



Food and Agriculture Organization
of the United Nations

Interactions between climate change, food production and consumption

Emilie Wieben, FAO
Sustainable Development Forum 2016 – Food and Climate Change
Tallinn, 8 November 2016



Food Systems & Climate Change

Overview

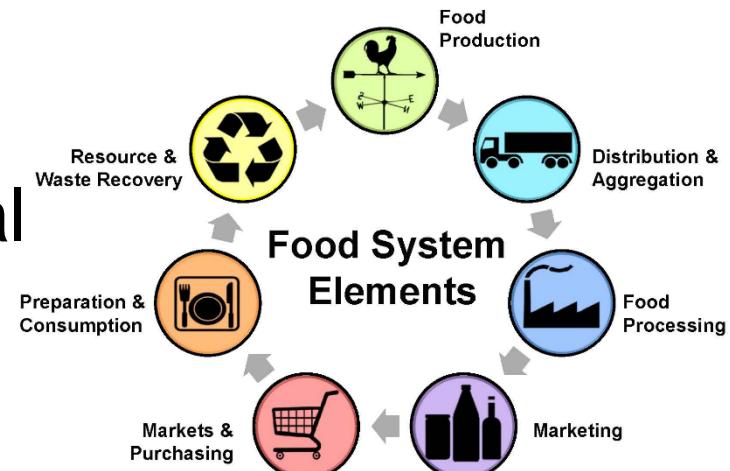
Impacts

Mobilizing actions

Challenges and opportunities

Global Food System: Key Challenges

- Increasing demand for food
- Productivity/yield rates are diminishing
- Increasing pressure on natural resources and ecosystems
- Inefficient supply chains
- Dietary changes & consumption patterns
- Impacts from climate change

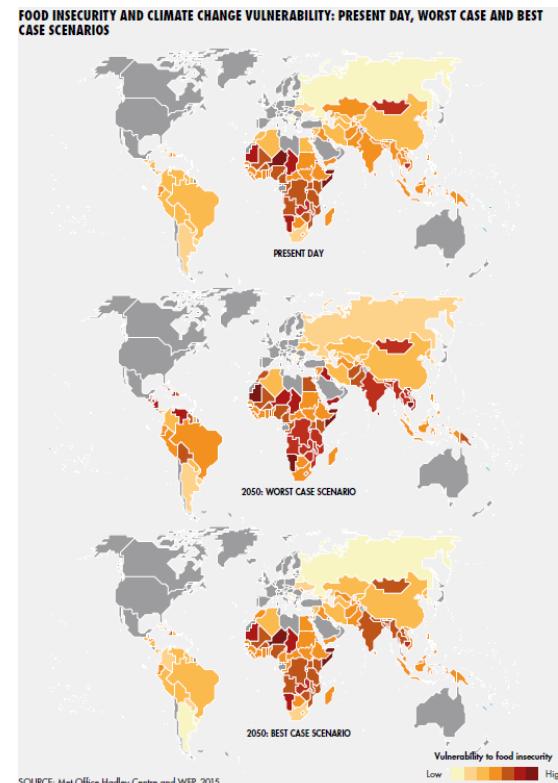


Source: NC State University

The effects of climate change

- Unevenly distributed
- Changes in weather patterns, extreme events, frequent droughts and water scarcity
- Pests and diseases
- Increase in food losses (crops & livestock)

Altogether impacting food systems' ability to provide adequate and nutritious food → increased vulnerability and reduced capacity to cope with climate change

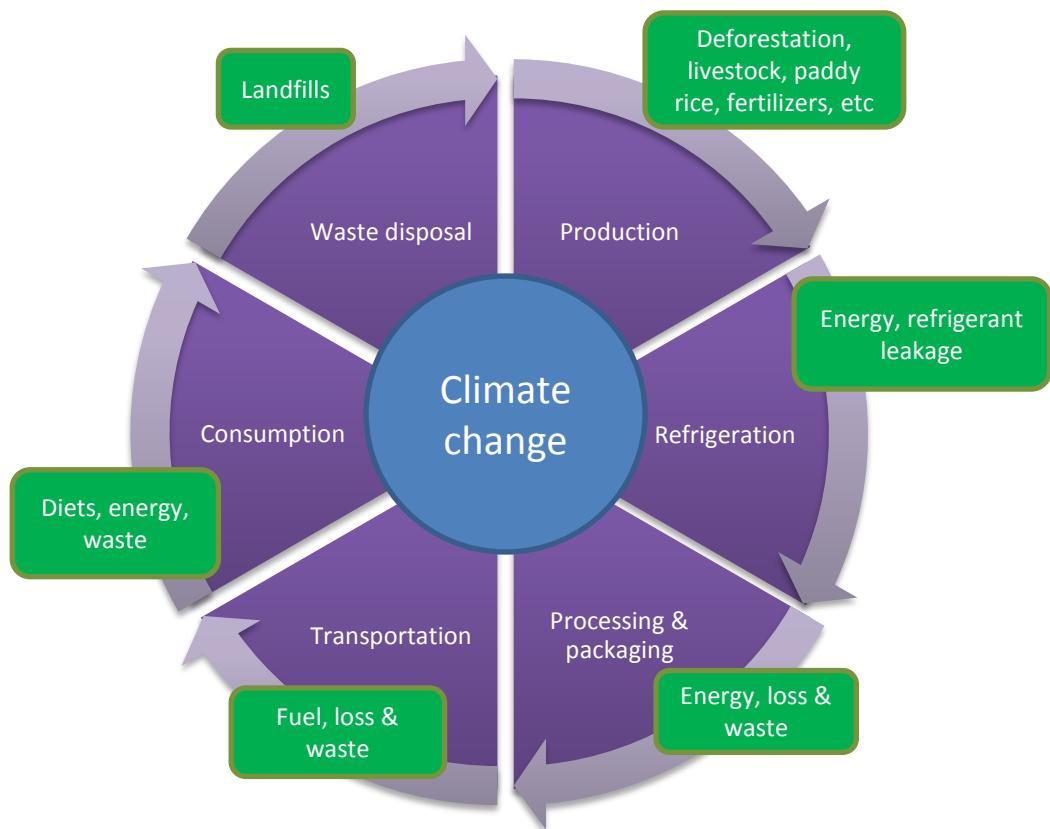


In: The State of Food and Agriculture 2016

The Global Food System & Impacts on Climate Change

Major contributor
19-29 % of global
GHG emissions

Food production &
consumption cuts
across major
emitting sectors





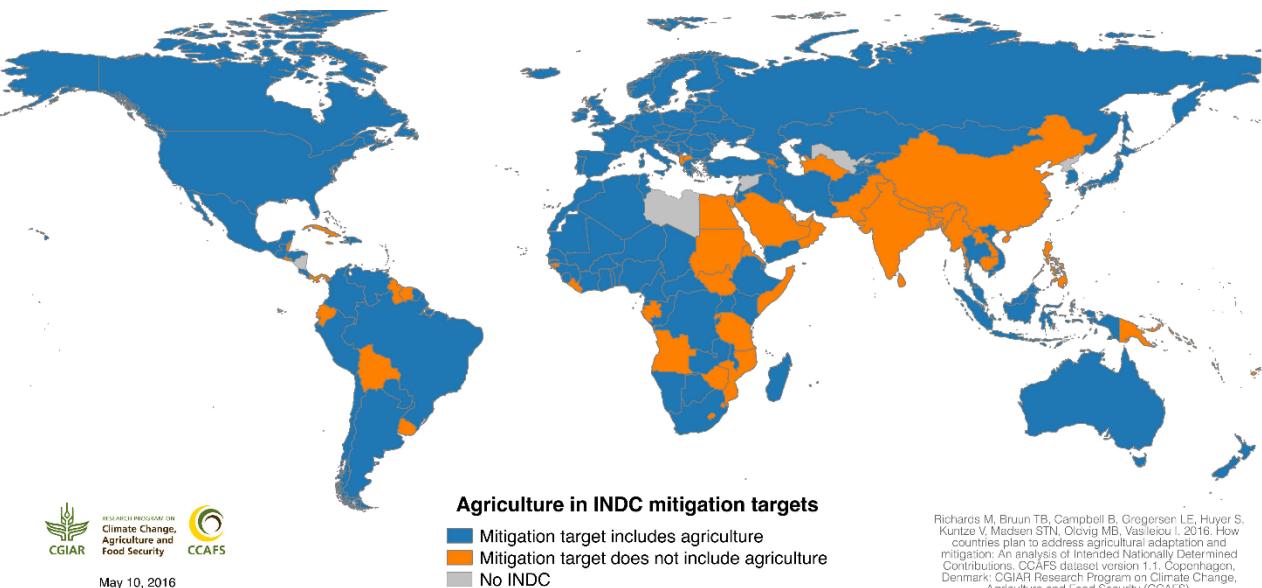
Food and Agriculture Organization
of the United Nations

Action on Food Systems under a Changing Climate

Sustainable Development Agenda & the Paris Agreement

- Food systems are intrinsically linked to the global targets.
- Reducing GHG emissions across the food system is critical to stay below the 2°C warming limit.
- Ahead of COP21, 119 Parties committed to mitigation in the agriculture sector – 64% developing countries

...however, not many have set quantitative targets...





‘Farm to Fork’ opportunities

- Promote integrated approaches
 - Halt deforestation
 - Scale up sustainable land practices
 - Increase genetic diversity
 - Address energy use in food value chains
 - Scale up the deployment of climate technologies
 - Reduce food loss and waste
 - Promote dietary changes
-



Translating commitments into action

- Climate action across the food system → cross-cutting opportunity to mitigate and adapt to climate change
 - Engaging with all actors in the supply chain - PPPs
 - Increase investment flows
 - Coherent policy frameworks
 - Adjust market incentives
-



Enabling factors

- Finance & investment
- Policy environment
- Stakeholder involvement
- Consumer awareness





Food and Agriculture Organization
of the United Nations

FAO: Activities on the ground



FAO's work on food & climate change

- Support to member countries on all aspects of food systems across the agriculture, forestry and fisheries sectors – health, markets, trade, etc
- Technical guidance and capacity building
- Data and tools for informed decision making
- Identify, develop and promote practices and approaches that improve rural livelihoods and the response to climate change

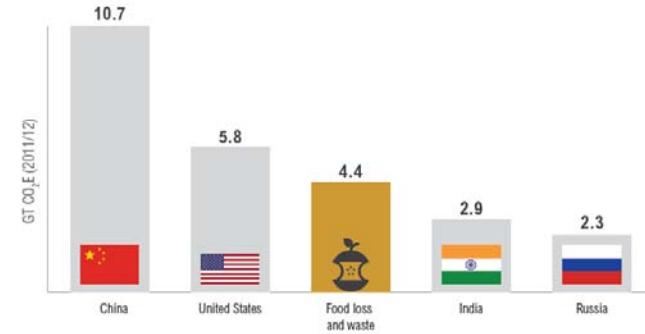


The Food Loss and Waste Issue

- Globally 1/3 of food is lost or wasted
- 8% of global GHG emissions
- Increases vulnerability

Addressing the food loss and waste challenge

- SDG 12.3
- FAOs SAVE FOOD Initiative
- Global Climate Action Agenda
- Promoting climate technologies





Take away messages

Ensuring **sustainability** throughout the **food system** is critical for driving **climate action** forward

Key areas for interventions in Europe/Estonia include:

- Innovations and production efficiency
 - Increase RE/EE along the supply chain
 - Shift to low-emission refrigeration
 - Prevent food waste
 - Promote seasonal & local diets
 - Reduce meat consumption
-
- The diagram consists of two blue curly braces on the right side of the list. The top brace groups the first three items under the label "Supply-side measures policy & investment". The bottom brace groups the last three items under the label "Demand-side driven Education & awareness".



Food and Agriculture Organization
of the United Nations

Thank you!

www.fao.org

emilie.wieben@fao.org
