



**Sustainable Water
Integrated Management (SWIM) -
Support Mechanism**



Project funded by
the European Union

Water is too precious to waste

**SUB-REGIONAL WORKSHOP ON INTER-LINKAGES
BETWEEN IWRM & ICZM**

SESSION 4: IWRM Planning and Status of IWRM Plans in SWIM PCs

Anthi Brouma, SWIM-SM Non-Key Expert

Algiers, 30 Oct-1 Nov June 2012

Outline of the presentation

- Rationale
- Part I: IWRM Planning Cycle
- Part II: Action Plan
- Part III: Status of IWRM in SWIM PCs

Setting the scene: Why IWRM Planning

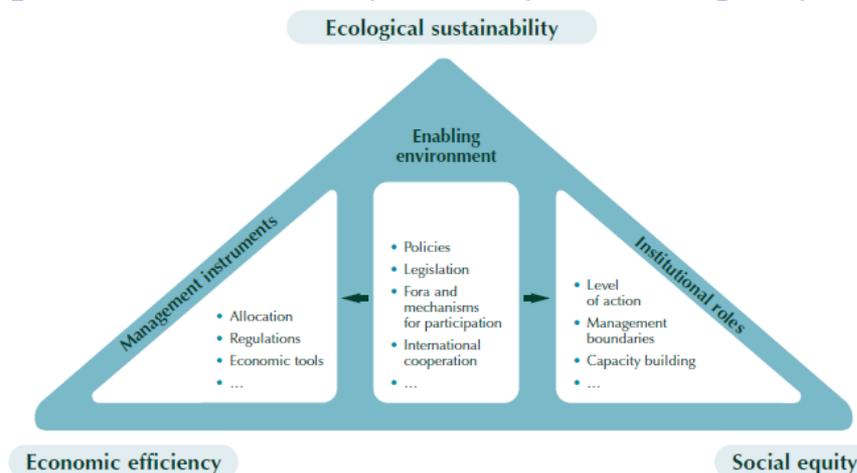
- Water is a key factor cutting across the pursue of sustainable development and sustainable livelihoods
- Water situation in Med – critical, interdependent and uncertain also in view of climate change
- Water challenges primarily linked to issues of governance
- Urgent need to move from discussion to tangible action that aligns with socio-economic, environmental & political considerations
- Significant on-going efforts by Med countries towards water sector reform processes

An IWRM Planning Process leads to:

- A National IWRM plan, elaborated, endorsed & implemented by stakeholders
- Policy makers, decision makers and stakeholders are informed about the Plan's context and are committed to implement it

The IWRM framework

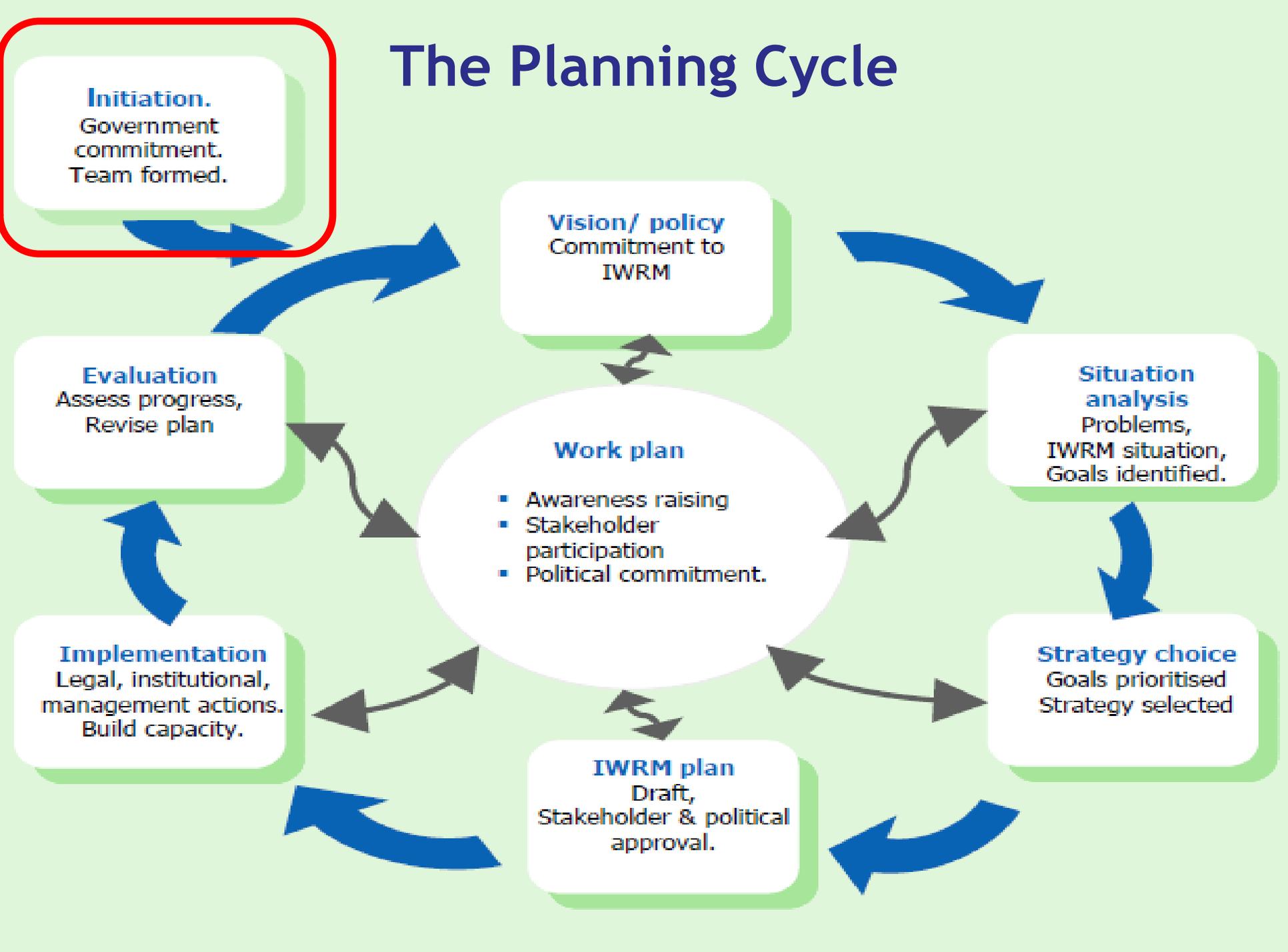
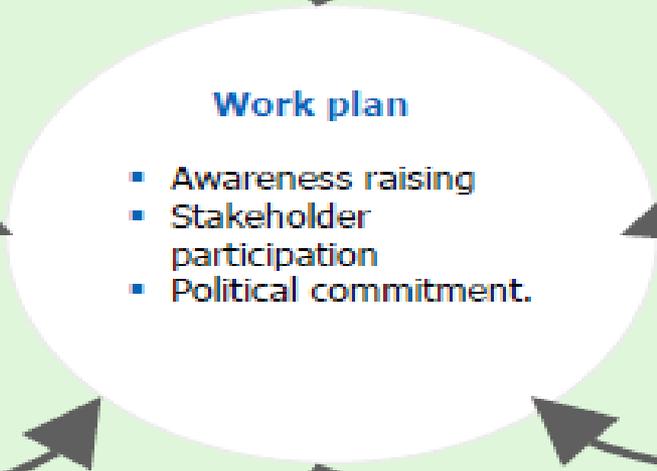
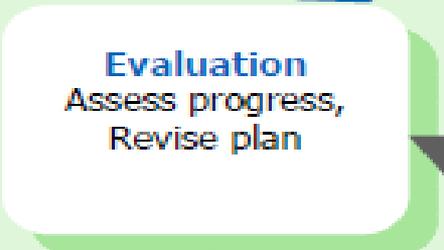
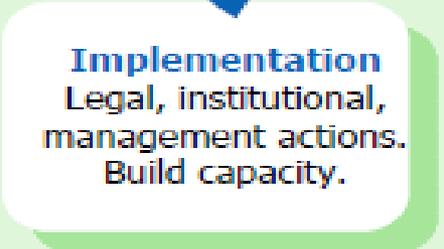
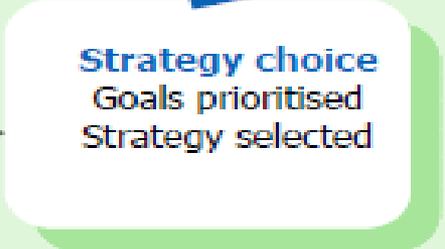
- IWRM as an approach that “*promotes the coordinated development and management of water, land, and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems*” (GWP, 2000)
- It focuses on three basic pillars and explicitly aims at avoiding a fragmented approach of water resources management by considering the following three pillars, also with due reference to the 3Es of sustainable development (-social-Equity, Environmental sustainability and economic Efficiency):
 - an **enabling environment** of suitable policies, strategies and legislation for sustainable water resources development and management,
 - putting in place the **institutional framework** through which policies, strategies and legislation are put into place, and
 - setting up the **management instruments** required for operationalising the policies and implementing the plans and strategies.





Part I
Planning Cycle for IWRM

The Planning Cycle



I. Initiating the Planning Process

Drivers for Initiation

- Internal forces - government awareness of water problems and willingness for action
- External: International Community and donors
- Water vision / policy

IWRM planning process is **dynamic** and requires:

- Multi sectoral approach
- Stakeholder participation

Expected Output:

- Government's interest in improved WRM is translated into commitment and setting up of a management structure to develop the plan
- A work plan for producing the IWRM plan

Key Activities for Initiating the Planning Process

1. **Obtaining Government's commitment**

- To be accepted, a plan has to be housed within the gov't structure from the outset
- Commitment required beyond one single ministry
- Commitment Indicators: Financial allocation to planning process, leadership of the planning team, # of agencies involved in the decision to develop a plan

2. **Raising awareness on principles for achieving sustainable WRM (IWRM)**

- IWRM to be presented as realistic means for change & addressing national water resources issues & problems
- Raising awareness should continue throughout the planning process
- **Target:** Government officials, IWRM planning management Team, Senior Government officials

3. **Establish Management Team (MT)**

The Planning Cycle

Initiation.
Government
commitment.
Team formed.

Vision/ policy
Commitment to
IWRM

Evaluation
Assess progress,
Revise plan

**Situation
analysis**
Problems,
IWRM situation,
Goals identified.

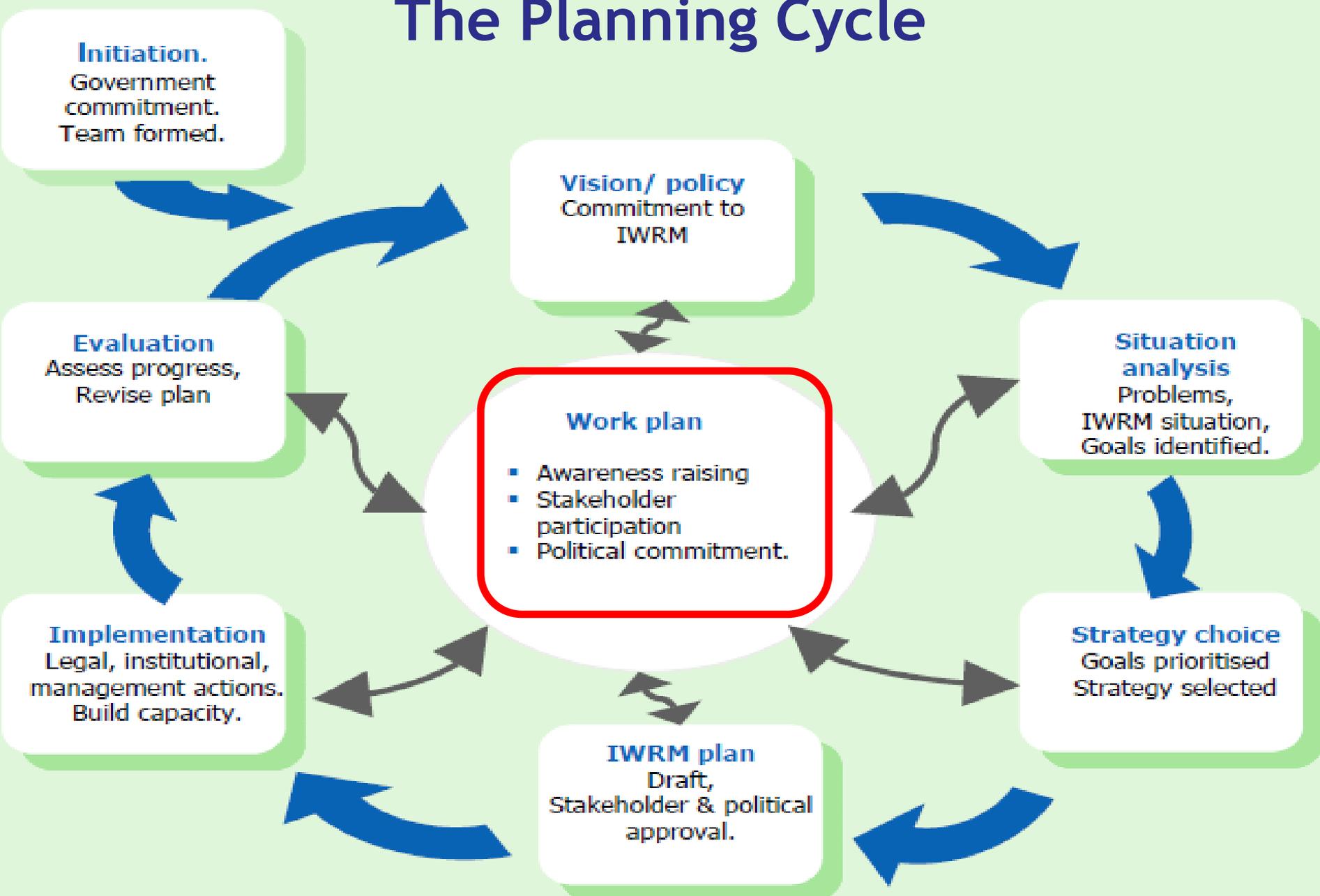
Implementation
Legal, institutional,
management actions.
Build capacity.

Strategy choice
Goals prioritised
Strategy selected

IWRM plan
Draft,
Stakeholder & political
approval.

Work plan

- Awareness raising
- Stakeholder participation
- Political commitment.



II. Developing the Work Plan

This entails: preparing the work for producing the IWRM Plan

Output:

1. A programme of action with detailed work plan and means of funding is in place.
2. Political will & support for the planning process is built
3. A framework for broad stakeholder participation is in place
4. Capacity building activities to support the planning process are identified

Key Activities:

1. Mobilisation of the team and development of detailed work plan
2. Gaining political commitment
3. Development of framework for stakeholder participation
4. Identification of capacity needs of various stakeholders in the management of water and the planning process

Development of the work plan entails the following:

- **Define the Terms of Reference** for the IWRM plan containing the rules to govern the whole process. Typical components:
 - Background Information
 - Strategic Planning Objectives
 - Division of responsibilities
 - Tasks
 - Workplan
 - Process management structure
 - Budget & Resources Required
 - Supporting data, material and information
- **Acquiring Resources and Funding** (budget may be developed by the MT but more likely, the team will be established after a known amount is committed during initiation)
- **Develop the work plan** providing detailed actions: To be prepared by the team and/or consultant. Areas covered include:
 - Briefing on required tasks; methodology to be applied; management and expert responsibilities; key project delivery points; key meetings / seminars / communication mechanisms

Strategies for gaining political commitment

- Identify **opportunities** for drawing attention to the broad IWRM issues
- Build on **international commitments** (e.g. most governments are committed to achieving the MDGs, Johannesburg Targets, soon-to-launch SDGs, etc)
- Start with key individuals, **champions**, and gradually build support
- Make presentations to the parliamentary committee or other gov't body with responsibilities on water, land or environment
- Appeal through **parliamentarians** to address the water problems of their constituents
- Utilise **journalists** active/interested in water/environmental issues
- Use **publicity** to raise water issues on the national agenda & relevance to politicians
- **Targeted information material** in a concise and reader-friendly format
- Use the 'process approach' and **build commitment along the way** – but don't leave it until too late

Steps in Stakeholder Participation

1. Identify the key stakeholders that could potentially affect or be affected by changes in water management (stakeholder mapping)
2. Assess stakeholder interests and the potential impact of the IWRM plan on them
3. Assess the influence and convening power of the identified stakeholders
4. Outline a stakeholder participation strategy (a plan to involve the stakeholders in different stages of the plan preparation)

Identifying Capacity Building Needs for the Planning process

- The simplest way to address capacity building needs is to follow each component of the work plan with the question –**do the people involved in this part of the plan have sufficient knowledge/skills to be able to participate and contribute effectively?**
- If not, then take the necessary steps to raise their understanding, awareness and build skills or competence
- This component needs to start right from the beginning of the process
- Capacity building needs are expected to change as the plan moves towards implementation and different skills are required

The Planning Cycle

Initiation.
Government
commitment.
Team formed.

Vision/ policy
Commitment to
IWRM

Evaluation
Assess progress,
Revise plan

**Situation
analysis**
Problems,
IWRM situation,
Goals identified.

Implementation
Legal, institutional,
management actions.
Build capacity.

Strategy choice
Goals prioritised
Strategy selected

Work plan

- Awareness raising
- Stakeholder participation
- Political commitment.

IWRM plan
Draft,
Stakeholder & political
approval.

III. Establish the Strategic Vision

Output: A formal or informal statement of a water vision or policy that embraces the principles of sustainable and integrated development & management of water resources

- The vision can either take the shape of an overall statement of principle for the future of water resources in the country, or be developed in more detail combining:
 - The rationale for the effort towards improved water management;
 - Expected outcomes in the short, medium and long term;
 - The way management and services are to be improved;
 - The timeline for meeting specific goals

Elements to consider when establishing the Strategic Vision

- Examine existing water policies or vision for consistency with sustainable development. If absent or non-successful-then strengthen awareness, especially at the political level
- Ensure sufficient understanding of means and measures to achieve sustainable WRM & through on-going CB and the development of targeted messages catered for the different groups
- Strengthen stakeholder involvement to ensure ownership, through consultations, draft reviews, etc
- Achieve political commitment to the vision or policy, as this is the first step towards acceptability of the IWRM Plan

The Planning Cycle

Initiation.
Government
commitment.
Team formed.

Vision/ policy
Commitment to
IWRM

Evaluation
Assess progress,
Revise plan

**Situation
analysis**
Problems,
IWRM situation,
Goals identified.

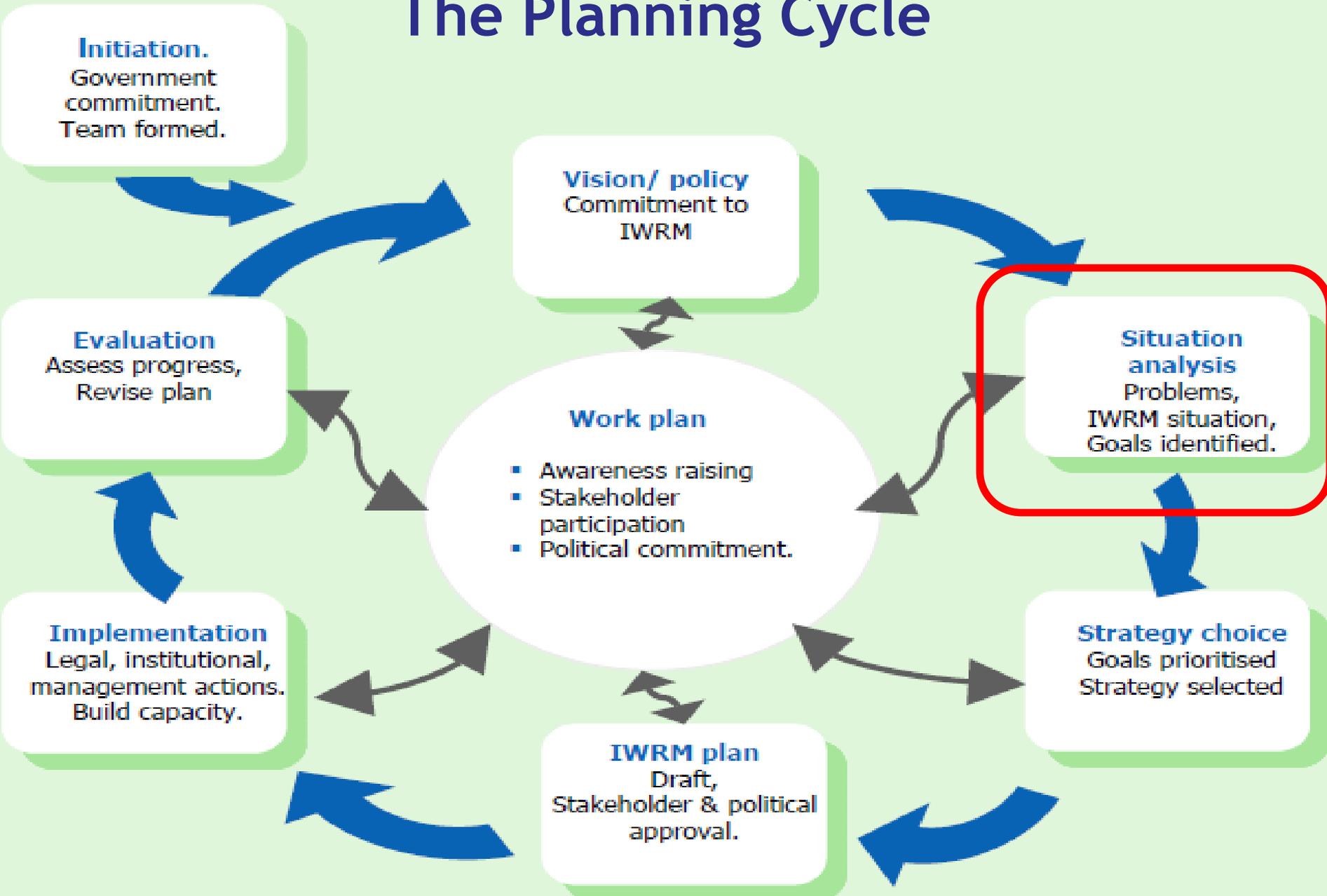
Implementation
Legal, institutional,
management actions.
Build capacity.

Strategy choice
Goals prioritised
Strategy selected

IWRM plan
Draft,
Stakeholder & political
approval.

Work plan

- Awareness raising
- Stakeholder participation
- Political commitment.



IV. Situation Analysis

Purpose: To characterise the status quo & make informed/accurate predictions about future adjustments necessary for an IWRM approach

Output: A Report elaborating the progress of implementing improved WRM, the outstanding issues, gaps and shortcomings in WRM and the proposed solutions

Prioritising the problems, issues and solutions in terms of social, economic, environmental and political priorities is an important aspect of the report

The analysis is carried out with due consideration to the IWRM principles

Defining Provisional Goals is also part of the process

IV. Situation Analysis (Continued)

SOME CRITERIA FOR PRIORITISING WRM ISSUES

- Is a barrier to solving other problems;
- Has an impact on a large number of people;
- Is a major equity issue;
- Will improve development and reduce poverty;
- Will significantly improve efficiency;
- Will positively impact on environment;
- Will improve water resource availability

Scope of water resource situation analysis

Institutional and legal analysis: Assesses the mandates of institutions, laws and policies for conflict, conformity, overlap and consistency with sustainable WRM

Hydrological and hydrogeological assessment: Examines the extent of the WR availability, taking account of seasonality and long-term trends in supply

Demand assessment examines the competing uses of water with the physical resource base and assesses demand for water (at various prices), *thus helping also to determine the financial resources available from tariff revenues for water resource management in different development scenarios*

Environmental Impact Assessments (EIA) collect data on the social and environmental implications of development programmes and projects. EIA is an important tool for cross-sectional integration involving project developers, water managers, decision-makers and the public

Scope of water resource situation analysis (2)

Social assessment: examines how social and institutional structures affect water use and management, degree of equitable access to water such as by gender and how specific projects might affect the social structure

Risk or vulnerability assessment: analyses the likelihood of extreme events, such as flood assessment; the environmental implications of development projects; or how a specific project might affect social structures; and droughts, and society vulnerability

Demand management assessment: assesses the potential for water savings through water conservation and demand management.

Non-conventional sources assessment: examines the potential for water reclamation, recycling and reuse, rainwater harvesting, grey-water reuse and desalination

Source: Adapted from the GWP Toolbox

The Planning Cycle

Initiation.
Government
commitment.
Team formed.

Vision/ policy
Commitment to
IWRM

**Situation
analysis**
Problems,
IWRM situation,
Goals identified.

Evaluation
Assess progress,
Revise plan

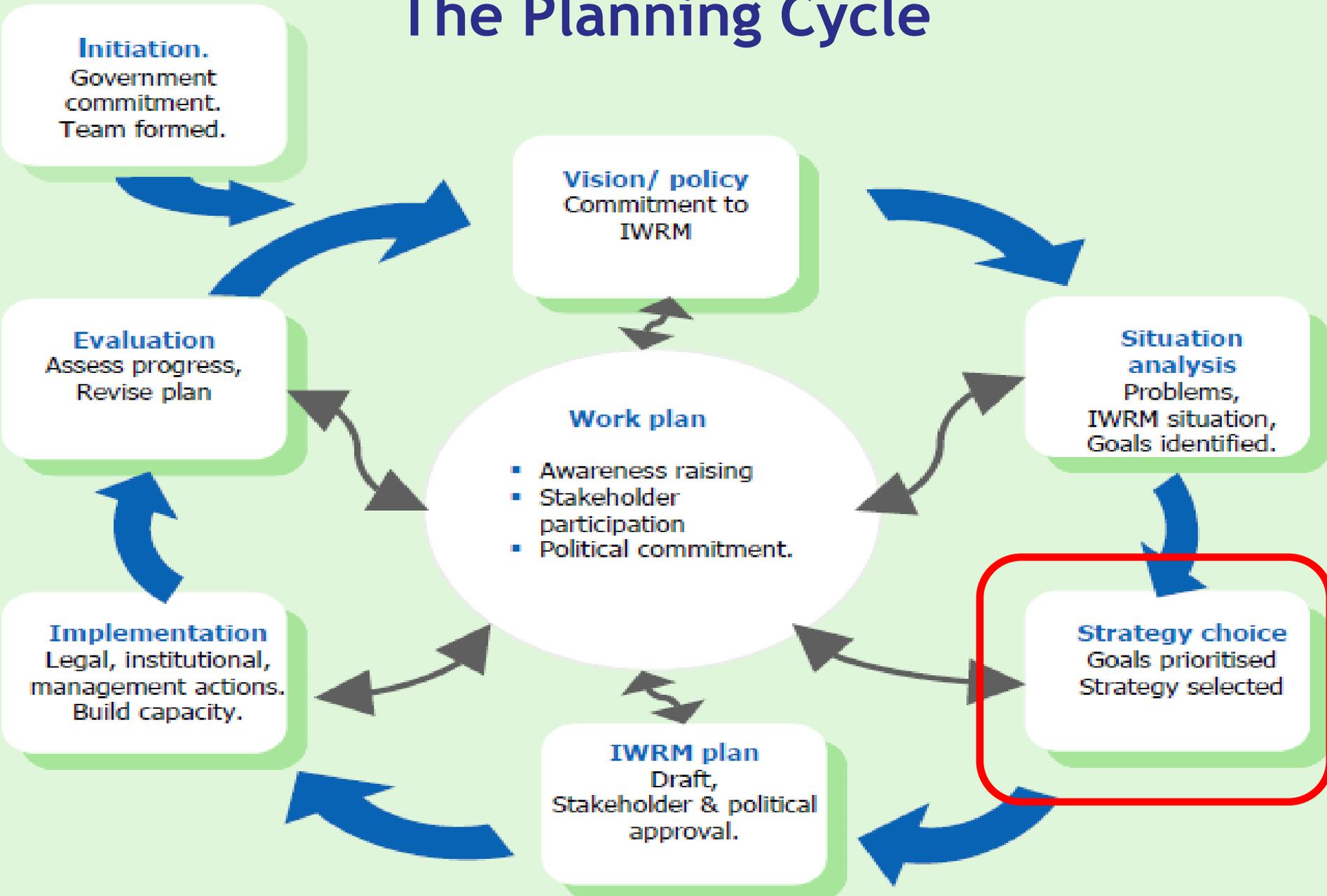
Work plan

- Awareness raising
- Stakeholder participation
- Political commitment.

Strategy choice
Goals prioritised
Strategy selected

Implementation
Legal, institutional,
management actions.
Build capacity.

IWRM plan
Draft,
Stakeholder & political
approval.



IV. Water Management Strategy and Options Identified

Output: A water resources management strategy with clear goals. The strategy should go beyond the actions needed to solve current problems or achieve short term objectives. It should establish a clear long term framework to achieve sustainable management and development of water resources

Scope of the strategic options & goals:

1. A policy or a vision

2. The strategic goals: describe how the vision can be achieved. The goals need to:

- cover a given issue
- address the main changes required to make the transition to sustainable development
- Be generic enough to encompass all aspects of the issue and ensure 'buy-in' by all relevant stakeholders, while being specific enough to allow measurable targets to be defined
- The strategy should cover enough goals to address the main economic, social & environmental concerns of sustainable water resources management, but few enough to be achievable and comprehensible

IV. Water Management Strategy and Options Identified (Cont'd)

Key Goals in IWRM may be drawn from the following:

- **In an international context:** WR to be managed observing international agreements, conventions, which entail the principle of equitable sharing of water and the benefits/responsibilities from shared watercourses
- **In a national context:** WR to be managed to support the achievement of national & sectoral development goals/strategies/plans
- **In a context of human and ecosystems' need:** WR to be managed in such a way that they are accessible for everyone, satisfy basic human needs and ecosystem requirements, which should take priority during allocation of WR
- **In a context of good governance management principles** the most significant principles include decentralisation of responsibilities to the lowest appropriate level, participatory management and decision making including gender mainstreaming, cooperative governance (across sectors & agencies) & management within hydrological units
- **In a context of financial sustainability** WRM to benefit from full/variable cost recovery within the management system; users & polluters' pay principles applied; charges & tariffs, subsidies, incentives and disincentives have a key role

IV. Water Management Strategy and Options Identified (Cont'd)

- 3. Targets for each goal describe specific & measurable activities, accomplishments to be achieved within specific timelines**
- 4. Institutional Roles covering partnerships, modalities for implementing the strategy, linkages with other strategic plans & institutions responsible for the different parts of the action plan and setting the rationale for institutional streamlining or the establishment of new ones (as needed)**
 - **To be effective, the strategy needs broad support across government, the private sector and civil society -> Involvement in all stages of the process of developing and implementing the strategy and in making decisions about the scope, the process and the outcomes is necessary**
 - **Identify changes in policies, institutions, and practices needed through the 3 Pillars of IWRM and the 13 Key Change Areas**

The Thirteen Key IWRM Change Areas

The Enabling Environment

1. Policies – setting goals for water use, protection and conservation
2. Legislative framework – the rules to enforce to achieve policies and goals
3. Financing and incentive structures – allocating financial resources to meet water needs

Institutional Roles

4. Creating an organizational framework – forms and functions
5. Institutional capacity building – developing human resources

Management Instruments

6. Water resources assessment – understanding resources and needs
7. Plans for IWRM – combining development options, resource use and human interaction
8. Demand management – using water more efficiently
9. Social change instruments – encouraging a water-oriented civil society
10. Conflict resolution – managing disputes, ensuring sharing of water
11. Regulatory instruments – allocation and water use limits
12. Economic instruments – using value and prices for efficiency and equity
13. Information management and exchange – improving knowledge for better water management

The Planning Cycle

Initiation.
Government
commitment.
Team formed.

Vision/ policy
Commitment to
IWRM

Evaluation
Assess progress,
Revise plan

**Situation
analysis**
Problems,
IWRM situation,
Goals identified.

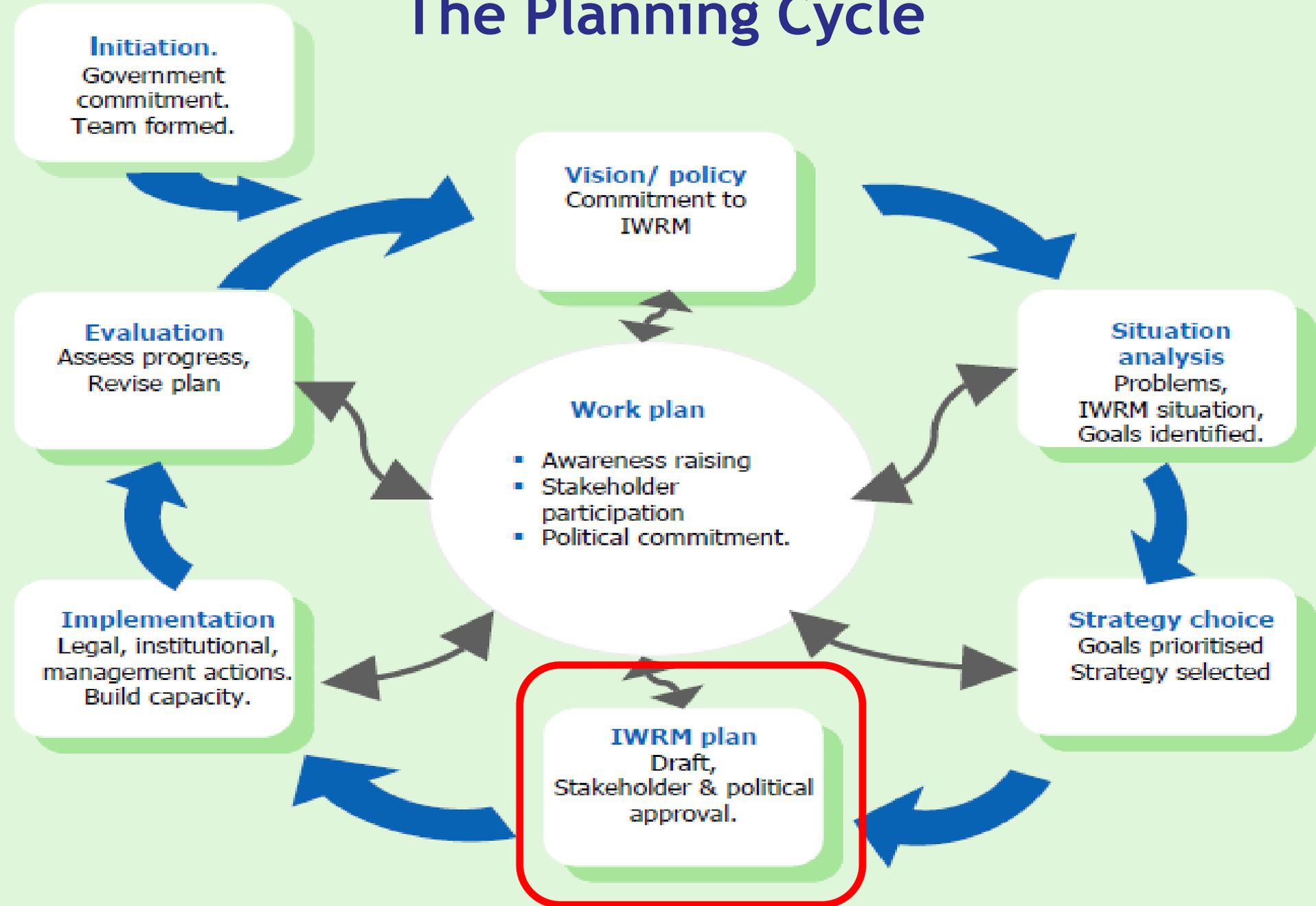
Work plan

- Awareness raising
- Stakeholder participation
- Political commitment.

Implementation
Legal, institutional,
management actions.
Build capacity.

Strategy choice
Goals prioritised
Strategy selected

IWRM plan
Draft,
Stakeholder & political
approval.



V. IWRM PLAN PREPARED AND APPROVED

Output: A plan operationalising the IWRM strategy detailing what has to be done, by whom, when and using what resources

When it comes to the actual writing of the plan there are four questions that need to be answered regarding:

- The content of the plan
- Political and public participation
- Timeframe for completion of the plan
- Who writes the plan

IWRM plan should address the following:

- Description of the water management approach to be replaced by the IWRM Plan
- Water resources assessment
- Description of the scope of the plan incl. goals, aims and objectives
- The water management vision & the level at which the plan is addressed
- Implementation strategy to achieve the vision, goals, aims and objectives
- Links to other national processes and/or plans
- Resource requirements to implement the plan

Approval of Plans

- After completion of the plan, it needs to be accepted by all stakeholders including the government
- It makes no sense to spend all the resources on developing a plan that at the end is not endorsed or remains on paper
- That is why political and stakeholder participation from the onset of the process of developing an IWRM plan are so important
- Extend the outreach and accessibility of the plan

Assessment of IWRM plan –A Check list of questions for assessment

Building Country Ownership through Participation:

- Does the plan describe the participatory process used to build ownership for the plan?
- Does the IWRM plan summarise the major issues raised during the participatory process & the impacts of the process on the plan content?
- Does the plan envisage its linkage to other national development plans and government documents which do, or should, address sustainable management and development of water resources?
- Are there plans for the public dissemination of the IWRM plan?

Diagnosing the Water Resources Problem

- How adequate are the existing water data?
- How well have the nature & causes of the water resource problems been identified? Are there any trends?
- To what extent has the analysis of the problems considered current thinking on WRM?

Targets, Indicators and Monitoring

- Does the plan define medium & long term goals towards sustainable WRM, establish indicators of progress & set annual and medium term targets?

Assessment of IWRM plan –A Check list of questions for assessment (Cont'd)

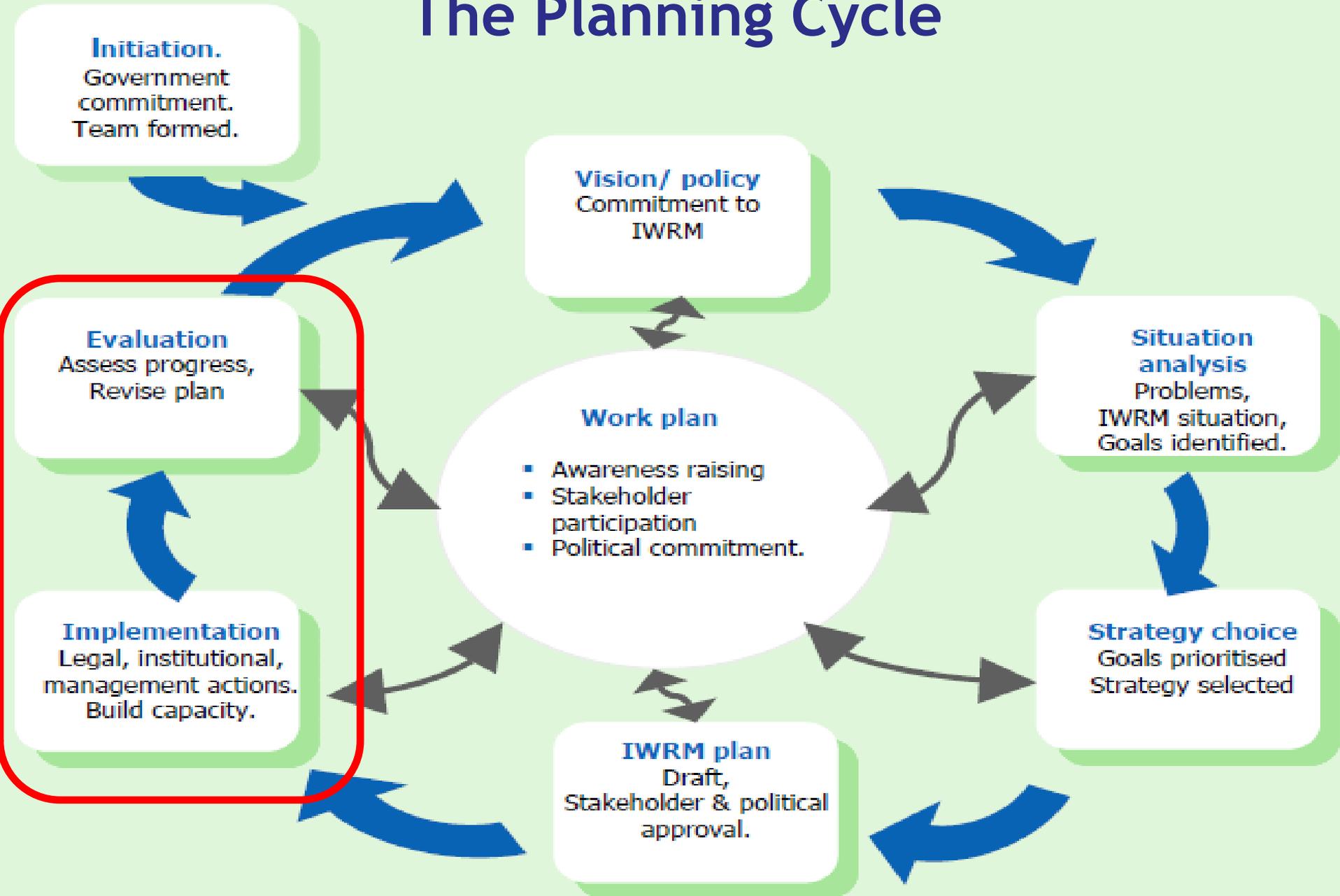
Targets, Indicators and Monitoring (Cont'd)

- Are the indicators & targets appropriate & consistent with the policy & strategy choices in the plan?
- Are current and proposed M&E systems adequate and sustainable?

Priority Actions

- Does the plan present clear priorities for action, relevant to the goals & targets & feasible in the light of the diagnosis, the targets, their estimated costs, available resources, institutional capacities & effectiveness of past policies?
- Does the strategy have an adequate & credible financing plan & is it amenable to adjustment responding to variable financing flows
- To what extent do the structural and sectoral goals and actions address key policy, institutional and management constraints to sustainable WRM?
- Do these address or encompass water as an economic as well as a social good, downstream responsibilities, the various forms and interdependent nature of the resource and the competing water uses in basins?
- To what extent are participatory and gender constraints and impacts of present water resources management systems addressed?

The Planning Cycle



VI. Implementation and evaluation

- The plan should be implemented as written, with due consideration that certain aspects may have to be modified based on experience during implementation
- The modifications should be documented & incorporated into the IWRM plan as circulated
- Constant & thorough monitoring of progress to the medium & long term goals of moving towards sustainable WRM should also be used to detect any changes
- The reliability, accuracy & precision of the M&E systems should be confirmed during the monitoring stages. Have these indicators and targets proved appropriate and consistent with the policy and strategy choices in the plan?
- Have the measured indicators of progress shown progress towards the set annual and medium term targets?
- Finally, all M&E should be used to modify & improve the IWRM plan. All modifications to the process, changes in timing, budget or goals should be made available to all participants



Part II

IWRM Action Plan: Key elements

How does the Action Plan emerge

- The action plan is developed from the outcome of the strategy. However, there is a determining inter-linkage between the plan and the strategy as further assessment and adjustment takes place
- Targets for each goal in the strategy form the core of any action plan as they describe specific and measurable activities, accomplishments or thresholds to be achieved by a given date.
- The targets serve to focus resources and guide the selection of options for action
- Because targets imply concrete actions and behaviour changes by specific stakeholders, they should be the product of negotiation

Main scope of Action Plan

- The Action Plan is used to operationalise the IWRM Strategy from one planning period to the next
- Identification of action priority areas is the core of the formulation of the Action Plan
- Actions would address a country's water challenges and gaps in ways that are economically efficient, socially equitable and environmentally sustainable (i.e. Align with sustainable development)
- When considering the actions, the focus need not be only on water – instead be multi-sectoral

Mapping out a plan of action

- Once areas to target for change have been broadly identified, the challenge becomes to map out a more detailed plan for action. This involves examination of:
- What is feasible given the **current political, economic and social context**?
- **The order of Change:** What types of change **should be prioritised**? Do some changes need to happen first to make others possible?
- What are the **relative costs & benefits** between various change options?
- How do the changes work together as a mutually reinforcing package?

Considering the political, economic, and social context

- One of the most common pitfalls is coming up with “ivory tower” solutions—solutions that are technically sound but do not take into account the real world context in which they will have to be implemented. For example:
 - full-cost pricing of irrigation water when farmers are struggling to make a living
 - Attempting to control groundwater withdrawal through licensing users when there is no capacity to shoulder the required administrative burden or prevent illegal abstraction

Considering the political, economic, and social context

- In cases where it is outside the power of the strategy to create the necessary conditions for successful implementation of a particular action, one can still include such actions while acknowledging current realities, by incorporating “triggers” into the action plan (i.e. when certain precondition is met)
 - Example: when *per-capita* income reaching a certain level—a particular action is launched (or “triggered”)

Some Ways of ensuring solutions succeed in practice

- Making sure that the formulation team includes people with a broad range of practical experience
- Ensuring adequate and structured stakeholder consultation and input
- Striving for transparent and accountable decision-making processes
- Being aware of and linking into existing policy formulation and budgeting processes
- Keeping in mind the diverse, complex, and not always rational influences on human decision-making and behaviour

Action Areas within an IWRM strategy

- Actions address the gaps in the IWRM framework
- They aim at reform of *policies, legislation and financing* frameworks, *institutional roles and capacities*, and enhanced *management instruments* required to deal with the priority water resources issues
- Links to other *national plans and international processes* are additional important components

Action Areas within an IWRM strategy (Cont'd 1)

- Enabling Environment
 - Policies
 - Legislative framework.
 - Financing and incentive structures
- Institutional Roles
 - Creating an organizational framework – forms and functions.
 - Institutional capacity building – developing human resources

Action Areas within an IWRM strategy (Cont'd 2)

- Management Instruments
 - Water resources assessment – understanding resources and needs
 - Planning
 - Demand management
 - Social change instruments
 - Conflict resolution
 - Regulatory instruments
 - Economic instruments
 - Information management and exchange – improving knowledge for better water management

Elements/Sections of an Action Plan

- Field of Action
- Justification
- Expected results (Result 1, 2, 3)
- Actions corresponding to each result
- Cost

Other Possible Fields in the Action Plan

- Supervising Authority
- Responsibility
- Base line & Target Indicators

Capacity Building (CB)

- IWRM implementation will entail important changes such as:
 - Appearance of new management functions
 - Shifting of existing functions at the central level towards other levels through devolution and decentralization
 - The need for new laws, policies, regulations, standards, etc
- All this will be expressed by the emergence of development needs of competence (engineers and technicians, lawyers, economists, communication and social sciences experts, ...) from the staff at all the levels
- This context requires to elaborate and implement realistic actions to develop and reinforce human resources
- Building capacity for implementation is a continuous process, to put up with demands for new knowledge and competencies help understand new directions, build commitment & develop appropriate responses to resource management challenges

Capacity Building (CB)

- CB should not be limited to government water management agencies
- It should include regulatory bodies, knowledge institutes, relevant private sector entities, and non-governmental, community-based organizations, and individual stakeholders who wish to participate

Capacity Building needs are likely to include

- Technical expertise in management areas, including
 - monitoring and evaluation;
 - engineering and applied science, incl. hydrology and ecology;
 - social sciences, especially economics,
 - political science, law and public administration
- Modelling and analysis of data, and developing and maintaining databases
- Conflict resolution, negotiation skills
- Trans-boundary cooperation and planning
- mobilizing financial resources
- short-term training to serve as refresher training for water managers, decision makers and politicians, promoting staff exchange & experience

Capacity Building needs are likely to include

- policy and planning capabilities
- skills in risk assessment
- environmental, social and economic assessments
- competencies in demand management and in use of prices and value for efficiency in use and equity in access
- Establish human resources development and capacity building tailored to the water resources and institutional issues
- Upgrading the skills and understanding of decision-makers, water managers and professionals in all sectors

To be effective, CB should be accompanied by institutional strengthening

Examples of institutional strengthening include

- ensuring each institution has a clear mission, strategy and workplan
- orienting the recruitment of staff to the needs of the institution
- Ensuring that institutions have an operating budget in-line with their mission and strategy
- Offering salaries/opportunities attractive enough to retain capacity within the country and prevent the “brain drain”

Assessment of IWRM PLAN Priority Actions

- Are the actions relevant to the goals & targets & feasible in the light of the diagnosis, the targets, their estimated costs, available resources, institutional capacities & effectiveness of past policies?
- Is there adequate & credible financing plan & is it amenable to adjustment responding to variable financing flows.
- To what extent do actions address key policy, institutional and management constraints to sustainable WRM?
- Do the actions address or encompass water as an economic as well as a social good, downstream responsibilities, the various forms and interdependent nature of the resource and the competing water uses in basins?

Build commitment to actions

- Ensure adoption at the highest political level
- An IWRM plan will typically suggest actions that go well beyond the responsibility of a particular ministry or department, and it may propose changes of central government institutions
- It is essential therefore, that the plan is adopted at the level where inter-ministerial co-ordination takes place, and ultimately – as in the case of national water legislation – with the Parliament

Stakeholder acceptance

- Dialogue and acceptance by stakeholders for the IWRM planning process is crucial
- Actions should be seen to lead to real improvements for people
- Incorporate into the management strategies and plans political feasibility, ideology and cultural aspects

Identify financing

There are important linkages between implementation of the water resources management strategy and plan and the government's annual budget cycle and multi-annual financial plans. Thus it is important that water resources management become institutionalised in domestic budget preparation and policy and programme formulation practices

Part III

SWIM-SM IWRM Review of IWRM Strategies and/or Plans in PCs

Background & Rationale of the Review

- **SWIM-SM objective:** to assist with the effective implementation & extensive dissemination of sustainable water resource management practices – to be achieved –among others- through targeted support to the PCs on:
 - water governance and mainstreaming
 - implementation of water plans
- **Why carry out a review of IWRM Plans/Strategies?**
 - Magnitude of existing and emerging challenges facing the water sector in the Mediterranean
 - The added value of & the recognised need for holistic and integrated approaches
 - On-going water sector reform processes in the countries (including SWIM PCs)
 - Identified as a clear priority by SWIM PCs during inception fact-finding missions
- **Scope of specific activity:** (i) review the status of IWRM plans/strategies in the SWIM PCs, (ii) conduct an analysis of the situation in 3 PCs (Jordan, Lebanon, Tunisia) & (iii) suggest a set of plausible policy options >> key objective to support a policy dialogue on the topic among the PCs
- IWRM Regional Expert Workshop (13-14 June 2012, Athens); IWRM Training of Government Officials (10-11 Sep. 2012, Athens)

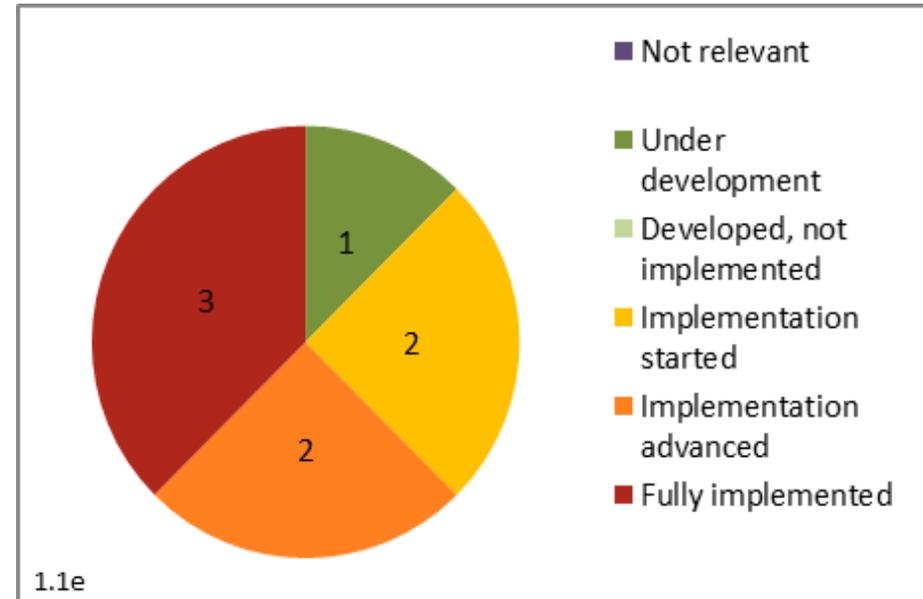
Context, Contributions & Structure of the Review

- Review embraces the IWRM approach within a sustainable development paradigm and follows the logic/context of the 3 IWRM pillars
- Analysis is based on literature review of secondary resources and primary information collected during country missions to the 3 PCs
- Regional Review structured around information provided in the form of diagrams by UNEP-DHI and which was obtained from the global survey for the preparation of the 2012 UN Water Report
- Review's structure:
 - Introduction
 - Regional review across the SWIM PCs
 - Analysis of situation in Jordan, Lebanon, Tunisia
 - Progress and achievements
 - Gaps, shortcoming and constraints
 - Challenges
 - Identification of policy options
 - Existing and emerging opportunities

The Enabling Environment – IWRM Plans

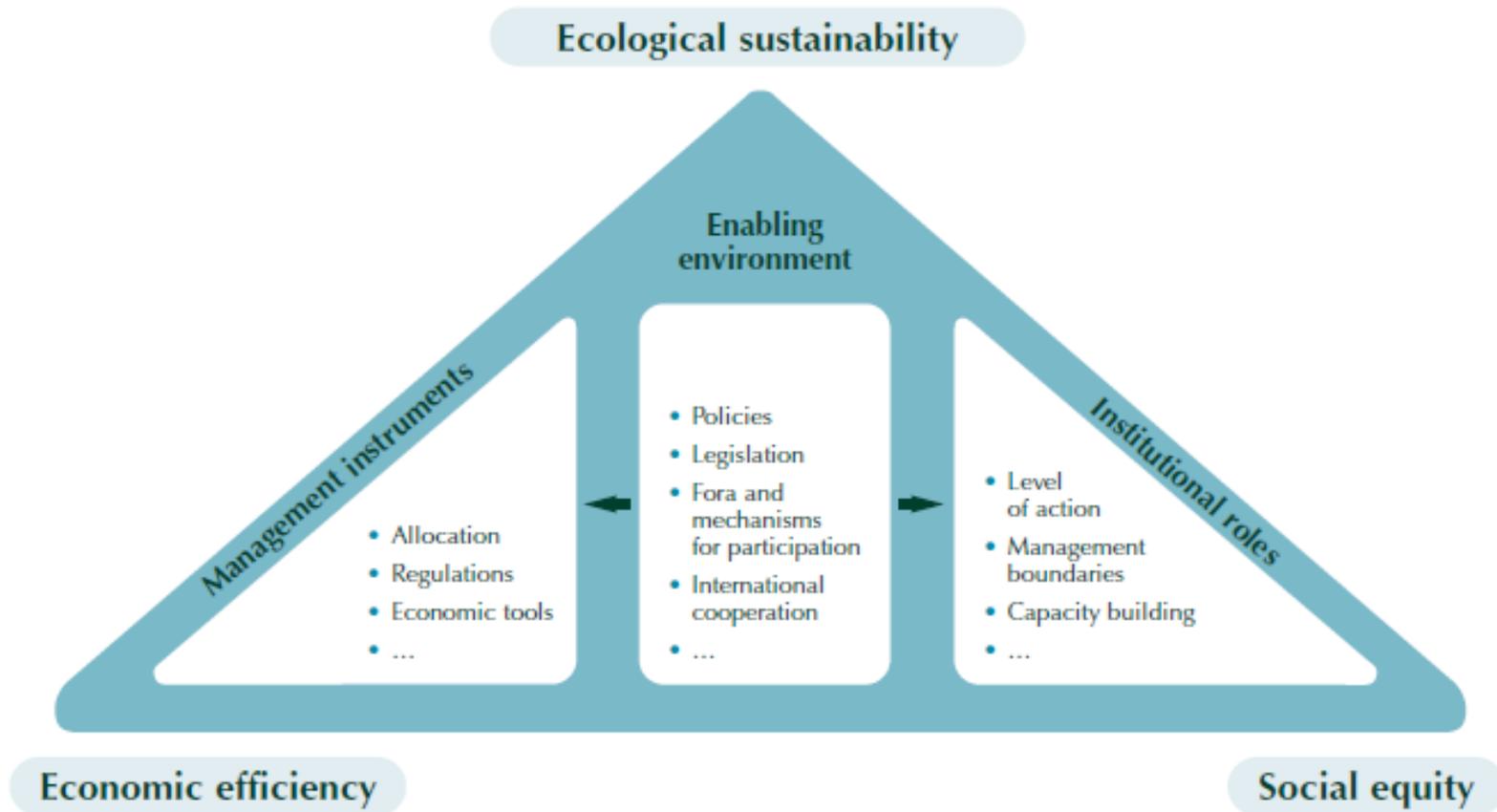
- Most PCs have frameworks consisting of plans and/or strategies that follow the IWRM principles
- Egypt and Jordan have in place & under implementation IWRM Plans as such – currently both countries conduct revision/update of their plans
- Algeria, Lebanon, Syria & Tunisia have explicit provisions in their legislations for the preparation of IWRM Plans

- Jordan: National Water Master Plan (2004); Water Strategy 2008-2022 (aligning also with the National Agenda)
- Lebanon: National 10-year Strategy Plan for the Water Sector (2000); National Water Sector Strategy (2012)
- Tunisia: number of sectoral/sub-sectoral strategies since 1990s; National Water Strategy 2050 (preparation launched)



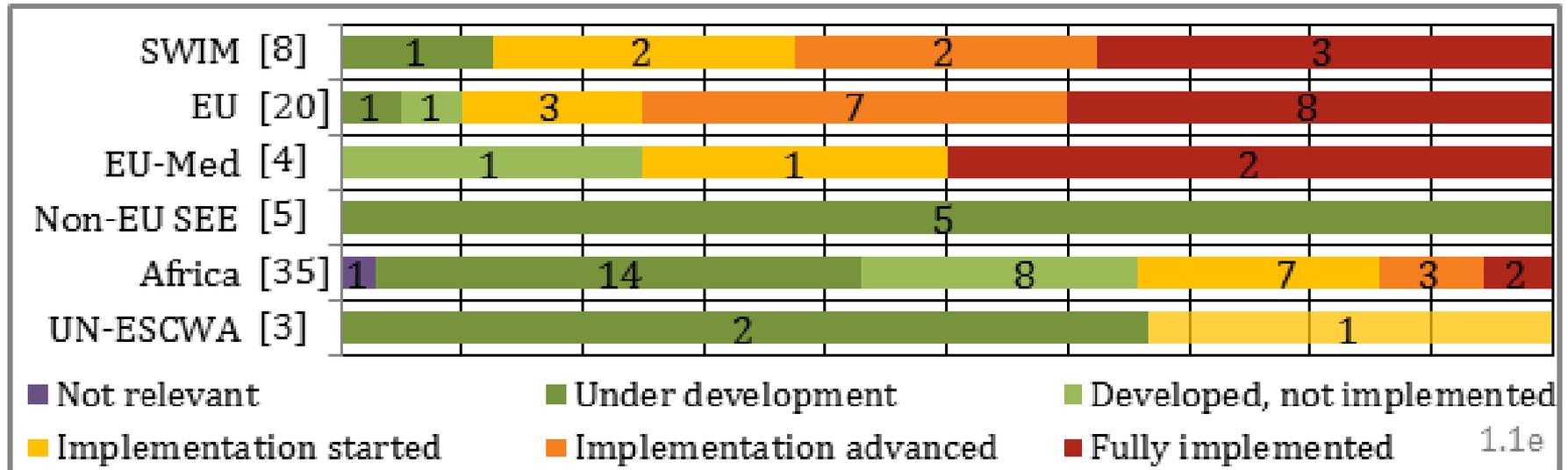
Status of national or federal integrated water resources management plan(s) or equivalent strategic plan document(s) in the 8 SWIM PCs

The IWRM framework



The Enabling Environment

Comparing implementation status of IWRM Plans

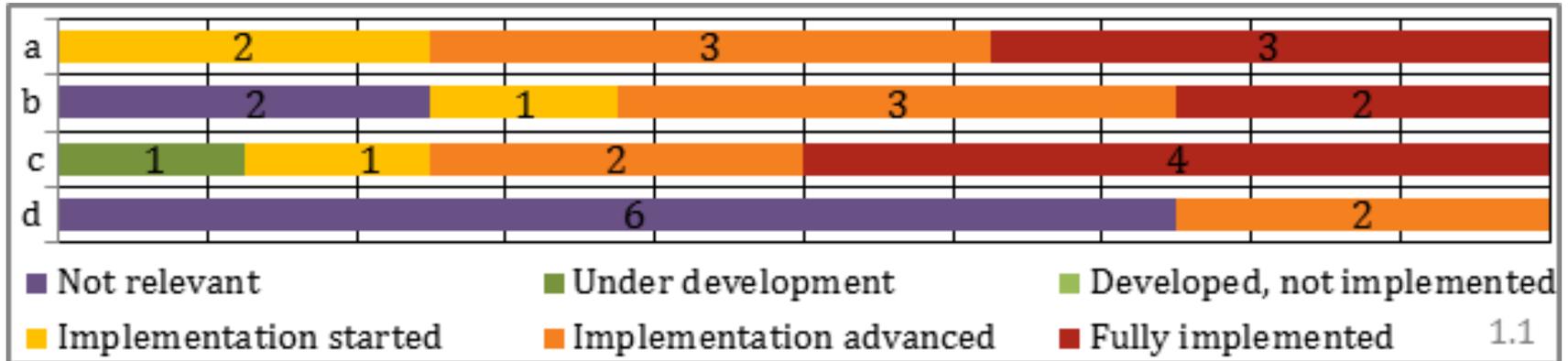


Selected cross-regional reporting on the status of IWRM Plan implementation

- SWIM PCs (considered as one group)
- EU member states (where 20 out of the 27 countries responded)
- Mediterranean EU member countries (where 4 out of the 7 countries responded)
- South-Eastern Europe Non-EU member countries (where 5 out of the 7 countries responded)
- Africa region (excluding the 5 SWIM PCs and where 35 countries responded)
- UN-ESCWA members (excluding the SWIM PCs and where 4 out of the 9 countries responded)

The Enabling Environment

Policies & Legislation in SWIM PCs

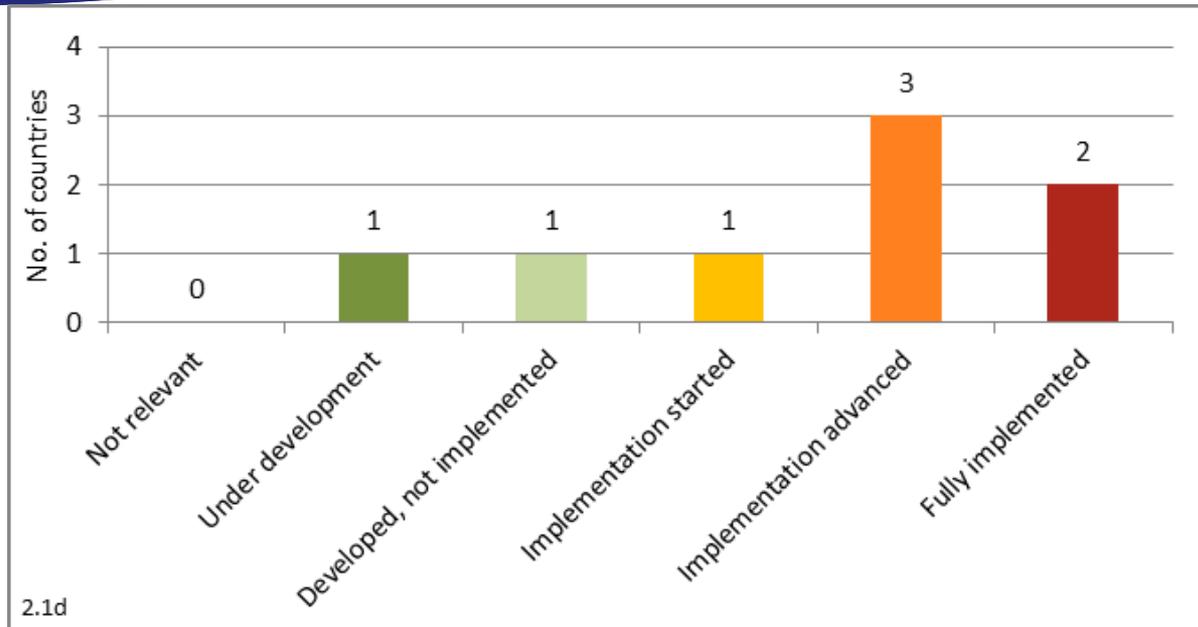


Status of national (a) and sub-national (b) water policies, as well as national (c) and sub-national (d) water legislation in 8 SWIM countries

- Lebanon: 2000 comprehensive legal framework (Law 221, Law 241 & amended Law 337/2001); number of by-laws; Water Code (to be submitted to CoM)
- Tunisia: Water Code (1975, amended by Law 116/2001); laws & regulations on specific issues, for example on WUAs (Decrees 1261 & 1262/1987), treated wastewater reuse in agriculture (Decree 1047/1989), including concerns on environmental issues
- Jordan: before 1988 legislation primarily based on residual Ottoman Majalla code and a few water laws; post-1988 and the establishment of the Ministry of Water and Irrigation there is rich legislative framework (i.e. Law 18/1988, 54/1992, 30/2001, 54/2002, by-law 85/2002, revision of GW by-law, 12/2003, etc)

Governance & Institutional Framework

Cross-sectoral coordination

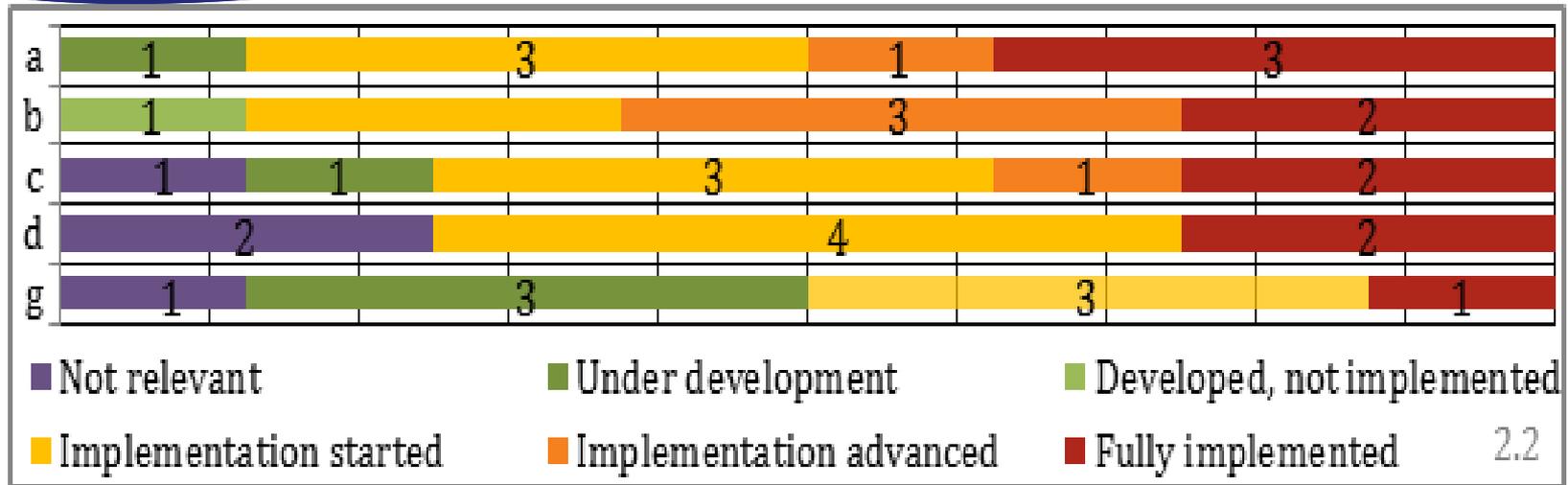


Status of mechanisms for cross-sector management of water resources in the 8 SWIM countries

- Jordan: not fully institutionalised – it is expected with Master Plan’s revision; Royal Water Committee; Highland Water Forum; inter-ministerial technical committees; Environmental Technical Committee
- Tunisia: National Water Committee (Water Code-Art 19/1975) replaced by a National Water Council (Decree 2606/2001); NWC revitalised in 2011 with BPEH as secretariat; BPEH also responsible for coordination among stakeholders (Decree 1560/2011)
- Lebanon: not institutionalised; elaboration process of the NWWS; example of National Environment Council (approved in March 2012)

Governance & Institutional Framework

Stakeholder Participation



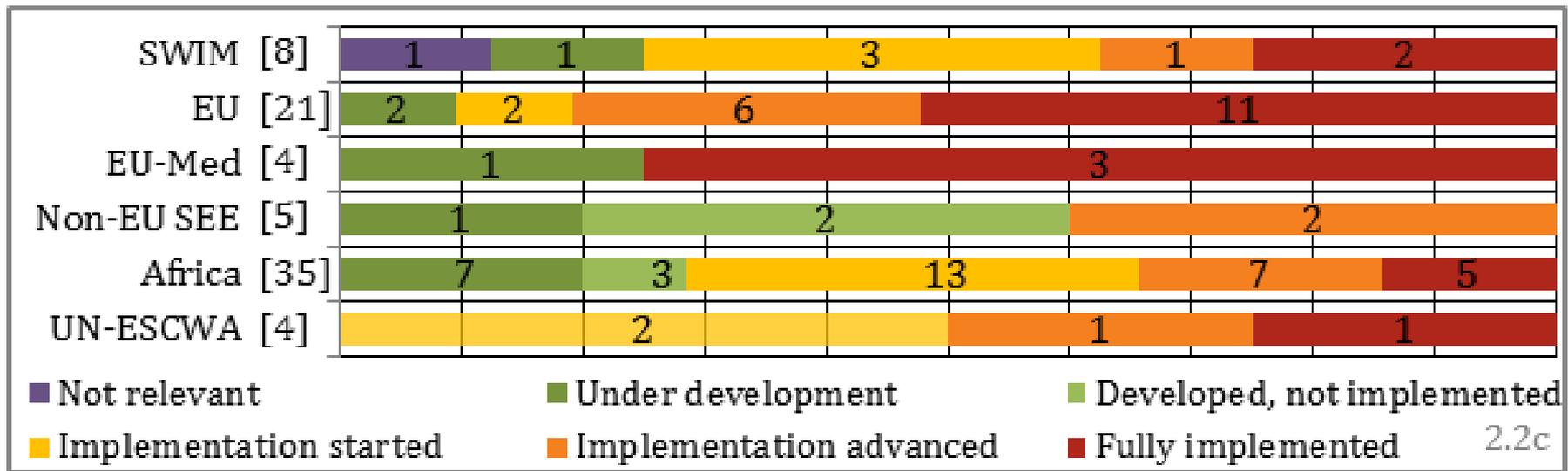
2.2

Status of: stakeholder having access to information on national water resources management and development (a); public awareness campaigns on water resources management and development (b); involvement of general public, civil society organisations and non-government organisations in water resources management and development at the national level (c); involvement of the private sector in water resources management and development at the national level (d); gender mainstreaming in water resources management and development (g) in the 8 SWIM PCs

- Jordan: law on civil society; Highland Water Forum
- Tunisia: National Water Council & its reactivation; role of BPEH
- Lebanon: National Environment Council; to be reinforced through set up of National Water Council

Governance & Institutional Framework

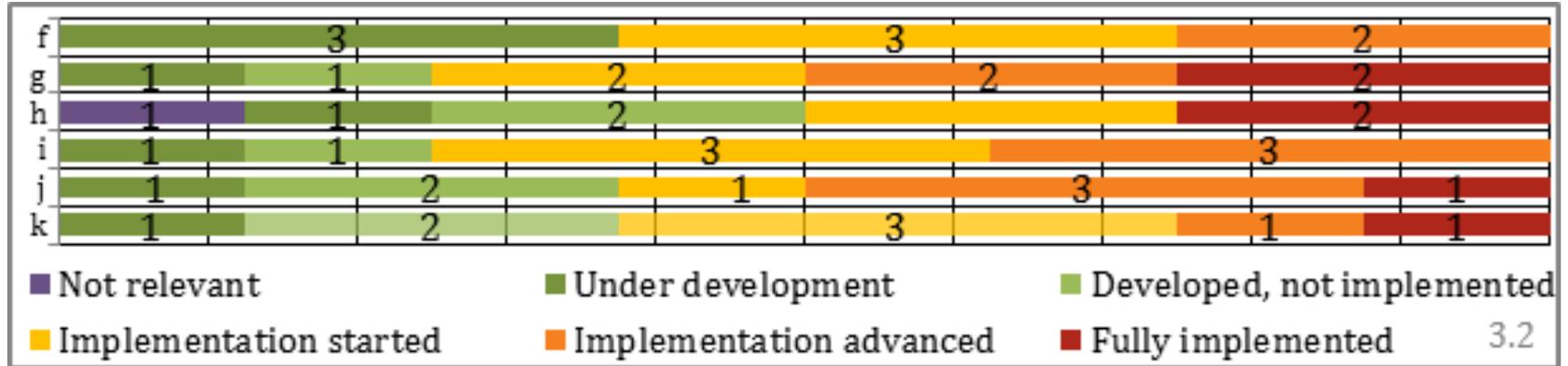
Stakeholder Participation at cross-regional level



Selected cross-regional reporting on the status of stakeholder access to information on national water resources management and development

Management Instruments

Emphasis on treated WW reuse programmes

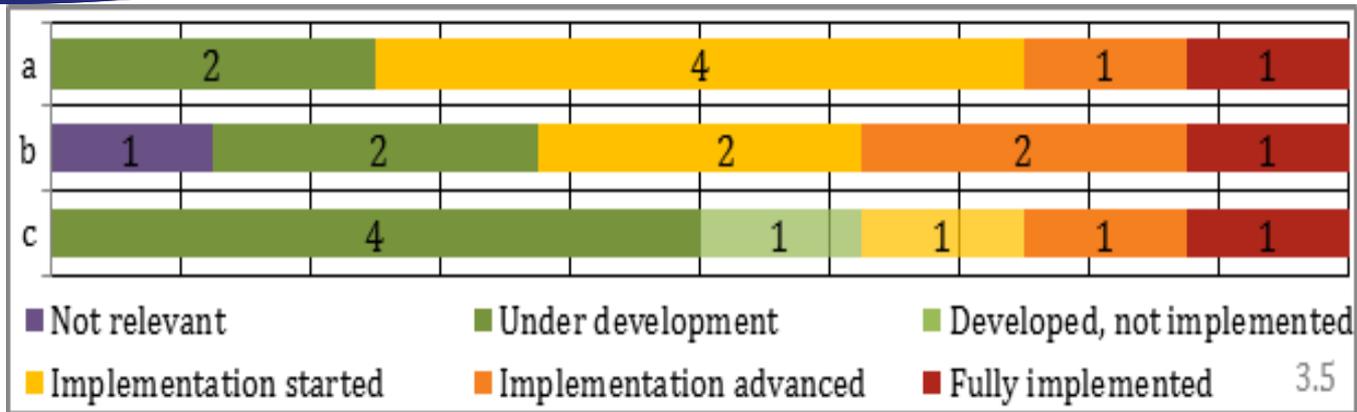


Status of: programmes for allocating water resources that include environmental considerations (f); demand management measures to improve water use efficiency in all sectors (g); **programme for re-use or recycling of water (h)**; programmes to evaluate environmental impacts of water projects (i); programmes to address water-related disasters (e.g. floods and droughts) (j); programmes to address climate change adaptation through water resources management (k) in the 8 SWIM PCs

- Jordan: has been using it since 1980; firmly within the water budget, e.g. in 2011 93% (102mm³ of a total of 110mm³) was reused in agriculture and industry; regular revision of treatment standards (higher than WHO/FAO)
- Tunisia: also part of the water budget; National Strategy supported by legal framework (Decree 2447/93); currently 28% (68mm³) of treated WW is reused with the aim to reach 50% by 2014 and 70% by 2021
- Lebanon: not part of the water budget with only one plant in operation; related provisions in the NWWS (where WW represents a key component)

Management Instruments

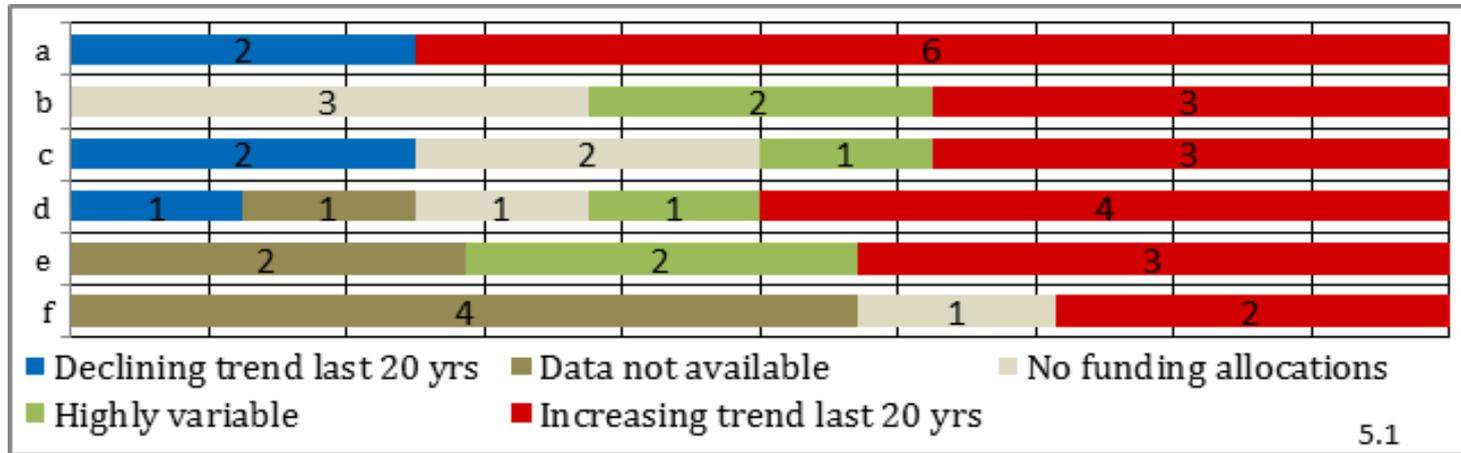
Economic Tools



Status of: **cost recovery mechanisms/progressive tariff structures for all water uses (a)**; subsidies for promoting water efficiency (b); charges for water resource management (e.g. pollution charges) (c) in the 8 SWIM PCs

- Lebanon: block tariff structure set for water supply – sanitation tariffs not yet introduced; revenue collection differs across the 4 WEs-LRA; different capacities result in different cost recovery rates (only B+ML covers O+M costs);
- Tunisia: urban water supply self-financed through tariffs; rural water supply subsidised; irrigation tariffs cover 60% of O+M; sanitation tariffs cover 100% of O+M and 60% of investment costs; until 2010 tariff policies based on user-pays principle; polluter-pays introduced along with environmental preservation taxes; most recent 5% increase approved in 2011;
- Jordan: water utilities cover 100% the O+M costs with additional revenues for capital investment; irrigation tariffs cover 60% the O+M costs and are heavily subsidised when it comes to tariffs of treated WW; recent increase in 2011 included pro-poor and energy-cost considerations; principles like polluter-pays/user-pays, O+M cost recovery targets, WW pricing foreseen in NWMP;

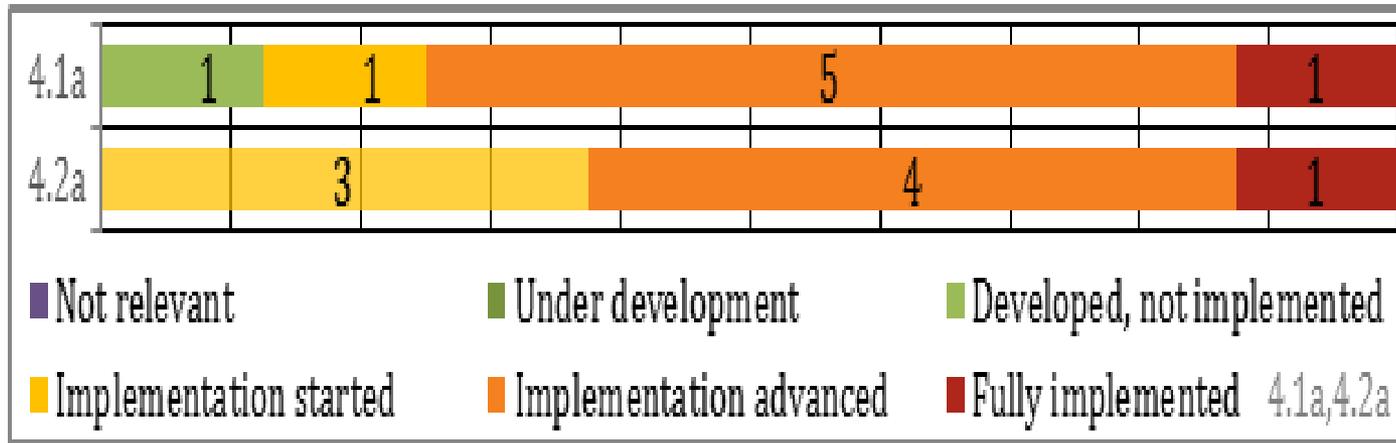
Sources of Financing for water resources



Financing trends for: **government budget allocation (as % of GDP) for water resources development (a)**; grants and loans from aid agencies for water resources development (b); investments from International Financing Institutions (e.g. World Bank) for water resources development (c); investments from private sources (e.g. banks and private operators, non-profit) for water resources development (d); revenues (e.g. from water use charges/tariffs) used for water resources development (e); payments for ecosystem services and related benefit/cost transfer schemes (f) in the 8 SWIM PCs

- Tunisia: public expenditure on water represents 1.7% of GDP; for 2010-2014 30.3 % of the total public expenditure will be directed to water supply and 27.9% to sanitation;
- Jordan: for 2011-2013 the government will cover 50% (1bn JD against a required 2.2 bn JD) of the required investment for the rehabilitation of existing and the development of new infrastructure
- Lebanon: public expenditure on the water and wastewater sector amounted to 0.5% of GDP (in 2009)

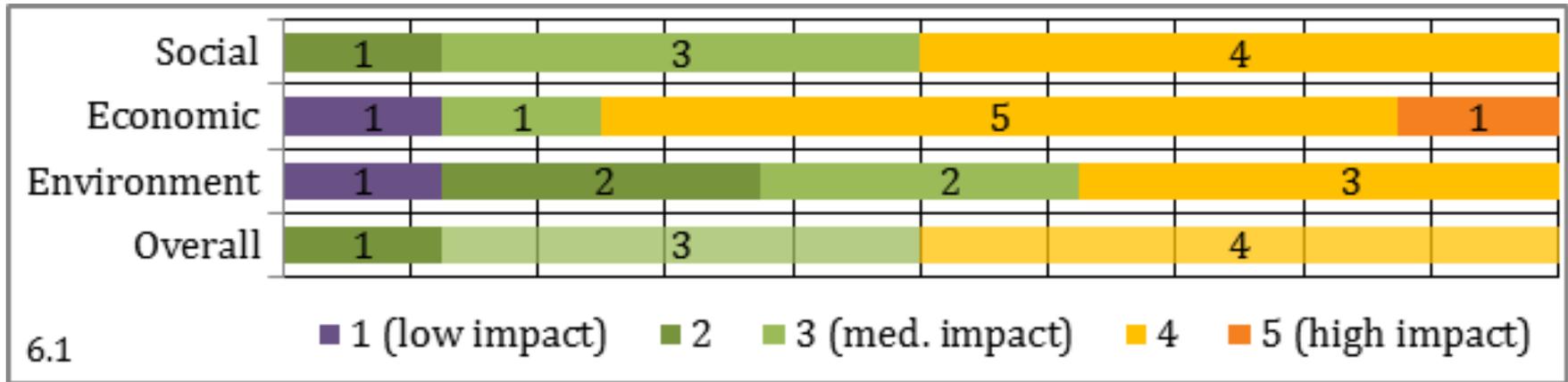
Infrastructure development & Financing



Status of: water resources included in national infrastructure investment plans (4.1a); financing for water resources included in national investment plans (4.2a) in the 8 SWIM PCs

- Lebanon: reported that these aspects have been developed but are not yet fully implemented
- Tunisia: reported advanced implementation in both cases
- Jordan: reported advanced implementation in both cases

Impacts from improved water resources management



Impact of improved water resources management towards meeting social, economic, environmental development objectives in the past 20 years, as well as the overall impact on development in the same period

- Economic objectives relate to economic growth, wealth, management of monetary assets and economic sector development
- Social objectives relate to human development, gender considerations, poverty alleviation, health, education and job creation
- Environmental objectives relate to conservation and sustainable use of natural resources, such as water, pollution control, nature, agricultural land, forest and fisheries

مع خالص شكري
وامتناني

Thank you
for your attention

Merci pour
votre attention



For additional information please contact:

Sustainable Water Integrated Management - Support Mechanism: info@swim-sm.eu

Website: www.swim-sm.eu