

Parallel session I: Responding to global policy challenges

Climate change: Science, policy & the road beyond Paris



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Science and Policy Making: towards a new dialogue

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Article 2

1. This Agreement, .. aims to strengthen the global response to .. threat of climate change, .. context of **sustainable development** and efforts to **eradicate poverty**:

(a) **Holding the increase .. global average temperature to well below 2 °C above pre-industrial levels and pursuing .. Limit .. to 1.5 °C .., significantly reduce the risks and impacts of climate change;**

MITIGATION

(b) **Increasing the ability to adapt to the adverse impacts of climate change and foster climate **resilience and low** greenhouse gas emissions development, in a manner that does not threaten **food production**;** ADAPTATION

Article 2

1.

(c) Making **finance flows** consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

2. This Agreement will be implemented to reflect **equity** and the principle of **common but differentiated responsibilities and respective capabilities**, in the light of different national circumstances.

Policy Issues for Science, Technology and Innovation

**Disaster
Risk
Reduction**

**Cities -
Urban
Issues**

Security

Poverty

Equity
common
but differentiated
responsibility

Health

Migration

**Climate
Change**

**Sustainable
Development**

**Food
Production**

**Economy
Finance**

**Need for integrated information
to provide science advice on possible futures and
actions that will create differences**



**Disaster Risk
Reduction**

**Disaster
Risk
Reduction**

**Cities -
Urban
Resilience**

**Security
erty**

**Climate
change**

**Sustainable
Development
Goals**



**Health
Micro
Finance
Product**

**Economic
Finance**

**2015
Policy
Agenda**

**Climate
Convention**



**2016 – onward – implementation of agenda – based
on science evidence**

2015-2030 Sustainable Dev

17 SDGs – with 169 targets



1. End **poverty** in all its forms everywhere
2. End hunger, achieve **food security** ... sustainable agriculture
3. Ensure **healthy** and promote well-being for all at all ages
4. Ensure inclusive and equitable quality **education** ...lifelong learning...
5. Achieve **gender equality** and empower all women and girls
6. Ensure availability and sustainable management of **water and sanitation**
7. Ensure access to affordable, **reliable, sustainable modern energy** for all
8. Promote sustained, **inclusive and sustainable economic growth**, ... work ...
9. Build **resilient infrastructure**, ...sustainable industrialization ... innovation
10. **Reduce inequality within and among countries**
11. Make **cities and human settlements** ... safe, resilient and sustainable
12. Ensure **sustainable consumption and production** patterns
13. Take urgent action to combat **climate change and its impacts***
14. Conserve and sustainably use the **oceans, seas and marine resources**
15. Protect, ... **terrestrial ecosystems**, ...forests, desertification, biodiversity
16. Promote **peaceful and inclusive societies for sustainable development**,
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development **Building on strong and integrated science**

*The post-2015 development agenda,
financing for development,
climate change and disaster
risk reduction ... credible links*

...action within and across sectors by States
at local, national, regional and global levels

Four priority areas for Disaster Risk Reduction

1. **Understanding disaster risk;**
2. **Strengthening disaster risk governance to manage disaster risk;** *Links to climate change adaptation*
3. **Investing in disaster risk reduction for resilience;** *Links to SDGs*
4. **Enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction.**



Lead - S&T Major Grp

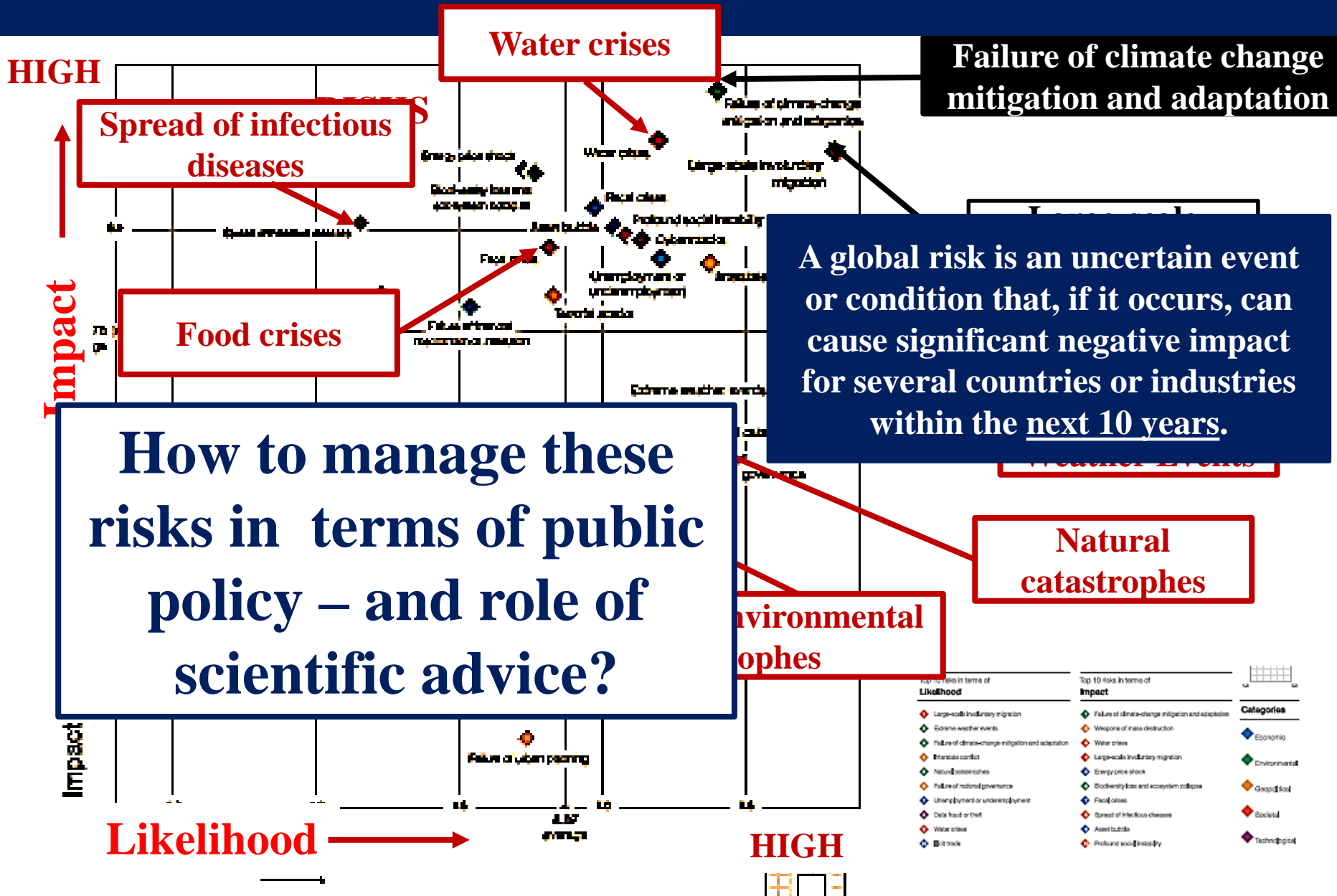
*Globally ~75% of disasters are
climate related.*

IPCC Fifth Assessment Synthesis Report

Topic 3: Future Pathways for Adaptation, Mitigation and Sustainable Development

- Adaptation and mitigation are **two complementary strategies** for responding to climate change. ... Both adaptation and mitigation can **reduce and manage the risks** of climate change impacts. **Yet, adaptation and mitigation can also create other risks, as well as benefits.**
- **Strategic responses to climate change involve consideration of climate-related risks along with the risks and co-benefits of adaptation and mitigation actions.**
- **Effective decision making** to limit climate change and its effects can be informed by a **wide range of analytical approaches** for evaluating expected risks and benefits, recognizing the importance of **governance, ethical dimensions, equity, value judgments, economic assessments and diverse perceptions and responses to risk and uncertainty.**
- **The risks of climate change, adaptation, and mitigation differ in nature, timescale, magnitude, and persistence.**

World Economic Forum - Global Risks 2016



International Council for Science – Research Collaboration and Science for Policy



Capacity

Challenges of intersecting issues. Can the intersections of issues enhance the effectiveness of political response? Can we bring in the “laggards”? Role of “transdisciplinary” science and advice.



Issues:
Energy,
...
Health, ...
Ethical,

Socio-Cultural Values
- Economy
- - ...



Integrated Science to Policy

Thank you.