

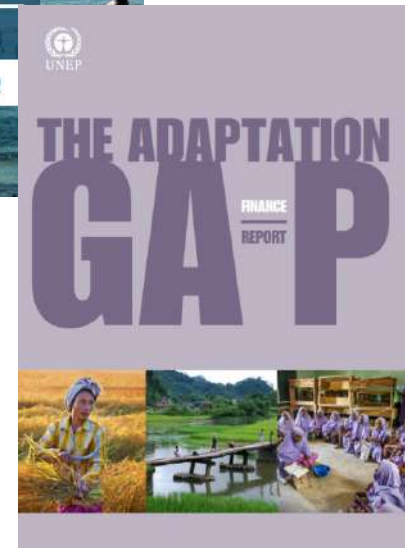
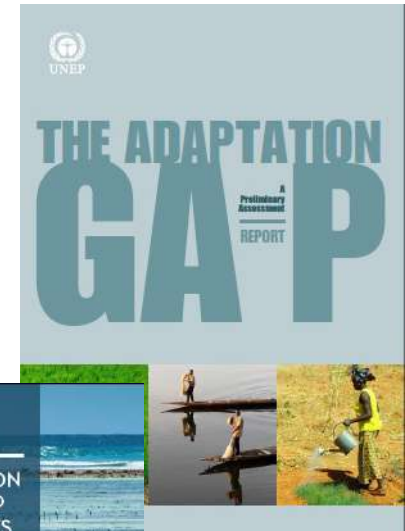
# Adaptation and development gaps and metrics

**Anne Olhoff**  
**Head of Climate Resilient Development Programme**  
**UNEP DTU Partnership**

Adaptation Metrics Conference, Skhirate, Morocco, 27 September 2016

# UNEP Adaptation Gap Reports

- Highlighting the role of concrete adaptation goals and targets as a driver for advancing effective and efficient adaptation action
- Indicating the need for several sets of indicators
- Illustrating the intrinsic interlinkages between development and adaptation



# Paris Agreement - need for tracking progress on adaptation action and support

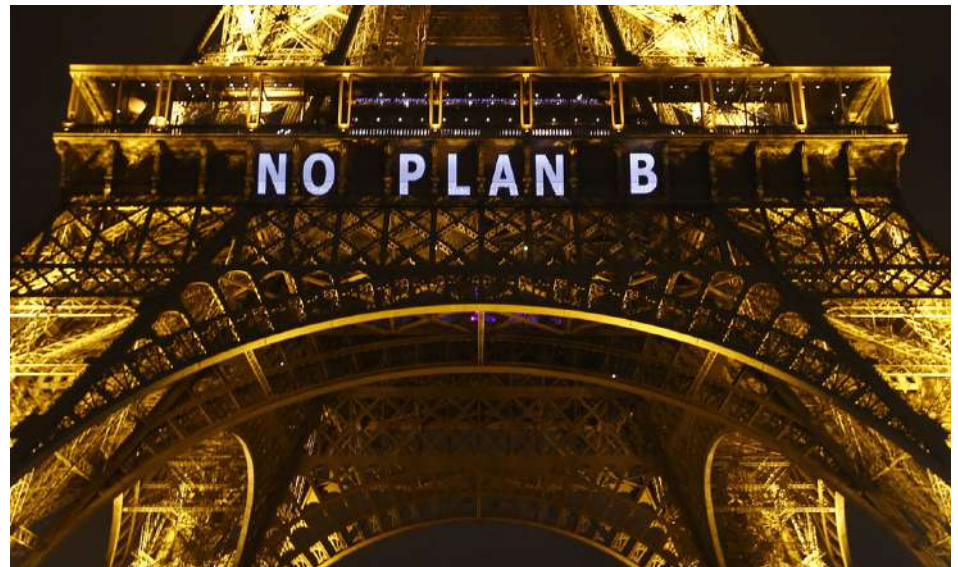
Establishes a global goal for adaptation.

Restates the commitment to increase developed country-party funding flowing to developing country parties.

Requests parties to draw-up and regularly update adaptation plans and strategies.

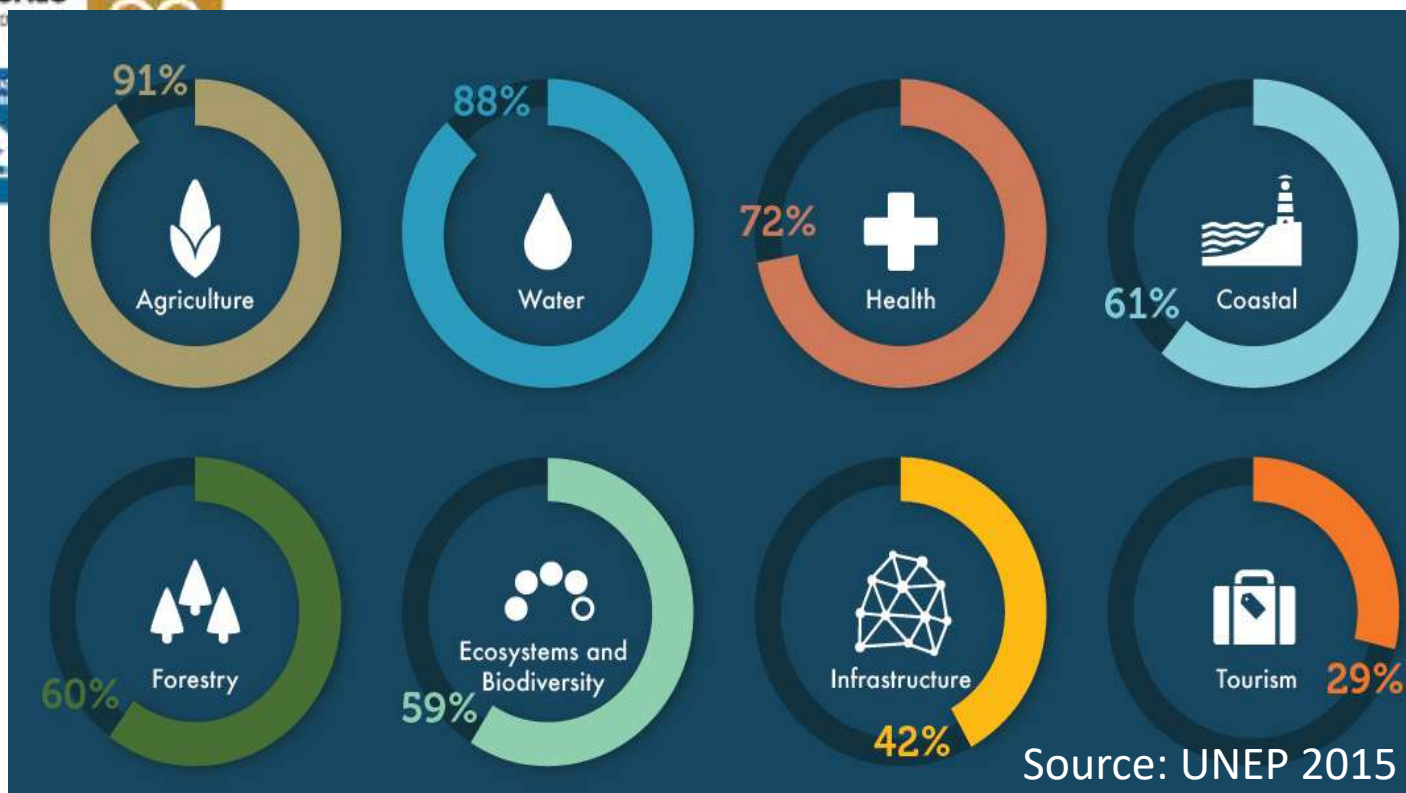
- Global stocktakes
- Transparency

Places CC action firmly in the context of SD





# Clear links between adaptation priorities in the INDCs and the SDGs



Source: UNEP 2015

# Development as adaptation Adaptation as development

- Closing current development and adaptation gaps have implications for our ability to manage climate change impacts in the future
- Adaptation and development approaches and metrics overlap and are already being integrated:
  - INDCs
  - M&E and MRE (Monitoring, Reporting and Evaluation) systems for adaptation linking to development priorities
  - Mainstreaming of adaptation in development projects, programmes, strategies and policies

# Adaptation is increasingly mainstreamed into development assistance



Source: UNEP 2016

## **Abundance of adaptation information and activities - including on metrics**

- International research, studies and assessments
- Peer reviewed literature
- Adaptation initiatives and projects
- M&E and MRE of adaptation
- UNFCCC reporting on NAPs, NAPAs, national communications, Biennial (Update) Reporting, INDCs, etc.
- Disaster Risk Reduction/Management (Sendai Framework)

Systematic overview and assessment can inform adaptation metrics action

Lack of impact indicators and evaluation

Issue of timeframe

# Moving forward - advancing adaptation action and results

- Metrics for what?
  - Further specifying adaptation goals and targets critical
- Process for establishing common understanding and consensus on sets of adaptation indicators?
  - E.g. learning from SDG and Sendai Framework processes
- Develop methodologies informed by project to sector to national to global level indicators experience
- Start 'simple' - reduces costs, eases implementation, eases interpretation, keeps systems flexible
- Ensure coordination between UNFCCC NDC, transparency and capacity building processes



# The Paris Agreement and the SDGs – Tacking stock of adaptation progress

Conference on Adaptation Metrics

27 September 2016, Skhirat, Morocco



## Overview

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- The Paris Agreement and the SDGs
- Measuring and reporting progress on the SDGs and adaptation under the Paris Agreement
- Reviewing progress at national and global level for the SDGs and for adaptation under the Paris Agreement



## The Paris Agreement and the SDGs

- **Goals of the Paris Agreement:** strengthen the global response to the threat of climate change, in the context of SD and efforts to eradicate poverty, including by
  - Limiting global temperature increase to well below 2 degrees and possibly 1.5
  - Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to SD and ensuring an adequate adaptation response in the context of the temperature goal
  - Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development

- **17 SDGs**



## Measuring and reporting progress on the SDGs and adaptation (1)

- Under SDGs: goals, targets and 230 quantitative and qualitative indicators, e.g.

Goal	Target	Indicator
Goal 1. End poverty	1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people 1.5.2 Direct disaster economic loss in relation to GDP 1.5.3 Number of countries with national and local DRR strategies
Goal 2. End hunger and achieve food security	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices	2.4.1 Proportion of agricultural area under productive and sustainable agriculture
Goal 13. Take urgent action to combat CC and its impacts	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries 13.2 Integrate climate change measures into national policies, strategies and planning	Same as 1.5.1 and 1.5.3  13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt



## Measuring and reporting progress on the SDGs and adaptation (2)

---

➤ Under Paris Agreement:

- **Global goal on adaptation** “Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to SD and ensuring an adequate adaptation response in the context of the temperature goal”
- **No globally agreed associated targets and indicators** (yet), up for Parties to translate this goal in their respective adaptation planning processes and the implementation of actions, including through their national adaptation plans (NAPs)
- Reporting through each Party’s **adaptation communication**, which may include its priorities, implementation and support needs, plans and actions
- The adaptation communication shall be, as appropriate, submitted and updated periodically, as a **component of or in conjunction with** other communications or documents, including a **NAP, a nationally determined contribution (NDC) and/or a national communication**





➤ **SDGs in line with 2030 Agenda:**

- Systematic, voluntary and country-led follow-up and review at various levels
- Intensified efforts to strengthen statistical capacities in developing countries
- Annual global progress report and every four years High Level Political Forum to carry out regular reviews, next 2019

➤ **Paris Agreement: Global Stocktake every 5 years starting in 2023** to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals. For adaptation it shall, inter alia:

- Recognize adaptation efforts of developing country Parties;
- Enhance the implementation of adaptation action taking into account the adaptation communication;
- Review the adequacy and effectiveness of adaptation and support provided for adaptation; and
- Review the overall progress made in achieving the global goal on adaptation



## Reviewing progress at national and global level for the SDGs and under the Paris Agreement (2)

---

- Adaptation communications and modalities for global stocktake still under negotiation (*has different timing and synthesis implications*)
- Understanding of vulnerability reduction and resilience/adaptive capacity increase is country/context specific (e.g. different levels of risk perception, of valuing current and future benefits: an agreed level of resilience for one country may be unacceptable for another)
- Creating robust review frameworks at national level reported through adaptation communications, which allow for setting a baseline (e.g. national adaptation goal and definition of adaptation efforts) and over time for:
  - Assessing country-specific progress towards the global adaptation goal (possibly relying on SDG indicators)
  - Recognizing national adaptation efforts
  - Reviewing the adequacy and effectiveness of adaptation and support
- Desirability and feasibility of global aggregation of national adaptation progress and for what purpose (e.g. identify global adaptation trends, mobilize financial support, increase mitigation efforts)?



# Thank you

Annett Moehner [amoehner@unfccc.int](mailto:amoehner@unfccc.int)

Information on adaptation under the UNFCCC  
[unfccc.int/4159](http://unfccc.int/4159)

Adaptation Facebook Exchange  
[www.facebook.com/The.Adaptation.Exchange](http://www.facebook.com/The.Adaptation.Exchange)





# Measuring climate resilient development and preparedness

*The GCCA+ Index  
and  
EU Climate-ADAPT*

**Apollonia Miola  
Frank Neher**

Adaptation Metrics, Rabat  
September 27<sup>th</sup>, 2016

# Overview

1. Construction of the GCCA+ Index
2. The Climate-ADAPT Adaptation Assessment in Europe
3. Climate Change adaptation and the SDGs

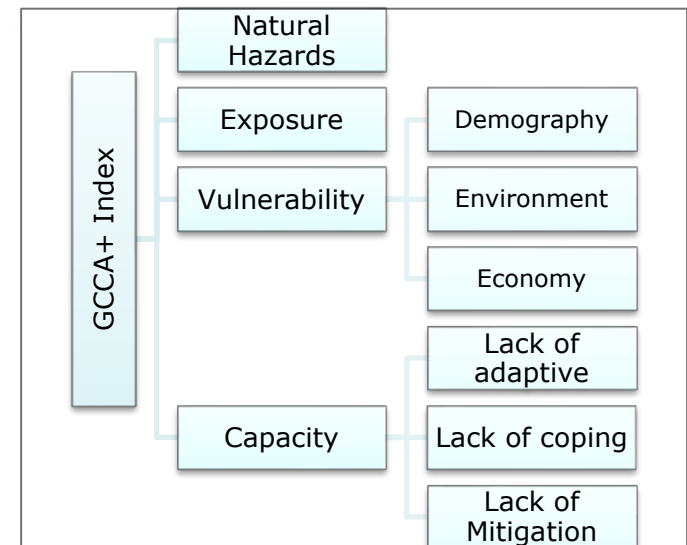
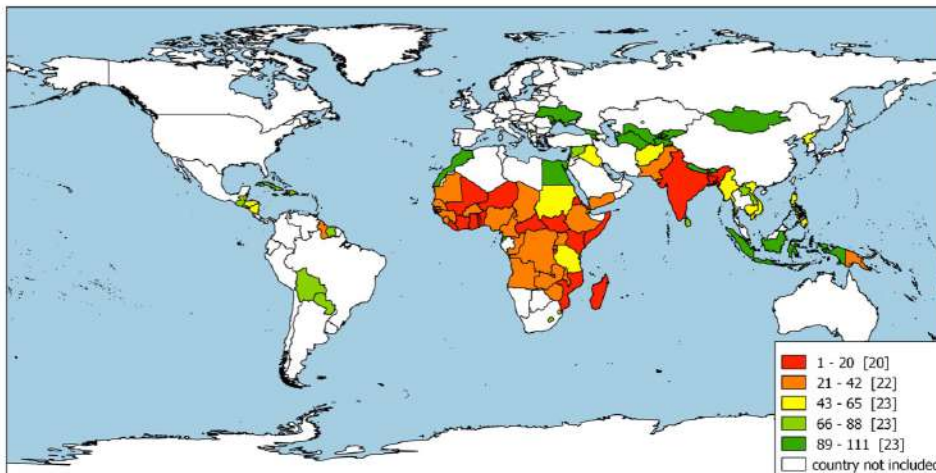


# 1. Construction of the GCCA+ Index

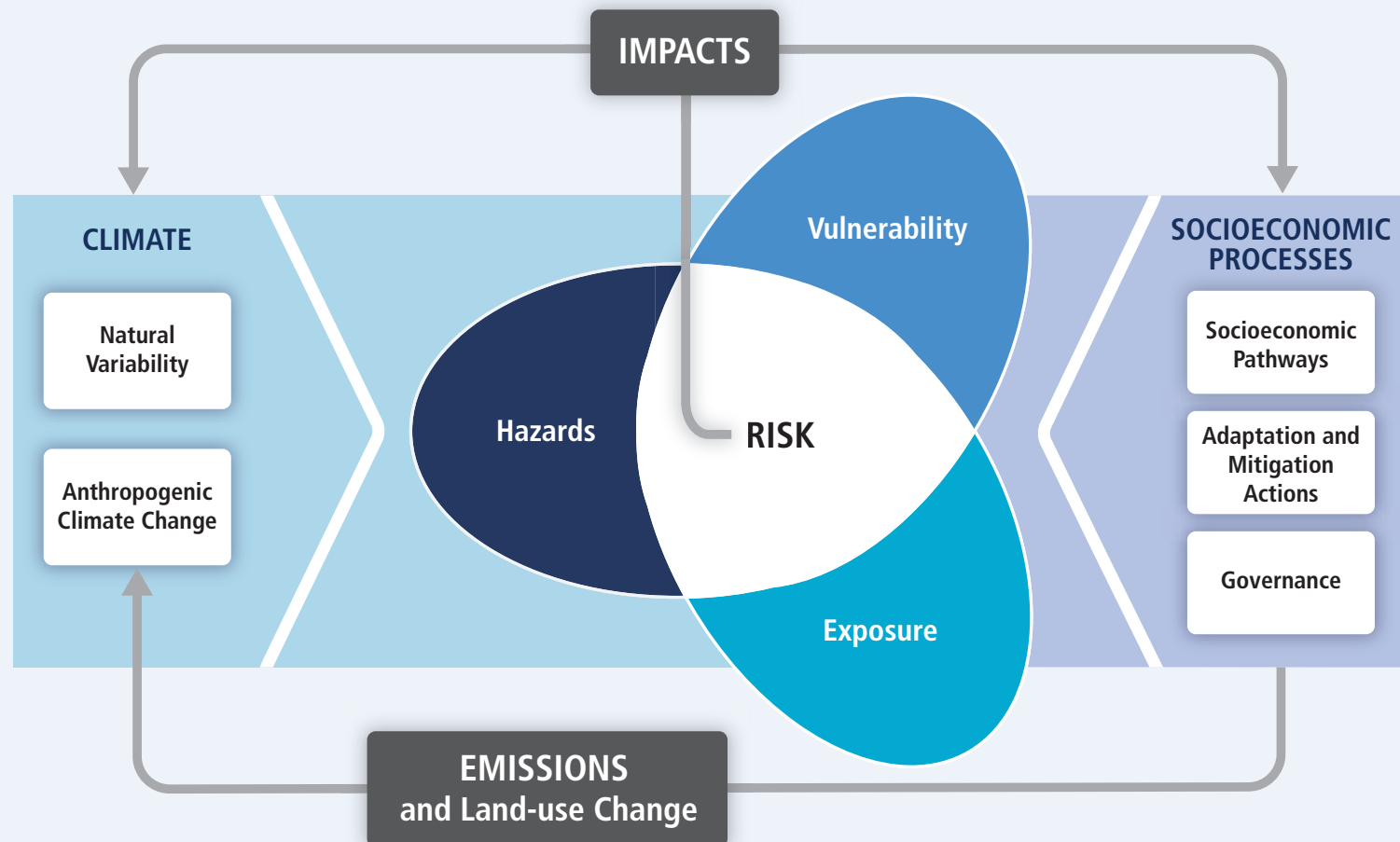
*An open source composite index for climate resilient and low carbon development for the Global Climate Change Alliance+ (A. Miola et al. 2015)*

# Index for the EU GCCA+ programme

**Objective:** ranking countries according their exposure to climate change risk and their capacity to meet those risks



# Theoretical framework



## EU GCCA+ index: 4 Components

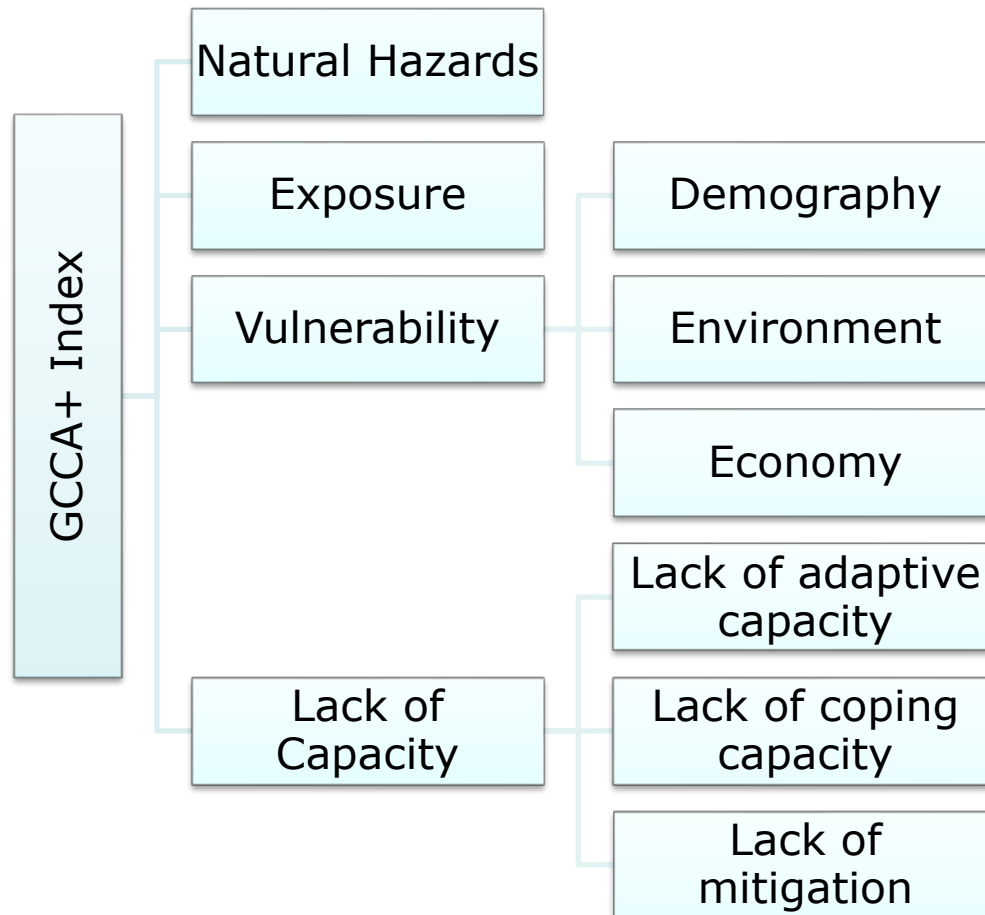
1. **Natural hazards:** occurrence of climate-related and weather-driven hazards (flooding, storms, droughts, and sea level rise)
2. **Exposure:** consequences for people and assets resulting from hazards
3. **Vulnerability:** socio-economic, environmental factors that are likely to influence vulnerability
4. **Capacity:** economic, social and environmental factors that make a country more resilient to climate change
  - **Adaptive capacity:** features that determine the ability to adapt of a local community including ecosystem services
  - **Coping capacity:** ability of a country to cope with disasters in terms of formal and organized activities
  - **Mitigation capacity:** factors that ease implementation of actions reducing greenhouse gases

# Criteria for the selection of the final list of indicators

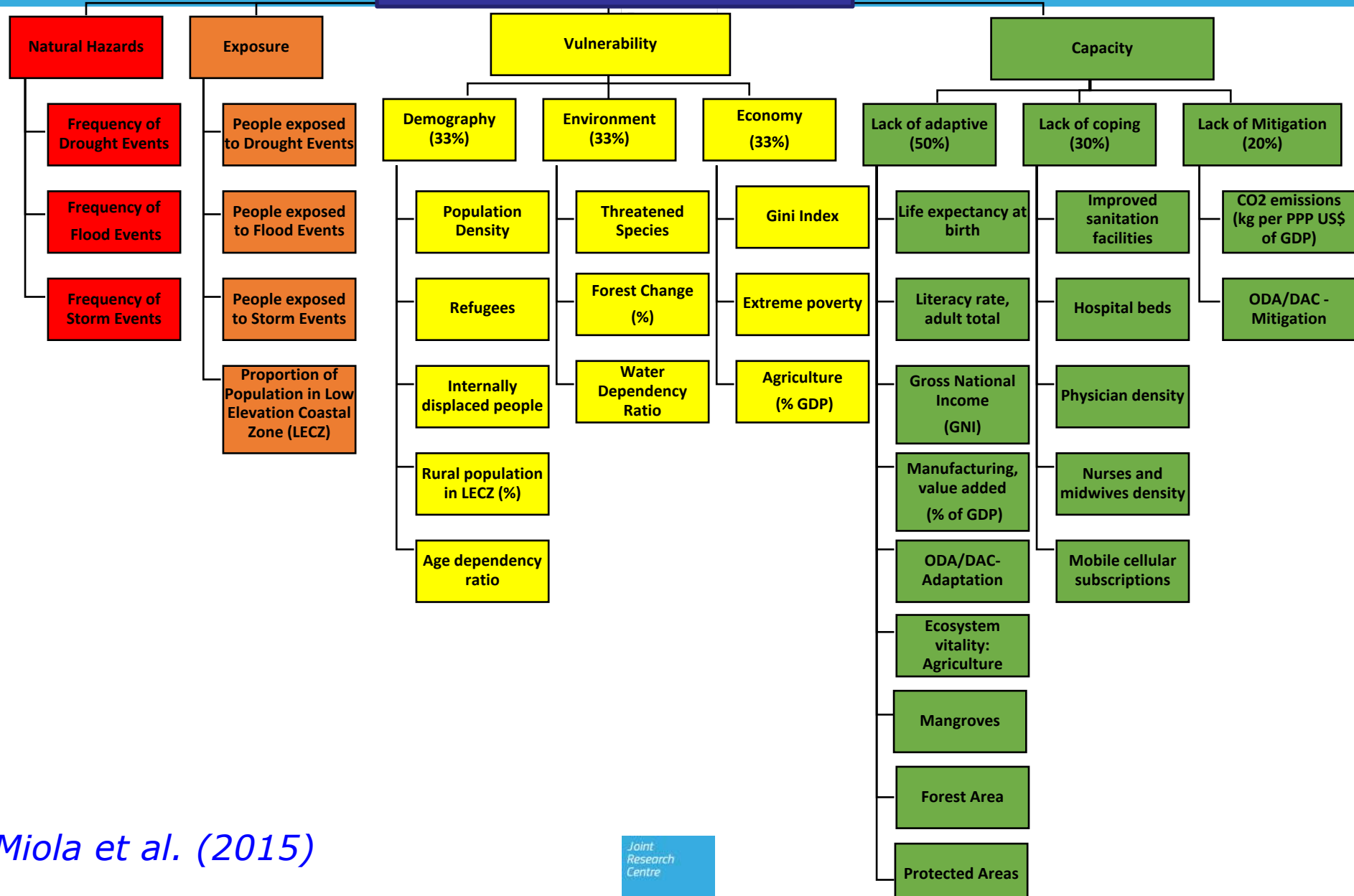
1. Reliability
2. Consistency
3. Global coverage (sample coverage)
4. Open-source: based on data which are in the public domain

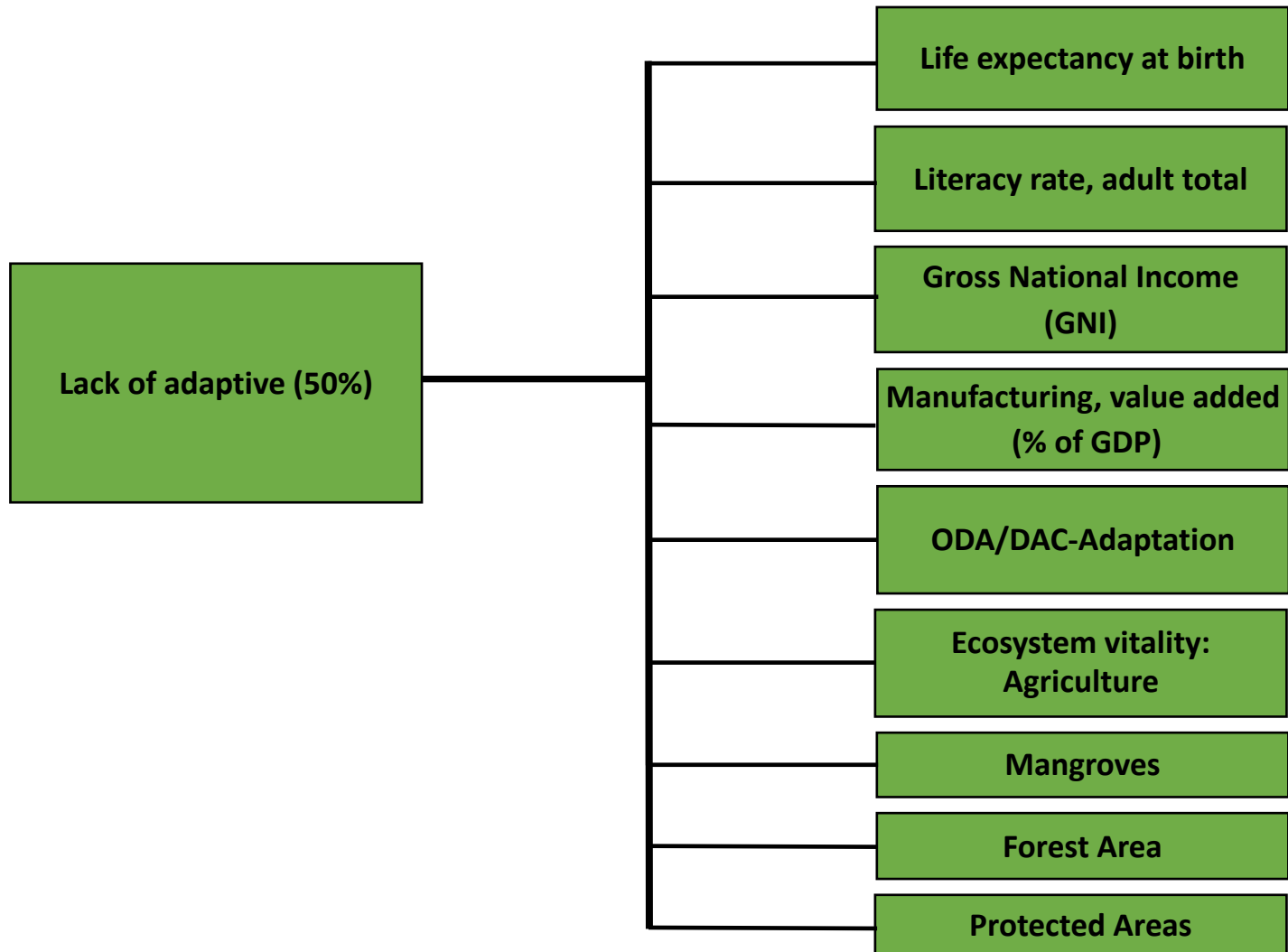


# Structure of the GCCA+ index



# GCCA+ Index





## **2. The Climate-ADAPT Adaptation Assessment in Europe**

## 2. The Climate-ADAPT Adaptation Assessment in Europe

Monitoring preparedness and action on **national** and **local** level in Europe (elements of the EU-adaptation strategy)

### 1. Adaptation Preparedness Scoreboard

- ✓ Measure level of readiness of member States

### 2. Mitigation and adaptation at local level

- ✓ Covenant of Mayors for Climate and Energy



## 2.1. Adaptation Preparedness Scoreboard

- Measures level of institutional readiness of member States
- Process based indicators built around the policy cycle
- 11 performance areas and a total of 34 indicators

Step 1: Preparing the ground for adaptation

Step 2: Assessing risks and vulnerabilities to  
climate change

Step 3: Identifying adaptation options

Step 4: Implementing adaptation action

Step 5: Monitoring and evaluation

## **2.1. Adaptation Preparedness Scoreboard**

Step 1: Preparing the ground

Performance area (2): Stakeholder participation

Indicator (2): Process for stakeholder involvement

Step 4: Implementation

Performance area (2): CC-adaptation mainstreamed

Indicator: Land and resource use management policies take into account the impact of climate change

## 2.2. Mitigation and adaptation at local level:


### ✓ Covenant of Mayors for Climate and Energy

Template Structure & Minimum Reporting Requirements:

Template Structure		Minimum Reporting Requirements			Link to Tab
		At the registration stage	Within 2 years	Within 4 years (and then every 2 years)	
Mitigation	Strategy	optional	*	*	➡
	Emission Inventories	optional	*	*	➡
	Mitigation Actions	optional	(BEI) *	(MEI every 4 years) *	➡
	Mitigation Report				➡
	Monitoring Report				➡
Adaptation	Adaptation Scoreboard	*	*	*	➡
	Risks and Vulnerabilities	optional	*	*	➡
	Adaptation Actions	optional	optional	*	➡
	Adaptation Report			(min. 3 Benchmarks)	➡
	Adaptation Indicators				➡

## 2.2. Mitigation and adaptation at local level:

- ✓ Covenant of Mayors for Climate and Energy

Adaptation cycle steps	Actions	Self check of the Status
<b>STEP 1 - Preparing the ground for adaptation</b>   <b>STRATEGY</b>	<u>Adaptation commitments defined/integrated into the local climate policy</u>	
	Human, technical and financial resources identified	
	Adaptation team (officer) appointed within the municipal administration and clear responsibilities assigned	
	Horizontal (i.e. across sectoral departments) coordination mechanisms in place	
	Vertical (i.e. across governance levels) coordination mechanisms in place	
	Consultative and participatory mechanisms set up, fostering the multi-stakeholder engagement in the adaptation process	
	Continuous communication process in place (for the engagement of the different target audiences)	7

## 2.2. Mitigation and adaptation at local level:

- ✓ Covenant of Mayors for Climate and Energy

<p><b>STEP 2 - Assessing risks &amp; vulnerabilities to climate change</b></p> <p><b>➡ RISKS &amp; VULNERABILITIES</b></p>	<p>Mapping of the possible methods &amp; data sources for carrying out a Risk &amp; Vulnerability Assessment conducted</p> <p>Assessment(s) of climate risks &amp; vulnerabilities undertaken</p> <p>Possible sectors of action identified and prioritised</p> <p>Available knowledge periodically reviewed and new findings integrated</p>	<p>4</p>
<p><b>STEPS 3 &amp; 4 - Identifying, assessing and selecting adaptation options</b></p> <p><b>➡ ACTIONS</b></p>	<p>Full portfolio of adaptation options compiled, documented and assessed</p> <p>Possibilities of mainstreaming adaptation in existing policies and plans assessed, possible synergies and conflicts (e.g. with mitigation actions) identified</p> <p><u>Adaptation Actions</u> developed and adopted (as part of the SECAP and/or other planning documents)</p>	<p>3</p>

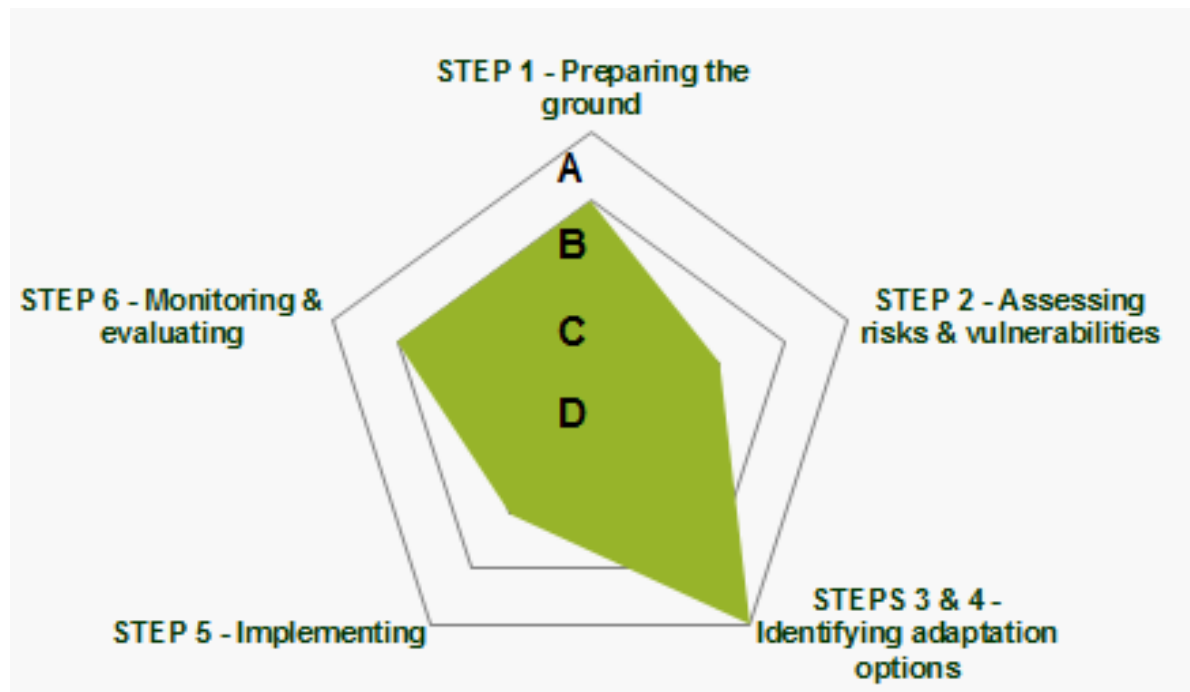
## 2.2. Mitigation and adaptation at local level:

- ✓ Covenant of Mayors for Climate and Energy

<p>STEP 5 - Implementing</p> <p>➡ ACTIONS</p>	<p>Implementation framework set, with clear milestones</p> <p><u>Adaptation actions</u> implemented and mainstreamed (where relevant) as defined in the adopted SECAP and/or other planning documents</p> <p>Coordinated action between mitigation and adaptation set</p>	<p>3</p>
<p>STEP 6 - Monitoring and evaluating</p> <p>➡ INDICATORS</p>	<p>Monitoring framework in place for adaptation actions</p> <p>Appropriate M&amp;E indicators identified</p> <p>Progress regularly monitored and reported to the relevant decision-makers</p> <p><u>Adaptation strategy</u> and/or <u>Action Plan</u> updated, revised and readjusted according to the findings of the M&amp;E procedure</p>	<p>4</p>

## 2.2. Mitigation and adaptation at local level:

- ✓ Covenant of Mayors for Climate and Energy





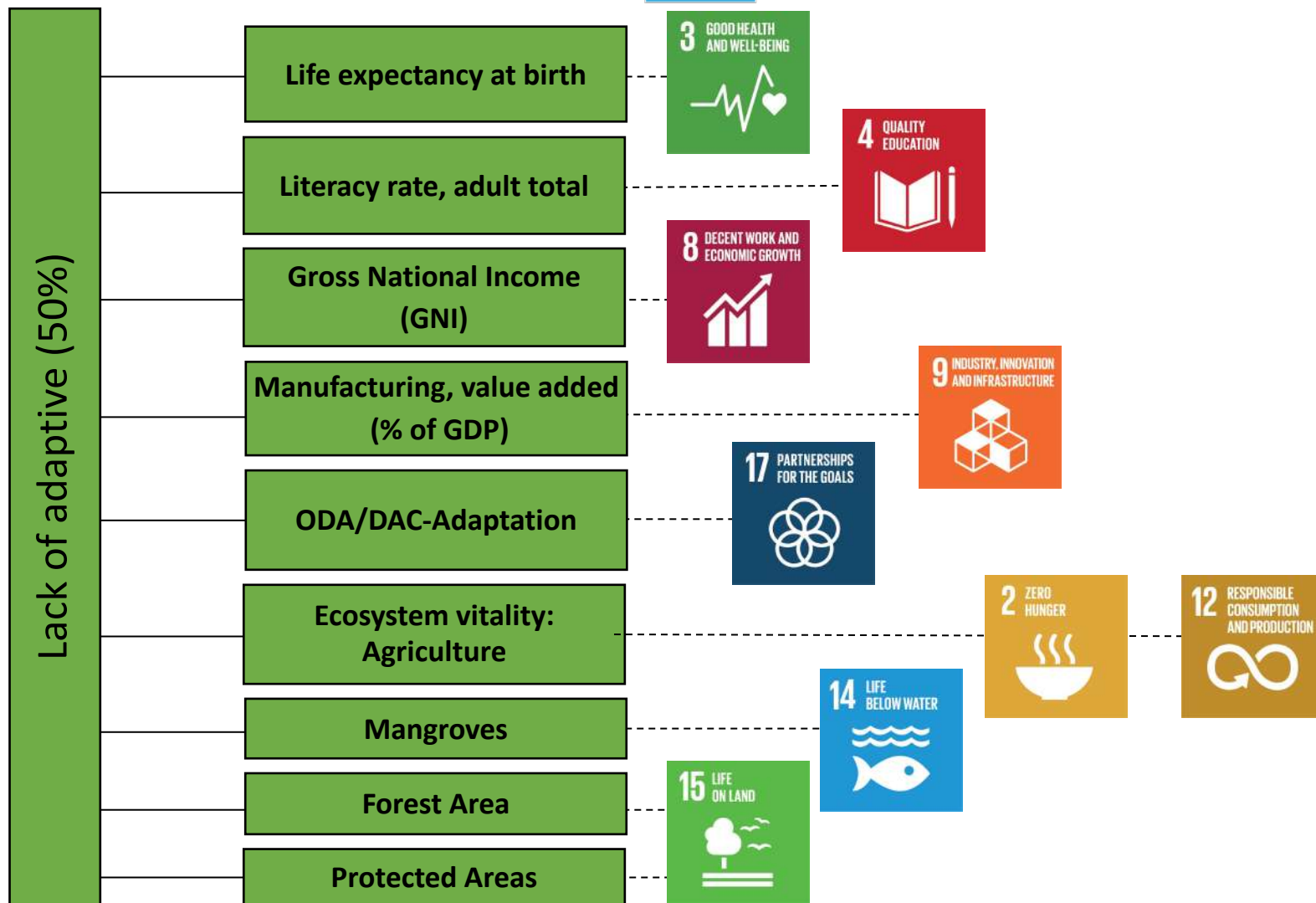
# **3. Metrics of Adaptation and the SDGs**

### **3. Metrics of Adaptation and the SDGs**

- Large overlap of GCCA+ indicators with SDG indicators
- Institutional development with the adaptation preparedness scoreboard

# The GCCA+ index and the SDGs

- Large number of indicators (for adaptation) included in the SDGs
- The GCCA+ index contains some indicators which could be used complementary the measure the SDGs



# Institutional Development and the Adaptation Preparedness Scoreboard

Target 16.6 Develop effective, accountable and transparent institutions at all levels

Target 17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation



# Contact

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Project leader

Building a Knowledge Base for the Sustainable Development Goals

European Commission

Joint Research Centre

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phone: +390332786729

*"What was once unthinkable is now unstoppable"*

*Ban Ki-moon, Secretary-General of the United Nations*

# Inter-Linkages

**Goal 13. Take urgent action to combat climate change and its impacts**



**Target 1.5: resilience of the poor and vulnerable**



**Target 2.1: food security**



**Target 3.d: health related capacity building and risk reduction**



**Target 9.1: resilient infrastructure**



**Target 11.5: disaster preparedness**



**Target 14.2: resilient marine ecosystems**



**Target 15.1: resilient terrestrial and freshwater ecosystems**



*Measuring health adaptation and  
mitigation of climate change: WHO's  
approach for monitoring country progress  
at the global level*

**Conference on adaptation metrics**

**Rabat, 27th September 2016**

**Mariam Otmani del Barrio**



**World Health  
Organization**

# Outline:

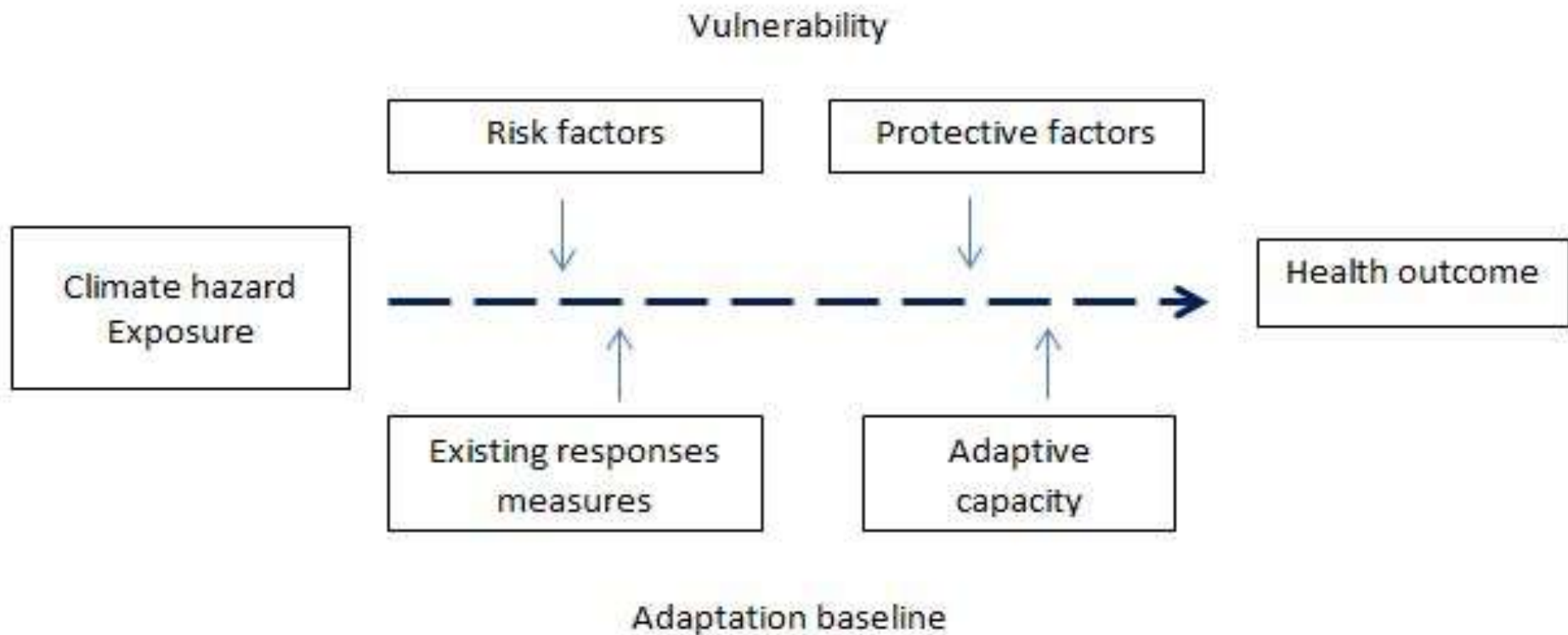
- Challenges in measuring the progress that countries are making in protecting health from climate change
- WHO institutional response to climate change and health: from a conceptual indicators framework to the development of WHO/UNFCCC country profiles as a reporting mechanism together with the SDGs.
- Evidence for measuring progress and inform decision making: Country profiles on climate and health (2015, 2016) –pragmatic tool for pm
  - E.g. Target 13.2 Integrate climate change measures into national policies, strategies and planning; and others:



# Health adaptation to climate change: Some challenges

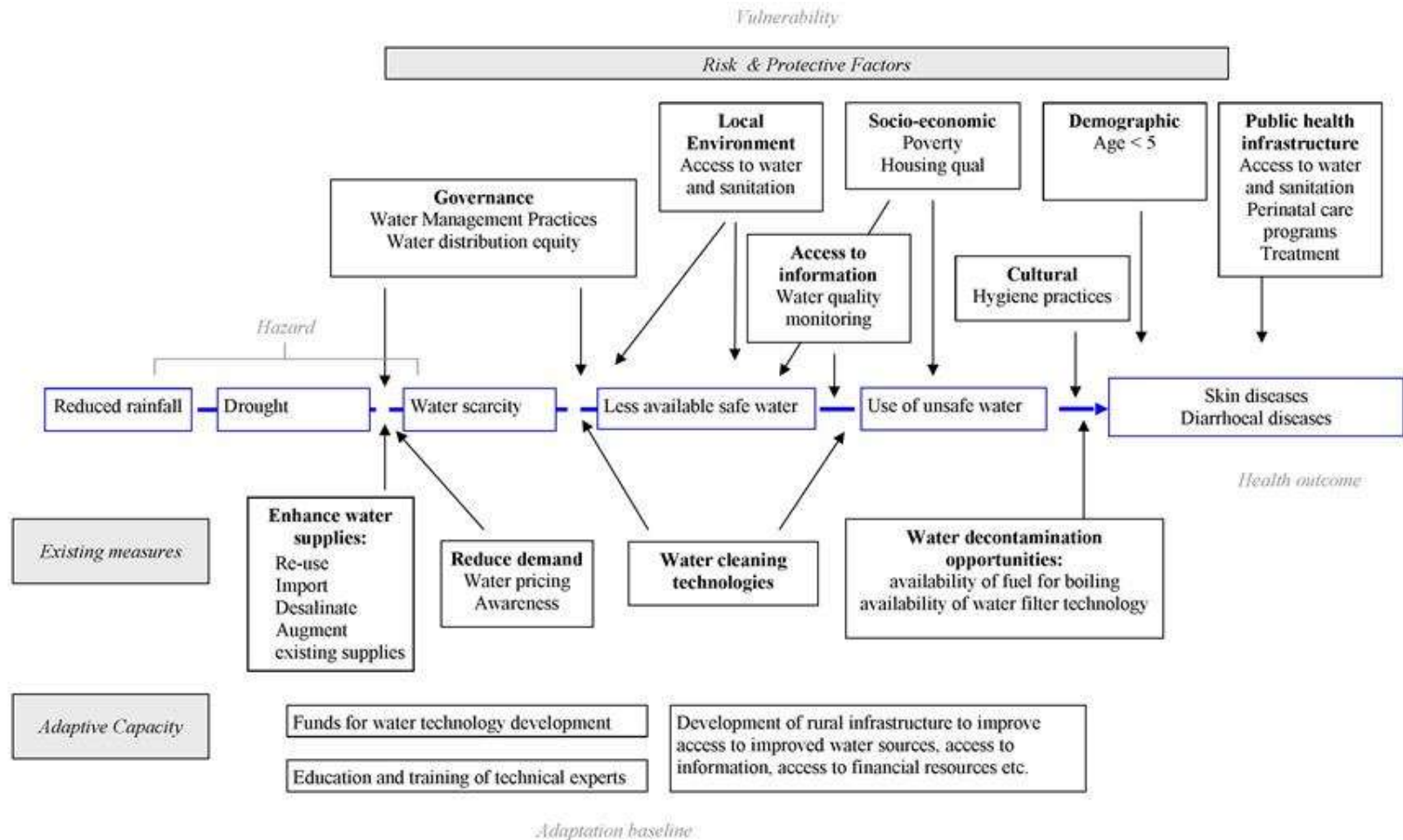
- Important evidence gap in terms of measurable outcomes or adaptation indicators that systematically give an indication of the state of adaptation in practice.
- Challenges to operationalize monitoring given the lack of a systematic approach to data collection of health adaptation interventions, strategies and approaches.
- Difficulties to reconcile the various time scales over which health adaptation takes place with the need at the policy level to access and put in place appraisal of monitored information.

# Framework for indicators to support health oriented climate change adaptation



**Indicators need to reflect the underlying causal network behind a given health issue by illustrating where linkages between exposures and effects can be modified by policy interventions.**

# Application to the water scarcity case



# Health adaptation Indicators for decision making

- Contextual Indicators show the current significance of different components of vulnerability, thereby allowing an assessment of where response measures might be most advantageously targeted.
- Current disease profiles and population health status indicators, if available, would be beneficial inputs to vulnerability assessment, and M+E of adaptation with a health angle.
- Using projection techniques and better understanding of scenarios contributes to establish baselines and setting targets

# WHO response and workplan

- Need and opportunity to advance a comprehensive approach, in which the health sector plays its appropriate role in providing evidence, promoting and monitoring the health effects of interventions that can both reduce air pollution and greenhouse gas emissions, while at the same time strengthening health resilience to climate risks.
- At the first WHO Global Climate Change and Health Conference, Member States requested WHO to continue to provide Ministries of Health with consistent information on health risks from climate change, as well as further expanding work to achieve health benefits while cutting greenhouse gas emissions.
- These Country Profiles would also form the basis for longer-term monitoring of climate change health impacts and opportunities after 2015.

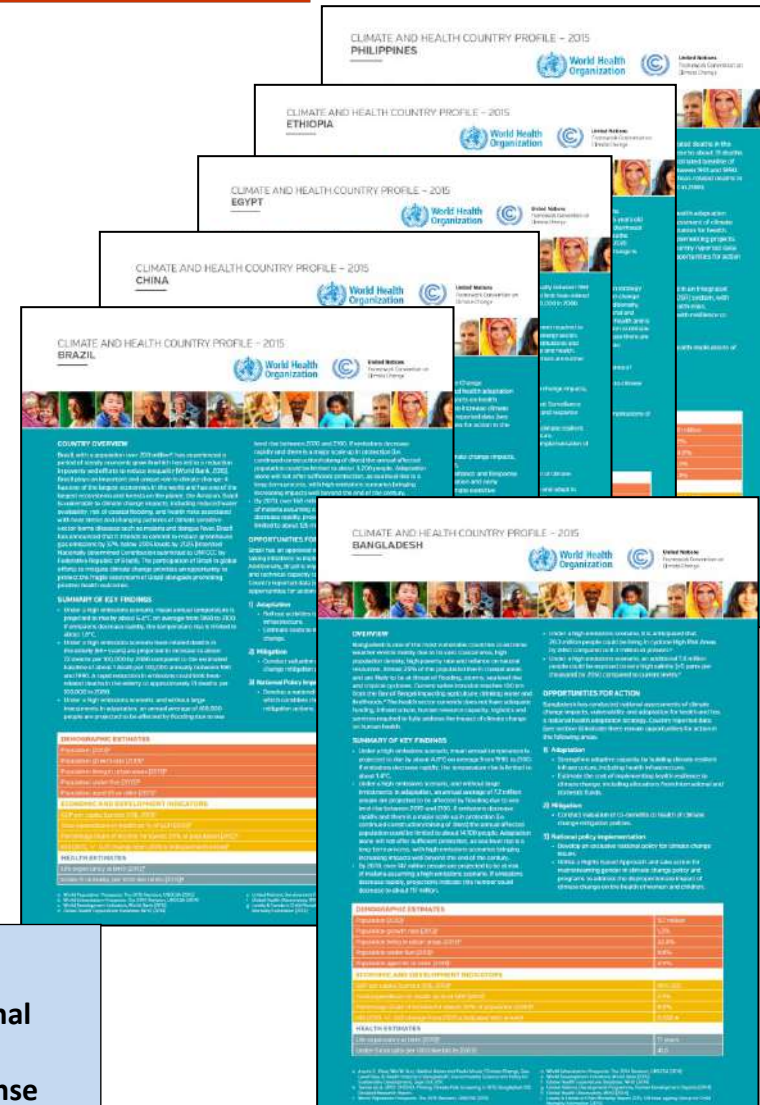
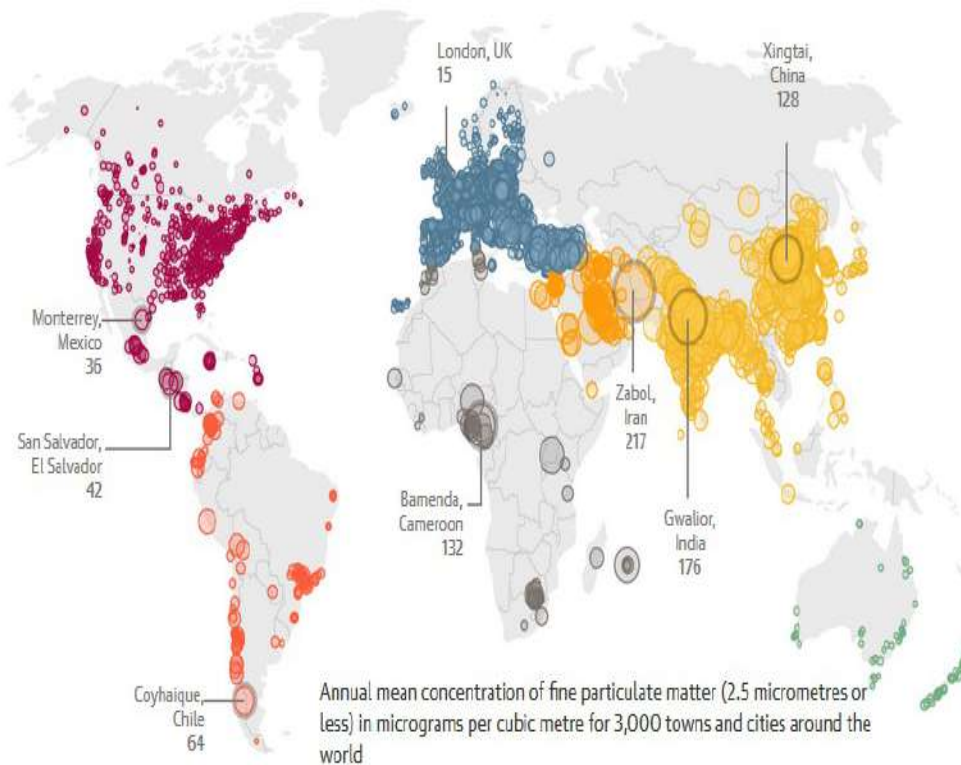




# Monitoring country progress

<http://www.who.int/globalchange/resources/countries/en>

Outdoor air pollution has grown 8% globally in the past five years, with billions of people around the world now exposed to dangerous air, according to new data from more than 3,000 cities compiled by the World Health Organisation (WHO).



Current and future climate hazards

Current and future health risks due to CCH

Current exposures due to air pollution

Co-benefits to health from CCH mitigation

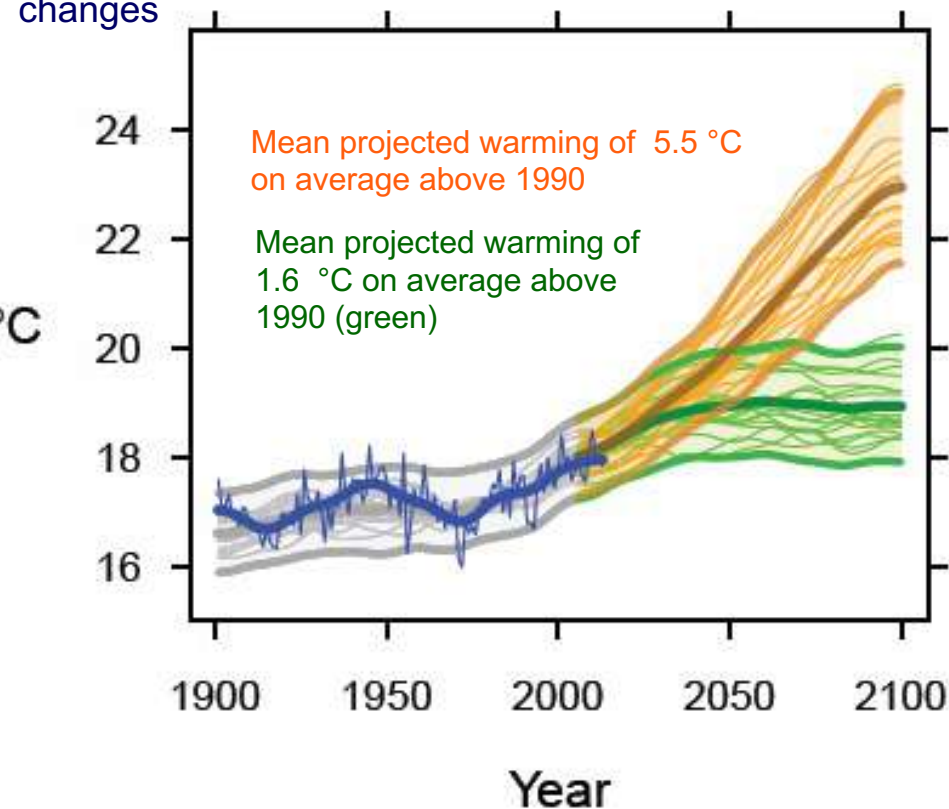
Emissions and commitments

National policy response



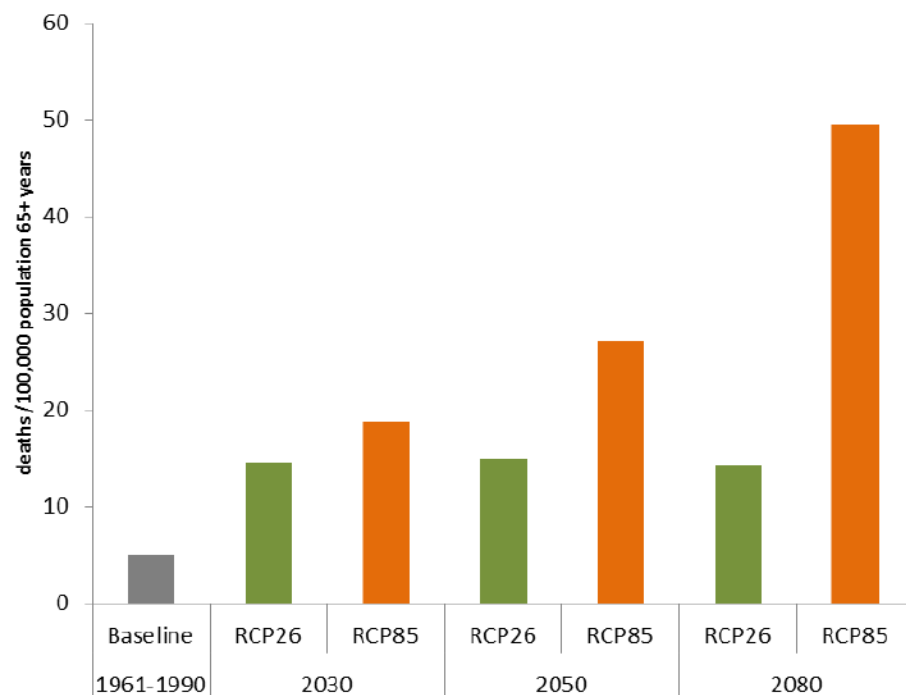
# Evidence for monitoring progress and decision making

Mean annual temperature projected changes



Source: Climate and Health Country profile for Morocco, 2015. Climate graphs generated by UEA

Heat-related mortality in population 65 years or over  
Morocco  
(deaths / 100,000 population over 65yrs)



Source: Climate and Health Country profile for Morocco, 2015 from Honda et al. 2015

The following table outlines the status of development or implementation of climate resilient measures, plans or strategies for health adaptation and mitigation of climate change (reported by countries).\*

GOVERNANCE AND POLICY	
Country has identified a national focal point for climate change in the Ministry of Health	✓
Country has a national health adaptation strategy approved by relevant government body	✓
The National Communication submitted to UNFCCC includes health implications of climate change mitigation policies	✓
HEALTH ADAPTATION IMPLEMENTATION	
Country is currently implementing projects or programmes on health adaptation to climate change	✓
Country has implemented actions to build institutional and technical capacities to work on climate change and health	✗
Country has conducted a national assessment of climate change impacts, vulnerability and adaptation for health	✓
Country has climate information included in Integrated Disease Surveillance and Response (IDSR) system, including development of early warning and response systems for climate-sensitive health risks	✗
Country has implemented activities to increase climate resilience of health infrastructure	✓
FINANCING AND COSTING MECHANISMS	
Estimated costs to implement health resilience to climate change included in planned allocations from domestic funds in the last financial biennium	✗
Estimated costs to implement health resilience to climate change included in planned allocations from international funds in the last financial biennium	✗
HEALTH BENEFITS FROM CLIMATE CHANGE MITIGATION	
The national strategy for climate change mitigation includes consideration of the health implications (health risks or co-benefits) of climate change mitigation actions	✓
Country has conducted valuation of co-benefits of health implications of climate mitigation policies	✗

\* Supporting monitoring efforts on health adaptation and mitigation of climate change: a systematic approach for tracking progress at the global level. WHO survey, 2015.

For further information please contact:  
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 20 Avenue Appia  
 1211 Geneva 27  
 Switzerland  
 Tel.: +41 22 791 3281 | Fax: +41 22 791 4853  
<http://www.who.int/globalchange/en/>



World Health  
Organization



United Nations  
Framework Convention on  
Climate Change

# Policy response

- Systematically collect data to establish a baseline for countries to report their progress in health adaptation and mitigation efforts.
- The Climate and Health Country Profiles provide a baseline of 12 indicators, including three indicators on Governance and Policy related to NAPs.
- Currently, out of 40 the country profiles published, 28 countries reported (WHO survey 2015) they have a national health adaptation strategy or plan approved.



World Health  
Organization



# Recommendations for measuring country progress

- 1. Assess the health gains that countries can expect through implementing their Nationally Determined Contributions to the UNFCCC, and the potential for greater health gains through more ambitious action on both mitigation and adaptation.
- 2. Contribute to the representation of health and climate linkages within the monitoring of the Sustainable Development Goals on climate change and health, as well as the SDGs relating to other health determinants, including energy, water and sanitation, nutrition, and cities and communities.



# Recommendations II

- 3. Promote standardized, evidence-based monitoring of national level progress in protecting health from climate change and gaining health benefits of climate mitigation, including expanding the coverage, scope and depth of the WHO/UNFCCC climate and health country profiles.
- 4. Establish a global platform to share information on national level progress on health.



## Second Global Conference Health & Climate

Paris 7–8 July 2016

- The outcome of the 2<sup>nd</sup> WHO Health and Climate Conference is a post COP21 health action agenda for the implementation of the Paris agreement to be delivered to the Moroccan Government as a contribution to COP22.
- “Health, Environment and Climate Coalition”.



# MARRAKECH

## COP22 | 2016 | CMP12

UN CLIMATE CHANGE CONFERENCE



# **Adaptation and Sustainable Development Goals**

## **The importance of NAPs**

**Imen Meliane**

**Climate Change Adaptation Specialist, UNDP**



# The 2030 Agenda is ‘indivisible’



- The main paradigm shift in the 2030 Agenda is the interlinking of the 17 SDGs. Implementation of the individual goals cannot be considered in isolation.
- Managing disaster and climate risks critical for sustainable development and poverty eradication.
- UNSG has called SDGs and CC “*indivisible*” and UNDP Administrator emphasized “*development must be risk-informed in order to be sustainable.*”



*Empowered lives.  
Resilient nations.*



- 169 targets



# SDG INDICATOR FRAMEWORK



- The Inter-Agency and Experts Group on SDGs Indicators(IAEG-SDG) has been tasked to develop an indicator framework for the goals and targets for the 2030 Agenda at the global level and to support its implementation
- A final report containing 241 indicators (231 unique indicators) has been submitted to the UN Statistical Commission



The IAEG-SDG recently classifies the indicators using a 3-tier system:

- ❑ **Tier 1:** an established methodology exists and data is widely available
- ❑ **Tier 2:** an established methodology exists, but data is not readily available
- ❑ **Tier 3:** an internationally-agreed methodology is yet to be developed

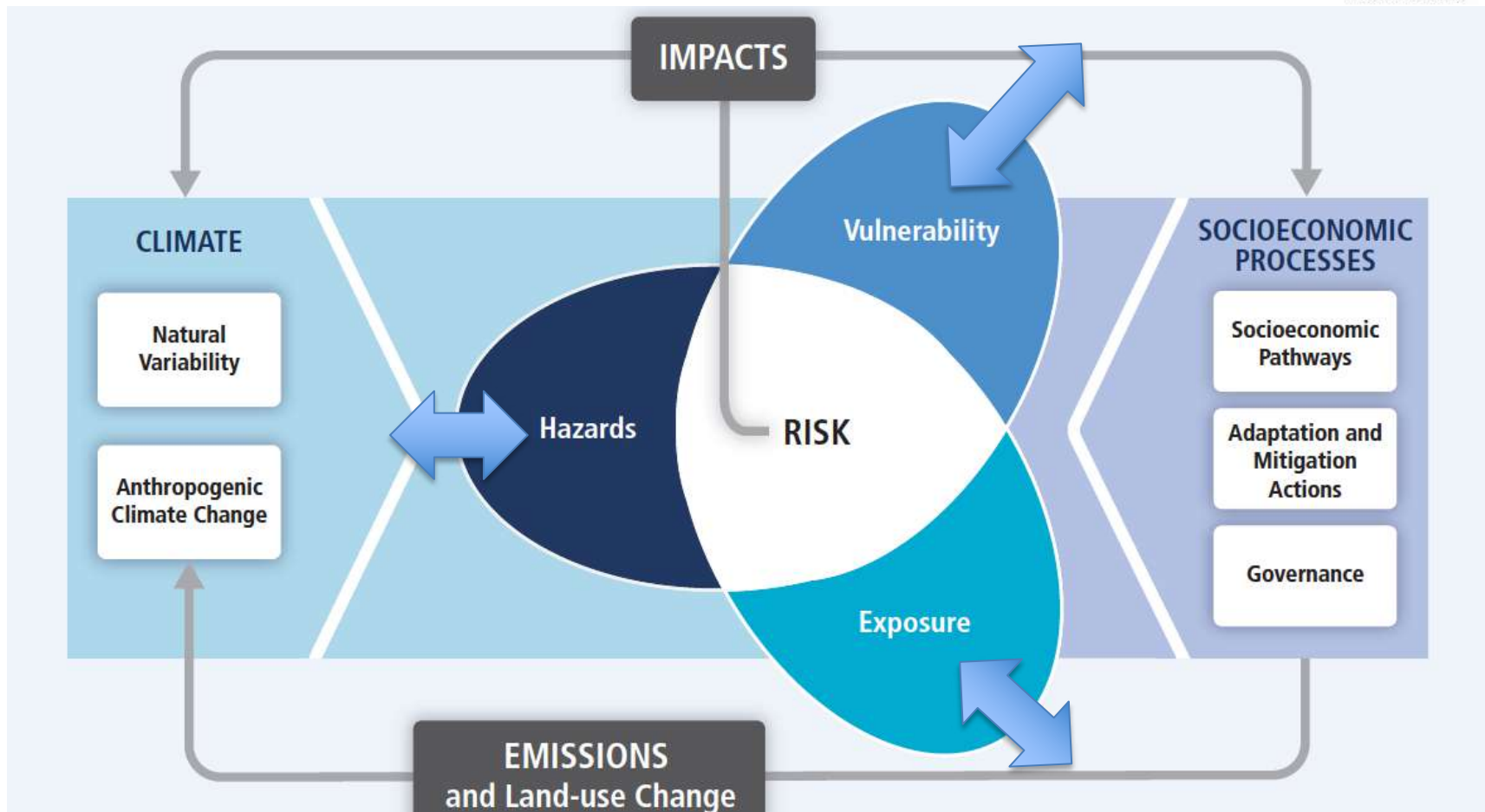
# Climate change targets and indicators under SDG 13

TARGET	INDICATOR	Tier
<b>13.1</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all Countries	<b>13.1.1</b> Number of countries with national and local disaster risk reduction strategies	II
	<b>13.1.2</b> Number of deaths, missing persons and persons affected by disaster per 100,000 people	II
<b>13.2</b> Integrate climate change measures into national policies, strategies and planning	<b>13.2.1</b> Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production	III
<b>13.3</b> Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	<b>13.3.1</b> Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula	III
	<b>13.3.2</b> Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	III

# Targets and indicators directly related to adaptation

TARGET	INDICATOR	Tier
<b>1.5</b> By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	<b>1.5.1</b> Number of deaths, missing persons and persons affected by disaster per 100,000 people	II
	<b>1.5.2</b> Direct disaster economic loss in relation to global gross domestic product (GDP)	II
<b>2.4</b> By 2030, ensure sustainable food production systems and implement resilient agricultural practices ..., that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters	<b>2.4.1</b> Proportion of agricultural area under productive and sustainable agriculture	III
<b>11.b</b> By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, ...	<b>11.b.1</b> Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030	III
	<b>11.b.2</b> Number of countries with national and local disaster risk reduction strategies	II

# Let's not re-invent the wheels



## Moving forward in implementing and measuring the SDGs



- Establish the criticality of DRR-CCA concerns in the national sectoral development planning risk-inform the sustainable development agenda
- Processes –NAP for mainstreaming adaptation in development planning, opportunity to harmonize indicators at national level
- Integrating measures at subnational and local level: impact evaluation at project level;
- Cross feeding data for indicators