Climate Change, from AR5 to AR6

Joy Jacqueline Pereira Vice Chair, IPCC Working Group II

Almaty, Kazakhstan 21-22 August 2019 bit.ly/ipcc_outreach_centralasia



WIDESPREAD OBSERVED IMPACTS A CHANGING WORLD

INTERGOVERNMENTAL PANEL ON CLIMOTE CHONE

INCREASING MAGNITUDES OF WARMING INCREASE THE LIKELIHOOD OF SEVERE AND PERVASIVE IMPACTS

RISKS OF CLIMATE CHANGE INCREASE WITH CONTINUED HIGH EMISSIONS

CLIMATE CHANGE REDUCING AND MANAGING RISKS

INTERGOVERNMENTAL PANEL ON CLIMBTE CHARGE

Key Risks in Asia

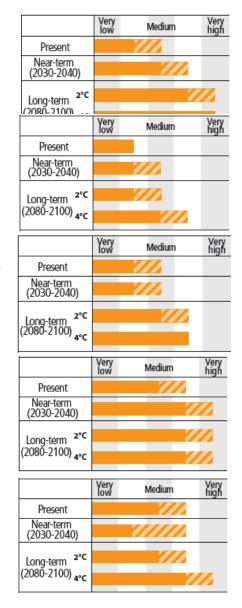
Increased risk of heat-related mortality (high confidence)

Increased risk of drought-related water and food shortage causing malnutrition (high confidence)

Increased risk of crop failure and lower crop production could lead to food insecurity in Asia (medium confidence)

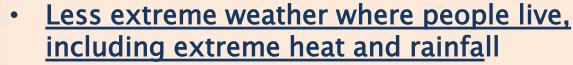
Water shortage in arid areas of Asia (medium confidence)

Exacerbated poverty, inequalities and new vulnerabilities (high confidence)



INTERGOVERNMENTAL PANEL ON CLIMATE CHARGE

Impacts of global warming 1.5°C (At 1.5°C compared to 2°C)



- By 2100, global mean sea level rise will be around 10 cm lower but may continue to rise for centuries
- 10 million fewer people exposed to risk of rising seas
- Lower impact on biodiversity and species
- Smaller reductions in yields of maize, rice, wheat
- <u>Global population exposed to increased</u> water shortages is up to 50% less
- Lower risk to fisheries and the livelihoods that depend on them
- Up to several hundred million fewer people exposed to climate-related risk and susceptible to poverty by 2050

TERGOVERNMENTAL PANEL ON CLIMATE CHA

Jason Florio / Aurora Photos

Adaptation is already occurring

Combining Traditional and Scientific

Knowledge

- Adapting Communications Infrastructure
 - Coastal & Water Management
 - Environmental Protection & Land Planning
- Municipal-Level Actions
- Adapting Energy & Public Infrastructure
- Disaster Risk Management
 - Development Planning
 - Early Warning Systems
 - Mangrove Reforestation
 - Water Resources Management

- Disaster Risk Management
- Basic Public Health
- Livelihood Diversification
- Ecosystem-Based Adaptation
- Water Resources Management
- Resilient Crop Varieties

- Planning for Sea-Level Rise
- Planning for Reduced Wate Availability

- International Cooperation
- Marine Spatial Planning

IPCC AR5 - Chapter 24, Asia: Coverage - 51 countries/regions

Source: IPCC, 2013 IPCC

INTERGOVERNMENTAL PANEL ON Climate change



- Current national commitments are not enough to keep to either 1.5°C or 2°C
- Would require deep changes in all aspects of society (e.g. energy, land, buildings, transport, food & diets, cities)
- New technologies, efficiency, cleaner energy sources, less deforestation, new land uses, sustainable agriculture
- Good news is there is movement in the right direction in lots of these areas but would need to do more, faster
- But this would require greater collective ambition

THANK YOU FOR YOUR ATTENTION!

For more information:

Website: <u>http://ipcc.ch/</u> IPCC Secretariat: <u>ipcc-sec@wmo.int</u>

Find us on:

f IPCC

@IPCC_CH

🗿 ІРСС



https://vimeo.com/ipcc



https://www.youtube.com/ipccgeneva



https://www.linkedin.com/company/ipcc



https://www.flickr.com/photos/ipccphoto/sets/



http://www.slideshare.net/ipcc-media/presentations





INTERGOVERNMENTAL PANEL ON Climate change