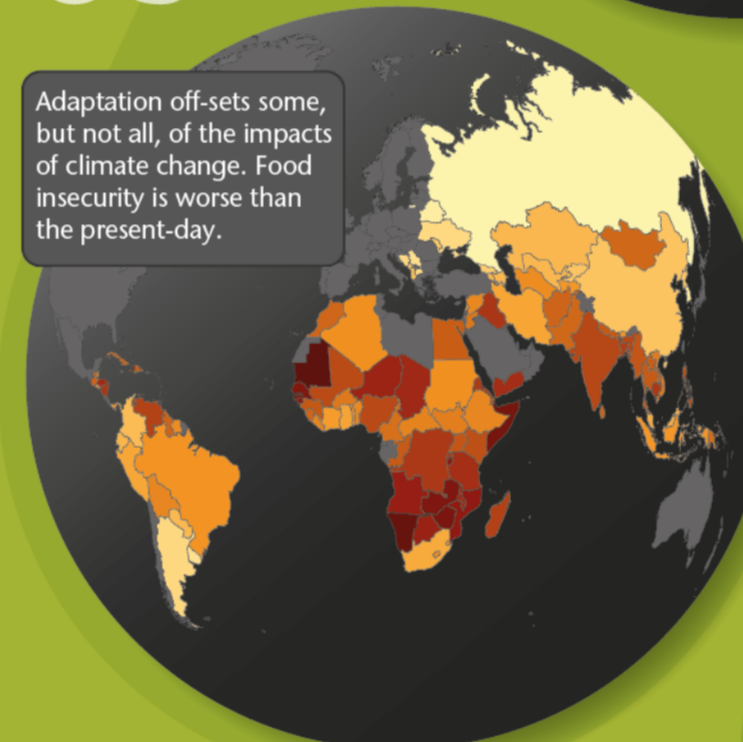
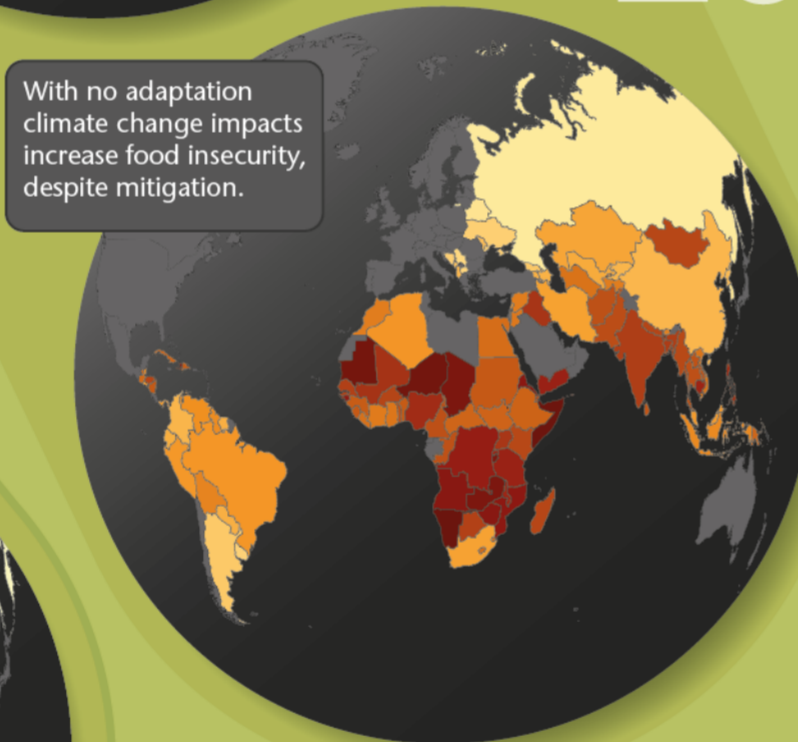
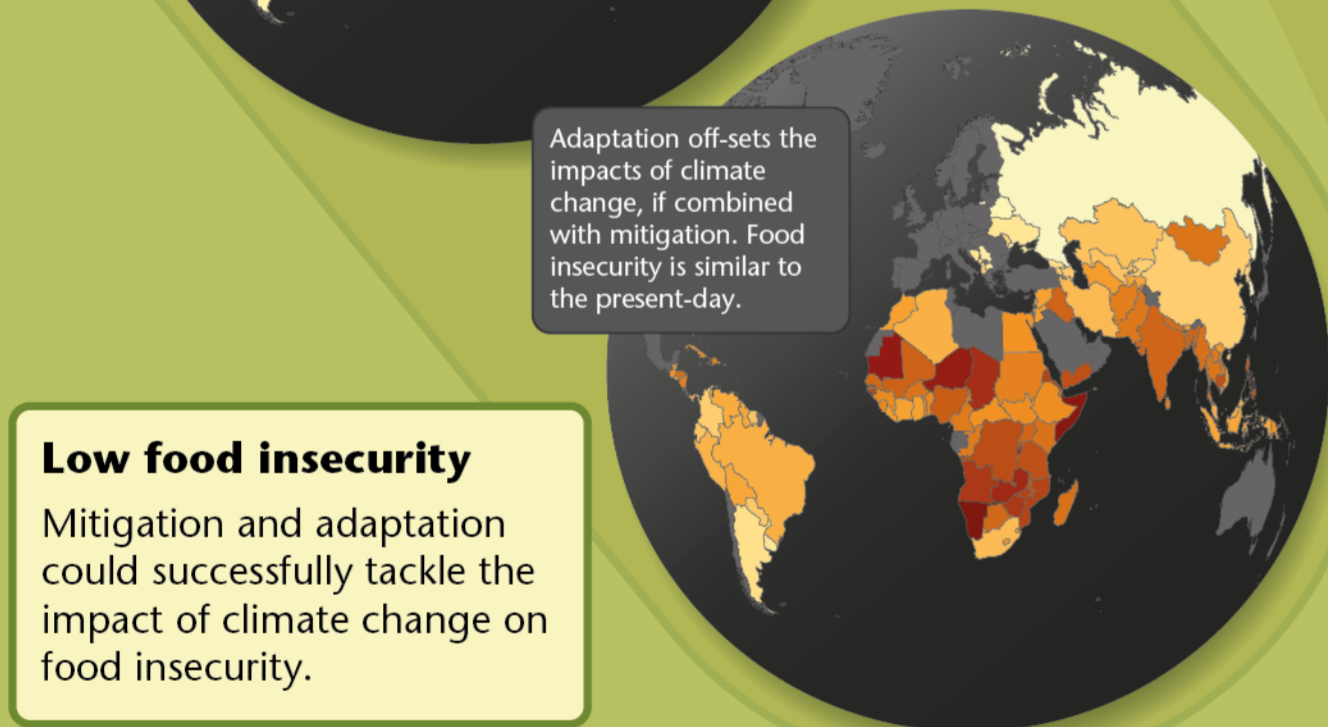
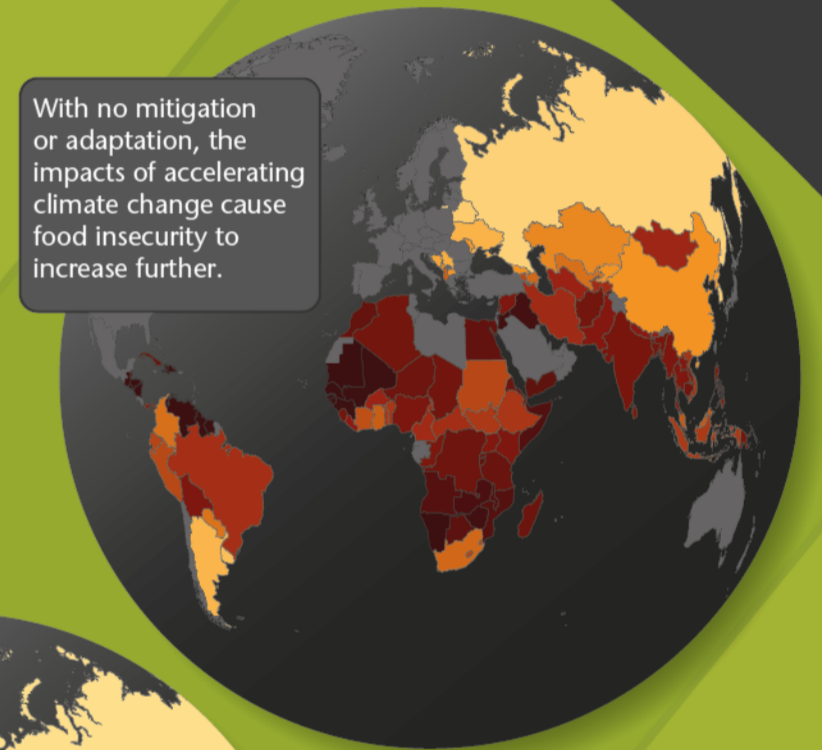
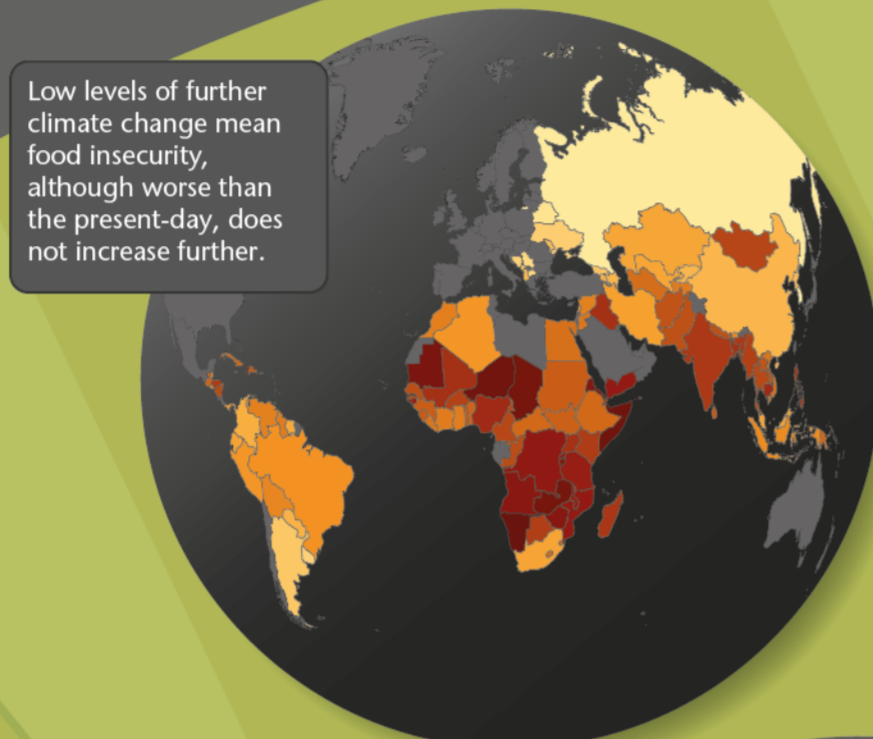
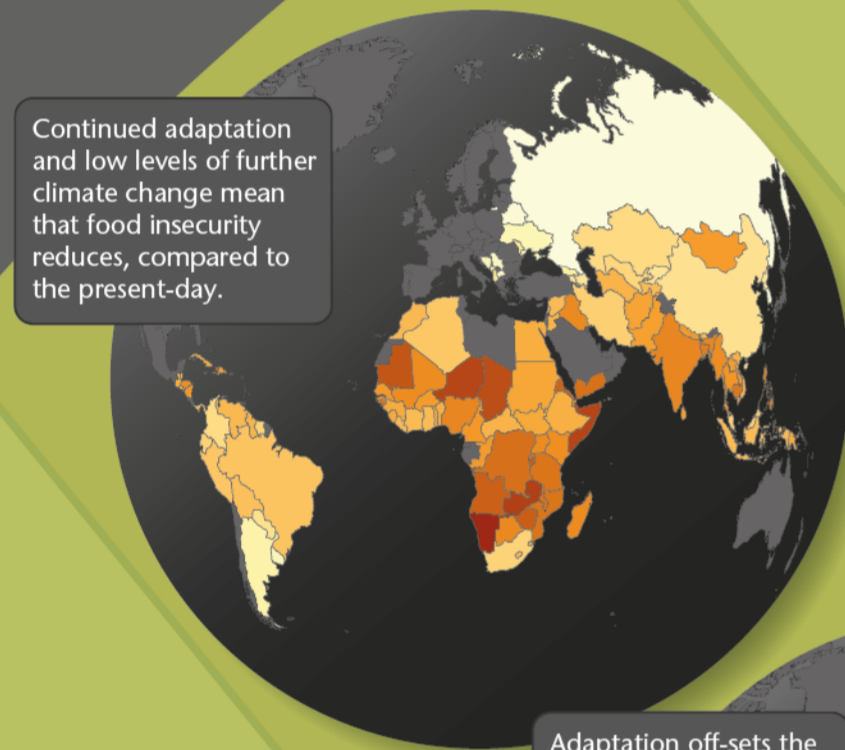
- High adaptation
- Low emissions

- No adaptation
- High emissions

### 2080s

### 2050s

### Present day



**Low food insecurity**  
Mitigation and adaptation could successfully tackle the impact of climate change on food insecurity.

**High food insecurity**  
With no action to address climate change the negative consequences for food insecurity could be severe.

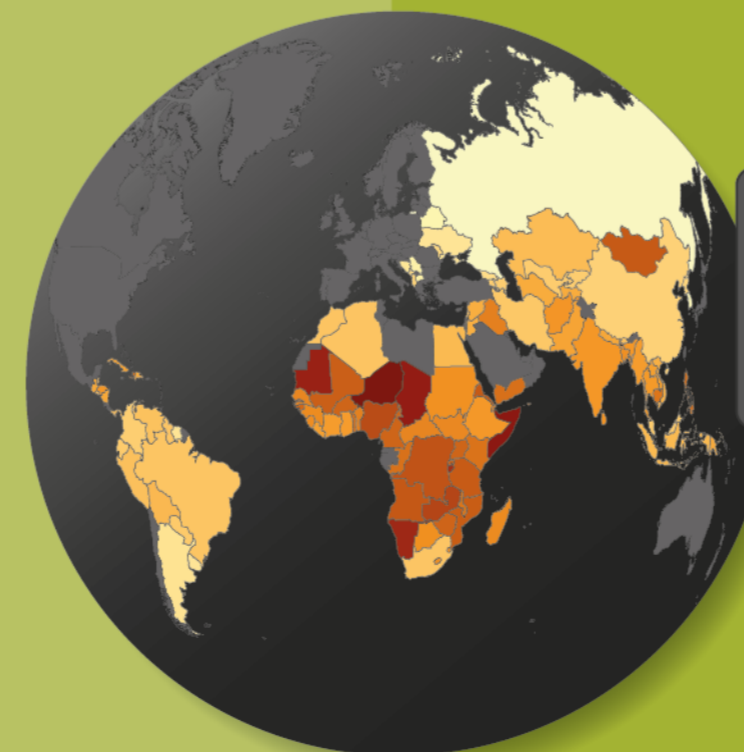
● **Low emissions** – The low emissions scenario represents a rapid and sustained reduction in future global emissions resulting in an increase in global average temperature of around 2 °C above pre-industrial levels by the end of the 21st century. This scenario is also known as RCP2.6.

● **High emissions** – The high emissions scenario represents considerable future increases in global emissions resulting in a rise in global average temperature of 4 °C or more above pre-industrial levels by the end of the 21st century. This scenario is also known as RCP8.5.

● **High adaptation** – This is a scenario where both the sensitivity of agricultural production and the ability of a country to cope with climate-related hazards has been improved. The change is around 10-15% in the 2050s, and a further 10-15% in the 2080s. The change is not applied equally to all countries, allowing the most vulnerable countries to improve more rapidly than the least vulnerable. This scenario was chosen as a representative of a plausible

level of adaptation, but is not a forecast of future behaviour. The results shown here are not particularly sensitive to the way the adaptation scenario has been developed.

● **No adaptation** – This scenario maintains agricultural sensitivity and adaptive capacity at present day levels. It therefore shows the impact of climate change alone on food insecurity.



Vulnerability to food insecurity

