



Food and Agriculture Organization
of the United Nations

INTERNATIONAL TECHNICAL CONFERENCE ON CLIMATE CHANGE, AGRICULTURAL TRADE AND FOOD SECURITY

15 -17 November 2017

FAO Headquarters, Rome Italy





Food and Agriculture Organization
of the United Nations

INTERNATIONAL TECHNICAL CONFERENCE ON
CLIMATE CHANGE, AGRICULTURAL TRADE AND FOOD SECURITY



Rome 15 November 2017

THE STATE OF FOOD AND AGRICULTURE

CLIMATE CHANGE,
AGRICULTURE
AND FOOD SECURITY

Mr Jakob Skoet
Economist, Economic and Social
Development Department

Why a report on climate, agriculture and food security?

Climate change is already
having an impact on
agriculture with severe
implications for food security

AT THE
SAME
TIME

The agriculture sectors
contribute to climate change
with 21% of emissions

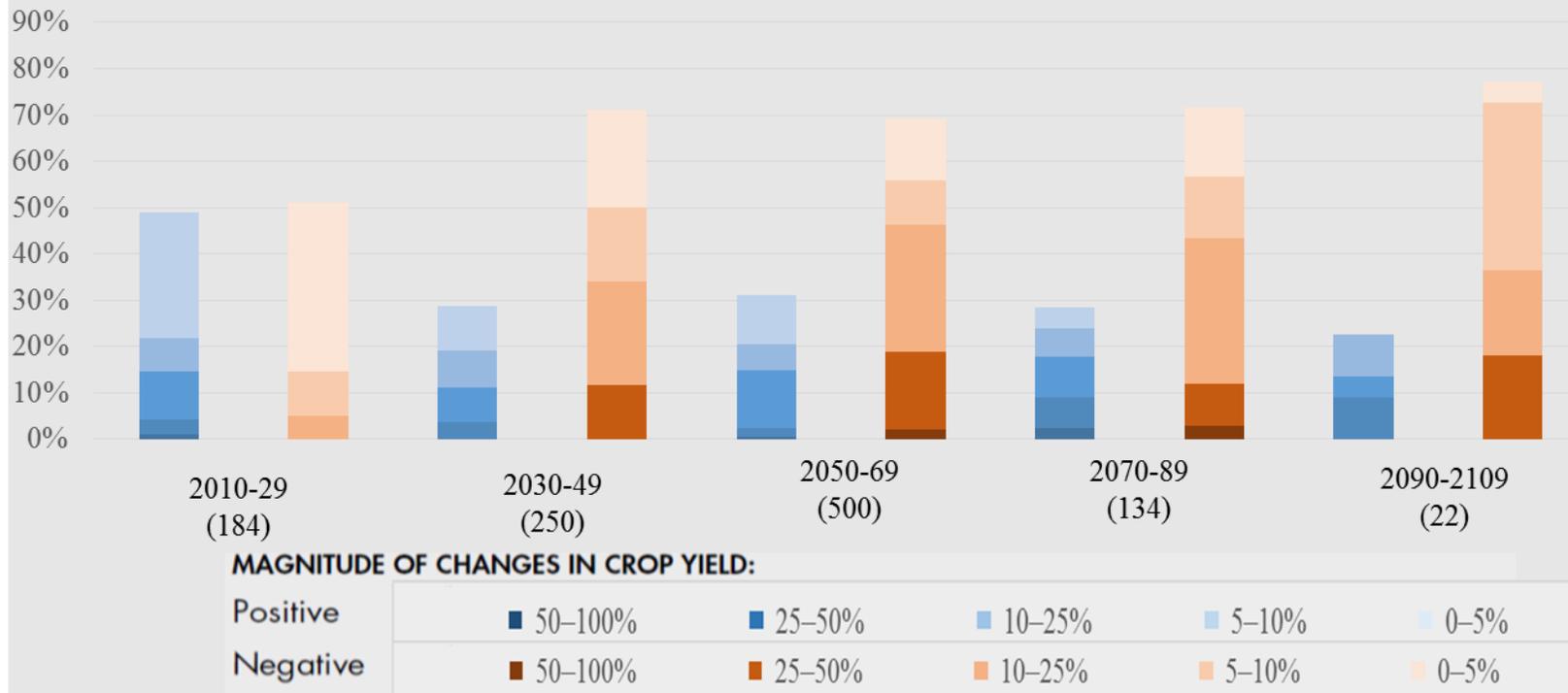
For agriculture to adapt and contribute to mitigation,
business as usual is not the answer

Good news : The global community is taking notice

Climate change affects agricultural production

Projected changes in crop yields for all locations worldwide owing to climate change

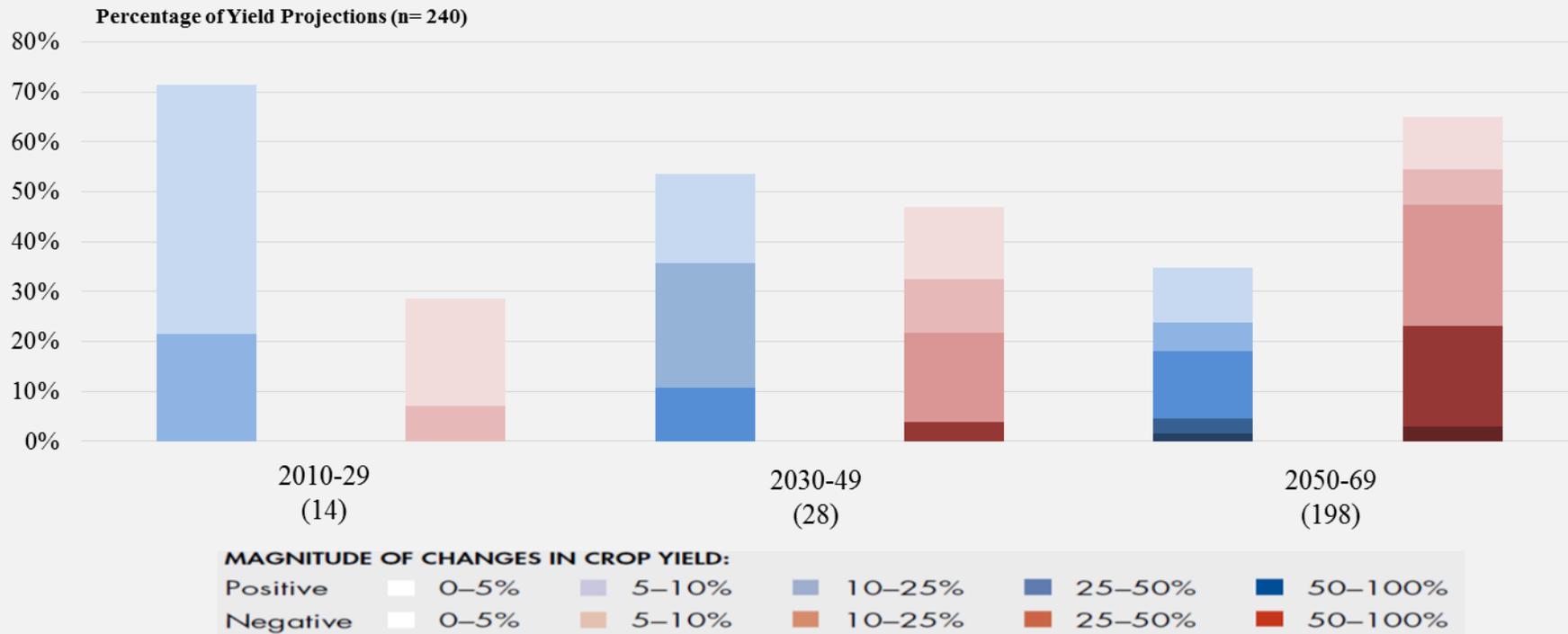
Percentage of Yield Projections (n= 1090)





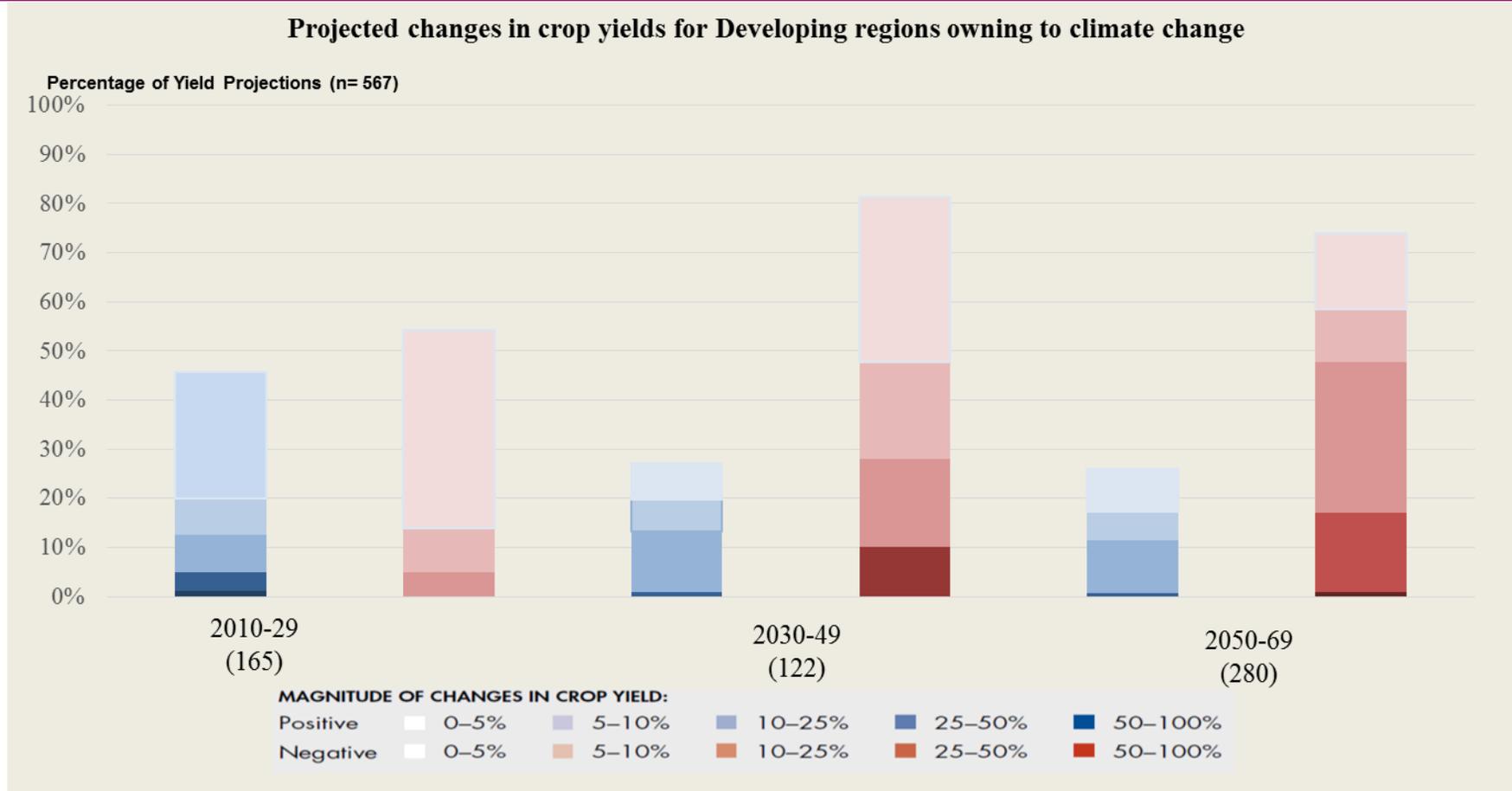
Climate change affects agricultural production Developed regions

Projected changes in crop yields in developed regions owing to climate change





Climate change affects agricultural production Developing regions



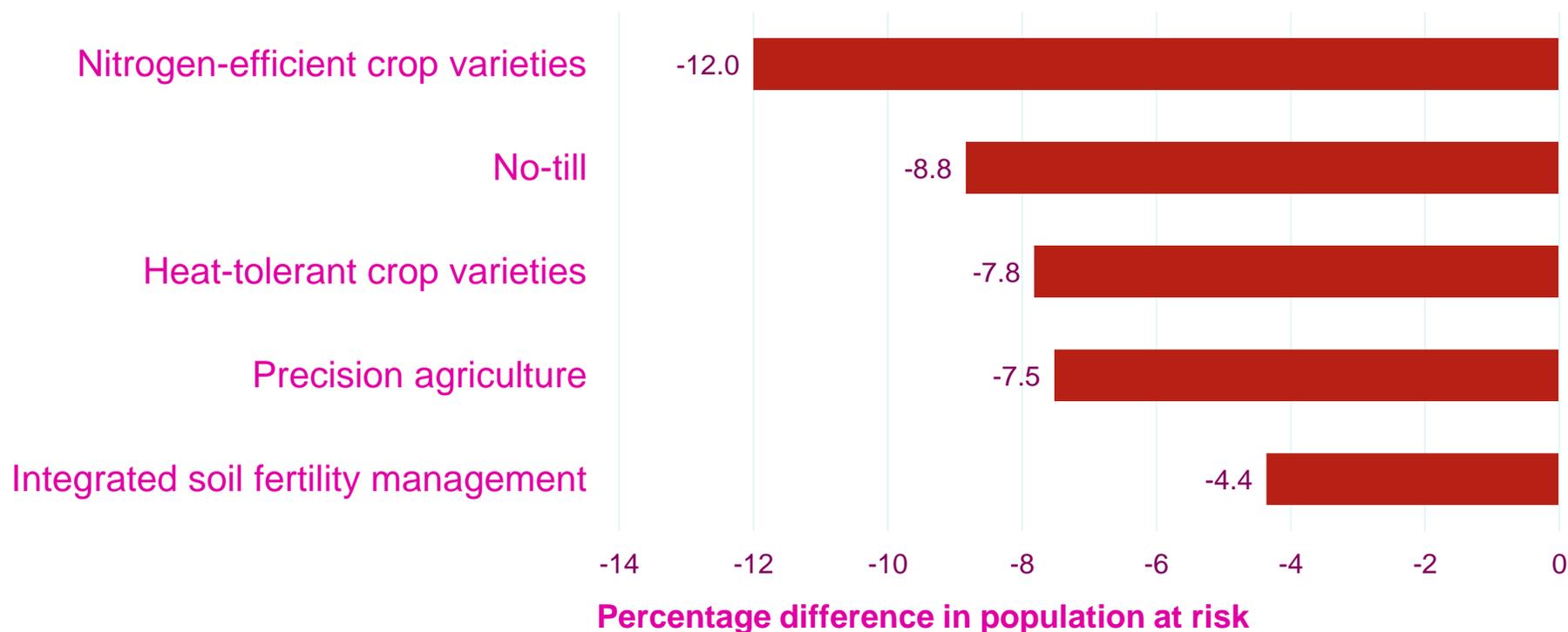
No eradication of global poverty without resilient smallholder agriculture

- ◆ Agricultural productivity declines
- ◆ Smallholder agriculture particularly vulnerable
- ◆ Rural women are among the most vulnerable
- ◆ Climate change could increase in poverty by between 35 and 122 million people by 2030



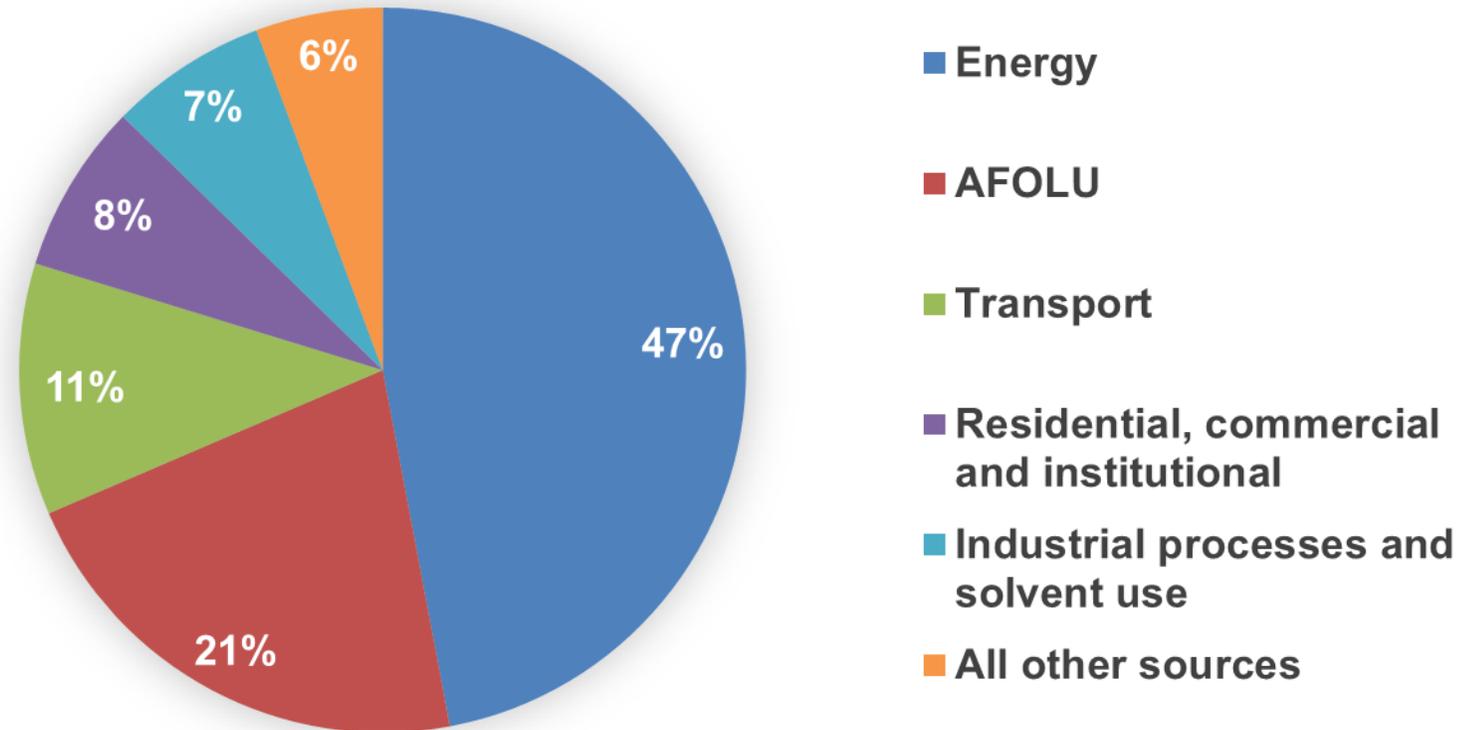
Solutions Exist: Improved production systems enhance food security

Change in 2050 in the number of people at risk of hunger, relative to the baseline scenario, after adoption of selected improved agricultural technologies

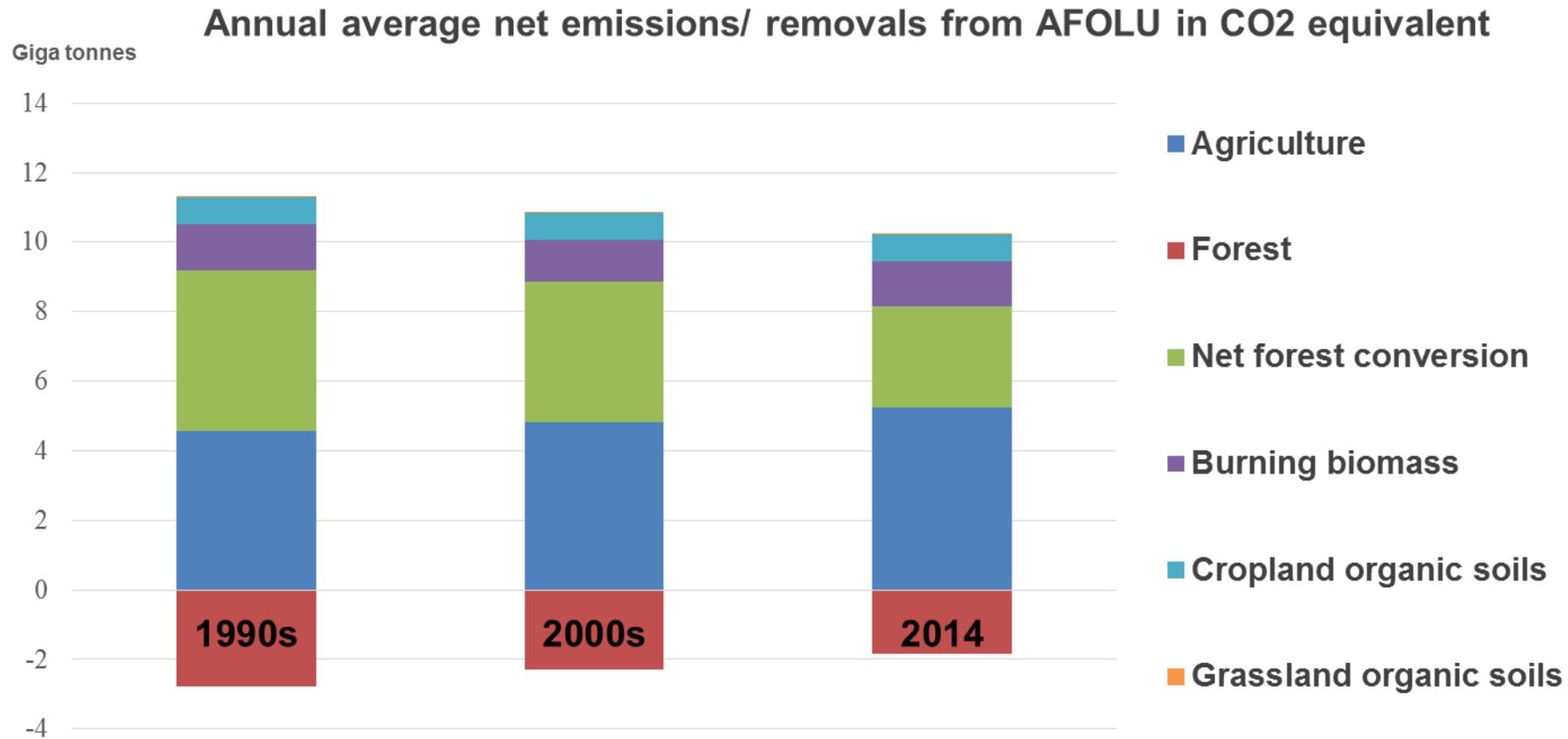


The agriculture sectors are major contributors to greenhouse gas emissions

Shares of Greenhouse Gas Emission from Economic Sectors in 2010



Agriculture, forestry and land use all contribute to GHG emissions



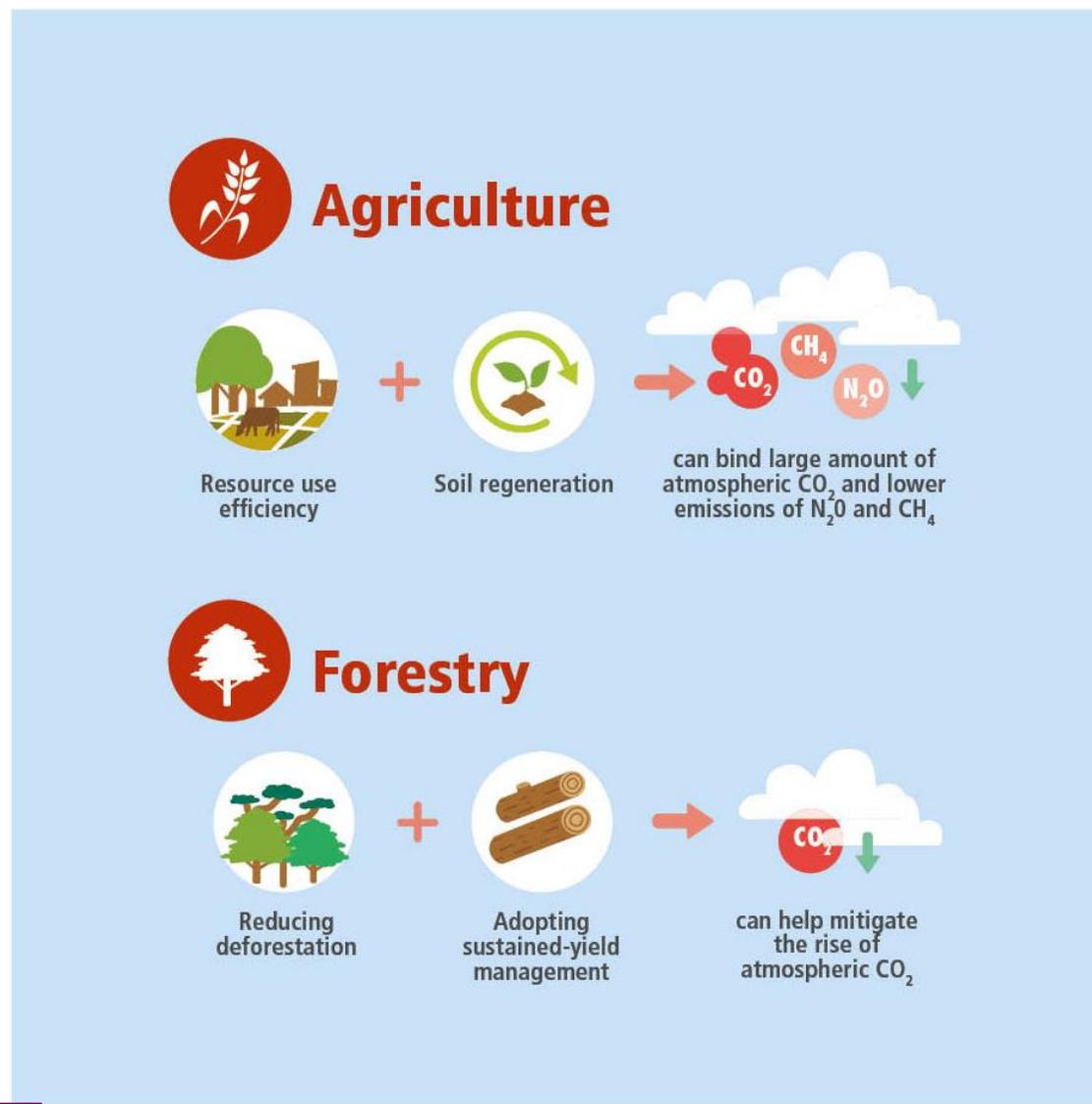
Food security can go hand in hand with mitigation

Enhance resource and emission efficiency:

- ◆ Closing yield gaps
- ◆ Increasing herd productivity

Creating carbon-rich landscapes:

- ◆ In forests
- ◆ In agriculture



Changing Farming Practices: Overcoming barriers

Smallholder producers face major barriers when adopting practices that can make their production systems more resilient and efficient.



Labour availability



Tenure security



Groups/social
capital



Risks and shocks



Credit access
and resource
endowments



Information



Beyond the farm: Making livelihoods more resilient

Interventions beyond farming practices are needed:

- ◆ Diversification
- ◆ Support to risk management – social protection
- ◆ Reducing gender inequalities



Beyond the farm: GHG emissions' reduction in food systems

Emissions beyond the farm can be reduced:

- ◆ Less losses and waste of food
- ◆ More sustainable diets
- ◆ Considering and assessing energy use in modern food systems



Way Forward: Policies and Climate Finance

- ◆ Removing perverse incentives and harmful subsidies
- ◆ Ensuring an efficient international trading system.
 - ◆ Minimizing trade restrictions
 - ◆ Ensuring a “climate-compatible” trade policy framework.



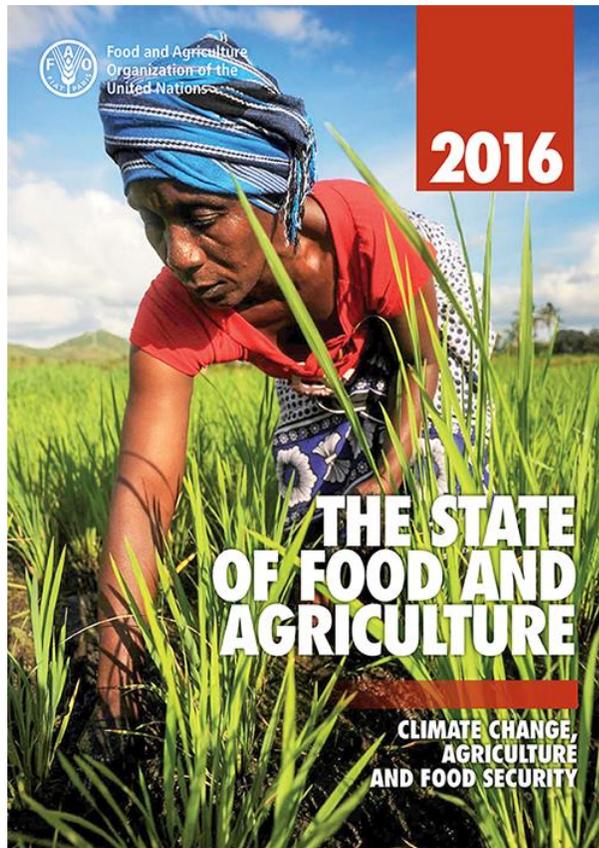
Food and Agriculture Organization
of the United Nations

INTERNATIONAL TECHNICAL CONFERENCE ON
CLIMATE CHANGE, AGRICULTURAL TRADE AND FOOD SECURITY

THANK YOU



For more information...



The State of Food and Agriculture 2016

Climate Change, Agriculture and Food Security

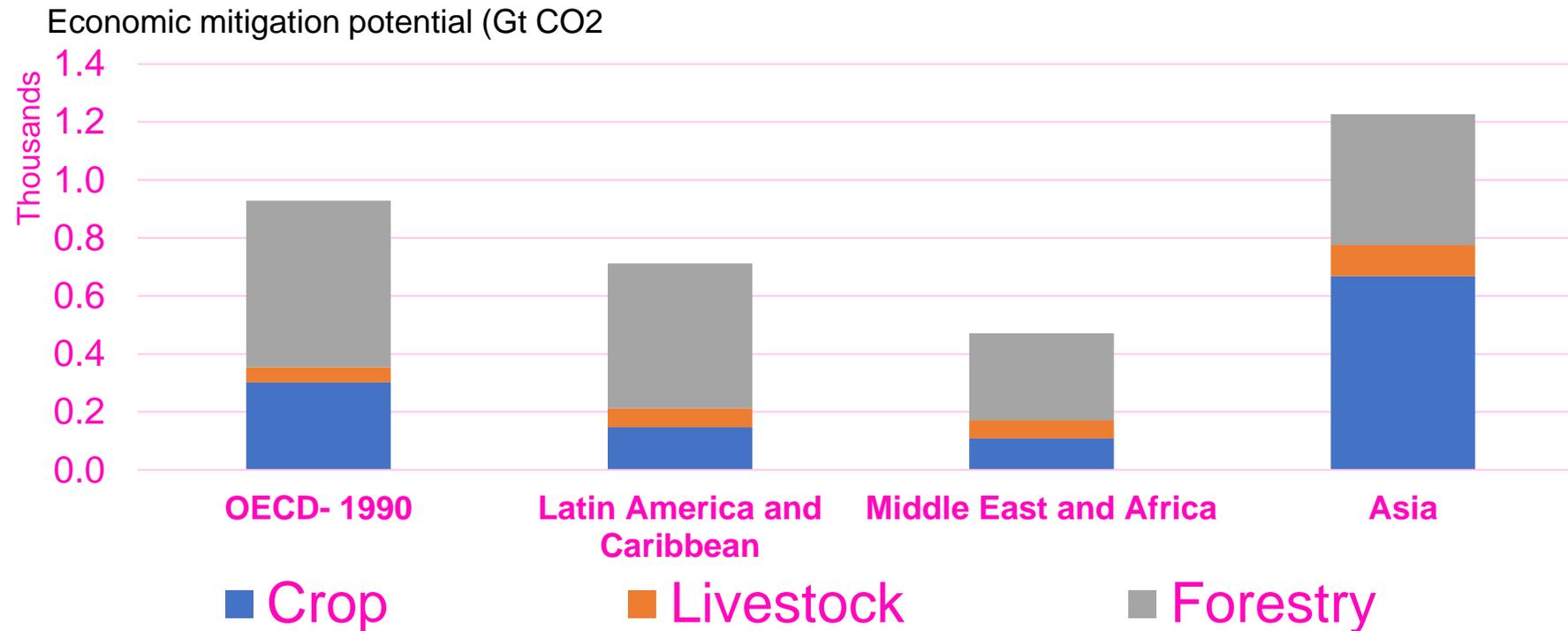
Available in:

Arabic, Chinese, English, French, Russian, and Spanish

<http://fao.org/publications/sofa>

Significant potential for mitigation, but varies by region

Economic mitigation potential in the AFOLU sector in 2030, by region



Note: Results reported for carbon prices of US\$20 per tonne of CO2 eq