



Building Health Resilience to Climate Risks

National Health Adaptation Planning and the Global Framework for Climate Services

International Climate Services Conference 4
Montevideo Uruguay Dec 6, 2014

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Overview

I. WHO Global Approach to
Climate Risks



New partnership with
WMO and Global
Framework for
Climate Services

II. National Health
Adaptation planning



Role of Climate
Services for Health

Part I

Global Climate and Health Action

Current and future directions of WHO Policy and Programming

Climate Change is an inconvenient truth for health

Global Health Priorities are highly sensitive to changing climatic conditions

Poor outdoor air quality kills 3.7million

Undernutrition kills 3.5 million

Diarrhoea kills 2.2 million

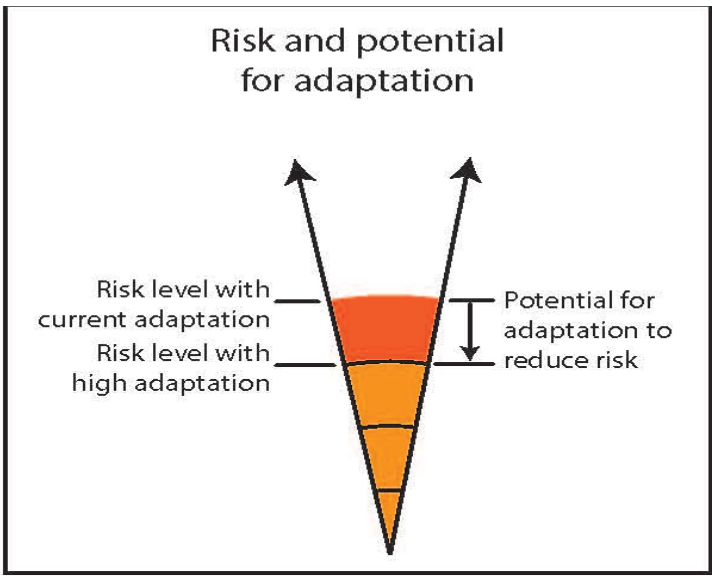
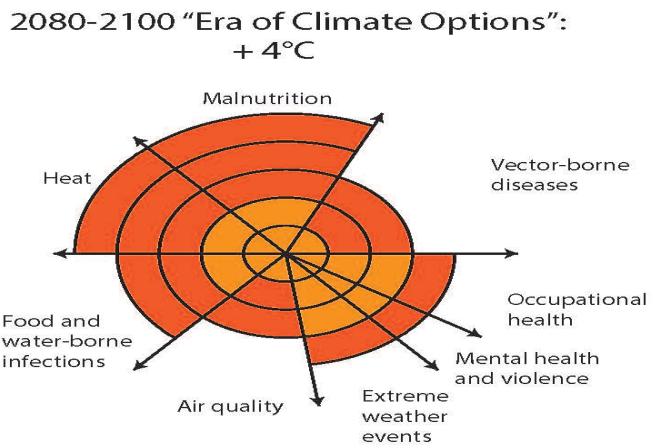
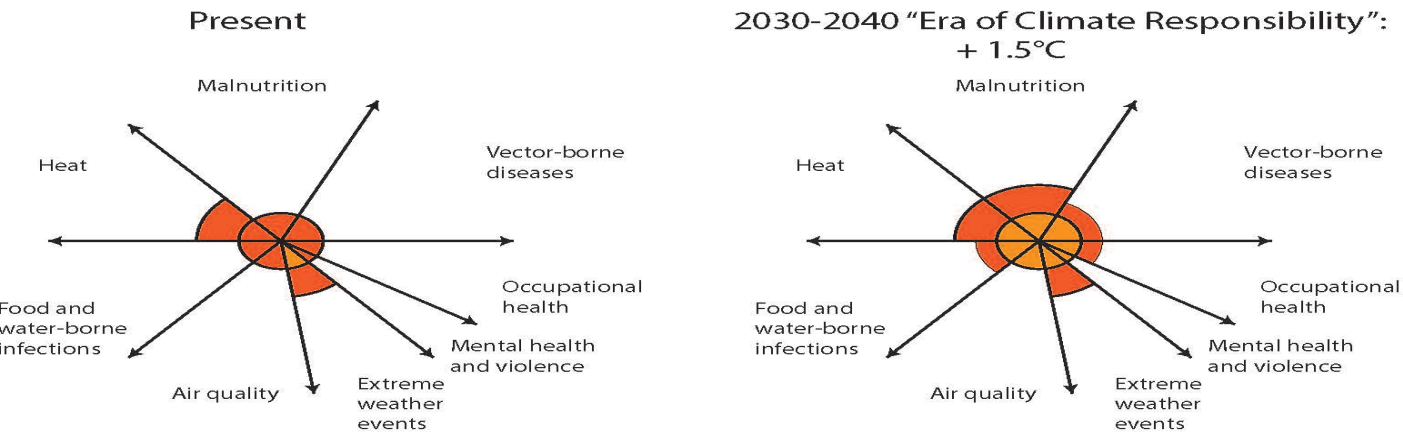
Malaria kills 900,000

Extreme weather events kill 60,000



More **difficult**, and **more expensive** to manage population risk and reduce the burden of disease.

Adaptation needs are significant ...



Climate – on the Health Policy Agenda

Global Health Policy Agenda

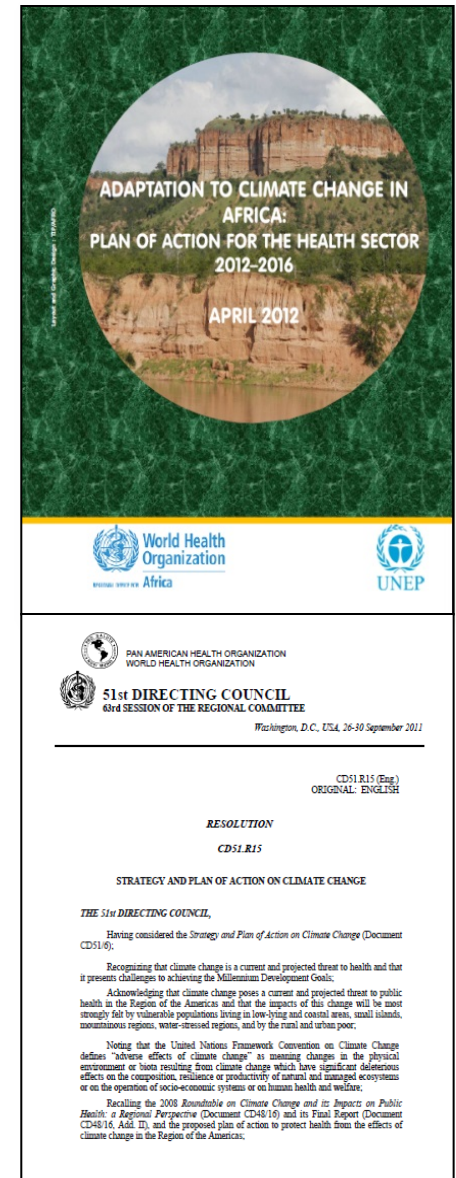
In 2008, World Health Assembly Resolution requests WHO to work with other partners to develop capacity to assess the risks from climate change for health and implement effective response measures.

Regional summits of Ministers of Health

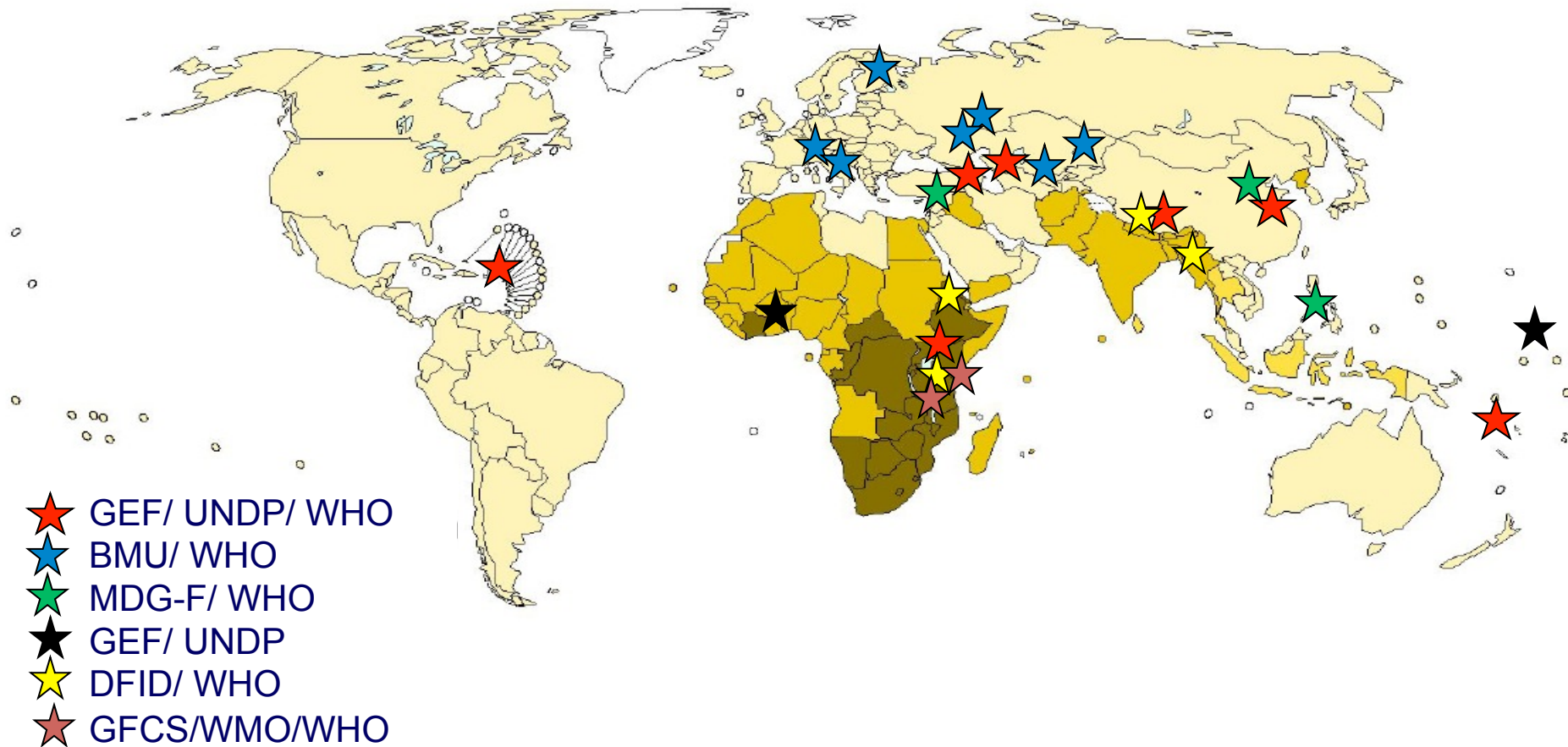
defined programmatic frameworks for health protection from climate change, outlining specific health needs

National

Health Adaption Plans, mainstreaming climate into national disaster, development and health policy



Expanding experience in health adaptation to climate change



Projects initiated since 2008, budget of over US\$500,000 per country.

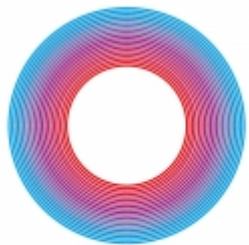
Momentum Building for Health & Climate



Over 600 participants, including 25 Ministers



Thematic session on climate, health, jobs



Session on investing in health

LIMA COP20 | CMP10
CONFERENCIA DE PARTES EN UNIDAS
SOBRE CAMBIO CLIMÁTICO 2014

Key Messages Emerging

- Strong political will
 - Increasing demand from Member States to take action on climate and health
 - Wide spectrum of needs and approaches to address adaptation and co-benefits of mitigation
 - Time to move from pilot projects to more systematic mainstreamed programming
- Recommendations for WHO :**
- More systematic monitoring of progress and risks
 - Stronger focus on evidence production and use
 - Establish a global platform for climate and health

WHO Focus to help countries respond to the health risks of climate change

ADAPTATION

- To strengthen resilience of health systems to climate risks and improving their **capacity** to adapt to long-term climate changes;

MITIGATION

- To identify, assess and promote actions that reduce the burden of diseases associated with **air pollution**, and other health consequences of policies that also cause climate change.

Future Directions for WHO

1. Partnership “platform” to respond to the increasing number of activities and actors engaged in this field;
2. Greater emphasis on actions that can improve health while also mitigating the extent of climate change;
3. Systematic support to make available country-specific information on climate risks to health and monitoring of adaptation progress.

WHO workplan

1. Strengthen partnerships to support health and climate
2. Awareness raising
3. Promote and guide the generation of scientific evidence
4. Provide policy and technical support to the implementation of the public health response to climate change

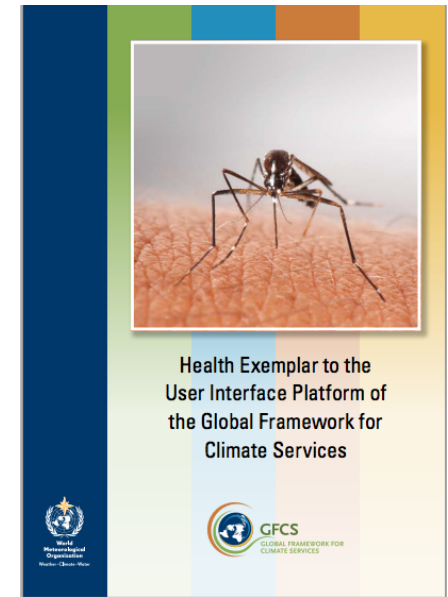


GFCS Implementation

Improve access to, and use of climate and weather knowledge to catalyze and orient action at global, regional, and national levels

Health Exemplar

Health Roadmap to GFCS to enhance access to and use of climate and weather information.



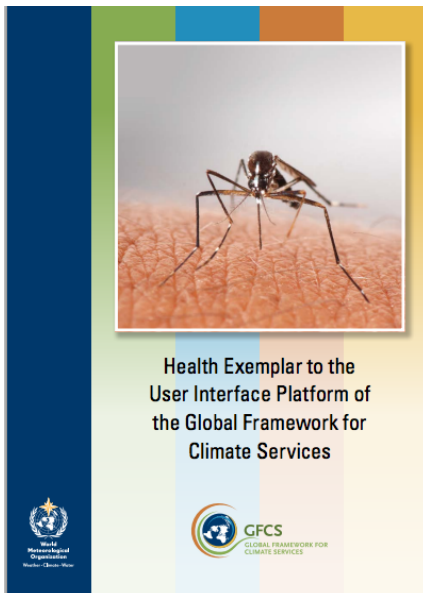
Uptake of Climate Services for health require:

1. Strengthened communication and partnerships among climate and health actors at all levels for the promotion of effective utilization of climate information within health policy, research and practice.
2. Improved health and climate research and evidence
3. Increased capacity of health sector to effectively access, understand and use climate and weather information for health decisions.
4. Climate and weather information effectively mainstreamed to health operations

WHO -WMO Climate and Health Office



Aim *To promote the development and use of climate and weather services enhance the management of climate related risks to health and improve health outcomes.*

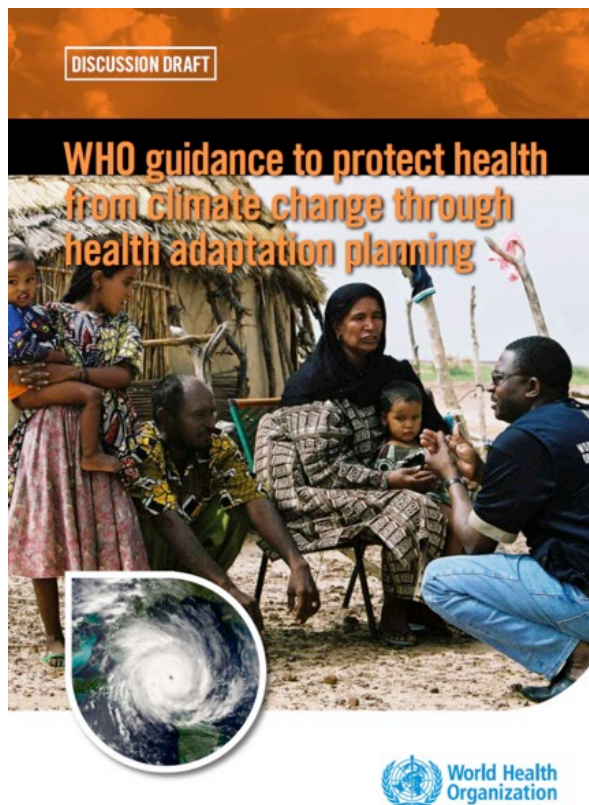


Part II

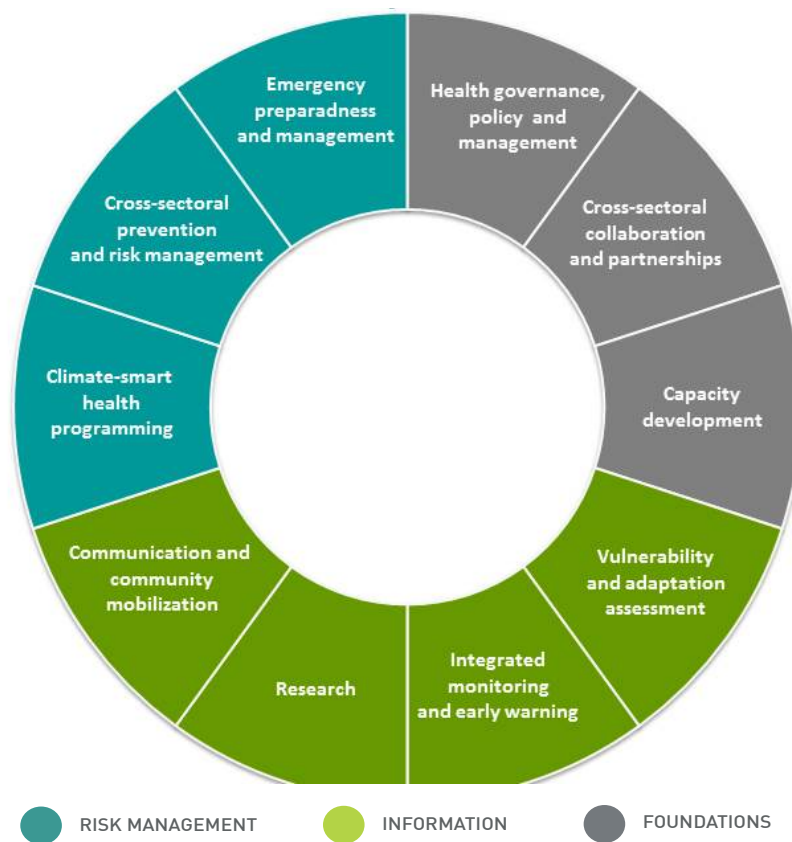
National Health Adaptation Plans

The need for climate services to inform decision-needs for implementation

Clearer approach to health adaptation planning process and content

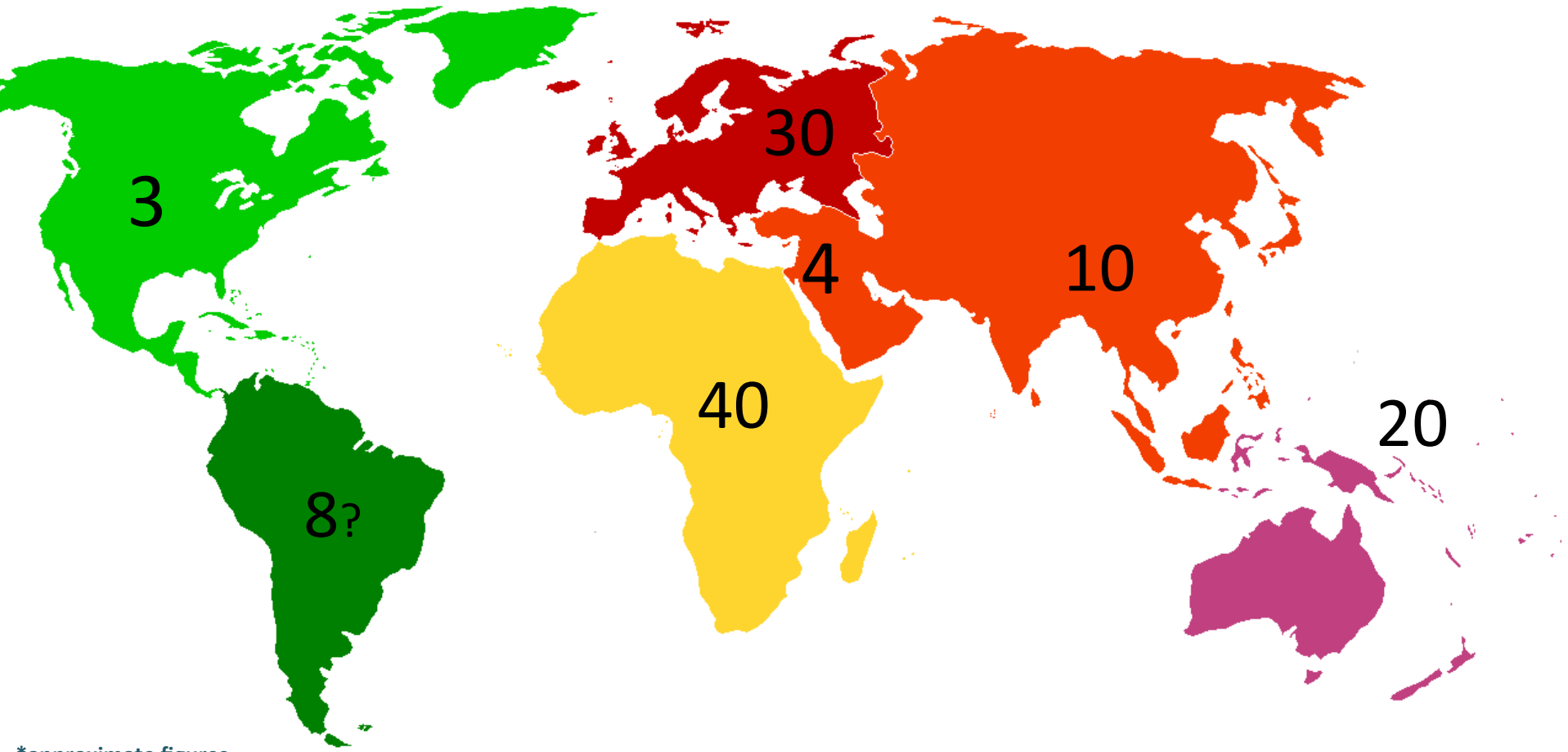


Ebi et al, WHO 2014
Guidance for health in national adaptation plans



Guillemot et al, WHO 2015
Operational framework for climate resilient health systems

Countries with National Health Adaptation Plans



*approximate figures

National Health Adaptation Plans - commonalities

Health Priorities

Extreme weather and disasters

Infectious disease control

Air quality and allergens

Water and sanitation

Nutrition

Mental Health

Health systems management

Actions that need to consider climate

Risk assessment and mapping

Surveillance & Monitoring

Forecasting & Early Warning

Information management

Research

Prevention and risk management

Health infrastructure

Health service planning and delivery

Policy, Standards and Norms

Evaluation

Risk communication



National Health plans calls for increased action to...

Adapt to climate change

Manage health risks of floods and storms

Manage air pollution risks

Stronger evidence base on disease linkages to environmental determinants

Epidemic preparedness & early warning

Regular, reliable, timely information mainstreamed into decision-making

Lesson learned -- even when data is available it may not be useable without tailored climate services

Regional / National Climate Scenarios and Projections

seasonal and weather forecasts, hazard mapping

Air quality monitoring & modeling

Real-time observational data

Historical climate data

Integrated transmission models

Summary - Decision needs to implement National Health plans

- Broad range of Health issues
- Broad range of decision - needs and applications
- Range of time-scales
- Range of geographic scales
- Requires integration of dynamic social and environmental knowledge
- Must involve social science and qualitative methods

Common challenges

What really needs to be understood about the climate?

What specific parameters and metrics are most relevant?

What format is it needed in?

How to tell if the climate information is reliable?

Who to call and work with?

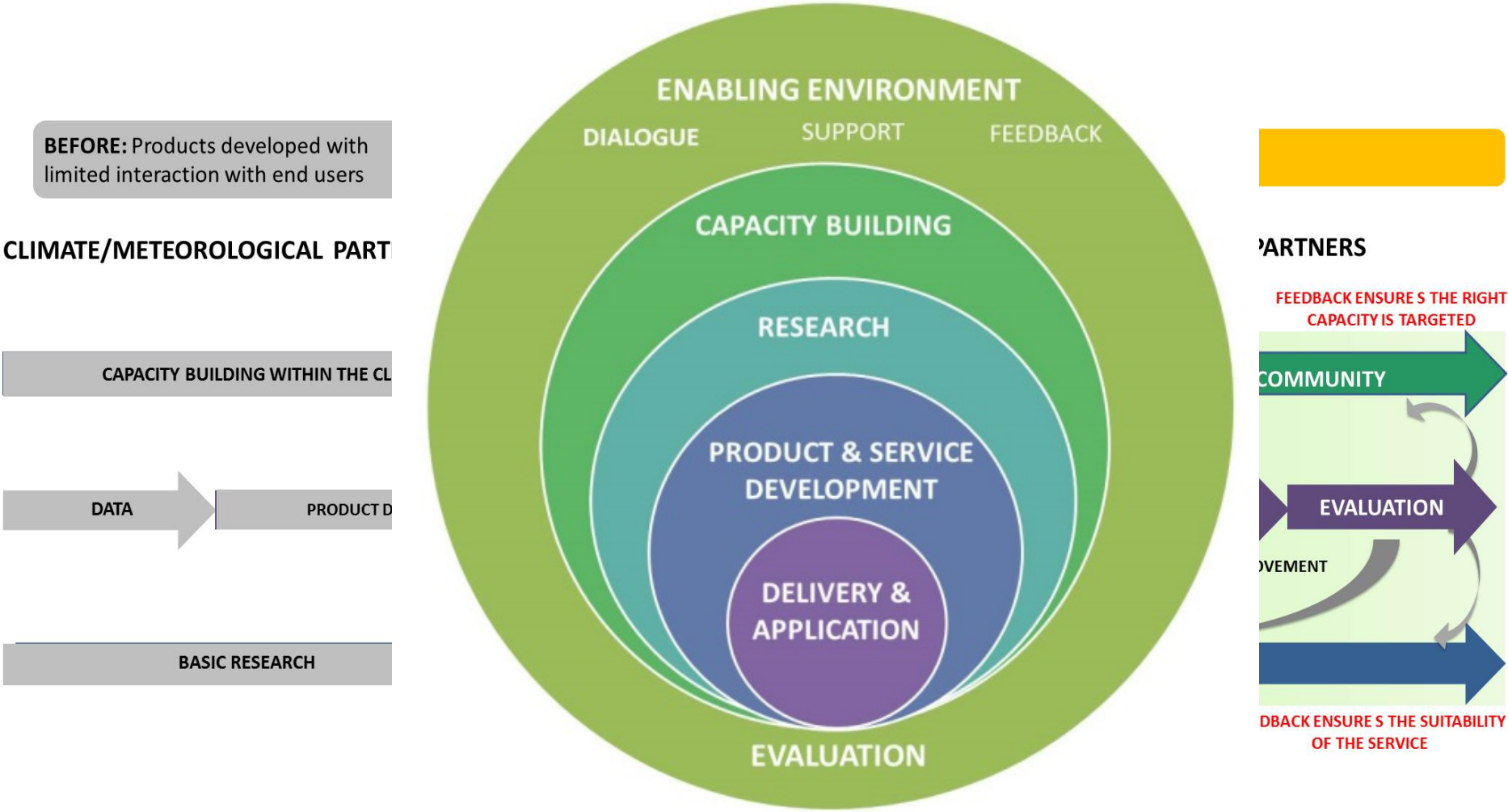
Climate Services for Health as a key solution

End-to-end process of joint collaboration between meteorological and health partners developed for the benefit of health clients (i.e. researchers, health workers, planners, policy makers, etc.)

to be able to:

- access timely, reliable, and usable climate and weather information;
- analyze and understand this information;
- apply this knowledge to improve health research or practice.”

Health-tailored climate services common process



Heat Wave and Health Risks Early Warning System in China

Health Challenge

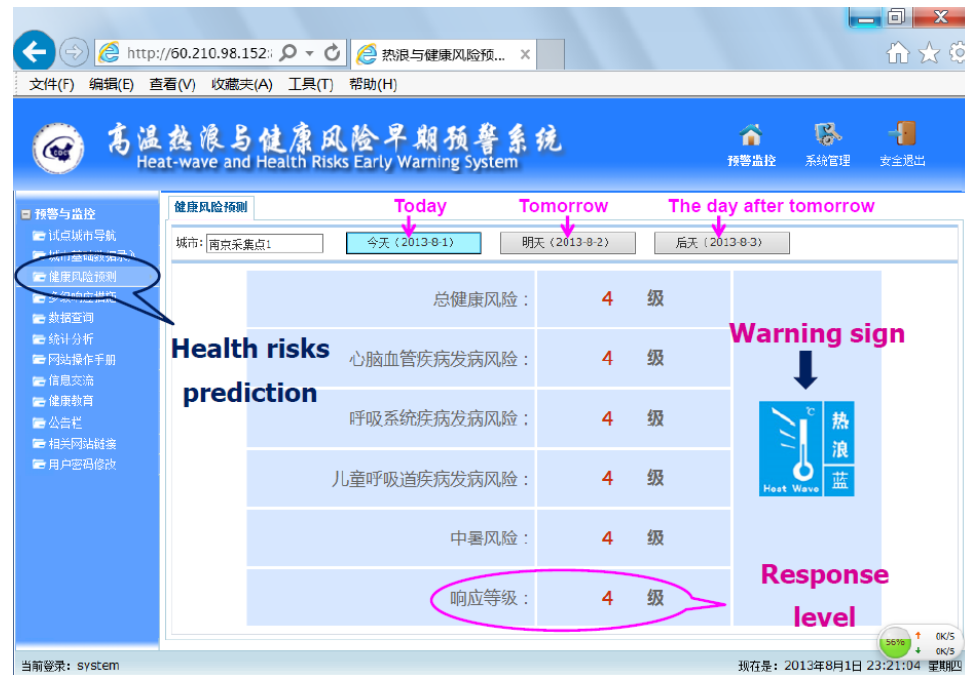
Increasing extreme heat events place people at risk for preventable health consequences

Response

Provide timely health risk warnings so communities and health professionals can take action

System includes

- **City-specific health risk model**
- **Guidance for multi-level response and communication plans**
- **Common social/mobile apps deliver messages to public**



Benefits: Predicts total health risks, heatstroke, cardiovascular and respiratory disease, and children's respiratory disease.

Pilot cities: Harbin -- Nanjing -- Shenzhen -- Chongqing



COMING IN 2015

Global Case Study Project

Highlighting the needs of users and providers
Showcasing experiences and lessons learned
Defining a common process for success



CONTENTS HIGHLIGHT

- Best practices for optimizing climate service use.
- Added value for health partners
- Common components to design and use health tailored climate services including:



Health Risks

Case studies describe innovative approaches to use climate knowledge to protect communities from:

- Food and waterborne diseases
- Extreme weather events
- Vector-borne diseases
- Heat and cold stress
- Poor air quality



Canada

What?

Wildfire-related air quality, forecasts, monitoring and alerts

How?

Smoke Plume modelling tools provide 48 hour advance warning of the location and concentration of smoke.

Mobile air quality monitors placed in populated areas detect smoke risks during fire events.

Benefits?

Information on hazardous air quality is used to identify and respond to smoke and heat exposure patients, and to inform emergency management and evacuation.

Brazil

What?

Dengue risk forecast for 2014 World Cup host cities

How?

New predictive model to inform dengue outbreaks, generated with real-time seasonal climate forecasts and epidemiological data.

Identified epidemic risk in host cities, results disseminated by global media.

Benefits?

Visitors and organizers informed of local dengue risk three months in advance.

Salomon Islands

What?

A climate-based malaria monitoring and early warning system

How?

Environmental suitability mapping, rainfall variability analyses and customized rainfall outlooks inform the EWS of high-risk periods and locations.

Benefits?

Provides the health system with up to four-month lead times for likely malaria epidemics. Also used to orient prevention efforts in high-risk areas.

COMING IN 2015

Toolkit for climate services for health



● RISK MANAGEMENT ● INFORMATION ● FOUNDATIONS

Identify risks



Identify response options

Climate variability today
Long-term changes



Identify climate knowledge needs



Develop climate services to support health sector

Summary

- Task ahead is to learn to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress.
- Essential for health sector to develop skill set to – to know how understand and use knowledge about the climate and weather
- Need to learn to develop and deliver climate services that co-produce accessible, useful, and reliable knowledge for decisionmaking
- *Climate services as Health services* ---a fundamental step for health partners to take climate action.

Food for thought?

What kind of climate services will be needed to support range of decision-needs during the implementation of national plans?



More information

GFCS

www.gfcs-climate.org

WHO Climate Change programme

<http://www.who.int/globalchange/climate/>

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**WHO/WMO CLIMATE
AND HEALTH OFFICE**

Climate Knowledge for Health Action



POLICY | PROJECTS | COORDINATION | OUTREACH