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World Health Organization

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International Workshop on Water Scarcity Taking action in transboundary basins and reducing health impacts

11-12 December 2017

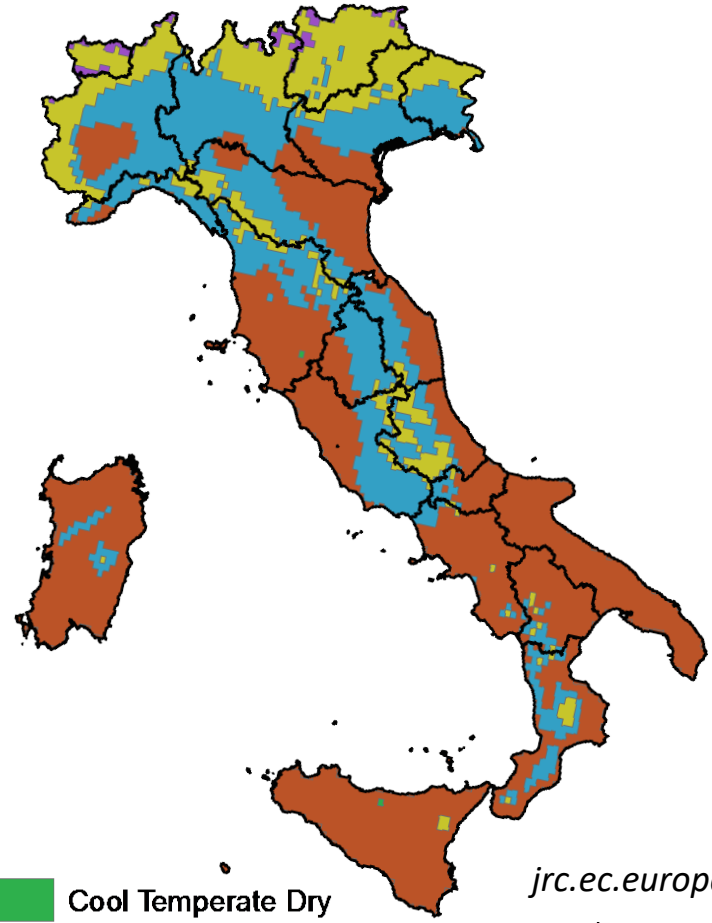
Salle XII, Palais des Nations, Geneva, Switzerland

Italy: a living lab on climate and environmental changes

- ✓ located in the middle of the Mediterranean basin
- ✓ continental northern sector, peninsular central-southern sector, two large islands and archipelagos, minor islands
- ✓ heterogeneous climate which leads to differences in the immediate risks posed by CC throughout the country
- ✓ impacts of CC and environmental changes are already exacerbating existing infrastructural deficiencies, post-industrial pollution phenomena (e.g., soil, water) and the intrinsic hydro-geological and seismic vulnerability of the country

DEMOGRAPHIC ESTIMATES

Population (2017)	60,579,000
Population growth rate (2017)	0%
Population living in urban areas (2017)	69.3%
Population age average, years (2017)	44.9
Population 65 years or over (2017)	22,3%
Economic & development indicators	
GDP per capita (current US\$, 2016)	30,527
Expenditure on health % of GDP (2014)	9.3%
Average annual HDI growth, 2010–2015 (%)	0.34



Cool Temperate Dry
 Warm Temperate Dry
 Cool Temperate Moist
 Warm Temperate Moist
 Polar Moist

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- ✓ acute climate changes have severely impacted natural disasters
- ✓ persistent CC are affecting our coastal areas, cities and water sources

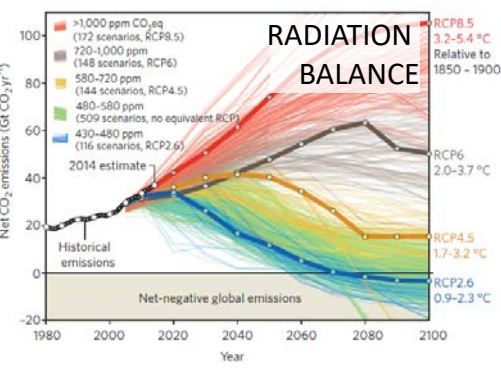
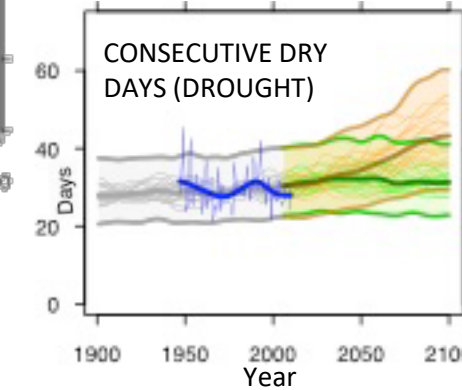
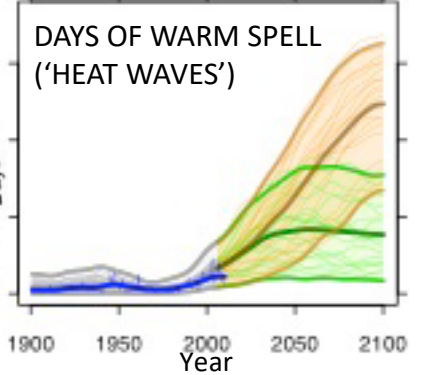
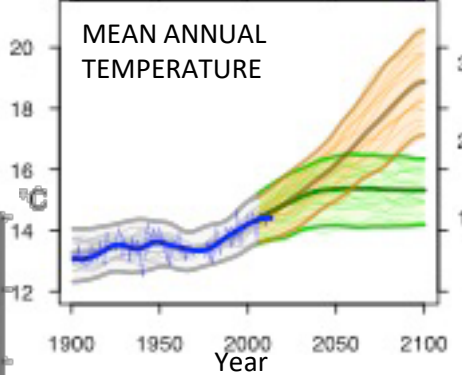
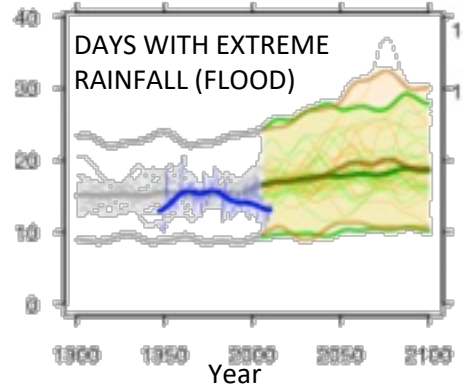
Italy: a living lab on climate and environmental changes



some main CC drivers



some main CC effects



High emissions scenario, representative concentration pathway 8.5 [RCP8.5] (orange), low emissions scenario, [RCP2.6] (green), annual observed record (blue), a) Climatic Res. Unit & Tyndall Centre for Clim. Change Res., University of East Anglia, 2015.; b) CMCC

- ✓ extreme climatic events seriously impacting systems and humans
- ✓ retreat of glaciers, coastal erosion, reduction in agricultural production, forest fires, desertification
- ✓ changing distribution of flora and fauna degrading biodiversity
- ✓ depletion of air quality, particularly in urban setting
- ✓ lacks in water access, deficit of safely managed water supplies, sanitation and hygiene
- ✓ re-emergence of previous/past endemic agents
- ✓ exotic communicable diseases, e.g., dengue, chikungunya, zika, crimea congo fever, west nile fever or blue tongue

WATER RESOURCES AND HEALTH

KEY IMPLICATIONS FOR HEALTH

Crisis on water access and safely managed water supply in several Italian regions (6/20 Italian regions calling for a "state of emergency" in summer 2017)

Aquatic ecosystems and groundwater resources seriously impacted

Saline intrusion, turbidity, algal blooms, water scarcity causing lower potential of dilution of pollutants in aquifers and bioaccumulation of contaminants

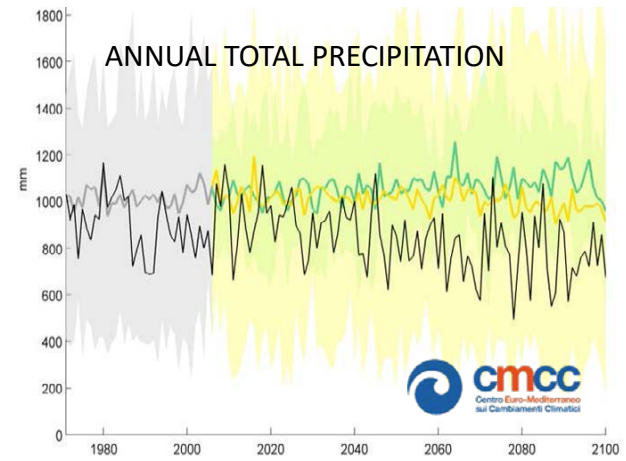
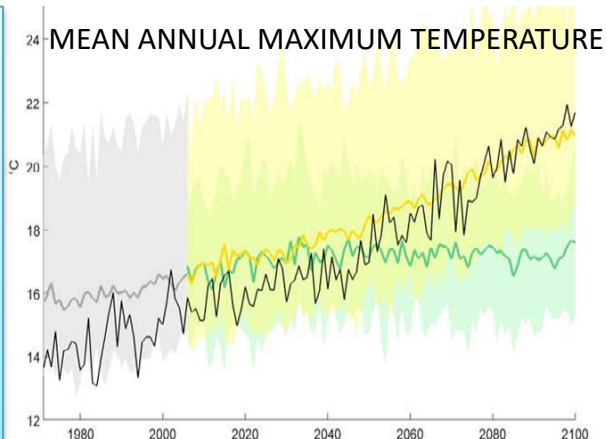
No sufficient water level in rivers and lakes failing to achieve a good status

Diseases due to lack of water for human consumption, sanitation and hygiene in emergency circumstances

Depletion of water quality and possible health impact (non communicable and communicable diseases)



- ✓ current and future scenario
- ✓ ↓ precipitation ↑ temperatures
- ↑ sea water level
- ✓ over-exploitation of water resources
- ✓ gaps in management & investments

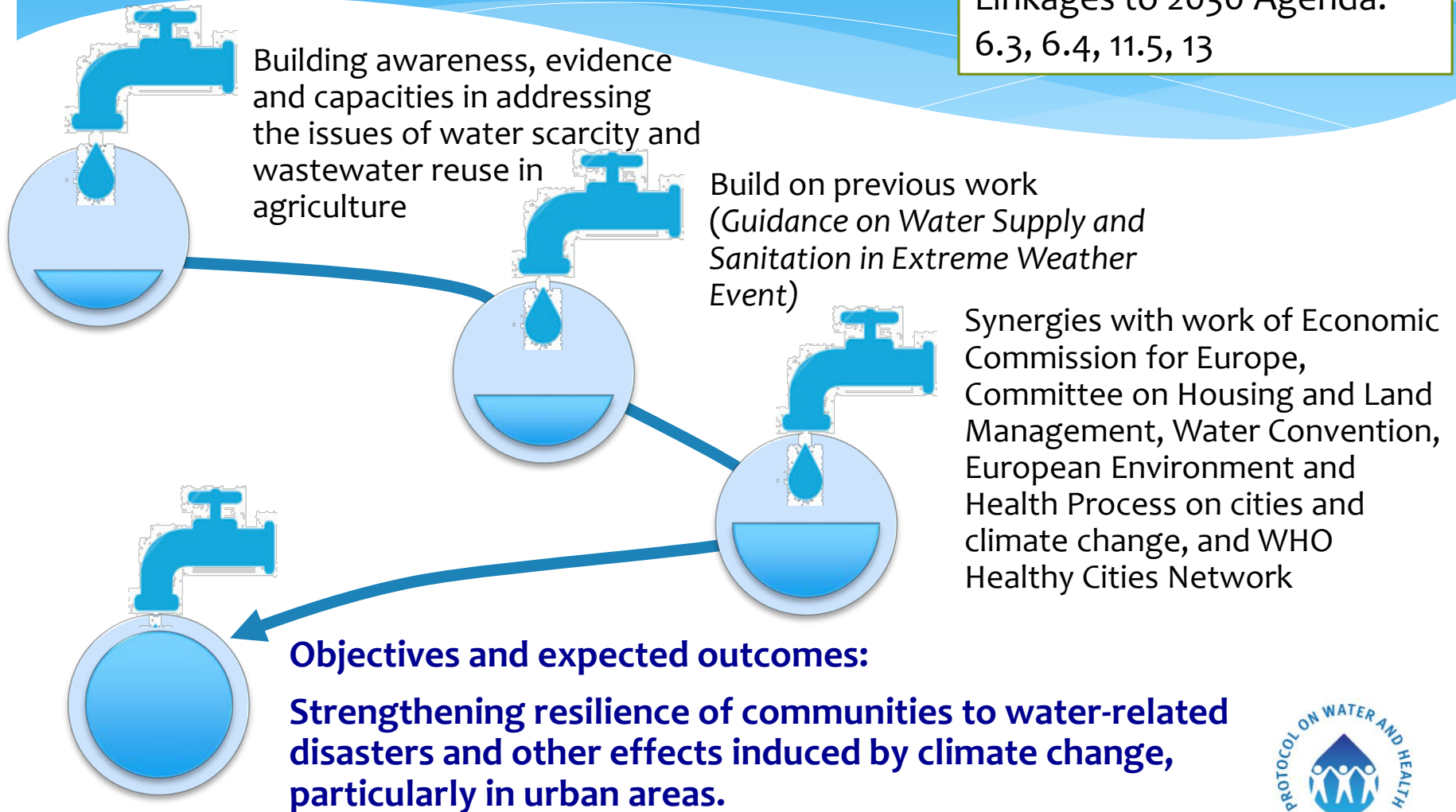




Programme area 7: Increasing resilience to climate change

Lead Parties: Italy and Spain

Linkages to 2030 Agenda:
6.3, 6.4, 11.5, 13



Programme area 7: Increasing resilience to climate change

1. Building capacity to deal with water scarcity and its health impacts

- * In cooperation with the Water Convention, increase capacity of authorities and water operators to manage water scarcity and prevent and mitigate related health impacts
- * **A regional workshop to review evidence related to the effects of water scarcity and identify good practices and lessons learned in water resource management, including wastewater reuse, to address water scarcity at the institutional, policy, scientific and technological levels (cooperation with PA 5 - *Safe and efficient management of water supply and sanitation systems*)**

Programme area 7: Increasing resilience to climate change

2. Exchanging experience on building resilience to climate change in urban areas

- * A regional workshop covering issues such as disaster preparedness and response, adaptation, wastewater management, recycling and reuse
- * **A regional symposium on extreme weather events and safe water supply and sanitation**, specifically focusing on WSP and SSP approaches in the light of climate change, floods and droughts (coordinated by PA 5)

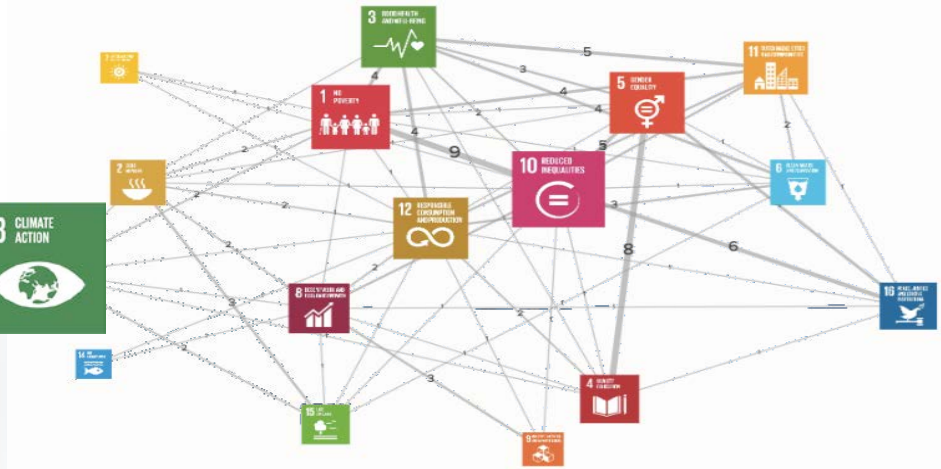


2017-6-7th April
pan-European Symposium
Water and Sanitation Safety
Planning and Extreme
Weather Events

Health

38. We are committed to **advancing global** health security and pursuing policies that advance physical and mental health improvements across the globe. Healthy lives and well-being are important to broader economic, social and security gains. We recognize that women's and adolescents' health and healthcare must be promoted. **We acknowledge the role of environmental factors in affecting human health.** We remain committed to strengthening health systems, preparedness for, and a prompt, effective and coordinated response to public health emergencies and long-term challenges. On this basis, **we have asked our Health Ministers to follow up on these issues during their November meeting.**

*The United Nations Development Programme (UNDP) recognises **planetary health as critical to achieving sustainable development across the economic, social, and environmental spheres—this ethos underpins our Strategic Plan for 2014–17.***



Actions on climate change and global partnerships are pivotal pillars towards other SDGs



CIVILISATION AND THE SYSTEMS ON WHICH IT DEPENDS



G7 Milan Health Ministers' Communiqué

5-6 November, 2017

"United towards Global Health: common strategies for common challenges"

G7 Milan Health Ministers' Communiqué

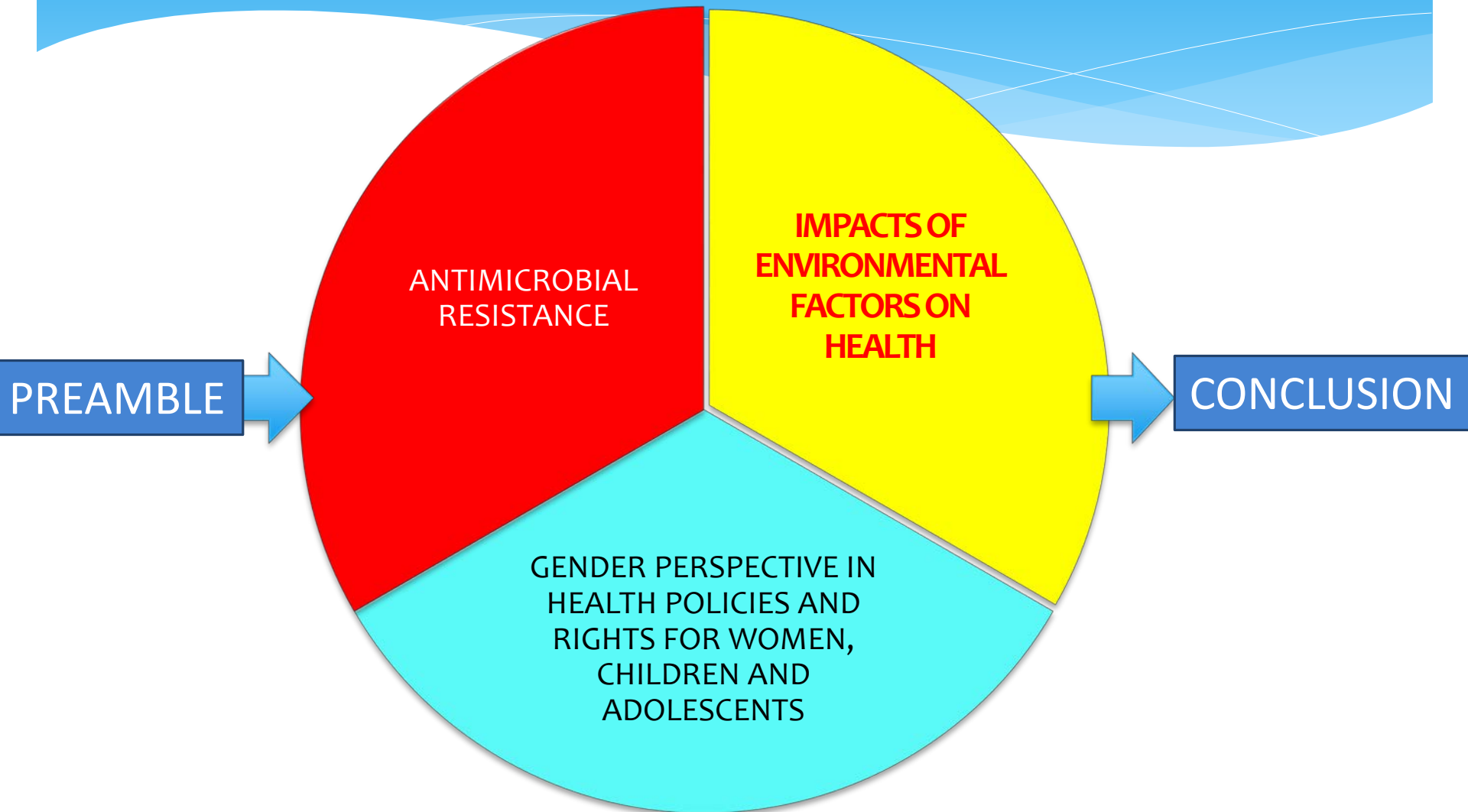
1. We, the **G7 Health Ministers, met in Milan on November 5-6 2017**, guided by the G7 Taormina Leaders' Communiqué and in a spirit of cooperation, to address the global challenges we face today. We commit to better prepare our health systems to respond collectively to present and future threats, to protect our citizens' wellbeing, and to promote global health for broader social, economic and security gains.
We recognize that alongside recent advancements in health care and global health coordination, there continue to **be challenges to global health**, including conflict and crisis, social inequalities, rapid globalization and urbanization, **environmental-related factors**, and increased movement or displacement of people. **We acknowledge our discussions on impact of the climate and environmental-related factors on health.**

3. We acknowledge that some **environmental-related factors contribute to health risks**, such as those associated with changing patterns of infectious diseases, **extreme weather events**, sea level rise, ocean acidification, air, **water**, biodiversity, soil pollution, **water scarcity**, food insecurity and malnutrition, food safety issues and increased migration.

7. We acknowledge the **central leadership and coordinating role of WHO in country capacity building** in preparing for and responding to public health emergencies, building resilient health systems, and the new strategic priority of **WHO leadership to address the health impacts of climate and environmental factors**. We acknowledge that **WHO's financial and human resource capacities have to be strengthened,**

G7 Milan Health Ministers' Communiqué

- 5-6 November, 2017



IMPACTS OF ENVIRONMENTAL FACTORS ON HEALTH

17. There is a need to **raise public and professional awareness through information and sharing on the impact of climate and environmental related factors on health**, and on the co-benefits to health of actions aimed at increasing resilience and addressing environmental degradation. We also need to promote the **exchange of data, best practices, technology and tools at all levels**, particularly those which are relevant at the urban, rural and community and workplace levels. Positive results can be achieved by working with our colleagues and stakeholders in sectors, such as environment, education, interdisciplinary research, transport, energy, finance, sustainable urban planning, sanitation, water and waste management, wildlife, agriculture and land use, and food systems.

IMPACTS OF ENVIRONMENTAL FACTORS ON HEALTH

19. The **G7 can make a difference in addressing the health impacts of air, water, and soil pollution and thus prevent deaths and disabilities caused by related NCDs**, including cancers, cardiovascular and lung disease, and diabetes. We will work collaboratively to share best practices and implement innovative approaches to improve surveillance and monitoring systems and support progress to reduce the burden of NCDs.

IMPACTS OF ENVIRONMENTAL FACTORS ON HEALTH

22. We will **work with other sectors and with international colleagues** towards achieving access to **safe drinking water and sanitation** by reducing geographical differences in services provided, avoiding discrimination or exclusion in access to services by vulnerable groups, and promoting affordability.

... the Protocol W & H entered in G7!



Programme area 7: Increasing resilience to climate change

Workshop 2019 in Italy

*strategies and resilience criteria to adapt
water systems and surveillance to CC*



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