



# Negotiating our climate

## What is COP and why does it matter?

Wednesday 25 March 2020

# Welcome



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- Panellists will answer questions at the end
- Please use the Q&A function to pose your questions – you can also upvote questions from other attendees
- Specify if your question is to the whole panel or a specific panellist
- All attendees will remain muted unless enabled to speak by the host
- Please note: this webinar is being recorded

# Agenda



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- Introduction
- Scientific basis & the UNFCCC
- UNFCCC & COP
- Sector focus: agriculture & the UNFCCC
- Leeds offering for COP26
- Q&A

Prof Richard Beardsworth

Prof Jason Lowe

Harriet Thew

Dhanush Dinesh

Prof Richard Beardsworth



- 26<sup>th</sup> UN Climate Change Conference of the Parties in Glasgow from 9-20 November
- CoPs from 1992 (Rio conference): part of governance structure of climate change regime
- > Copenhagen 2009; Paris 2015; Madrid 2019; Glasgow 2020

## **Copenhagen (2009)**

no post-Kyoto agreement; 2°C average temperature increase above pre-industrial levels agreed

## **The Paris agreement (2015)**

- hold increase to 2°C and limit rise to 1.5 °C ideally
- all nations/countries involved ('Nationally determined contributions')
- report regularly and with ambition ('ratcheting up' emissions' reduction)
- make finance flows consistent with a global pathway towards 'climate resilience' and 'climate-resistant development' = \$100 billion pa. by 2020 → 2025
- five years on (2020) review/ratchet-up
- Paris agreement perceived at the time as 'a revolution in collective climate action' (President of France)

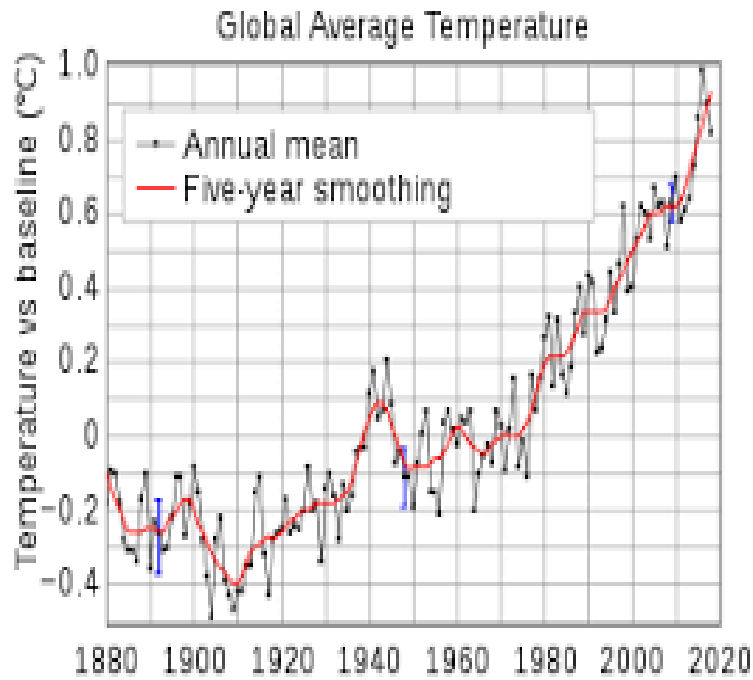
## Madrid 2019:

Dilemmas of collective action since 2015 confirmed starkly--

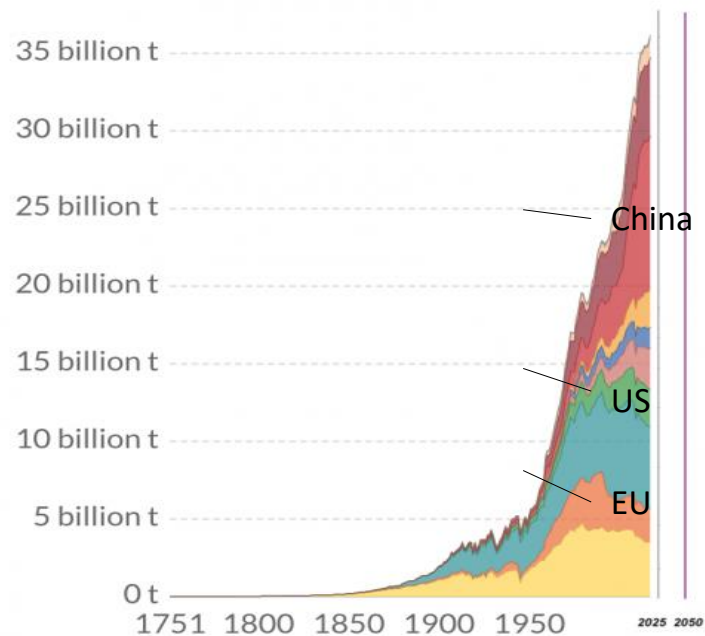
- Reporting requirements of transparency, common timeframes for climate pledges, and clear commitments to finance adaptation strategies in developing countries – all punted to Glasgow 2020
- + Global emissions continue to rise in 2019...
- UN General Secretary, December 2019: ‘a failure of global political will’
- The gap between inside and outside of intragovernmental politics tested (Youth strikes, Extinction Rebellion, etc.)
- ‘Climate Action Now’ social movement pitted against climate change regime since 1992



- Review of Paris agreement
- Ratcheting up of Paris agreement -> 2025
- Setting new goals for monitoring and finance
- Need for very strong, transformative global political leadership
  
- COVID-19 (obstacle or opportunity)
- American Presidential Elections, November 3<sup>rd</sup>
- EU/UK 'Brexit' trade negotiations
  
- Mobilization of UK political agenda of 'Just transition to NetZero society'?

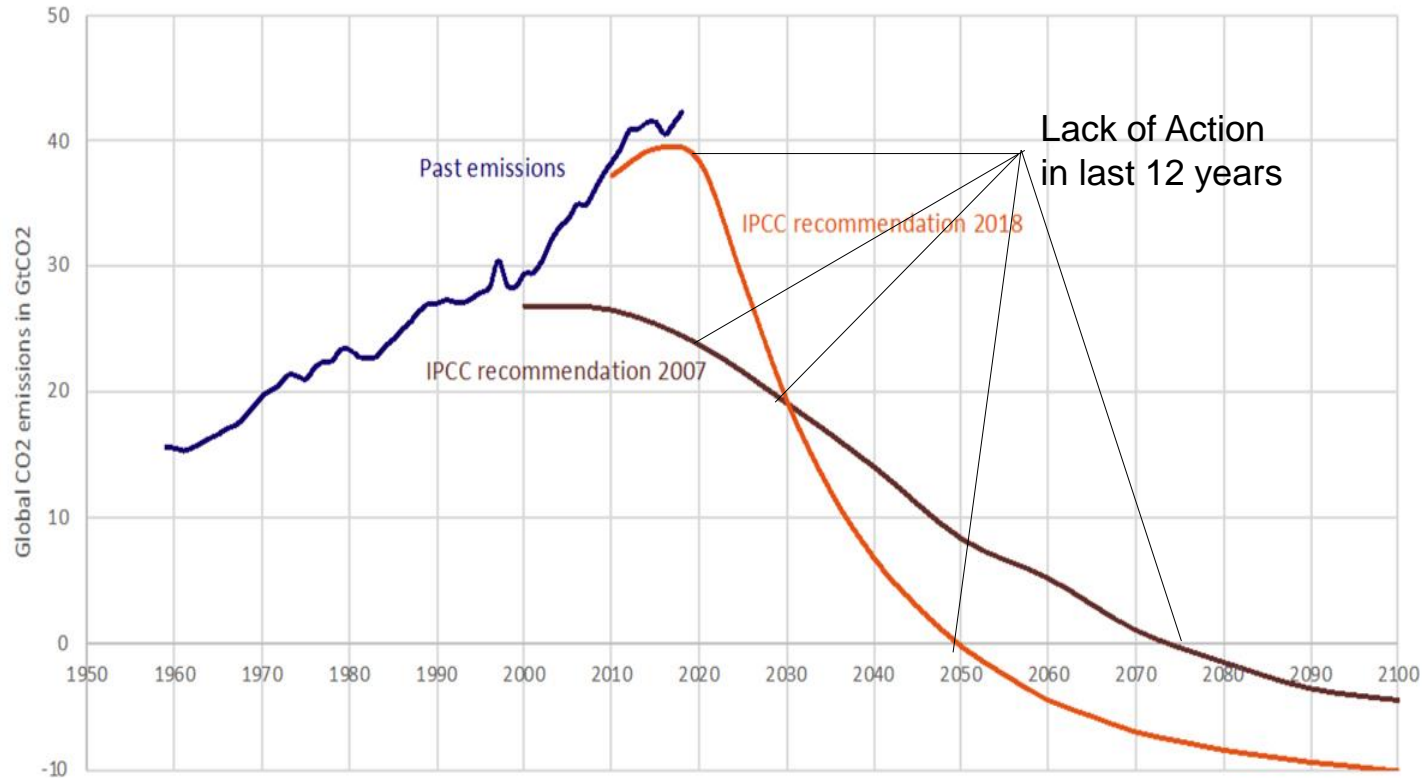


### Annual total CO<sub>2</sub> emissions, by world region



Source: Carbon Dioxide Information Analysis Center (CDIAC); Global Carbon Project (GCP)







Rank	Country	Emissions in 2017 (MtCO <sub>2</sub> )	% of Global Emissions
#1	China	9,839	27.2%
#2	United States	5,269	14.6%
#3	India	2,467	6.8%
#4	Russia	1,693	4.7%
#5	Japan	1,205	3.3%
#6	Germany	799	2.2%
#7	Iran	672	1.9%
#8	Saudi Arabia	635	1.8%
#9	South Korea	616	1.7%
#10	Canada	573	1.6%
#11	Mexico	490	1.4%
#12	Indonesia	487	1.3%
#13	Brazil	476	1.3%
#14	South Africa	456	1.3%
#15	Turkey	448	1.2%
	Top 15	26,125	72.2%
	Rest of World	10,028	27.7%

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Delivering research to underpin robust and timely climate solutions



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# Scientific basis and an overview of UNFCCC and CoP

**Professor Jason A. Lowe**

**Chair of interdisciplinary climate research**



**UN CLIMATE  
CHANGE  
CONFERENCE  
UK 2020**

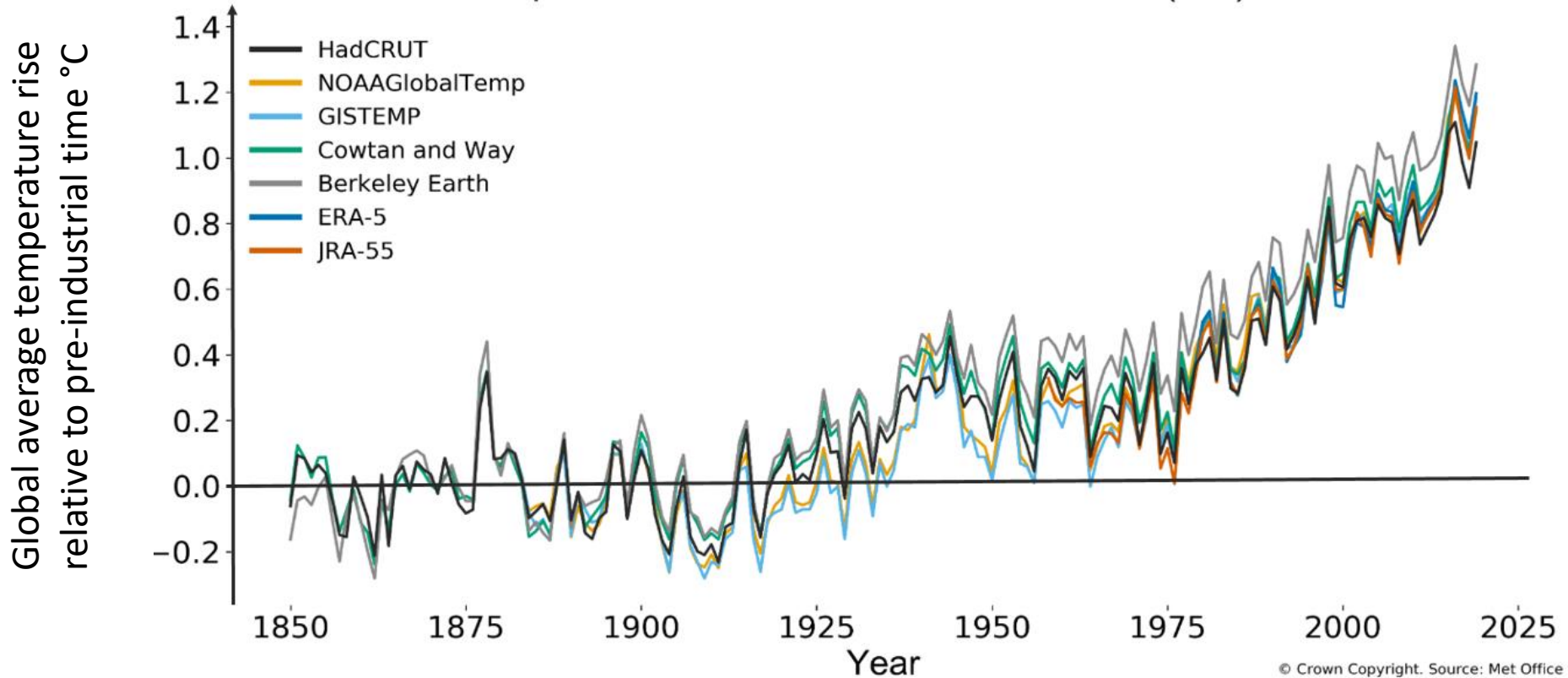
IN PARTNERSHIP WITH ITALY

# Our climate: past and future



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Global average temperatures are around 1°C above pre-industrial levels



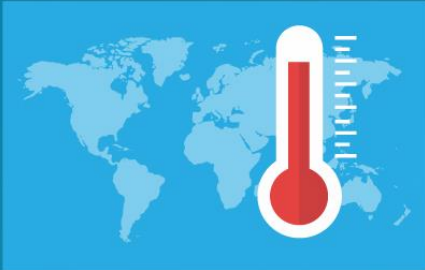
# Our climate: past and future



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## Temperature

2018 average temperature was  $0.91 \pm 0.1$  °C above pre-industrial levels.



2015, 2016, 2017 and 2018 were the warmest four years on record.

## CO<sub>2</sub> concentration

At the end of 2018, global atmospheric CO<sub>2</sub> concentrations were at more than 409 ppm.



Earth's atmosphere now has about 45% more CO<sub>2</sub> than it did before the Industrial Revolution.

## Arctic sea ice

2018 Winter maximum: At 14.47 million km<sup>2</sup>, March Arctic sea extent was the 2<sup>nd</sup> lowest on record and 1.03 million km<sup>2</sup> below average\*.



2018 Summer minimum: September Arctic sea ice extent was 4.6 million km<sup>2</sup>, 1.63 million km<sup>2</sup> below average\*, showing a decrease of 13.1% per decade from 1979 to 2018.

\*Relative to the 1981 to 2010 average extent (Source: HadISST1.2 dataset)

## Sea level rise

Global sea level has increased by about 17 cm since the start of the 20<sup>th</sup> Century.



Global sea level is currently rising at about 3 cm per decade.

Additionally:

Glaciers have been losing mass

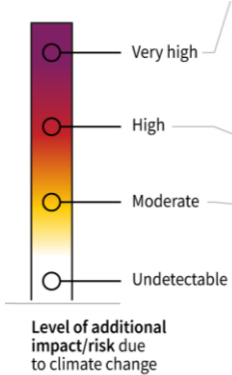
Greenland and Antarctic ice sheet also losing mass

Heat content of the ocean increasing

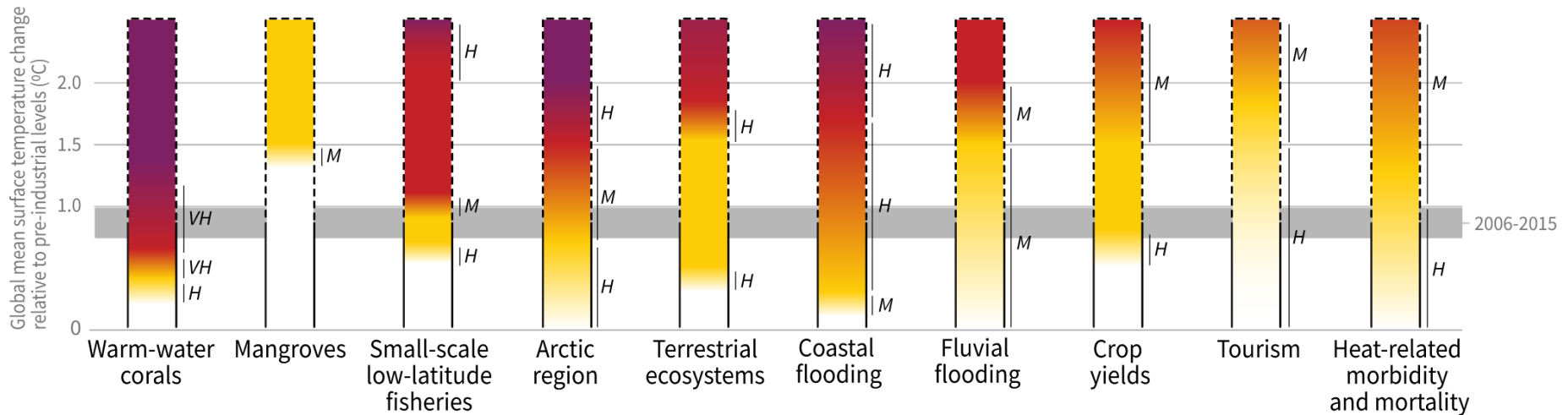
# Our climate: past and future



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## Impacts and risks for selected natural, managed and human systems



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high

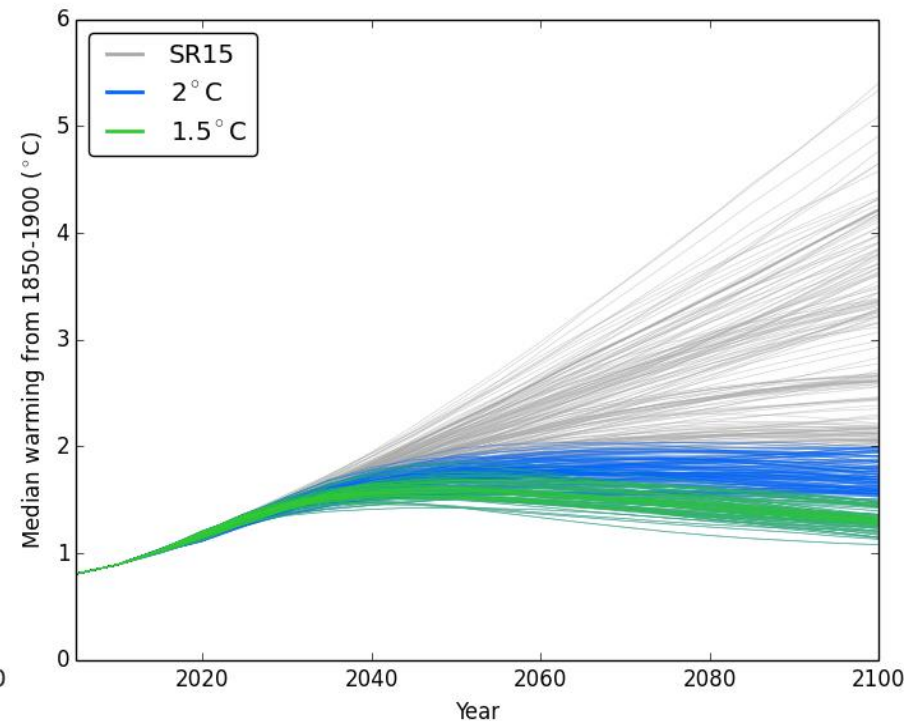
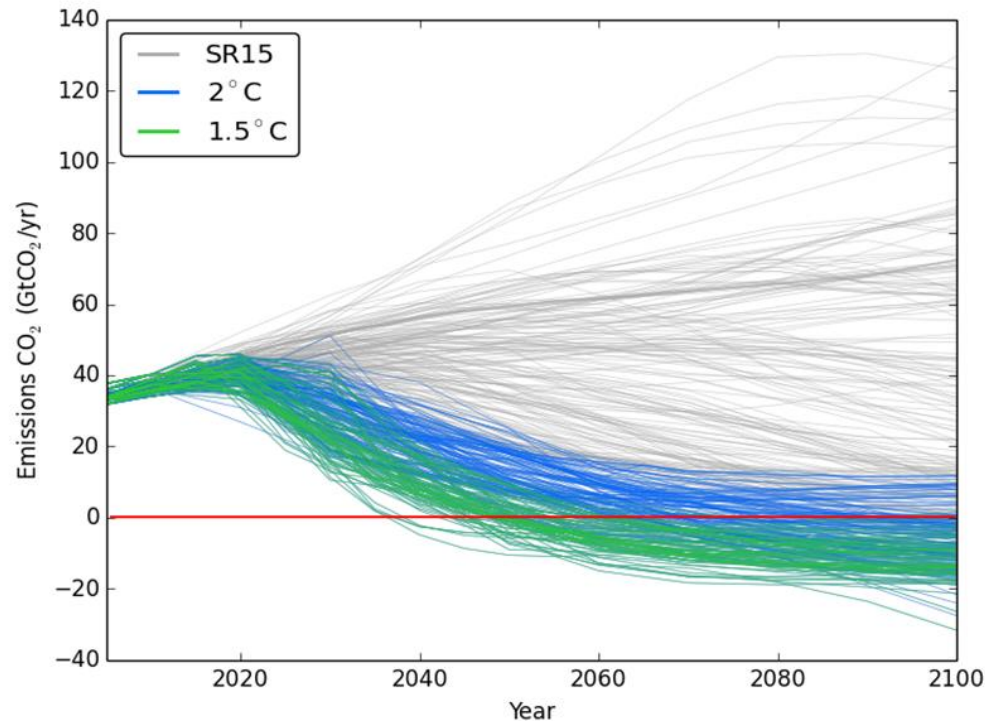
IPCC “reasons for concern”

# Our climate: past and future



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Future pathways of greenhouse gas emissions exist that are compatible with limiting warming below 1.5°C



The emissions gap is large. In 2030, annual emissions need to be 15 GtCO<sub>2</sub>e lower than current unconditional NDCs imply for the 2°C goal, and 32 GtCO<sub>2</sub>e lower for the 1.5°C goal.

UN Emissions gap report, 2019

# What is the UNFCCC?



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Process brings together nations from around the world to discuss (and sometimes agree) how to avoid dangerous climate change.

The conference of parties (CoP) provides an annual meeting that:

- Attempts to further the negotiations towards global agreement
- Considers monitoring and review of agreements
- Considers technical aspects – e.g. SBSTA
- Has an extended programme to allow multiple stakeholders to interact through events such as seminars, display stands, informal gathering, art, etc.....

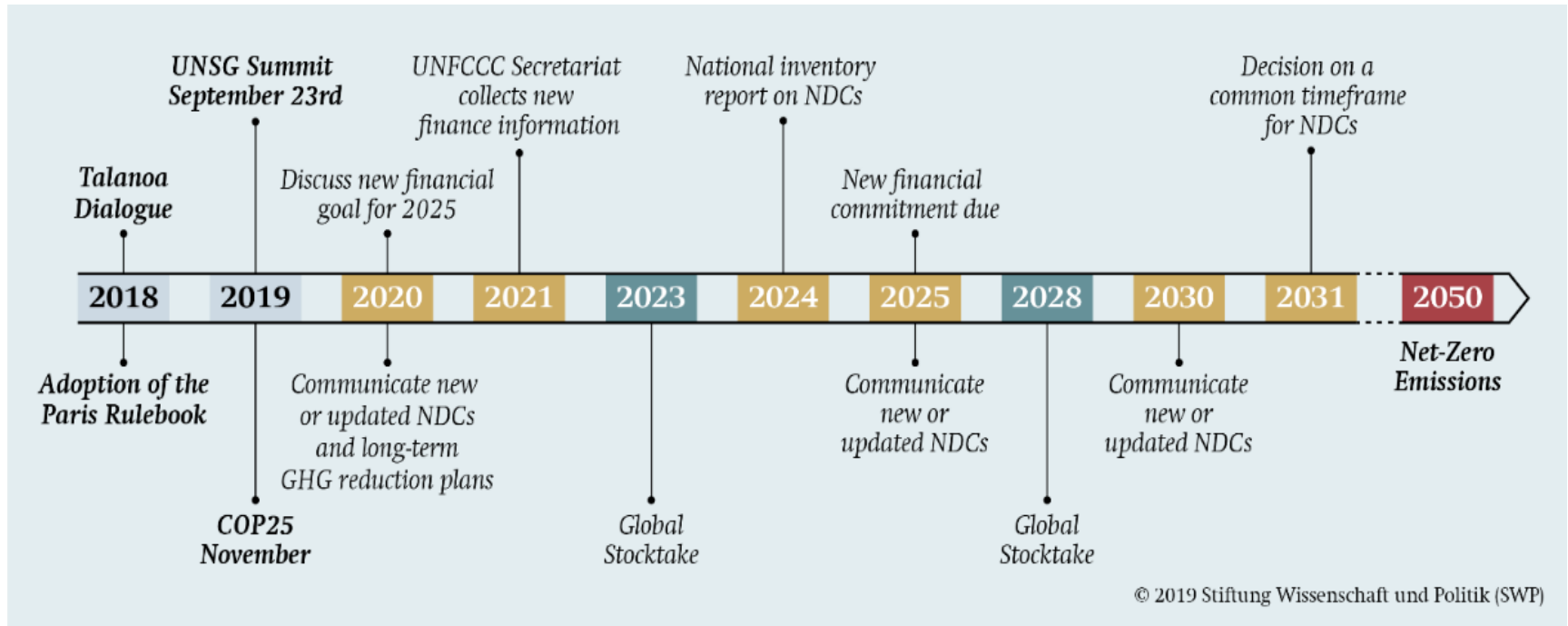




# Why is CoP26 so special?



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UK will host CoP26 in Glasgow 2020.  
Italy is co-host

**A major aim is to improve ambition in emission reduction pledges.**

Some CoP26 themes:

- Natural climate solutions
- Resilience and adaptation
- Energy transitions
- Finance
- Engagement of youth



# United Nations Climate Change Negotiations

HARRIET THEW, SCHOOL OF EARTH AND ENVIRONMENT

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## Coming up...

What happens at a COP?

- Governance structure
- Who attends?
- Main events

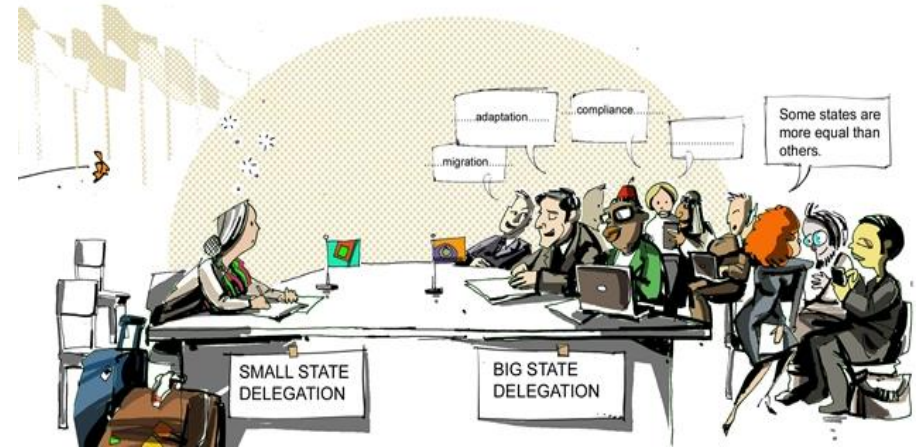
*plenaries, negotiations, side events, pavilions, exhibits, actions.*

How can researchers engage with COPs/the UNFCCC?

- Inside
- Outside
- Beyond the COP

## Governance Structure

- 197 "parties" to the "Convention"
- Negotiating blocs: G77 & China, BASIC, LDCs, AOSIS, African Group, EU etc.
- Secretariat to facilitate interactions
- Permanent bodies of the UNFCCC:
  - Subsidiary Body of Implementation SBI
  - Subsidiary Body for Scientific and Technological Advice (SBSTA)
  - Ad hoc bodies (ADP, APA)
  - Consensus decision-making



## Who attends?

Paris, COP21:

~28,000 attendees.

~18,000 government reps, ~8,000 NGOs,

~2,000 media

### Civil servants

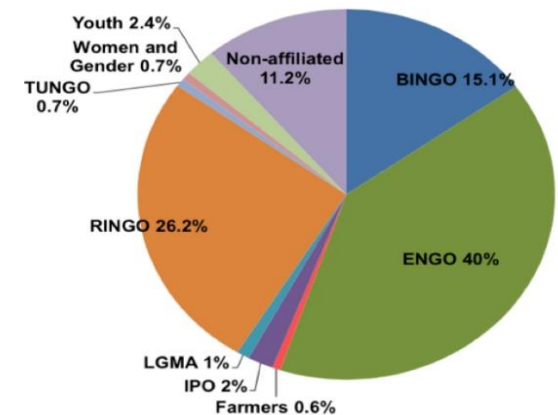
- Various departments: e.g. Environment/Climate Change, Finance, Development, Foreign Office, Education

### Politicians

- Ministers
- Heads of State
- Representatives of devolved governments

### Civil society

- Environmental NGOs (ENGO)
- Business and Industry (BINGO)
- Indigenous Peoples' Organisations (IPO)
- Research and Independent NGOs (RINGO)
- Trade Unions (TUNGO)
- Local Gov & Municipal Authorities (LGMA)
- Women and Gender
- Youth NGOs (YOUNGO)
- Farmers





What happens at a COP? – Plenaries



# Negotiations









Pavilions



# Exhibits



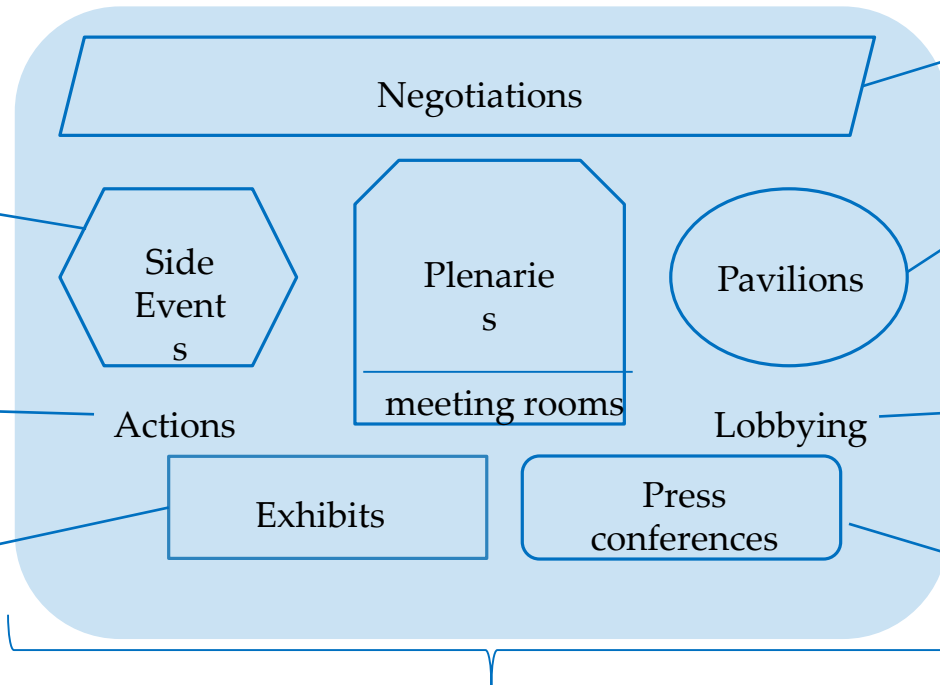
Actions





# How can researchers engage – inside?

The Blue Zone: **UNFCCC badge required**



Observe, take detailed notes for constituency - feed back in daily meetings

Also home to country offices. Meet negotiators, participate in events, free food/drinks

Encourage negotiators to support key issues

Attend, tweet, network with media, may lead to interviews

Co-host, present research linking to negotiations – applications approved by Secretariat

Join in (with permission) take photos, publicise online

Share research findings e.g. leaflets, banners, posters (not academic)

Collect data e.g. ethnography of youth participants

**Is this the right space for you? Don't be a COP tourist!**

# How can researchers engage – outside?

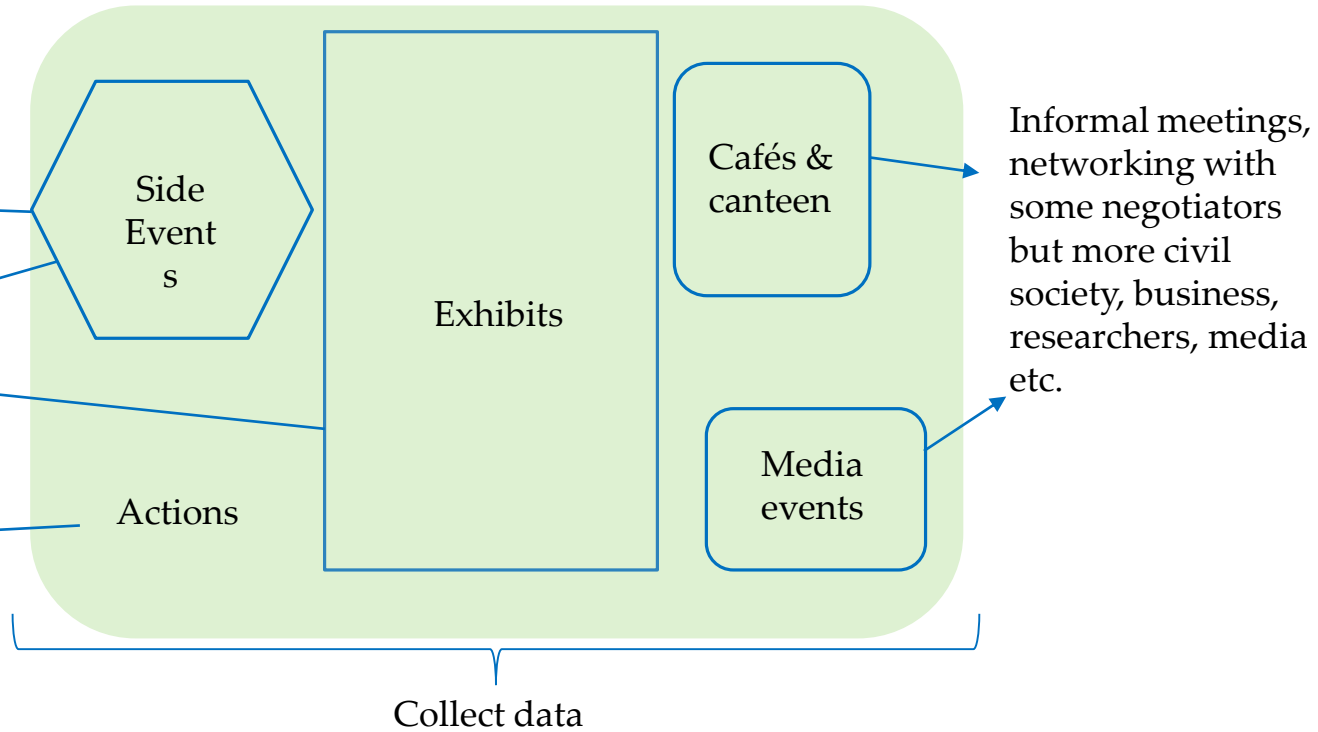
The Green Zone: UN accreditation not required



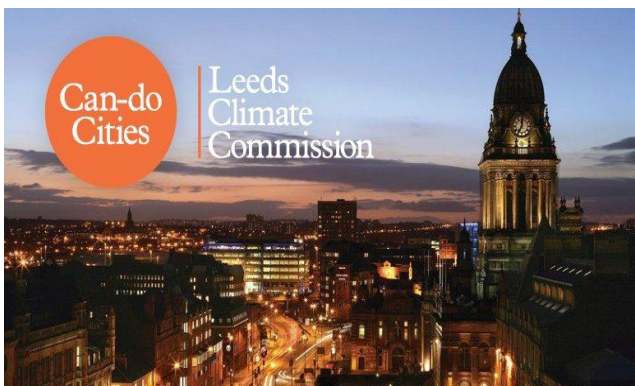
Host side events, present research (less clearly linked to negotiations)

Share solutions, promote projects, innovations, publicise technologies etc.

Join in (with permission) take photos, publicise online



# Across Glasgow, locally, nationally, globally and online



UNFCCC Regional climate weeks

Africa

March 2020, Uganda (postponed)

Latin America & Caribbean

6-10<sup>th</sup> July, Dominican Republic

Middle East & North Africa

October 2020 dates, Dubai

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Agriculture, food security and  
land use workshops

March 2020, Germany  
(postponed)

Sustainable Energy for All Forum  
26-28<sup>th</sup> May, Rwanda

Global Adaptation Summit  
Oct 2020, Netherlands

UNFCCC webcasts: available at  
many conferences



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Thank you





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# Agriculture and the UNFCCC



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Climate Change,  
Agriculture and  
Food Security



Dhanush Dinesh

*Global Policy Engagement Manager*

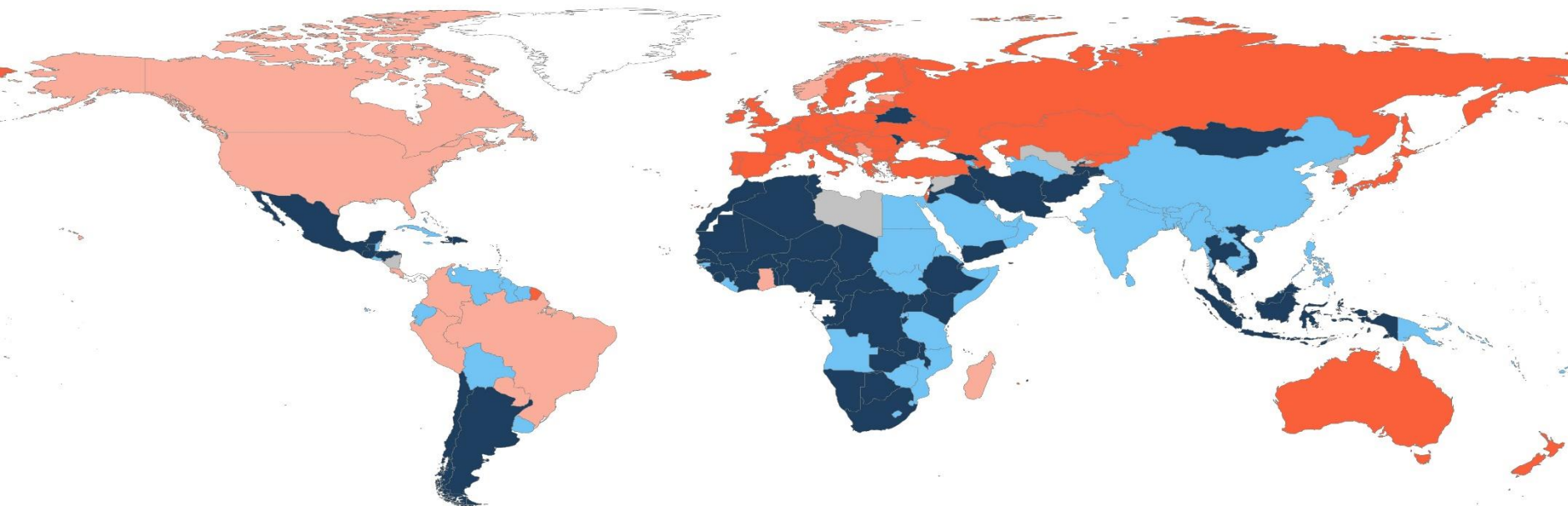




- 
- A woman with dark hair, wearing a blue dress and a red patterned shawl, stands in a lush green field. In the background, there are trees and mountains under a clear sky. The text is overlaid on a semi-transparent green box at the bottom of the image.
1. Agriculture in the NDCs
  2. Agriculture negotiations in the UNFCCC
  3. Engaging in agriculture negotiations:  
CCAFS experience

# Nationally Determined Contributions

- NDCs allow for:
  - **Scrutiny** of actions
  - Global **evaluation** of targets
- Agriculture prominent in NDCs <https://ccafs.cgiar.org/agricultures-prominence-indcs-data-and-maps>



## Agriculture in the INDCs

- Mitigation target and adaptation priorities include agriculture
- Adaptation priorities include agriculture
- GHG reduction target specifically includes agriculture
- Economy-wide GHG reduction target
- No agriculture in INDC
- No INDC

Richards M, Bruun TB, Campbell B, Gregersen LE, Huyer S, Kuntze V, Madsen STN, Oldvig MB, Vasileiou I. 2016. How countries plan to address agricultural adaptation and mitigation: An analysis of Intended Nationally Determined Contributions. CCAFS dataset version 1.3. Copenhagen, Denmark: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

# Clear sub-sectoral priorities for action at the farm level in NDCs

farm /  
landscape

Soils and land



Livestock



Crops



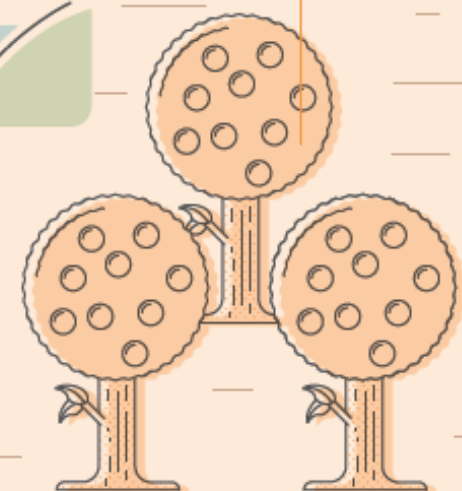
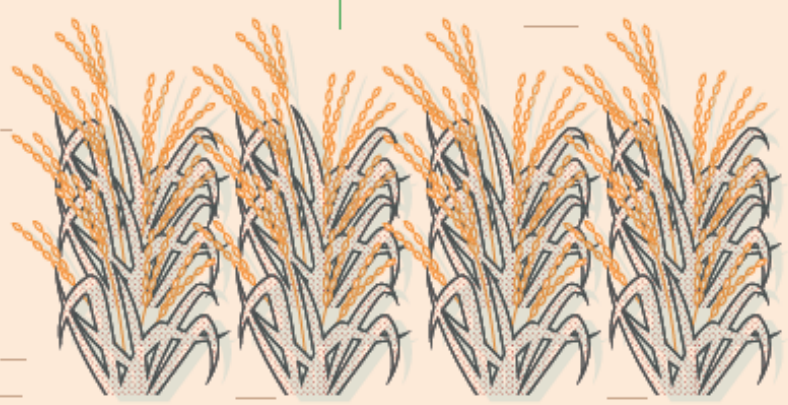
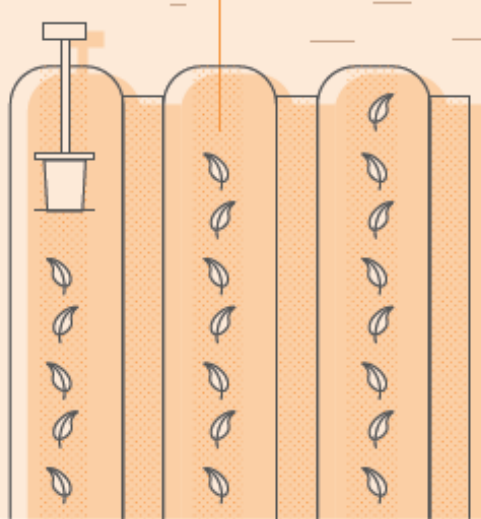
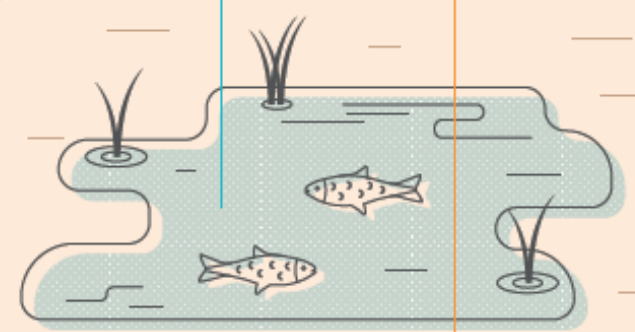
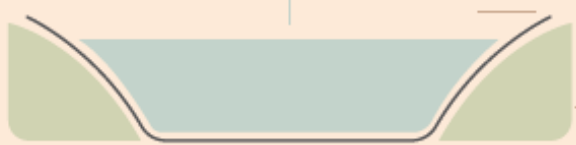
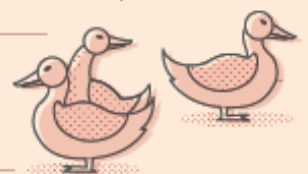
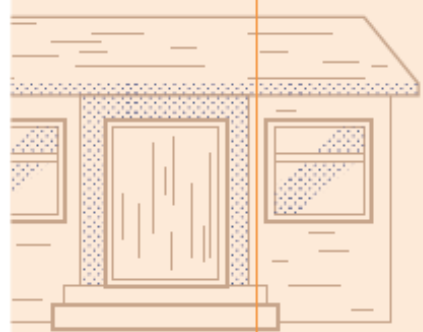
Water



Fisheries



Trees



Source: Adapted from Richards et al. 2016



# Need to reach 500 million smallholders by 2030

1 GT reduction target (2030)  
Current technologies can only do 20-40%.

Up to 40% gender disparity in  
agricultural productivity in  
some countries.

Climate change impacts on crop yields will be negative  
from 2030s onwards.

420 million youth in Africa, two-thirds unemployed/  
vulnerably employed. Age group will nearly double by 2050.

# Agriculture negotiations in the UNFCCC



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Agriculture and  
Food Security



**2011**  
COP requests SBSTA to consider issues related to Agriculture

**2013**  
In-session workshop on state of scientific knowledge

**2014**  
SBSTA calls for submissions and workshops announced

**2017**  
Landmark decision – Koronivia Joint Work on Agriculture

**2020**  
Conclusion of Koronivia process – next steps?

# Engaging in agriculture negotiations: CCAFS experience





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Agriculture and  
Food Security



- Targeted knowledge products
- Submissions
- Expert presentations
- Capacity building activities
- Events and engagement

CCAFS Report No. 16

   THE WORLD BANK

Submission from the CGIAR System Organization, International Centre for Tropical Agriculture and the World Bank, in response to Decision 4/CP.23.

*These are views on*

**Koronivia road map under the Koronivia joint work on agriculture (decision 4/CP.23) on topic 2(a) - Modalities for implementation of the outcomes of the five in-session workshops on issues related to agriculture and other future topics that may arise from this work.**

**Key Messages:**

- An implementation gap exists between the clear need and urgency for climate action in agriculture and the incentives, tools and mechanisms available for farmers, countries and other stakeholders to do so.
- The discussion on modalities for the implementation of issues related to agriculture presents a singular opportunity to narrow this gap.
- Producers, especially small-holder farmers, should be at the center of any climate change adaptation and mitigation considerations in agriculture.
- KJW should work to issue guidance for putting in place institutional, technical and financial structures in line with the specific characteristics of the agriculture sector – within and outside the Convention.

**Key priorities for action for the KJW to consider:**

- Prioritise financing for climate action in agriculture and strengthen proven delivery channels to reach smallholder producers and SMEs.
- Ensure adequate policy and incentive frameworks for sustainable agricultural investments.



The event series at COP24  
**AGRICULTURE  
ADVANTAGE 2.0**  
4-12 December 2018  
Katowice, Poland



...e application of digital tools to enable more  
... from climate actions in the sector.  
...plementation and knowledge transfer in the  
...to global efforts to meet the goal of limiting  
...lications for food security.  
...d to take the lead on measurement and monitoring  
...sibility could be the transparency framework, to  
...with existing agricultural databases and information





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Agriculture and  
Food Security**



[www.ccafs.cgiar.org](http://www.ccafs.cgiar.org)

# Thank you



# The Leeds offering for COP26



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Support to the  
UK COP  
presidency

Providing vital  
research input

Accelerating  
climate education

Engaging with  
the public

Net-zero  
universities

Building an  
alliance



# Support to the UK COP presidency



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- Offering advice on a range of topics, including climate science, climate change solutions and scientific diplomacy
- Engaging with government departments, including the Cabinet Office, BEIS, Defra and the FCO
- Particularly supporting the COP26 delivery team through the synthesis of relevant climate literature



# Providing vital research input



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- Important resource for evidence-based policy
- Working through the Research and Independent NGOs (RINGOs) constituency to the UNFCCC
- We're developing a series of events to support researcher engagement with COP26 and the UNFCCC process



Photo by Sigit Deni Sasmito/CIFOR

# Accelerating climate education



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- COP26 presents an opportunity to embed climate education into curriculums
- Working groups are advancing this at a university level
- Researchers working with education groups to develop resources for schools



# Engaging with the public



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- We can act as a conduit between COP26 and local communities
- Several events are being explored, including a webinar with the City Climate Commissions and a 'Climate Question Time' for young people



# Net-zero universities



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- The University of Leeds has made ambitious net-zero commitments
- Our campus functions as a living laboratory: monitoring air quality, trialing scalable food waste systems, etc.
- We want to harness the ambition of COP26 to drive the momentum of our Climate Plan



# Building an alliance



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- The University of Leeds is part of a growing group of universities and other institutions working together to support COP26
- Intended legacy is a climate research community that is strongly positioned to support delivery of the UK's net-zero emissions target



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[climate.leeds.ac.uk](https://climate.leeds.ac.uk)

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