



SOFF

Systematic Observations
Financing Facility

First Funders' Forum

24 March 2021

Virtual meeting



Systematic Observations Financing Facility **First Funders' Forum**

Agenda item 2 - SOFF rationale

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Hydromet – at the core of bold and effective action

Paris Agreement

Strengthen systematic observation of the climate system and early warning systems

Sustainable Development Goals

Strengthen environmental monitoring for climate change mitigation, adaptation and early warning

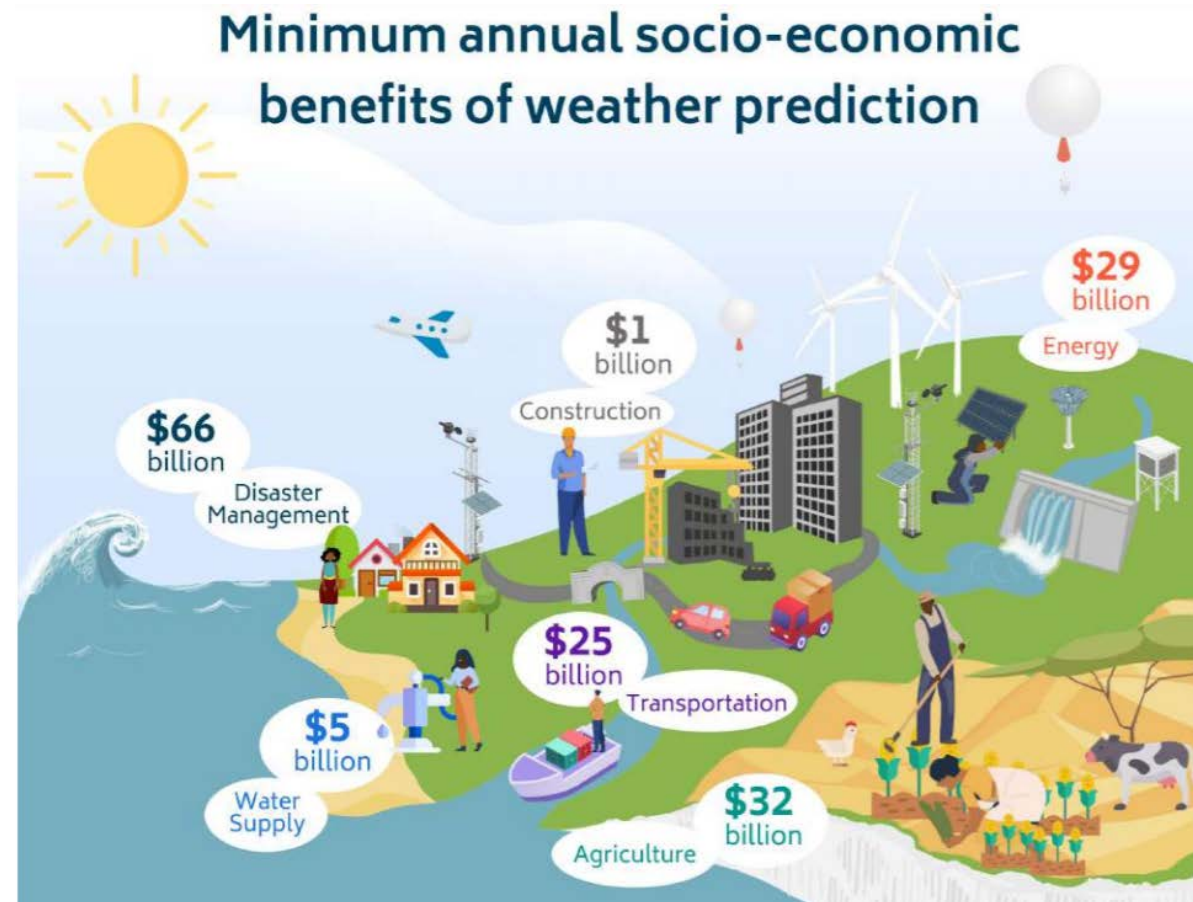
Sendai Framework

Substantially increase the availability and access to **multi-hazard early warning systems and disaster risk information** and assessments to the people

The benefits from better prediction are measurable and significant

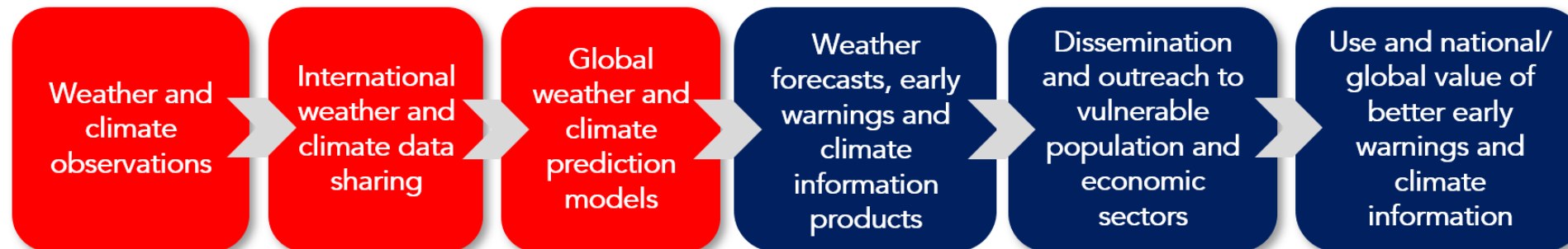
USD 160 billion

World Bank estimates of the **minimum annual socio-economic benefits of weather prediction and climate information**



Weather and climate observations from the whole globe are the basis for weather forecasts, early warning systems, and climate services

The hydromet value chain



The foundational role of surface-based observations

- **Essential for weather and climate prediction models**
- **Measure weather and climate variables** that cannot be reliably observed from space
- **Play a vital role** in the calibration and validation of satellite data



Surface land-based observations



Upper-air land-based observations

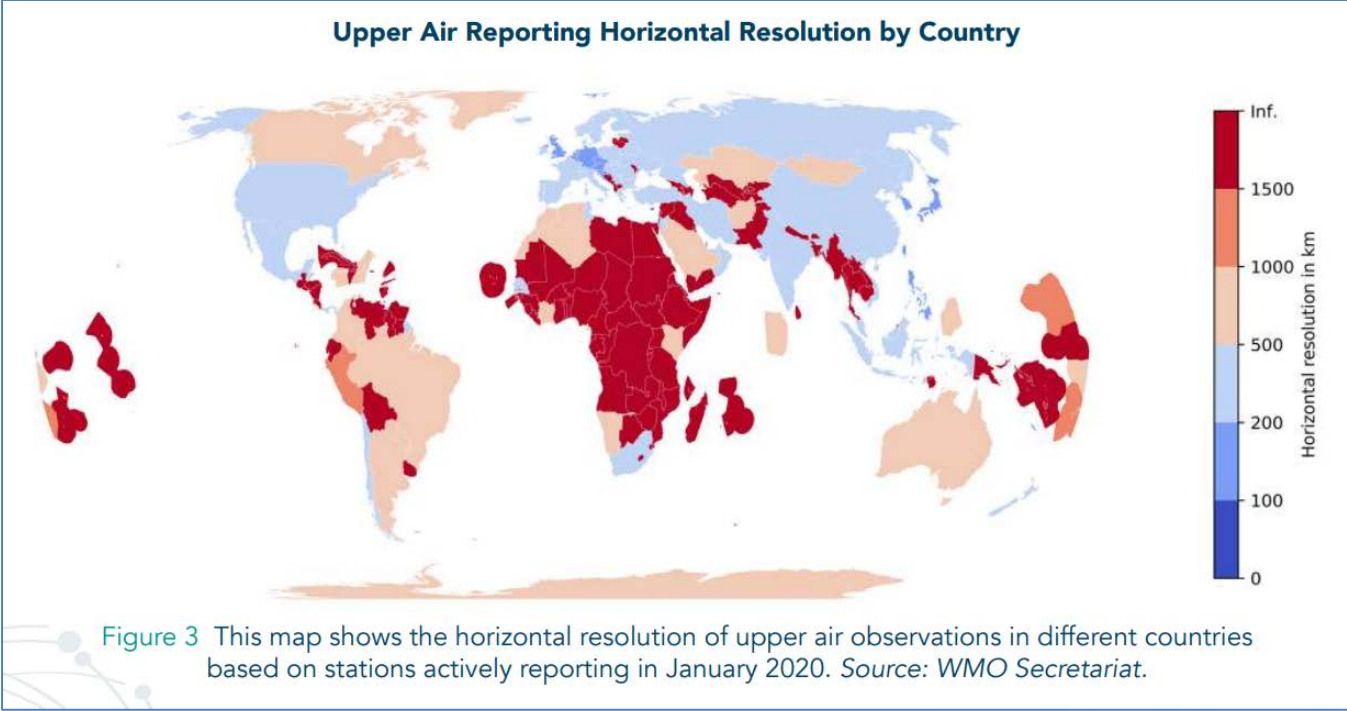
The Global Basic Observing Network (GBON)

A global endeavor for better weather and climate information

- **A global “optimal” design to respond to the most essential data requirements of weather and climate prediction models** that are not met or fully met by satellite systems
- **Agreed by 193 WMO Member countries and territories**
- **Clear requirements for countries** to collect and internationally exchange the most essential surface-based weather data
- Based on the principle of global **free and unrestricted** data sharing

Surface-based observations necessary for weather and climate prediction are not being collected and/or internationally shared in many parts of the world

SIDS and LDCs are currently far from meeting the Global Basic Observing Network requirements



The benefits from GBON

Closing the GBON gap is highly beneficial and economically efficient.

- **USD 5 billion per year** - the potential benefits directly attributed to the implementation of GBON in those countries with the largest data-sharing gaps
- **1:25 cost-benefit** - for every dollar invested in GBON in these countries, at least 25 US dollars in socio-economic return could be realized, much higher than in low-gap countries
- **These investments provide the foundation to realize the USD 162 billion** of estimated minimum annual benefits of weather and climate prediction



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Weather and climate information for the global public good

**THANK YOU
MERCI**