

Regional cooperation on Ocean matters



ICG/CARIBE EWS-XI
Mid term meeting of officers

WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

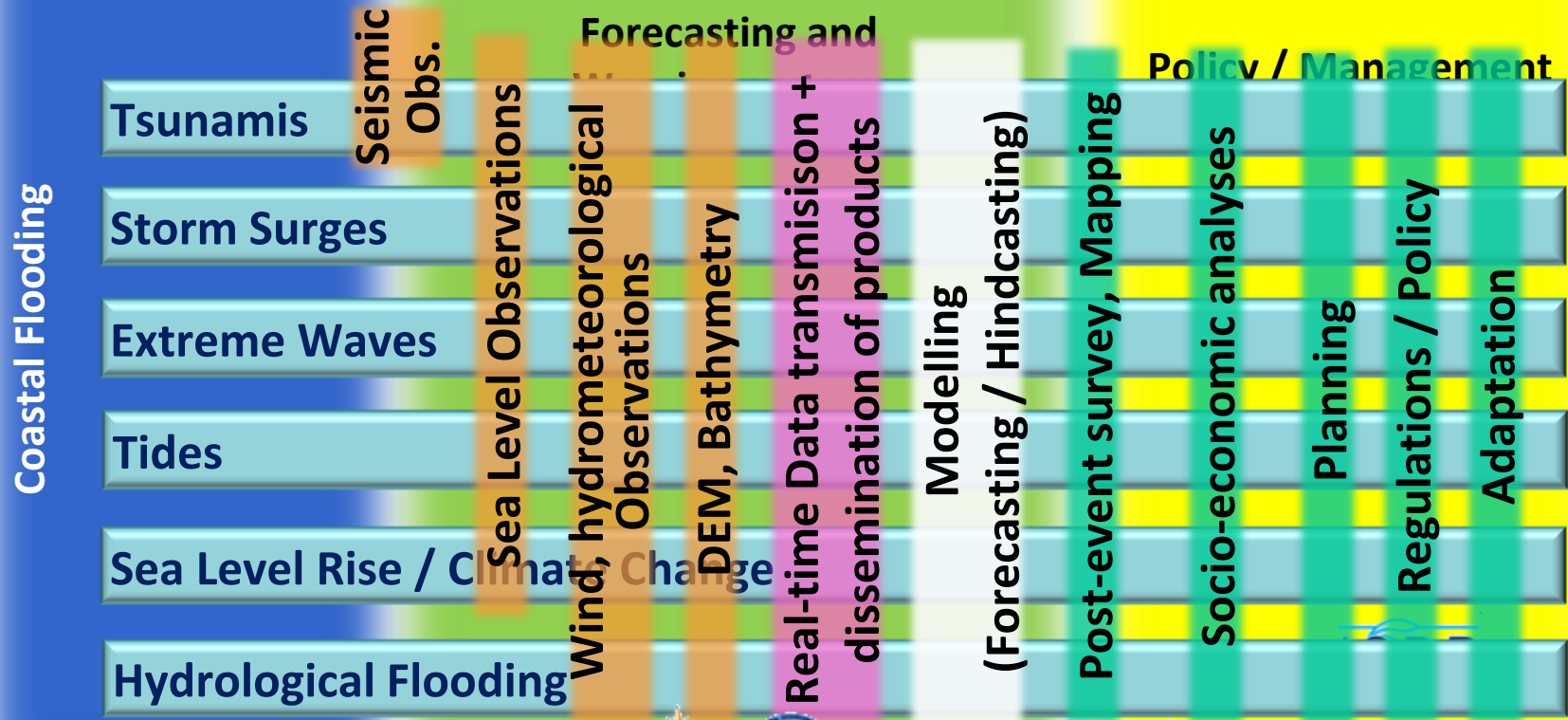
Coastal Flooding & Vulnerable Populations

- Coastal populations are rapidly growing worldwide – more than 44% people live within 150km of the coast
- Coastal inundation threatens lives and livelihoods
- Historically, storm surges have killed more people than winds by Tropical Cyclones, and inundation from earthquake-triggered tsunamis
- Storm surges are the most underestimated and misunderstood of natural hazards

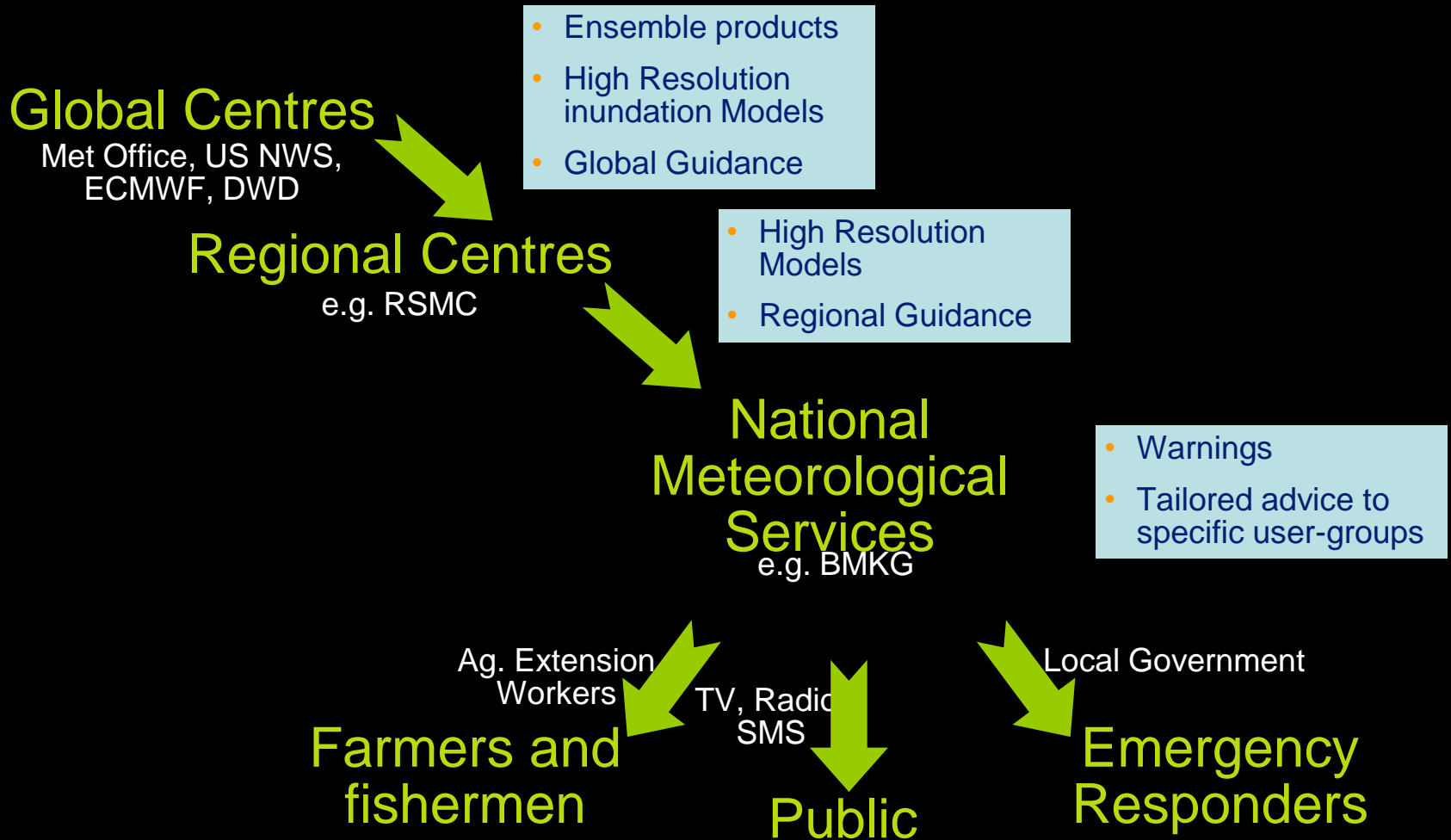
Reducing vulnerability in coastal areas

- Recognizing the extreme vulnerability of coastal areas and reducing the risk of disaster is a priority in WMO, the Joint IOC-WMO Technical Commission for Oceanography and Marine Meteorology (JCOMM) and the Commission for Hydrology (CHy).
- The **Coastal Inundation Demonstration Forecasting Project (CIFDP)** was established in 2009 – a partnership between WMO, JCOMM and CHy.
- It's a **multi-hazard early warning system**, integrating river flow, storm surge, wave and flood forecasting to enhance coastal inundation forecasting and warning systems, that can be sustained by the responsible national agencies.

End-to-end Coastal Inundation Management

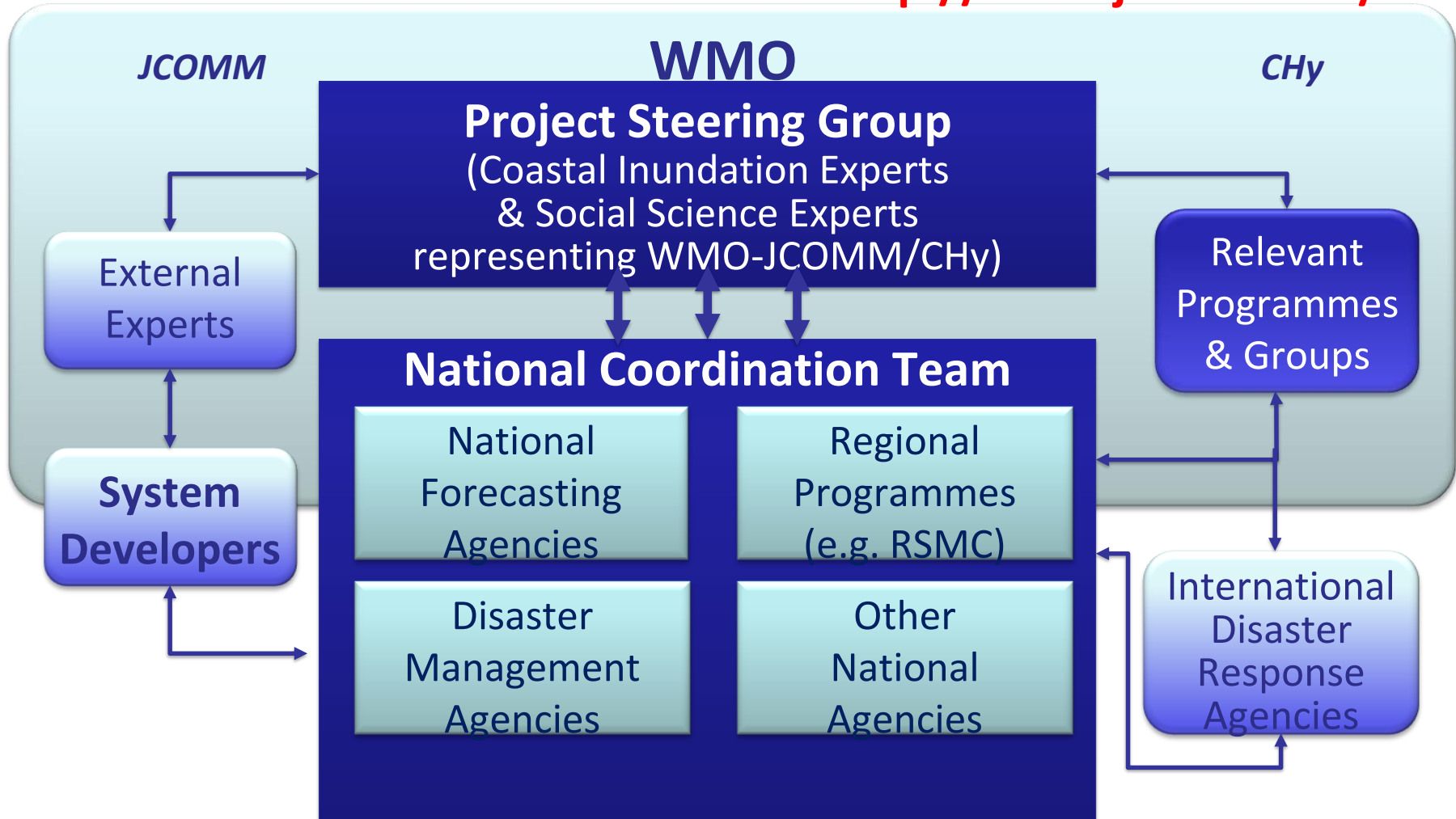


WMO CIFDP cascading framework



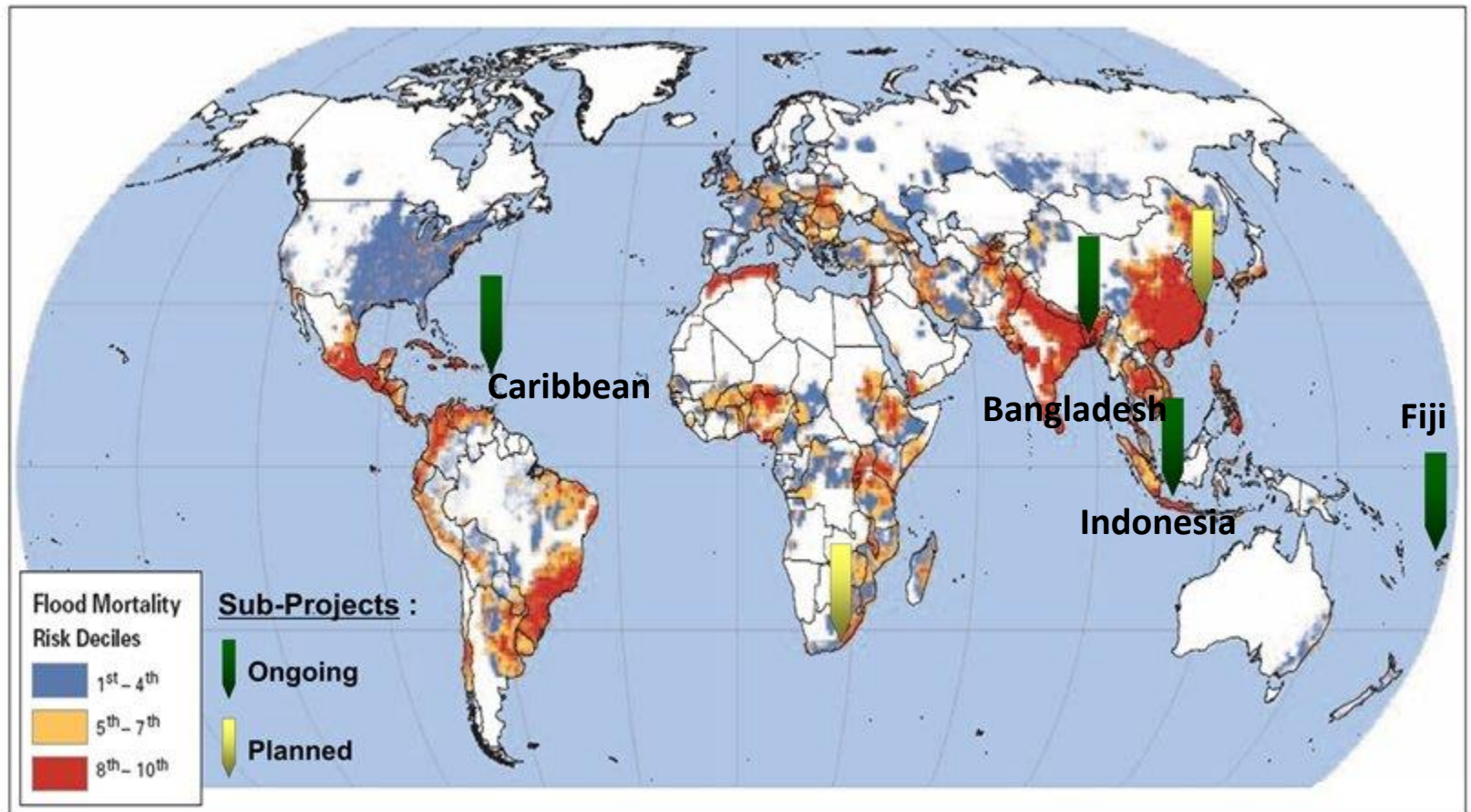
CIFDP Implementation: Key Players

<http://www.jcomm.info/CIFDP>



CIFDP Implementation: 4 countries (currently)

<http://www.jcomm.info/CIFDP>



Natural Disaster Hotspots: A Global Risk Analysis. World Bank, 2005

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CIFDP Progress

- Phased approach – with collaboration between individuals and institutions with expertise in storm surge, wave and hydrological flooding
- Focused on transfer of technology to adopting countries, particularly for developing capacity in the met and hydrological services
- Implemented on national and regional scales to support end-user needs – on completion, forecasting will be provided by National Meteorological and Hydrological Services
- Public outreach – especially increasing awareness of storm surges
- Demonstration projects only for now – future of CIFDP

2017/2018 – Key Events

- Evaluation of CIFDP – sustainability
- Promotion of CIFDP:
 - *1st International Workshop Waves, Coastal Hazards and Storm Surges (September, Liverpool)*
 - *Marine Technical Conference (Geneve, October)*
 - *JCOMM-5 Session (Geneve, October) – Side Event*
- Completion of Bangladesh (Nov, 2017)
- Next Project Steering Group (Feb 2018, Shanghai)
- Completion of Caribbean project (Nov, 2018)

Ocean matters - 2030

Our vision

*By 2030 all WMO
Members more resilient ...
through the best possible
services, whether over
land,
at sea or in the air...*

Key drivers

*High-impact weather
and climate extremes... safety
of people ... exposure and
vulnerability ... growth of
human settlements particularly
in flood plains
and coastal zones*



Services

Timely, fit-for-purpose weather, climate, water, marine and related environmental impact-based information and services: DRR, adaptation to climate risk and sustainable development

Observations

Modernized, enhanced, optimal and integrated global observation network of the Earth system (atmosphere, hydrosphere, oceans, cryosphere and biosphere)

Research

Leveraged global research community resulting in fundamental advances in the understanding of the Earth system: atmosphere, ocean, cryosphere, biosphere ... regional sea level and coastal impacts



Country Profile Database

Indicators on marine observation and services

Marine observations

- Marine meteorological and oceanographic observing stations operated, maintained or funded
- Marine meteorological and oceanographic observing data shared and exchanged with WMO
- Collaborative agreements or partnerships in your country concerning integrated marine meteorological and oceanographic observations

Marine services

- Marine weather and ocean forecasting
- Maritime safety services, including in the Arctic
- Coastal hazards forecasting and warnings



Thank you

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