



Sustainable Water
Integrated Management (SWIM) -
Support Mechanism



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the European Union

Water is too precious to waste

SESSION 7: STRENGTHENING THE ENABLING ENVIRONMENT

Training workshop on the identification and development of climate change no-regret actions in the water sector, 3-5 October 2012, Amman

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Objectives of Session 7

- **Goal:** How to help decision-makers to introduce and adopt policy, legislation and institutional frameworks that support no-regrets adaptation strategies to climate change
- **Learning Objectives:**
 - Have an outline on:
 - What are the entry points for mainstreaming CC in the water policy cycle?
 - Which principles of good governance are available to address climate change manifestations?
 - How to assess and improve legislation for no-regret adaptation of water management?
 - What are Key institutional requirements for effective mainstreaming?
 - How to strengthen institutions and capacities?

Introduction ⁽¹⁾

- Water policy should create an enabling environment for adaptation to climate change through, among other things, **climate-proofing of policy, legal and institutional frameworks** and by strong communication
- Any water policy should be based on the understanding that **stable and unchanging baseline conditions no longer exist**
 - As climate change imposes a new reality, the political, legal and institutional frameworks need to be assessed and adjusted to allow for climate change adaptation
- **Climate change adaptation should be integrated into existing water and development planning processes**
 - This integration can also enhance coherence among policy sectors and avoid potential conflicts

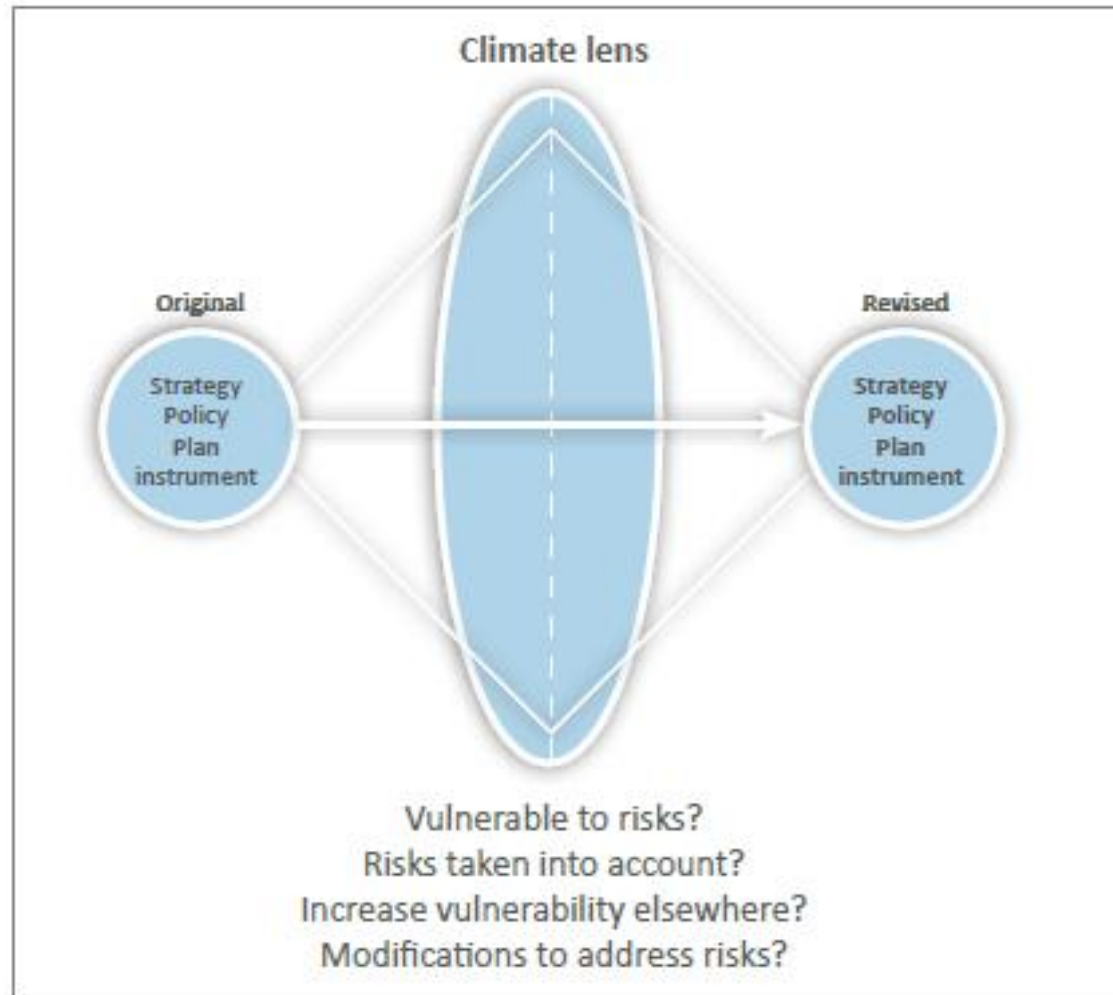
Introduction ⁽²⁾

- The roles and responsibilities of institutions dealing with climate change adaptation should be clearly defined
- Legislation should be developed in a flexible way and should not present barriers for adaptation

Water policy adaptation

- The most essential and challenging task for policymakers is to create an enabling environment for adaptation of the water sector to climate change **on all levels**
- Sound and sustainable water policies at the local, national and transboundary levels should acknowledge the **new conditions** where the baseline is inherently unstable and changing
- An appropriate response therefore needs to be developed to increase the resistance and resilience of the water policies that will be directly or indirectly affected by the impacts of climate change, also referred to as **climate-proofing**
 - **Spatial planning** is an important basis on which to develop policies that take into account **all sectors**

Climate lens



Water policy adaptation: Status in Arab region ⁽¹⁾

- CC is a newly introduced driver in water resources management in the Arab region
- Therefore, adaptation strategies need to be embedded within existing national water policies and legislative and institutional frameworks
- This means, difficult policy choices have to be made between additional capital investments or advocacy campaigns to promote behavioral changes
- Many countries in the region are already taking actions that will help them manage the challenges of CC
 - The approach each has followed is specific to the context of the Country

Water policy adaptation: Status in Arab region ⁽²⁾

- The main emphasis is on improving information, strengthening institutions and devising strategies for reducing the negative impact on vulnerable population groups
- There are as well several regional initiatives in the making, among these initiatives are:
 - the World Bank's Strategic Framework on Development and Climate Change in MENA
 - the NBI's Initiative to Address Climate Change Impacts and Adaptation in the Nile basin
 - the Arab-OECD countries' new initiatives to promote investment
 - the Strategy for Water in the Mediterranean of the Union for Mediterranean
 - the Strategy for Water Security in the Arab Region adopted in June 2011 by Arab Ministerial Council for Water

The Strategy for Water in the Mediterranean ⁽¹⁾

- **22 December 2008 in Jordan: Declaration of the Euro-Mediterranean Ministerial Conference on Water**
 - Ministers agree to define the **Long Term Strategy for Water in the Mediterranean (SWM)**

- **Principles of the Strategy:**
 - i. Tackle problems that go beyond the means of any one country(..), in particular to the **impact of climate change** and environmental needs
 - ii. Build on **integrated approaches**....
 - iii. Conservation of **water quality** including the prevention of further deterioration of water resources and the balance between the quantity of water used and the quantity of water available including mitigating and preventing the consequence of **drought and water scarcity**
 - iv. Include both measurable **qualitative and quantitative objectives** (..)
 - v. Consider the most **appropriate instruments** to reach the objectives of the Strategy, (..) keeping in mind the differences in national situations...
 - vi. Develop and exploit for the benefit of all, **scientific, technical and technological tools** in these fields

The Strategy for Water in the Mediterranean (2)

- **The Strategy should address:**
 - a. “Advancing on **effective water governance for integrated water resources management and water supply and sanitation**; awareness, technical and capacity building and coordination within administrative units among stakeholders”
 - b. “Addressing **water and climate change**, through **adaptation measures** together with mitigation with emphasis, inter alia, on management of **droughts and floods**, mitigation of **water scarcity** and combat desertification”
 - c. “Optimizing **water financing**, water valuation and appropriate instruments, with emphasis on innovate mechanisms”
 - d. “**Water demand management and efficiency**, and non-conventional water resources”

The Arab Water Security Strategy ⁽¹⁾

- The Strategy for Water Security in the Arab Region **adopted in June 2011 by Arab Ministerial Council for Water** was established to bring about appropriate solutions to ensure water security in the region
- Five priority projects were identified for the integrated water resources management in the Arab region
 - These projects were used to define the Arab Region's five Targets during the 6th World Water Forum that take place in Marseille in March 2012
- **Priorities and Targets in the Arab Region:**
 1. In the medium term (by 2020), **raising water use efficiency by 15 to 25 %** for meeting increased water demand and ensuring water and food security for facing the future challenges in accordance with the available water resources and the principals of sustainable development

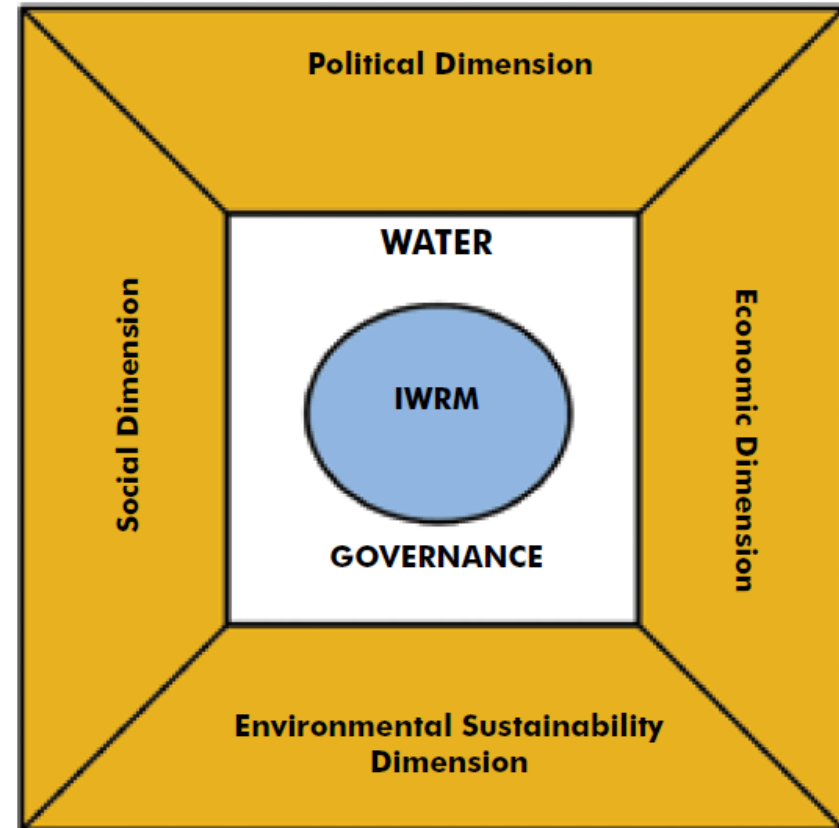
The Arab Water Security Strategy (2)

- **Priorities and Targets in the Arab Region:**

2. Adoption, in the short term (by 2015), of **integrated water policies** which secure water for all sectors to achieve a maximum socioeconomic benefits and insure the implementation of the millennium development goals
3. Develop, in the medium term (by 2020), **alternative and practical solutions for using non conventional water** with focusing on the use of renewable energy in water desalination and water treatment for meeting the increasing water demand
4. **a-** By 2020 the signing of **permanent agreements on shared water resources** in the Arab region according to the "Arab Convention on shared Water Resources in the Arab region" and International Water Law
b - By 2025 **reinforcing the establishment of permanent agreements** between riparian Arab countries and neighbouring countries on ground and surface water resources on reasonable and equitable basis and according to the International Water Law and historic agreements
5. In the medium term (by 2020), each Arab countries has defined a **national policy for including climate change adaptation policy into national water policy**

Principles of good water governance

- To foster cooperation on adaptation between different levels and across borders, the following principles of good water governance should be applied:
 - **Accountability:** providing access to justice in environmental matters
 - **Transparency:** providing access to information
 - **Participation:** enabling participation by all stakeholders
- These principles include an **integrated approach** whereby environmental and health concerns can be incorporated into all decisions, where decisions are made at the appropriate level



Water governance “provides the context in which the IWRM approach can be applied”, and addresses the “manner in which allocative and regulatory politics are exercised in the management of resources (natural, economic, and social)” (Rogers and Hall, 2003)

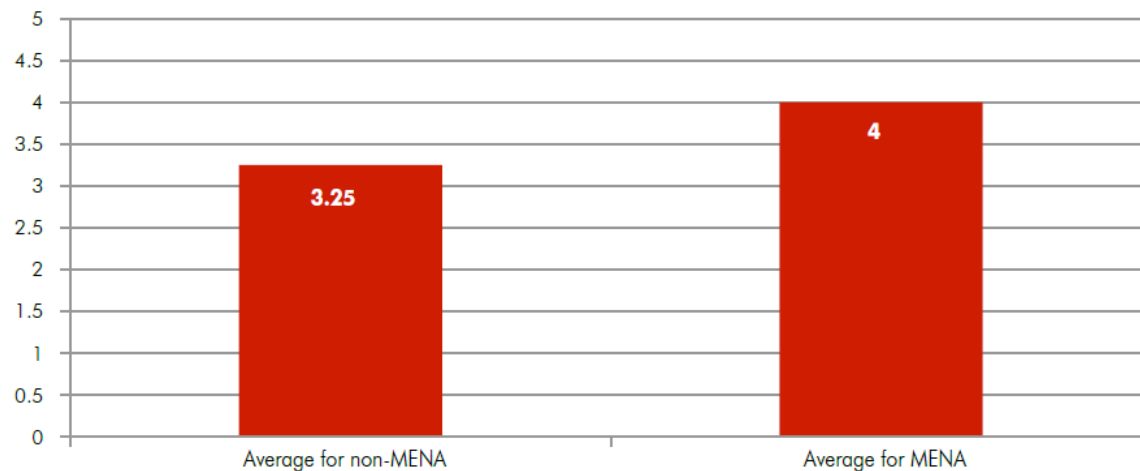
The enabling environment for good water governance



Water governance: status in the Arab region ⁽¹⁾

- Several Arab countries have been able to achieve **progress over the past two decades** in reforming their water sector policies, reinforcing institutions, modernizing legal frameworks, and building capacities to improve water management and services

Index of Quality of Water Policies and Institutions



Source: World Bank, 2007

Evaluation of water policies and institutions in MENA and comparable non-MENA countries, 2004

The overall evaluation of the World Bank study shows that with respect to the issues of governance and administrative reforms, the MENA region:

- rates high in indicators related to **political stability**
- is fair in terms of **service delivery and anticorruption**
- and rates low on issues of **public voice, accountability, and participation**

The study identifies as a **main constraint the overall size of the public sector**

Water governance: status in the Arab region ⁽²⁾

- The water sector in Arab countries suffers from a **weak governance structure** due to **inadequate policies and institutions**
- The capacity of institutions participating in drafting and monitoring national and local IWRM plans needs to be improved, particularly at the **local level**
- Improving the **legal framework** and the **rule of law** is also needed
 - To improve water service efficiency and ensure accountability, the public sector has to shape new rules and regulations governing private sector participation in the water sector
- More experience and institution-strengthening measures are needed to **expand public-private partnership** (PPP) capacity so that it can make a real contribution to meeting the region's growing urban water service needs

Water governance: status in the Arab region ⁽³⁾

- **Participation** must not be understood as an end in itself with the rise of organized water user groups as the final objective
 - Participation has to be a means of achieving joint responsibility at all levels of decision-making processes, where actors form part of the problem as well as the solution
- **Access to reliable data and exchange of information** remains a big constraint
 - Data collection and monitoring programs are conducted by a variety of authorities without co-ordination and integration
 - When data is available, it is not continuous, comparable, reliable, properly reported, or disclosed to the public
 - Information on water resources management (quantity and quality) and water sector performance is considered in many instants as classified information not to be disclosed

Water governance: status in the Arab region ⁽⁴⁾

- The **crucial role of research** in creating the knowledge base needed to improve water governance has not yet been sufficiently emphasized
 - Innovations in science and technology are needed in order to sustainably manage both conventional and nonconventional water resources
 - Relevant research and development could greatly enhance the institutional capacity, improve governance performance, and reduce associated running costs
- Few Arab countries have highly reputed **water research centers** that conduct research on water resources management:
 - The National Water Research Center (NWRC) in Egypt is one of a few in the region. Its research agenda and products are aligned with the national water plan of the country
 - Relevant research is emerging today from the Gulf countries, where research and innovations have become central in formulating water strategies and plans (international rating of King Saud University of Riyadh)
- **Progress in capacity building, training, and development of the professional skills** necessary to meet current and future challenges are receiving increasing attention:
 - Newly established regional organizations such as the Arab Water Council (AWC), the Arab Water Countries Utilities Association (ACWUA) and the Arab Water Academy (AWA) seek to promote 'good' water governance in Arab countries
 - They implement capacity building and training programs with priority given to policy and institutional reform, water governance, and water management

Assessing and improving water legislation for adaptation ⁽¹⁾

- Existing legislation can present barriers to future adaptation
- So, as a first step, from the local to the transboundary level, **it should be assessed** in terms of its capacity to support adaptation to climate change
 - If necessary **it should be reformed**
- Legislation **should be flexible** enough to accommodate ongoing environmental and socio-economic changes, and capable of adapting to future changes
 - For instance, increasing water stress is expected to lead to an increased use of new water sources such as wastewater in agriculture and aquaculture
 - The regulatory framework and its enforcement for health protection **should be prepared to adapt**

Assessing and improving water legislation for adaptation ⁽²⁾

- Since the effects of climate change remain uncertain, legal frameworks, **especially those including water allocation**, should be flexible enough to respond to any projected or unforeseen change
- **Flexibility can imply an ability to change the rules**
 - for example in order to introduce new knowledge, or an option to apply a variety of policies to face climate change

Legislation and Water Laws: status in the Arab region ⁽¹⁾

Many laws have been enacted by Arab states addressing specific concerns, but the coverage of most of their respective mandates tends to be limited as illustrated

In most Arab states, there is either only minimal legislation dealing with water resources, or overlapping laws that are outdated and do not satisfy current requirements

Therefore, **the preparation and proclamation of rational and up-to-date water legislation are the most important measures to be taken by decision makers in most Arab countries**

Water legislation in selected Arab states

	Legislative status		Ownership	Use	Institutions
	Past	Present			
Jordan	Vestiges of Majalla and a few laws, 1937-1988	Fragmented, most recent laws are Nos. 18 and 19 of 1988	State property (explicit)	Regulation by permit for both surface water and groundwater	Single, Ministry of Water and Irrigation, with two water authorities, 1988
Lebanon	Vestiges of Majalla and French code and a few laws and decrees, 1925-1985	Fragmented, but there are plans for a comprehensive law	Public domain (implicit)	Regulation by permit and old irrigation code	Ministry of Hydraulic and Electric Resources; a few other ministries and many regional commissions
Oman	Sharia, customary practices, and well and aflaj registration laws, 1975-1988	Fragmented regulatory decrees for wells and aflaj, 1995	State property (explicit)	Extensive regulation by permit for development of groundwater and aflaj	Single, Ministry of Water Resources, 1989
Saudi Arabia	Sharia and customary laws, water conservation regulations and many decrees, 1932-1988	Planning for a comprehensive law	State property (implicit)	Regulation by permit, mainly groundwater	Single, Ministry of Water and Electricity (formed in 2002 and consolidated all water-related agencies: Saline Water Corporation, wastewater, etc.)
Syrian Arab Republic	Vestiges of Majalla code, sharia, and many decrees and laws, 1925-1995	Comprehensive water law under preparation	Public domain (implicit)	Elaborate permit system; regulation for both surface water and groundwater sources	Ministries, mainly of irrigation (1982) but also of housing, agriculture, public work and water resources
United Arab Emirates	Sharia, customary laws and a number of decrees, 1980-1994	Comprehensive water law drafted in 1995	Public domain (implicit)	Limited regulation by permit system for groundwater	Ministries, including agriculture and fisheries, electricity and water, and municipalities and the Higher Water Council, 1981

Source: ESCWA, 1997

Legislation and Water Laws: status in the Arab region ⁽²⁾

- Some of the legal and institutional water constraints in most Arab states are hereby noted:
 - Water responsibilities are scattered among many ministries, water authorities, committees, and entities, which has contributed to poor coordination, mismanagement, duplication of efforts, and inefficiencies in water distribution and use
 - Moreover, control of water pumping and extraction is either absent or very limited
 - Enforcement of water regulations is limited due to acquired water rights, political attitudes and the inflexibility and resistance of most farmers
 - Lack of accurate data and information about water resources, quantities, and quality
 - and inadequate qualified technicians and maintenance personnel, the lack of funds to train staff and political interference in staff recruitment, have all left their negative mark on the overall quality of manpower in the water sector

Legislation and Water Laws: status in the Arab region ⁽³⁾

- Sound water legislation is needed in most Arab States for several reasons:
 - To establish a mechanism to control/regulate access to and abstractions from water resources
 - To promote water use efficiency (allocative priorities, incentives)
 - To promote appropriate economic instruments and principles (e.g., water charges, cost recovery)
 - To enable metering of abstractions
 - To enable pollution control and environmental impact assessment (EIA) enforcement
 - To set institutional arrangement for planning and coordination mechanisms (institution building, guiding principles such as demand management)
 - To establish protected areas around water resources
 - To provide for control and planning of land use
 - and to set fines and penalties for violations which cause damages to water resources

Legislation and Water Laws: status in the Arab region ⁽⁴⁾

- Several states in the Arab region have begun to realize the importance of sound water legislation and have consequently taken steps either to update and modernize existing laws or to introduce new legislation and laws and strengthen institutional arrangements
 - Egypt, Jordan, Morocco, Oman, Palestinian National Authority and Yemen have made an effort to revise or modernize existing water laws during the last 15 years
 - In fact Morocco and Yemen have been two of the first countries in the Arab region to put in force a framework water law that reflects modern water principles and attempts to address the country-specific issues faced in these countries
 - Of the two countries with framework laws, Morocco's is the most complete (World Bank, 2009)

Key institutional requirements for effective mainstreaming



Roles & responsibilities of main stakeholders

Stakeholder group	Main roles & responsibilities
Central government (incl. office of prime minister, ministries of finance/budget/planning, ...)	Leadership, performance management frameworks Policies, standards & regulations Allocation of budget resources Guidance & capacity building
Local governments	Implementation of national policies Integration with community strategies
Private sector	Preparation for losses & opportunities, risk mngt Contribution to sustainable investments & vulnerability reduction through development
Scientific & academic organisations	Policy-oriented research Support for decision making
Investment promotion agencies	Climate-proofing of investments, bridging of development gaps
Poverty reduction organisations	Climate change adequately addressed

Institutionalising climate change mainstreaming

Which institutional model?

- There is no single, 'blueprint' institutional model for effective mainstreaming of climate change
- Each country has to determine the most suitable institutional arrangements based on:
 - current institutional structures
 - a clear diagnosis of their strengths and weaknesses
 - a clear plan for overall governance improvement
- However, there are some agreed principles and examples of good practice

Principles for institutional and capacity strengthening ⁽¹⁾

- Move coordination of climate adaptation to a **central body** with a **coordination mandate and decision-making power over line ministries**
 - e.g. China: National Development & Reform Commission
 - e.g. Kenya: Office of the President
- Establish or strengthen coordination mechanisms, with a **clear allocation of responsibilities** and **permanent arrangements**
 - e.g. Mexico: Inter-Ministerial Commission on Climate Change (CICC) with dedicated working groups

Principles for institutional and capacity strengthening ⁽²⁾

- Build on **pre-existing intersectoral coordination mechanisms** wherever possible
 - e.g. coordination structures for food security, disaster risk reduction and management, sustainable land management, environmental management
- **Institutionalise flexibility**
 - e.g. commitment to regular policy/strategy revisions and reassessment of available knowledge
- **Institutionalise adaptation/mitigation mainstreaming**
 - e.g. in guidelines, procedures, systems, criteria for screening and prioritising programmes and projects

Principles for institutional and capacity strengthening ⁽³⁾

- Develop effective **national-local coordination mechanisms**, identifying the **most suitable level** at which to cooperate/coordinate
 - e.g. Rwanda: annual performance contracts between various levels of government, with clear definition of goals, indicators and activities
- **Strengthen institutions at the sub-national level**, matching the transfer of competences with the transfer of resources

Steps in institutional and capacity strengthening



Needs assessment: capacity development for whom ? for what ?

- Capacity development (CD) should take place at three complementary levels:
 - the ‘enabling environment’ or ‘system level’ (overall institutional level)
 - the organisation level
 - the individual level

Indicators for assessing adaptive capacity

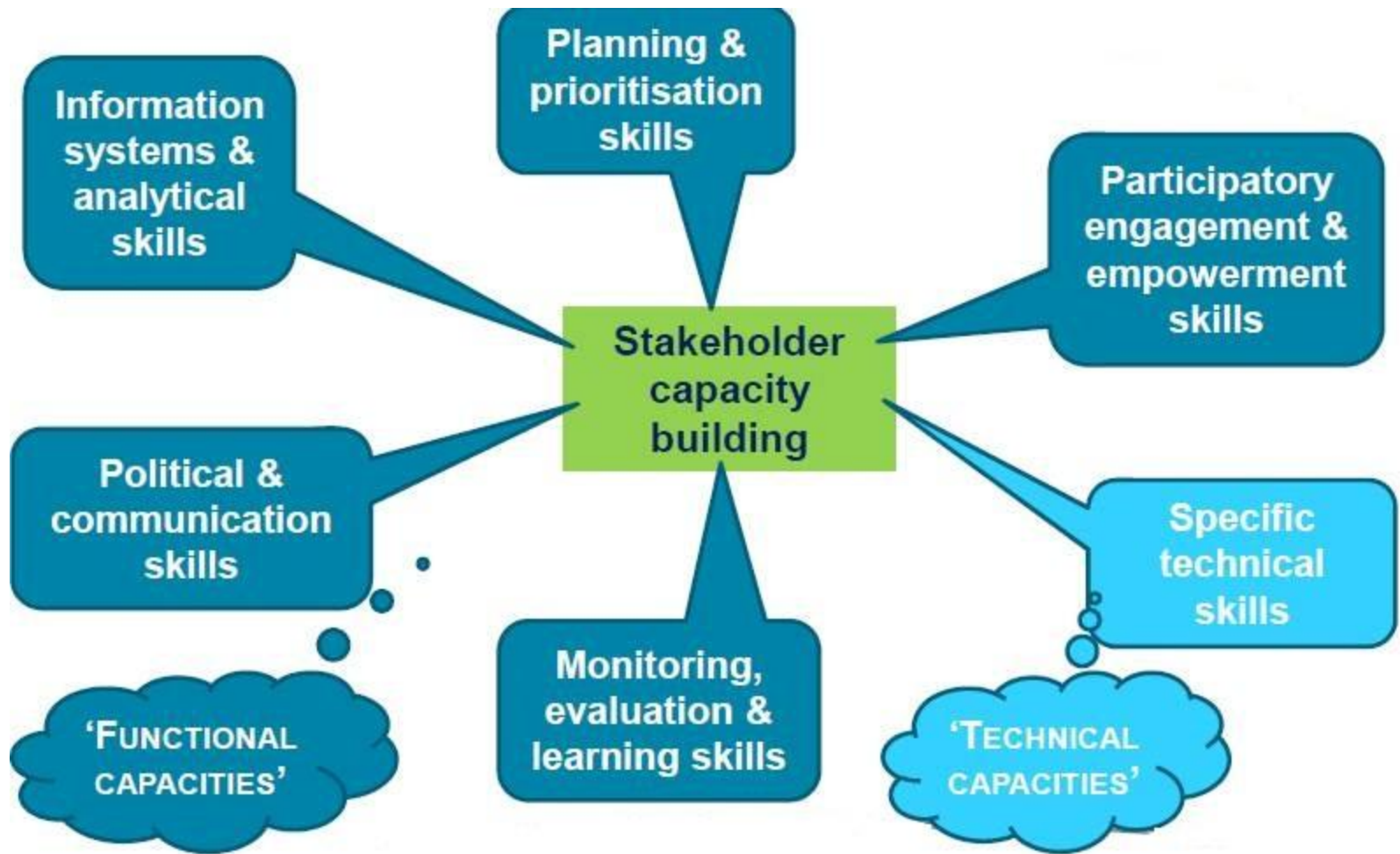
Level	Indicators
Individual	<ul style="list-style-type: none"> • Are people generating and using climate information for planning? • Are people managing risk by planning for and investing in the future? • Do people have the knowledge and skills to employ adaptation strategies? • Are men and women working together to address challenges? • Do women and other marginalized groups have equal access to information, skills and services?
Organization	<ul style="list-style-type: none"> • Is the organization aware of which areas and groups are at risk? • Can the organization identify and assess the risks to the services being provided? • Is the organization addressing these risks in the local community strategy or community plan? • Have disaster risk management policies and practices been changed as a result of reflection and learning-by-doing? • Is there a process in place for information and learning to flow from communities to the organization and vice versa?
Enabling Environment	<ul style="list-style-type: none"> • Are the institutional frameworks adapted to the new reality of risks? • Are policies reviewed using the global change 'lens'? • Is the environment supporting the implementation of local disaster risk management plans? • What is the level of participatory planning processes at local levels? • Is there a mechanism for the communication of climate information? • Are the voices of women and other marginalized groups supported in local planning processes?
Civil Society	<ul style="list-style-type: none"> • Are civil society entities able to mobilize awareness and resources to manage the process? • Can the society learn from change? • Does the society seek creative solutions to change? • How long does it take the society to respond to changes? • Are there strong communication channels within the society?

Sources: CARE (2009); Maguire and Cartwright (2008); Urban and Mitchell (2011).

In Knowledge base , the United Nations World Water Development Report 4, Vol.2, UNESCO 2012

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Needs assessment: stakeholders' CD needs for mainstreaming



Needs assessment: national capacity self-assessments

- Based on existing or ad hoc institutional assessments, consider for all relevant organisations:
 - Level of education & awareness of climate change
 - Organisations' mandates & functions with regard to climate-related issues
 - Influence of climate risks on capacity to function
 - Technical, financial, legal/regulatory capacities & information systems in relation to climate-related issues
 - Planning, decision-making, budget allocation & programming mechanisms
 - Collaboration & coordination structures & mechanisms

Working Mechanisms: setting up WM for a mainstreaming initiative

- Define **institutional arrangements** (political and technical)
 - e.g. Steering and technical committees
- Set up a **management framework**
 - Leadership arrangements
 - Human resources
 - Financial arrangements
 - M&E arrangements
- Develop an **operational work plan**

3 Learning-by-doing: multiple approaches

- Formal **training** on mainstreaming and on specific technical aspects
- Exchange **visits**
- **On-the-job learning** through national mainstreaming programmes including:
 - Interdisciplinary teams
 - Twinning between organisations
 - Technical assistance
 - Demonstration projects
- **Lesson learning and dissemination**

Key messages

- Conditions for successful no-regrets CC adaptation strategies include:
 - willingness to cooperate among actors
 - a strong political commitment at the national level
 - agreed targets
 - sound science
 - public participation
 - and effective processes which ensure that policy, legal and institutional developments reflect science

Recommendations to policy-makers in SWIM countries

- Preparation and proclamation of rational and up to-date water legislation
 - is the most important measure to be taken by decision makers in most SWIM countries
- A national water policy must exist with:
 - clear government objectives pertaining to IWRM
 - flexibility of water management practices
 - climate change assessments in National Water Plans
 - national and sub-national adaptation strategies
 - scale up investment efforts in storage capacity and IWRM
 - design infrastructure projects in anticipation of climate change
 - developing long-term scenarios and strategies for action in all planning activities
- Institutional reforms need to be introduced through a participatory and consultative process, involving formal and informal arrangements, to develop understanding and ownership of the change process

شكرا لانتباهكم

Thank you for your
attention

