WEATHER CLIMATE WATER
TEMPS CLIMAT EAU

Water & Climate Change

5 October 2021

Perspectives from WMO

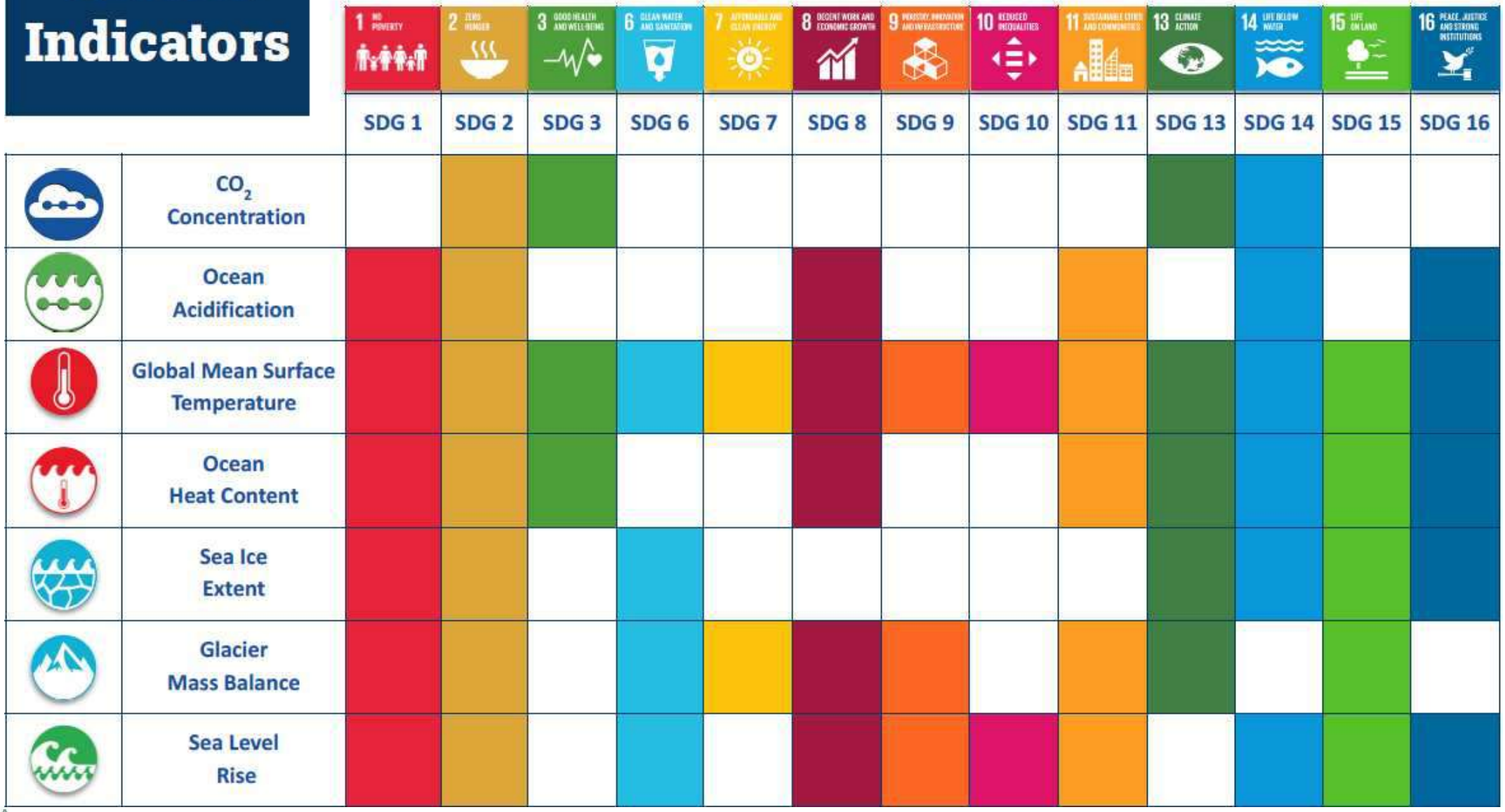
WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Johannes Cullmann
Deputy Secretary-General

SDGs & Indicators

Climate change threatens sustainable development



"The future we want"

2015
+1.2°C

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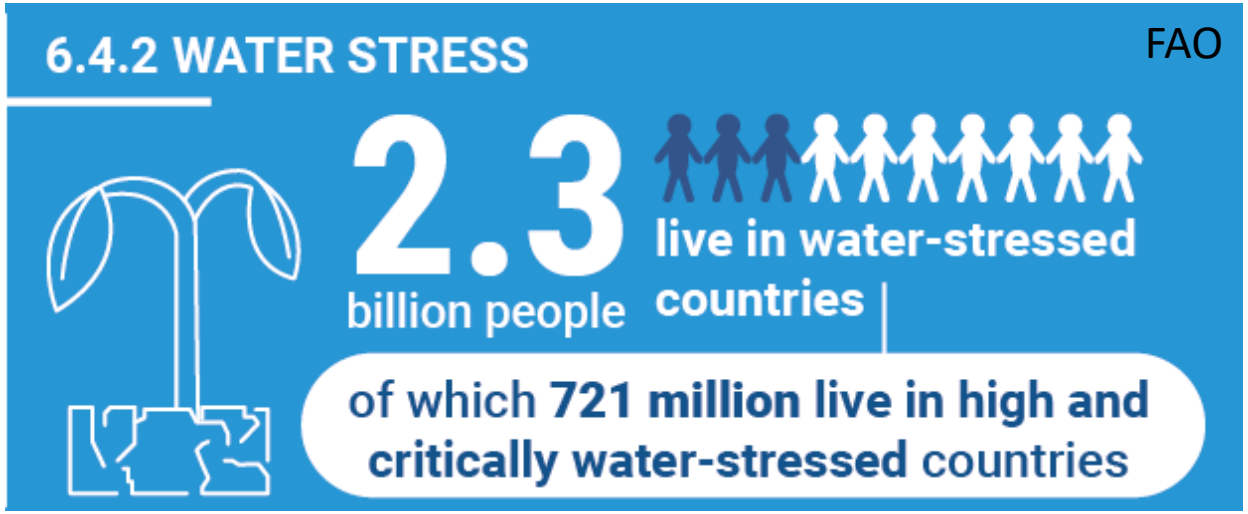
"Climate Indicators and Sustainable Development: Demonstrating the Interconnections" 22.IX.2021

SDG 6 – we are not on track

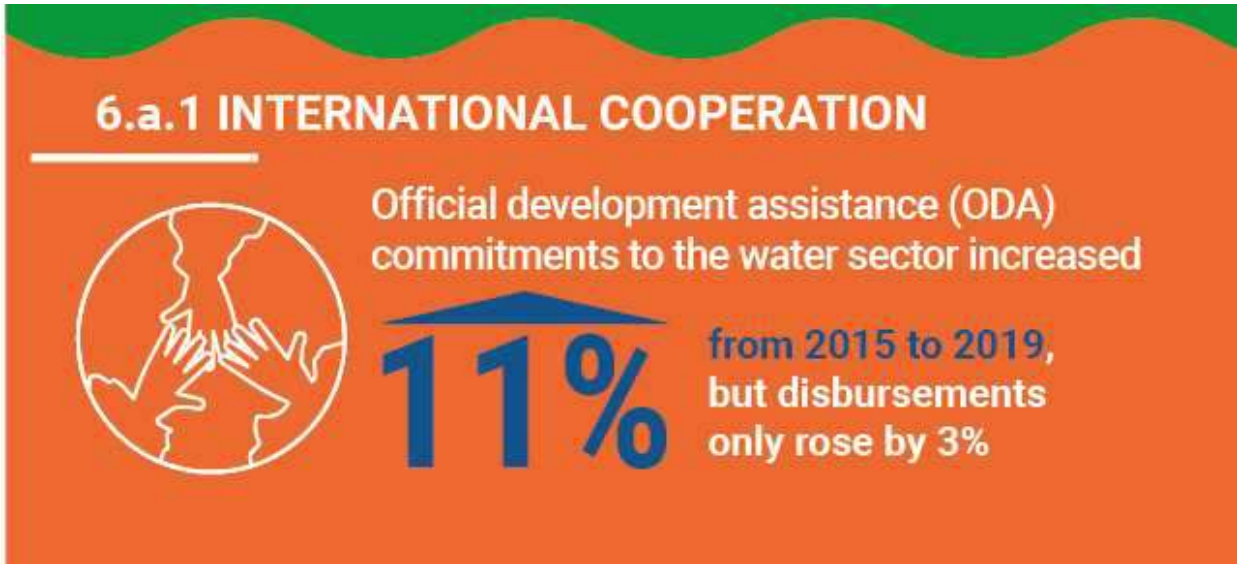


80% of the world's population
already suffers from serious threats to its water security:
water availability, water demand and pollution.

Additional 8% would be exposed to new or aggravated water scarcity at 2°C of global warming.

IPCC WG-II, AR5

UNEP



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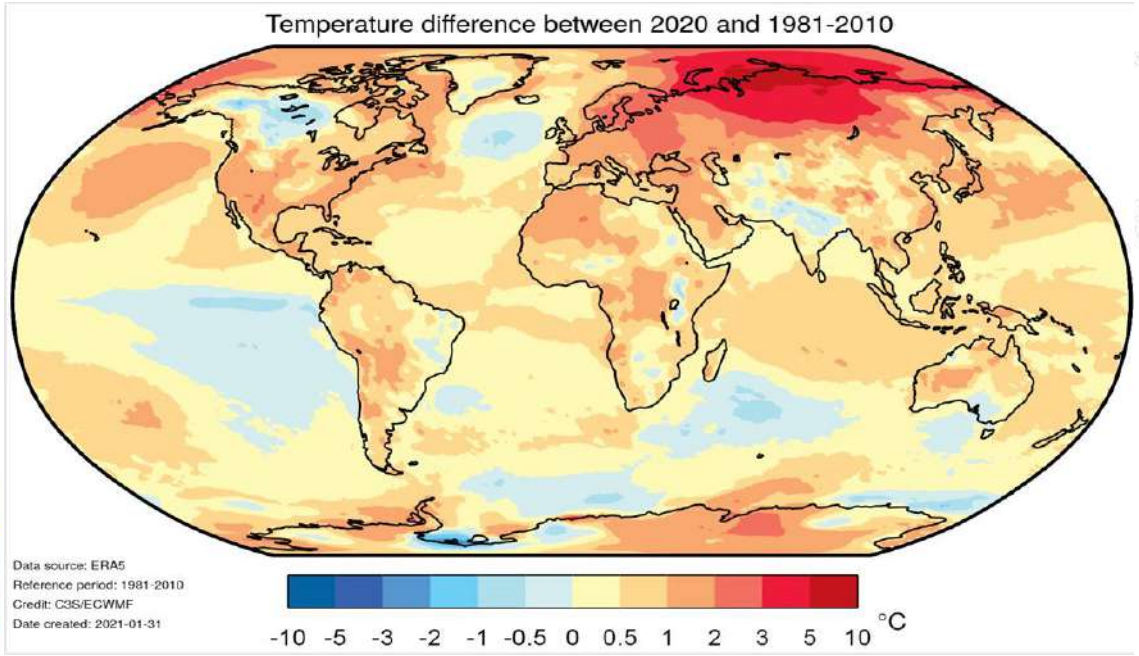
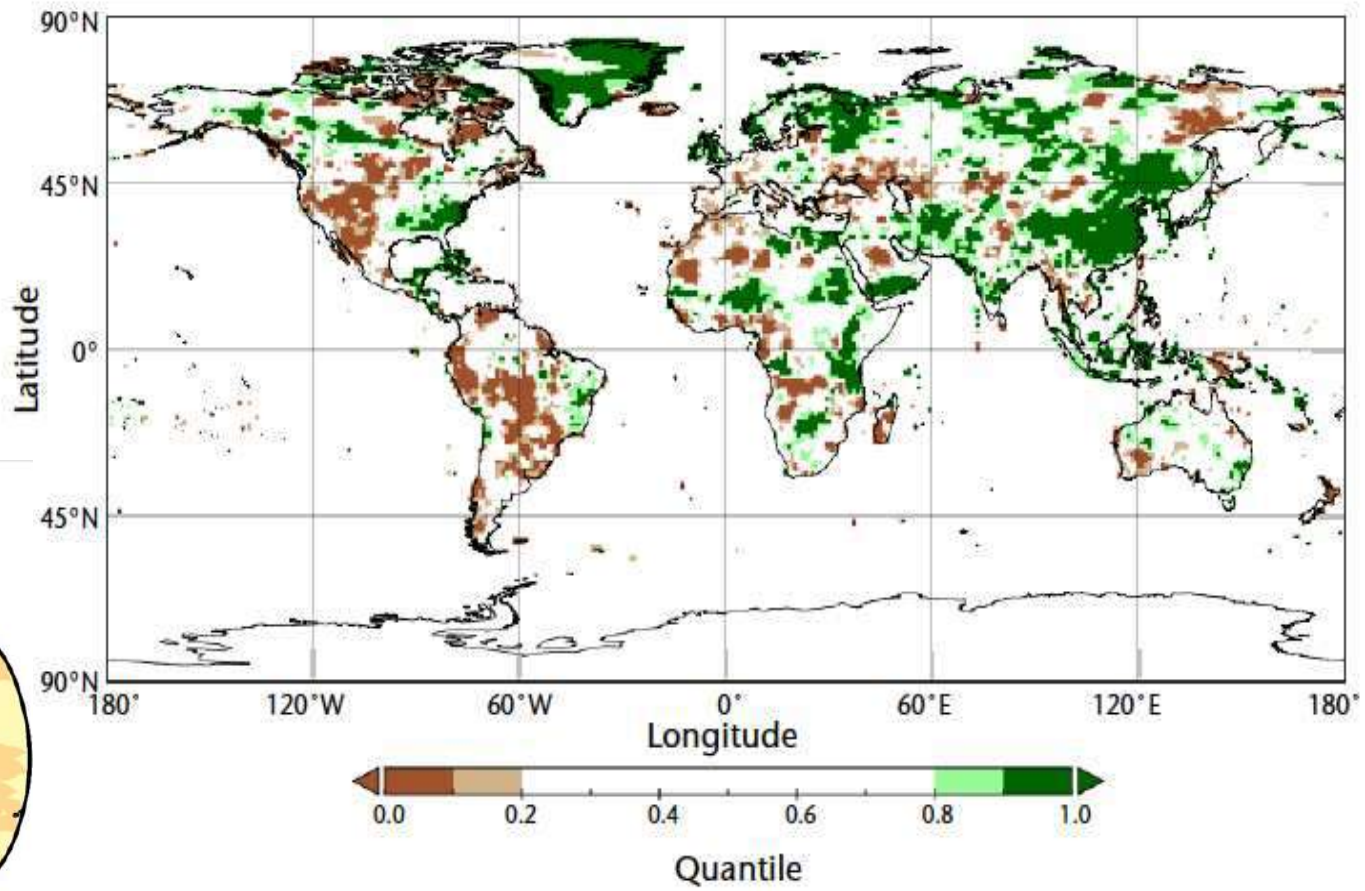
Source: UN Water, SGD 6 Progress report, March 2021

State of the Global Climate: 2020 +1.2°C

Climate change => precipitation change => shifts in rainfall patters & agricultural seasons => major impact on food security, human health…





2.3 billion people live under water-stress

Water is top priority in 79% NDCs

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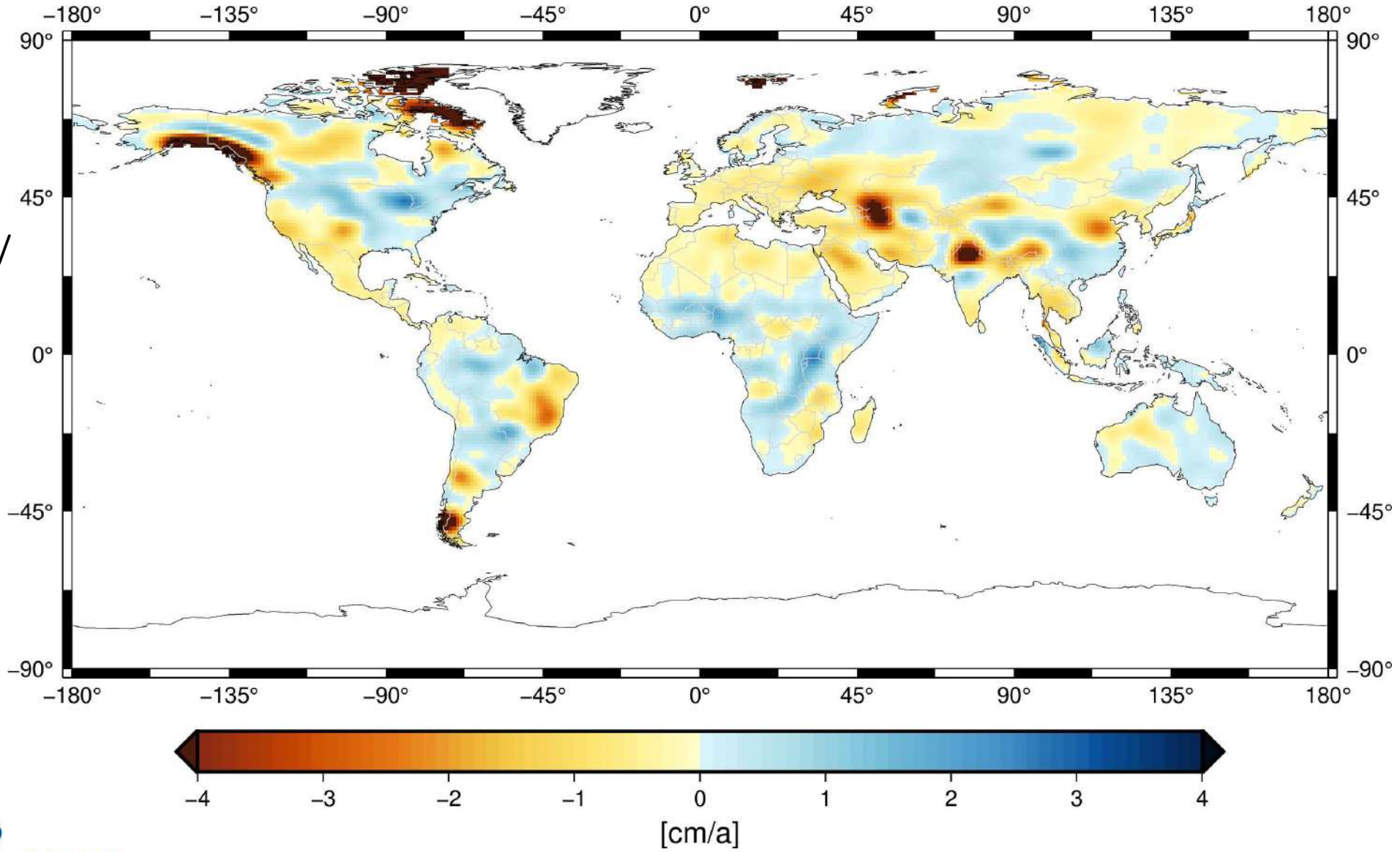
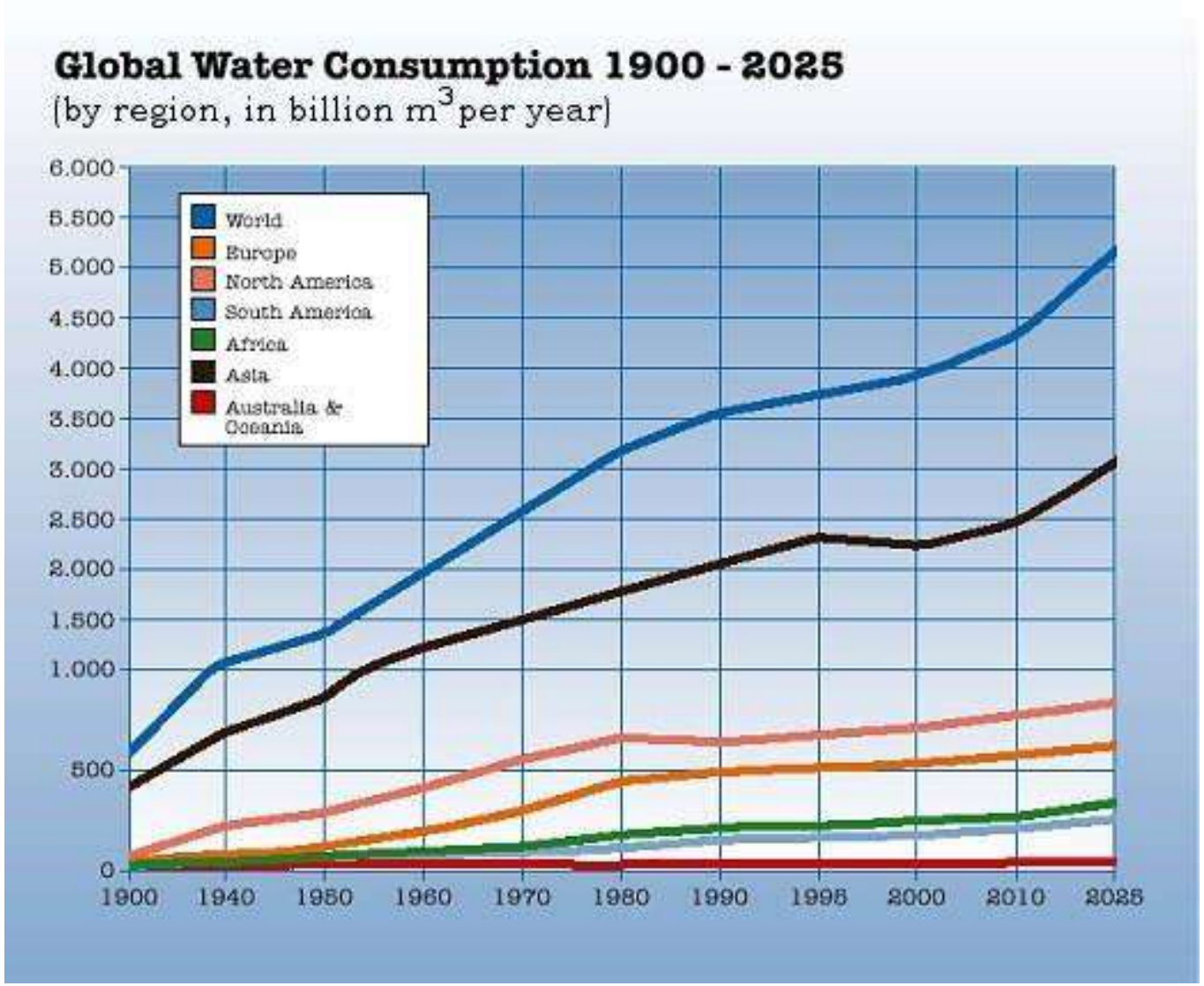
Story map <here>

Total water loss in last 20 years

Loss 1 cm of water equivalent/ year



GFZ Potsdam



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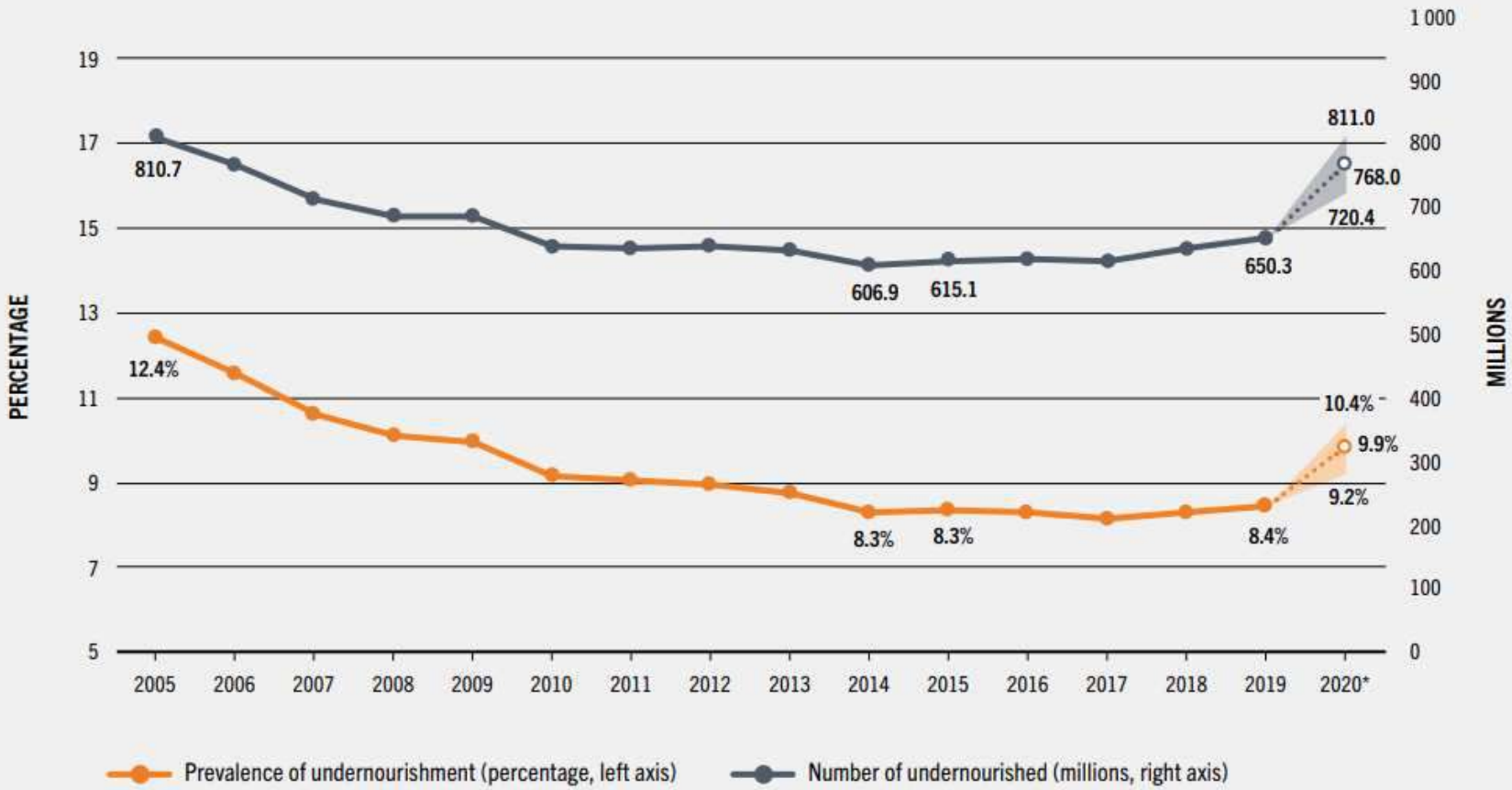
Source: wrsc.org, World Resources SimCenter

State of the Global Climate: 2020 +1.2°C

FIGURE 1 THE NUMBER OF UNDERNOURISHED PEOPLE IN THE WORLD CONTINUED TO RISE IN 2020. BETWEEN 720 AND 811 MILLION PEOPLE IN THE WORLD FACED HUNGER IN 2020. CONSIDERING THE MIDDLE OF THE PROJECTED RANGE (768 MILLION), 118 MILLION MORE PEOPLE WERE FACING HUNGER IN 2020 THAN IN 2019 – OR AS MANY AS 161 MILLION, CONSIDERING THE UPPER BOUND OF THE RANGE

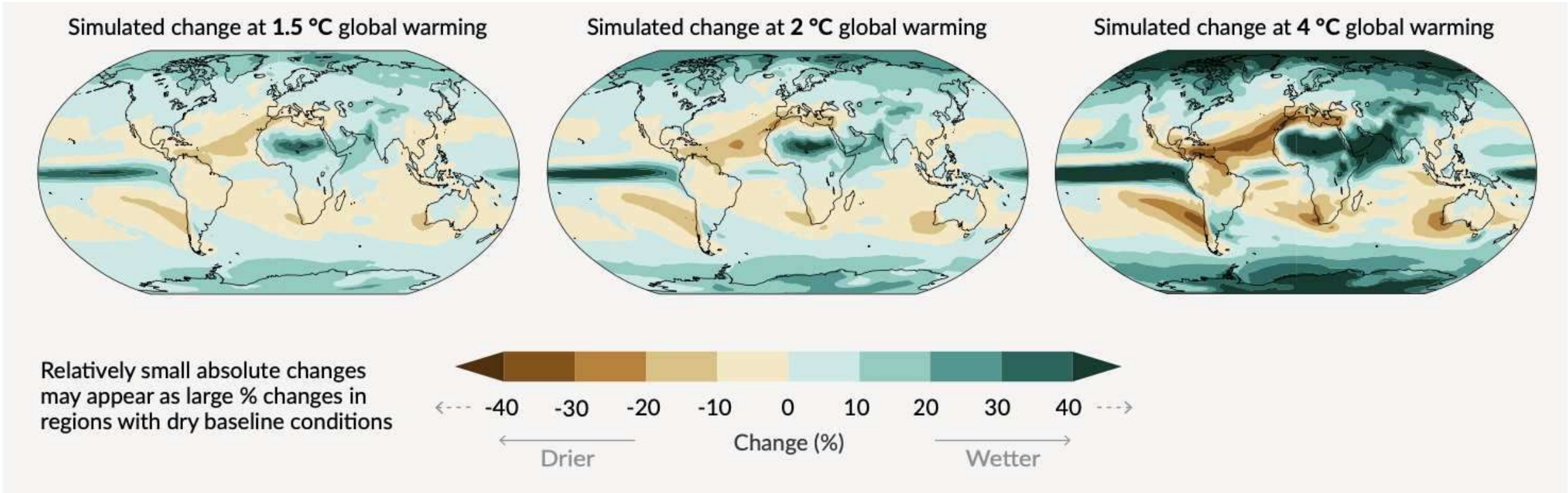


NOTES: * Projected values for 2020 in the figure are illustrated by dotted lines. Shaded areas show lower and upper bounds of the estimated range.

FAO, 2020

With every additional amount of global warming changes get larger

Annual mean precipitation



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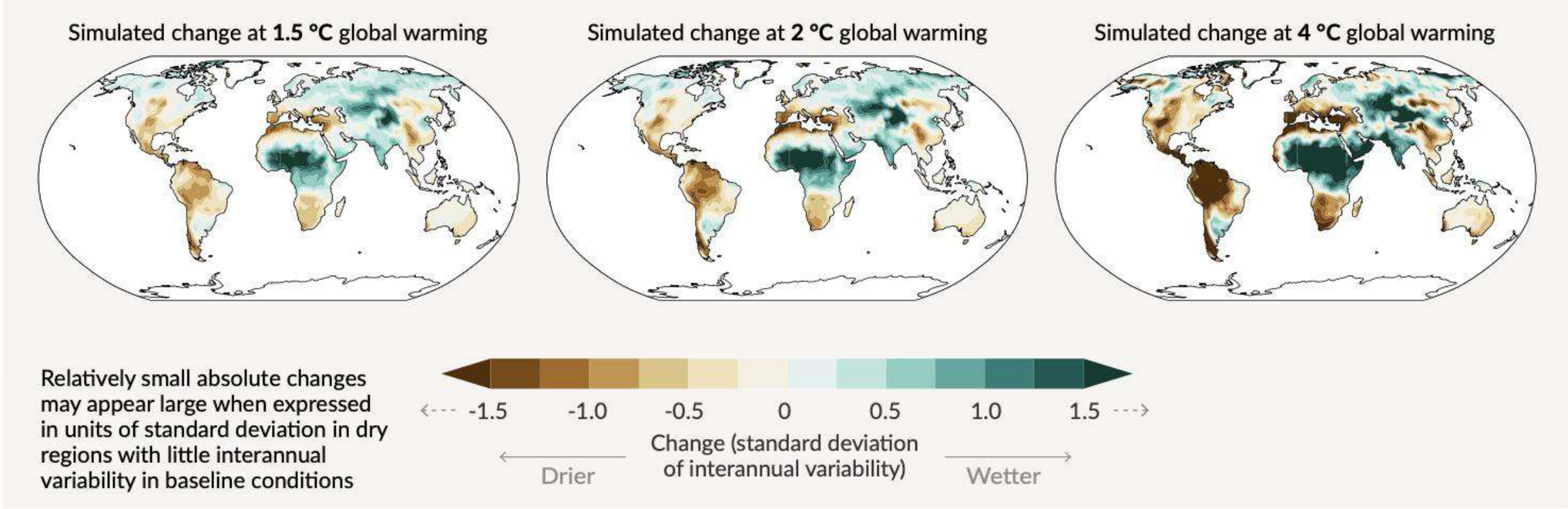
IPCC AR6 WG-I (2021)

With every additional amount of global warming changes get larger

Annual mean total column soil moisture



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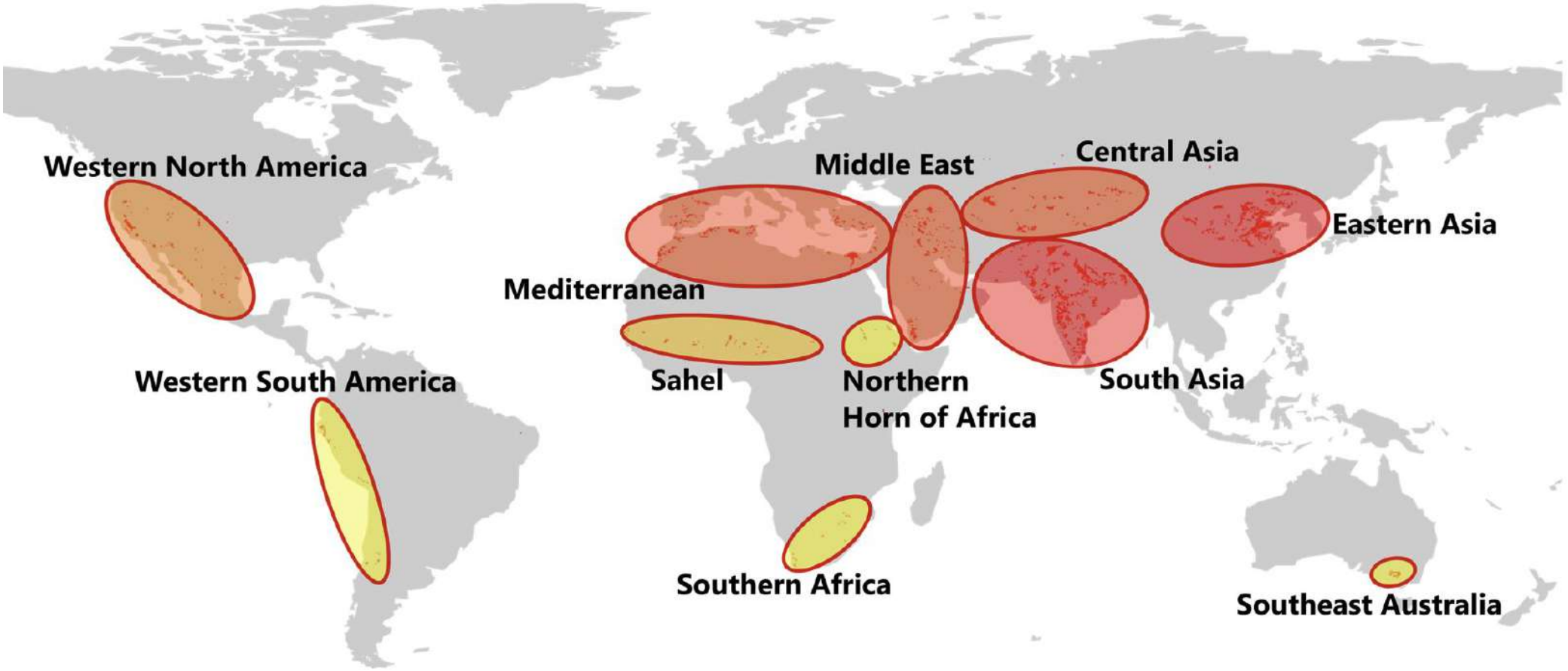
IPCC AR6 WG-I (2021)

Global water stress hotspots



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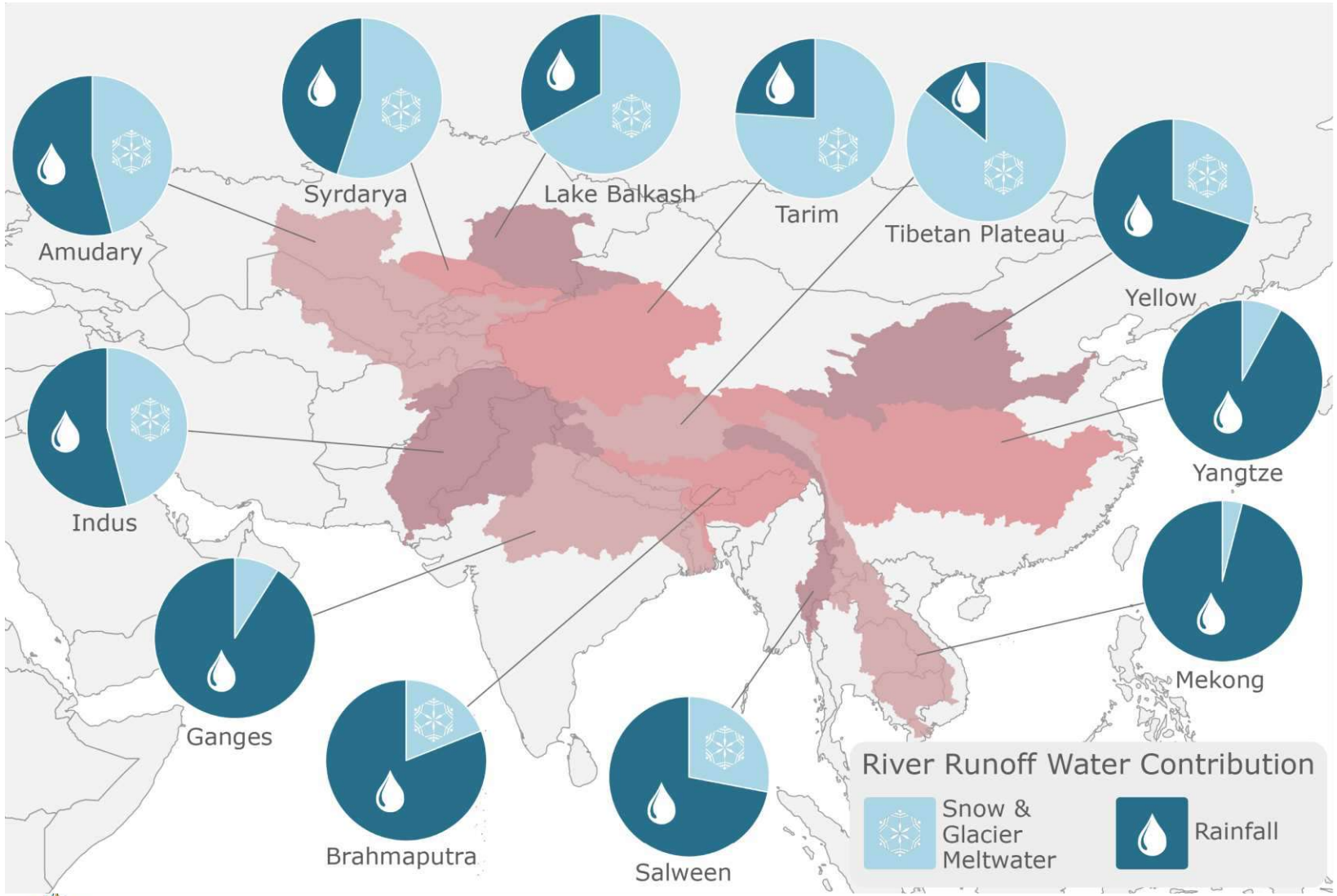
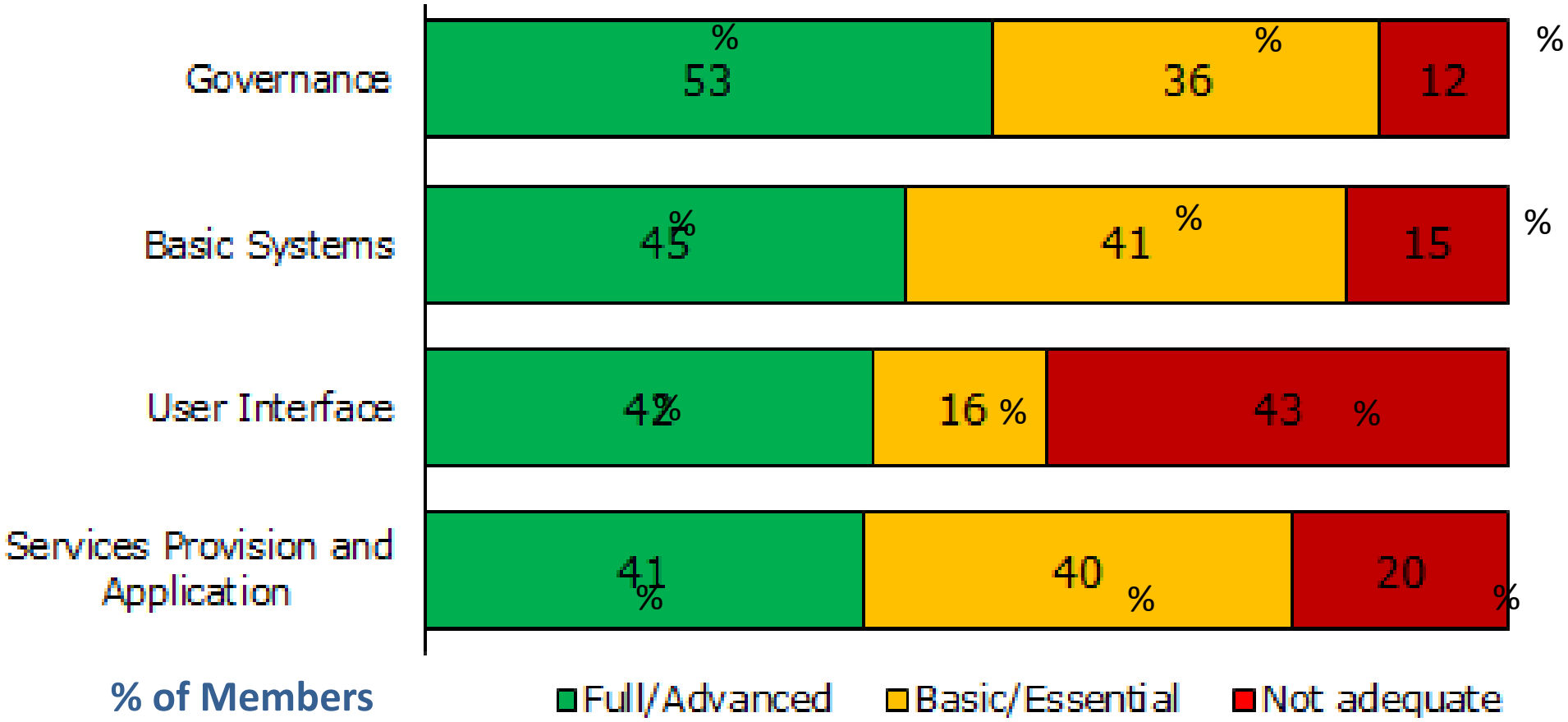
Knowledge priorities that we need to address



– How to support societies to understand and adapt to changing water resources, as glaciers and snow caps melt?

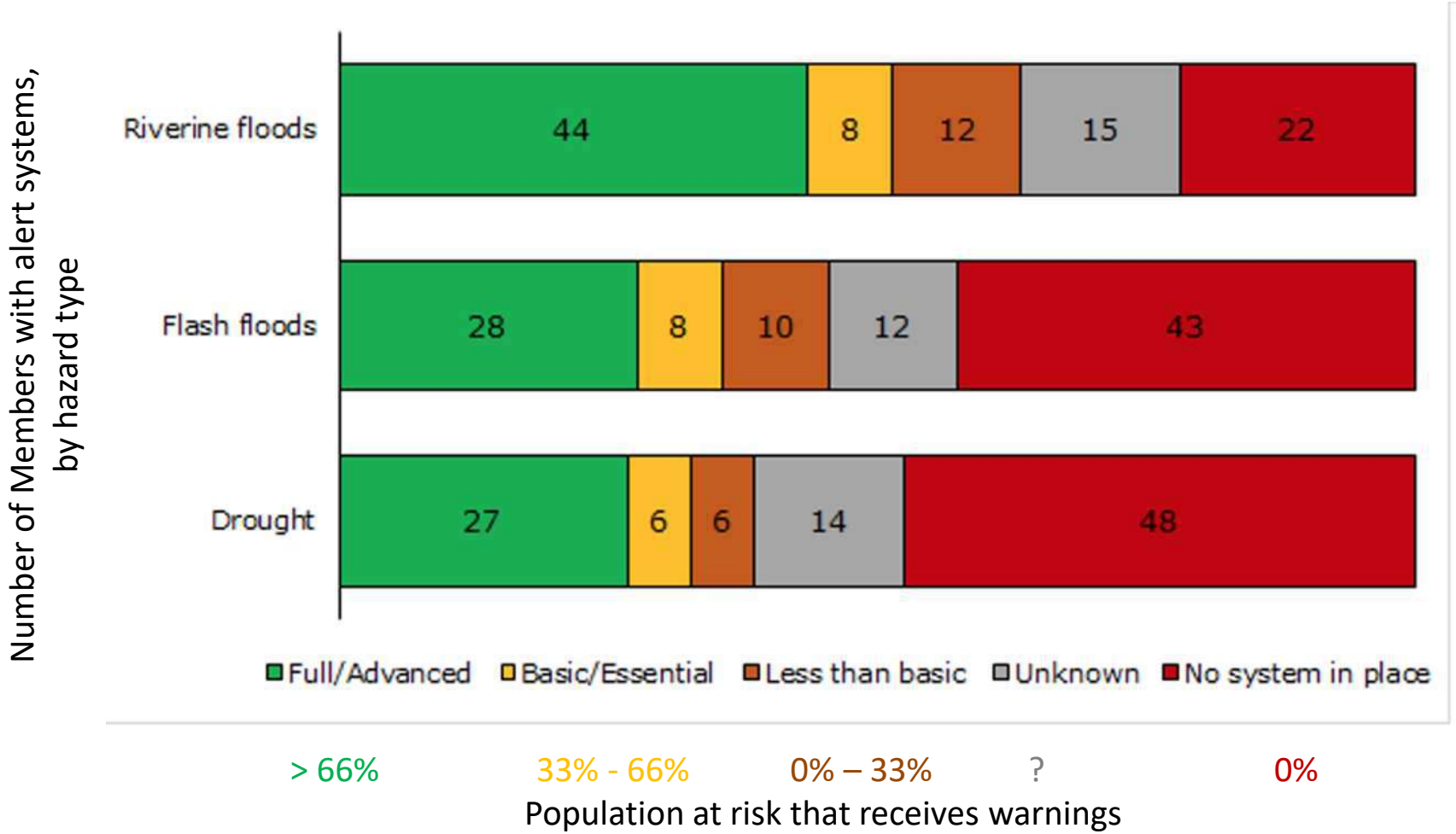
Basin scale contributions from snow and glacier meltwater to major river runoff - Asia

HYDRO CAPACITY AT A GLANCE



- 60% of Members do not have a good level of service
- 43% of Members have an inadequate interaction with users

Population at risk must receive warnings



46% of Member States have inadequate drought and flood forecasting systems
Only 33% are reaching 2/3 or more of the population at risk

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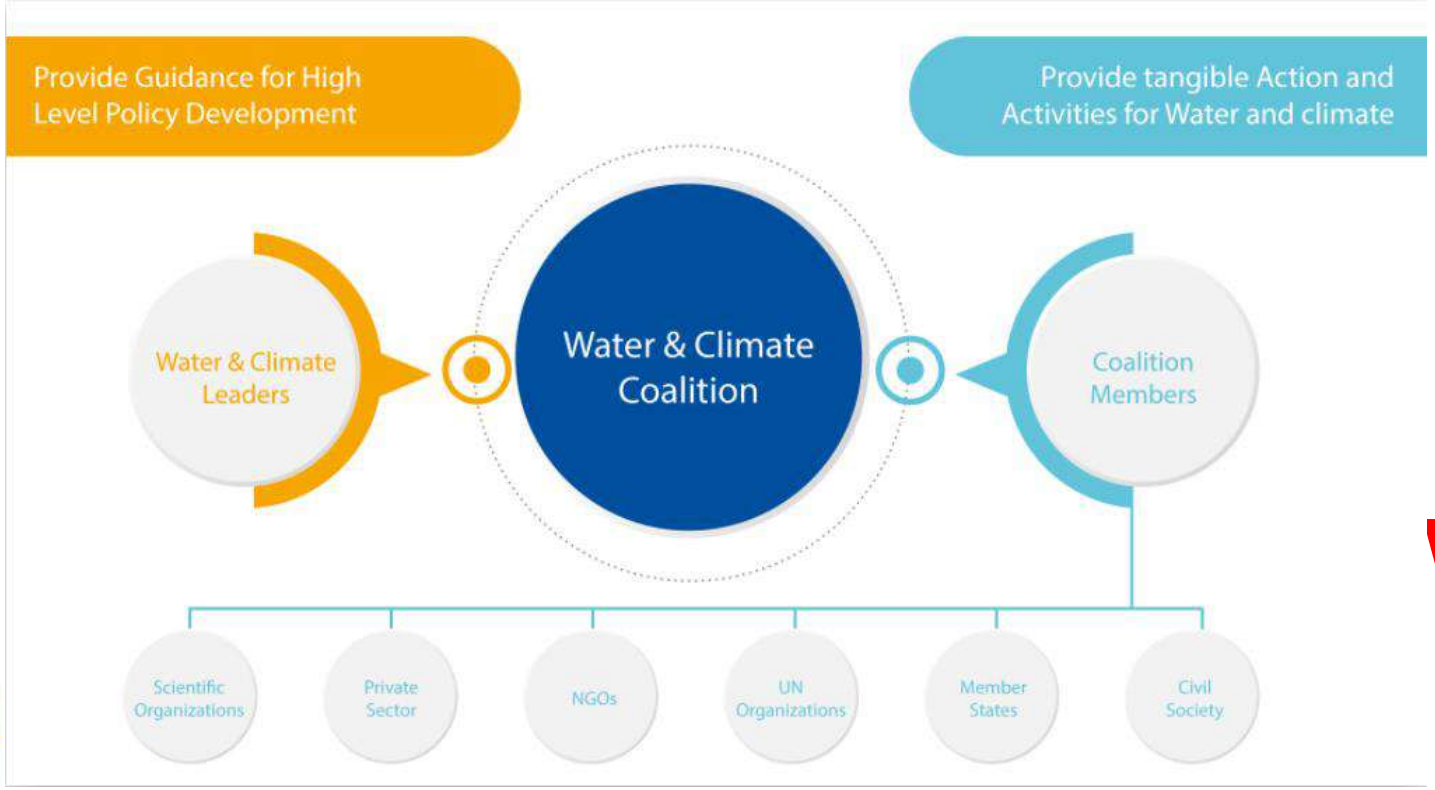
WMO State of Climate Services: Water (5.X.2021)

Water stress is a global challenge



SDG 6
Global Acceleration Framework
Data & Information

Water and Climate Coalition

Empower countries – Ensure data access –
HydroSOS – Risk assessment

Water and Climate Coalition Leaders

6 CLEAN WATER AND SANITATION

Mr. Emomali Rahmon
President, Republic of Tajikistan

Mr. János Áder
President, Hungary

Mrs. Hilda Heine
Past President, Republic of the Marshall Islands

Mr. Komi Sélom Klassou
Past Prime Minister, Republic of Togo

Mr. Han Seung-soo
Past Prime Minister, Republic of Korea

Mr. Carl-Hermann Gustav Schlettwein
President AMCOW; Minister, Republic of Namibia

Mrs. Cora van Nieuwenhuizen
Minister of Infrastructure and Water Management, Kingdom of the Netherlands

Mr. Abdelkader Amara
Minister, Kingdom of Morocco

Mrs. Hannele Pokka
Professor; Past Minister, Republic of Finland

Mrs. Haydée Rodriguez
Vice Minister, Republic of Costa Rica

Mr. Gilbert Houngbo
Chair UN-Water; President IFAD

Mr. Petteri Taalas
Secretary General WMO

Mr. Howard Bamsey
Chair Global Water Partnership

Mrs. Lindsey Blodgétt
World Youth Parliaments for Water

Mr. Matthias Berninger
SVP Public Affairs & Sustainability BAYER

Mr. Ernest Gibson
UN Secretary-General's Youth Advisory Group on Climate Change

WORLD METEOROLOGICAL ORGANIZATION

WFP World Food Programme

UN environment programme

World Health Organization

unicef

FAO FIAT PANIS

UNESCO

IFAD Investing in rural people

UNDP

Tangible desired outcomes of the Coalition

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Key messages

1

Every bit of warming matters. Every life matters.

Climate and water action can reduce risk and save millions from floods and droughts

2

The water crisis can be mitigated. Reverse the current trend of loosing water.

3

Integrate water and climate monitoring & information systems.

Establish common practices for water & climate impact assessment.

4

Water can unite.

Agree on transboundary benefit sharing arragmenets.

No nation can resolve water challenge alone!

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Thank you

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