

SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

Objectives, expected results and processes

New tendencies in the Management of Coastal Areas

Contribution to the elaboration of an integrated management for the Coastal Zone of the Rabat-Sale-Kenitra Region

Presented by:

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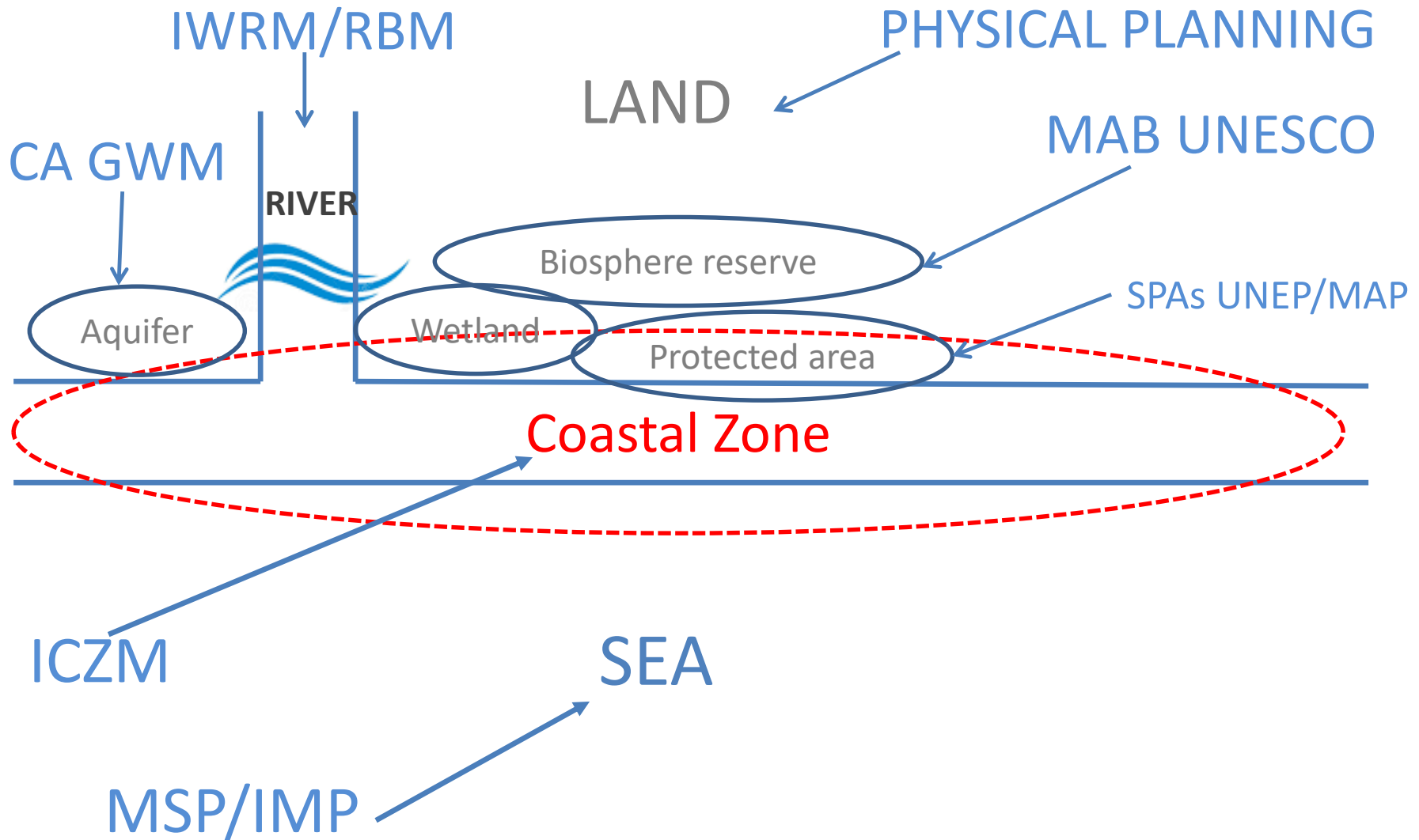
Objective of the workshop

The overall objective of the workshop and this presentation is the facilitation of the elaboration of an Integrated Management Plan of the coastal zone of the **Rabat-Sale-Kenitra** region.

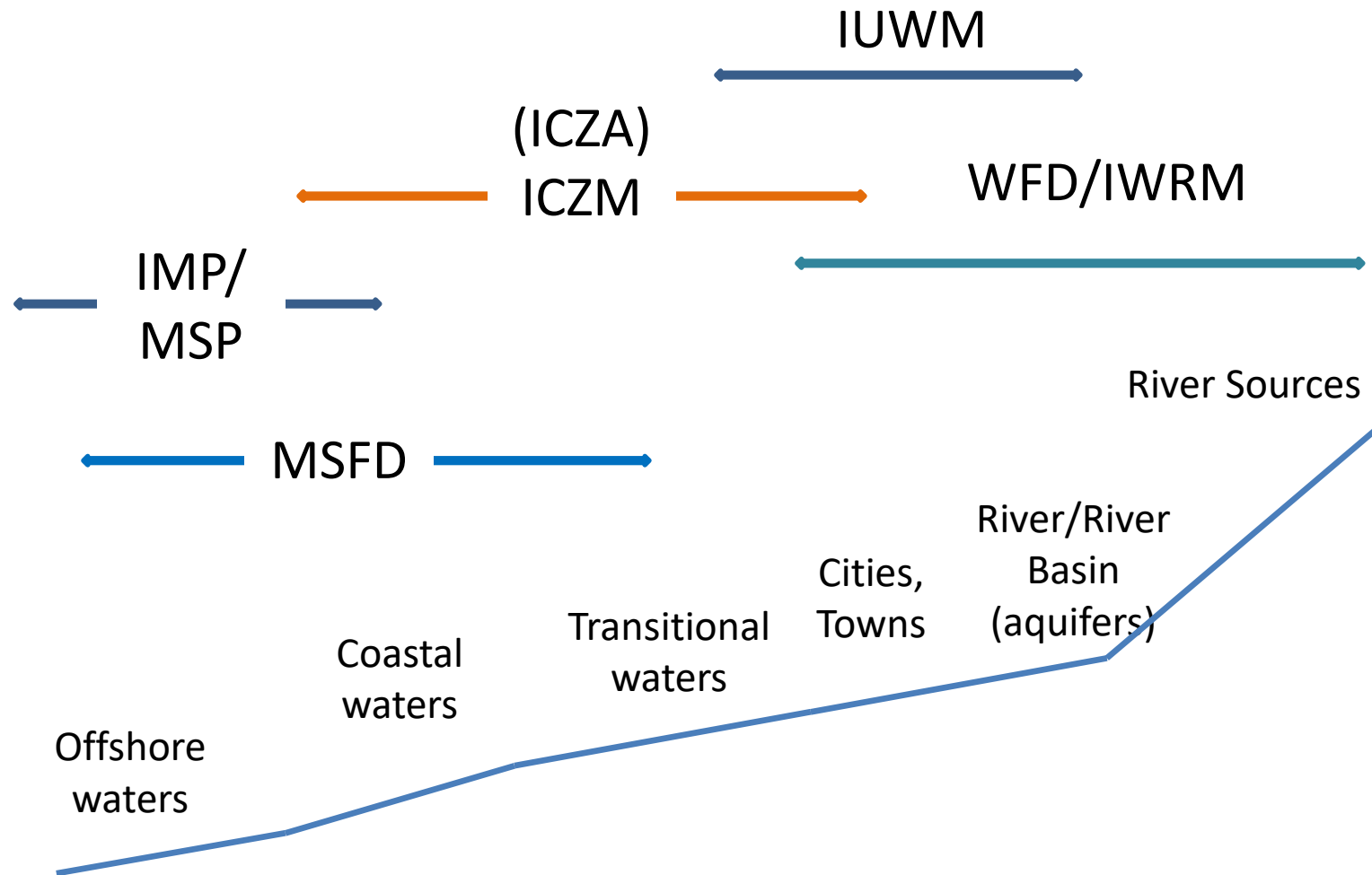
In this presentation we will examine the principles, objectives and specific steps followed for the preparation of such an Management Plan.

We will put the emphasis in approaching a common Vision and in identifying some key elements that should be included in the Management Plan.

Various types of Management related to the Coastal Zone



Currently various management tools are applied in the way from the Source to Sea (S2S)



“Integrating the Integrated”: ICZM

The objectives of integrated coastal zone management are to:

- (a) facilitate**, through the rational planning of activities, **the sustainable development of coastal zones** by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development;
- (b) preserve coastal zones** for the benefit of current and future generations;
- (c) ensure the sustainable use of natural resources**, particularly with regard to **water use**;
- (d) ensure preservation of the integrity of coastal ecosystems**, landscapes and geomorphology;
- (e) prevent and/or reduce the effects of natural hazards** and in particular of climate change, which can be induced by natural or human activities;
- (f) achieve coherence between public and private initiatives** and between all decisions by the public authorities, at the national, regional and local levels, which affect the use of the coastal zone.

“Integrating the Integrated”:IWRM

IWRM, is a process which promotes the coordinated development and management of **water, land and related resources** in order to maximize economic and social welfare in an equitable manner **without compromising the sustainability of vital ecosystems** and the environment (GWP,TEC, 2000).

“Integrating the Integrated”: IWRM



“Integrating the Integrated”: Evolution of IWRM, IRBM

IRBM, emerged as a "process of coordinating conservation, management and development of water, land and related resources across sectors within a given **river basin**, in order to maximise the economic and social benefits derived from water resources in an equitable manner while preserving and, where necessary, restoring freshwater ecosystems." (GWP, TEC Paper No.4 on IWRM, 2000)/Compatibility with WFD.

“Integrating the Integrated”: Evolution of IWRM, WFD

In the EU countries and beyond, the EU WFD is used as an “interpretation” (to a certain extent) of the IWRM.



“Integrating the Integrated”: CAGM

Coastal Aquifer and Groundwater Management and Planning (CAGM) was proposed by UNESCO IHP and aims to protect, enhance and to the extent possible, restore the status of all bodies of coastal groundwater. It is an integral part of both ICZM and IWRM.

Other important plannings related to ICZM

Physical Planning is strongly related to land-use planning, urban design, transport planning, landscape planning, building plans, etc.

Spatial Planning refers to the methods used by the public sector to influence the distribution of people and activities in spaces at various scales as well as the location of the various infrastructures, recreation and nature areas. It operates from the large-scale national or regional down to the local.

Marine/Maritime Spatial Planning (MSP) is commonly understood as a public process for analysing and planning the spatial and temporal distribution of human activities in sea areas to achieve economic, environmental and social objectives.

“Integrating the Integrated”: EBA

The 12 Principles of the **Ecosystem Based Approach (EBA)**

- 1: Recognise objectives as society’s choice.
- 2: Aim for decentralised management (i.e. subsidiarity).
- 3: Consider the extended impacts, or externalities.
- 4: Understand the economic context and aim to reduce market distortion.
- 5: Prioritise ecosystem services
- 6: Recognise and respect ecosystem limits.
- 7: Operate at an appropriate scale, spatially and temporally.
- 8: Manage for the long-term, considering lagged effects.
- 9: Accept change as inherent and inevitable.
- 10: Balance use and preservation.
- 11: Bring all knowledge to bear.
- 12: Involve all relevant stakeholders.

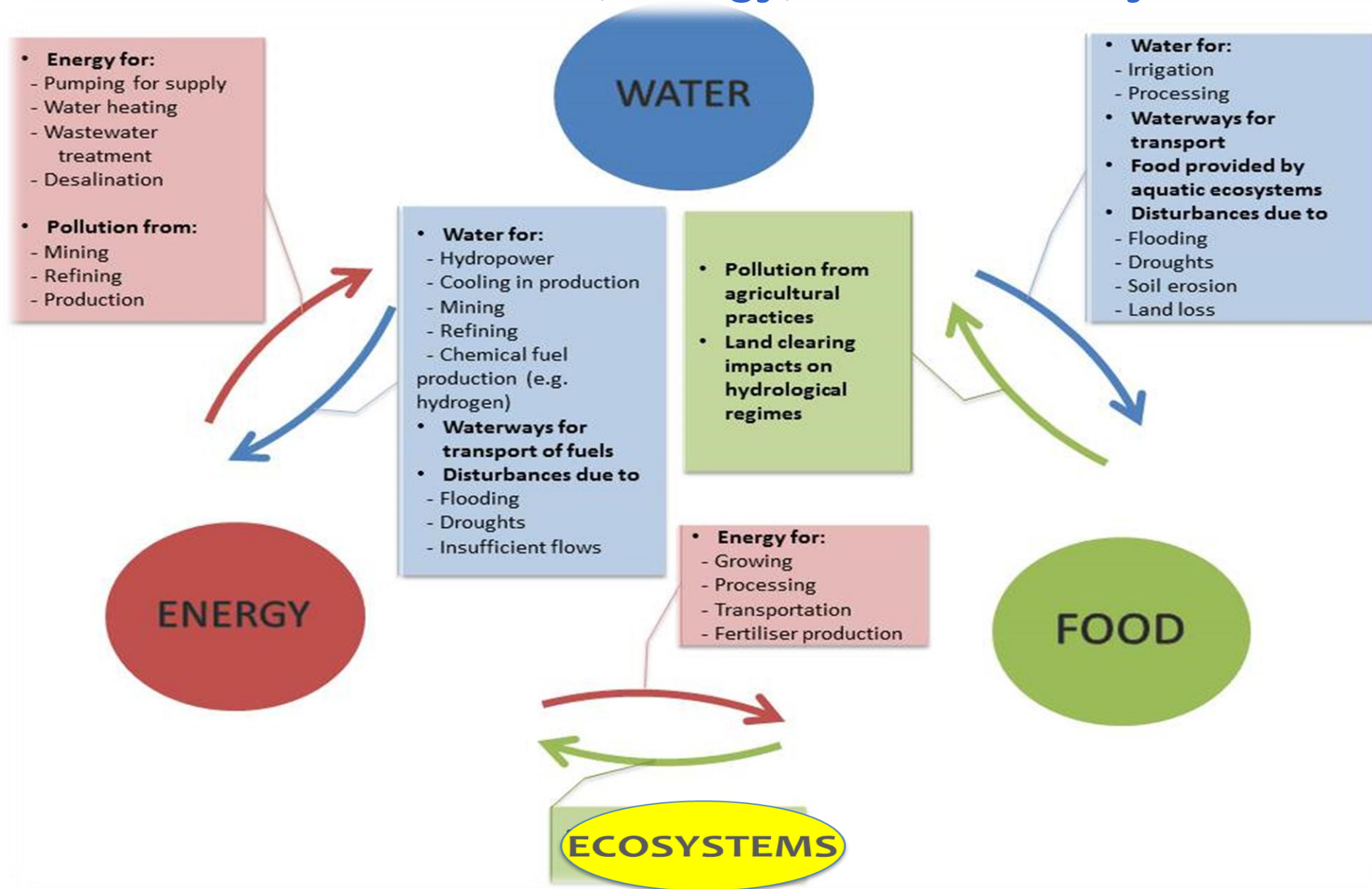
“Integrating the Integrated”: Adaptation to CC

Adaptation means anticipating the adverse effects of climate change and taking appropriate action to prevent or minimize the damage they can cause, or even taking advantage of opportunities that may arise. It has been shown that well planning is needed in adopting appropriate measures including: effective use of scarce water resources; building flood defenses; developing drought-tolerant crops; choosing forestry practices less vulnerable to storms and fires; setting aside land corridors to help species migrate etc.

Most of the aforementioned measures are complementary to those introduced through IWRM, ICZM and EBA.

“Integrating the Integrated”: The Nexus

The ‘nexus’ of water, energy, food and ecosystems



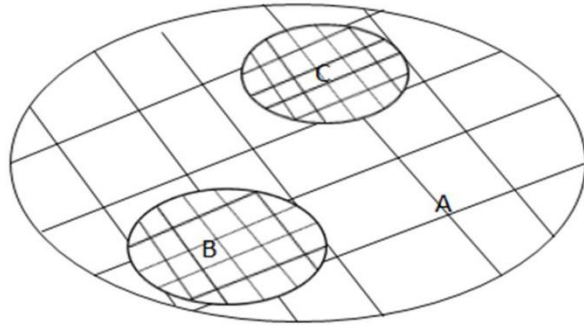
SDGs

In 2015 all UN Member States unanimously decided to achieve 17 Sustainable Development Goals and 169 targets by 2030.

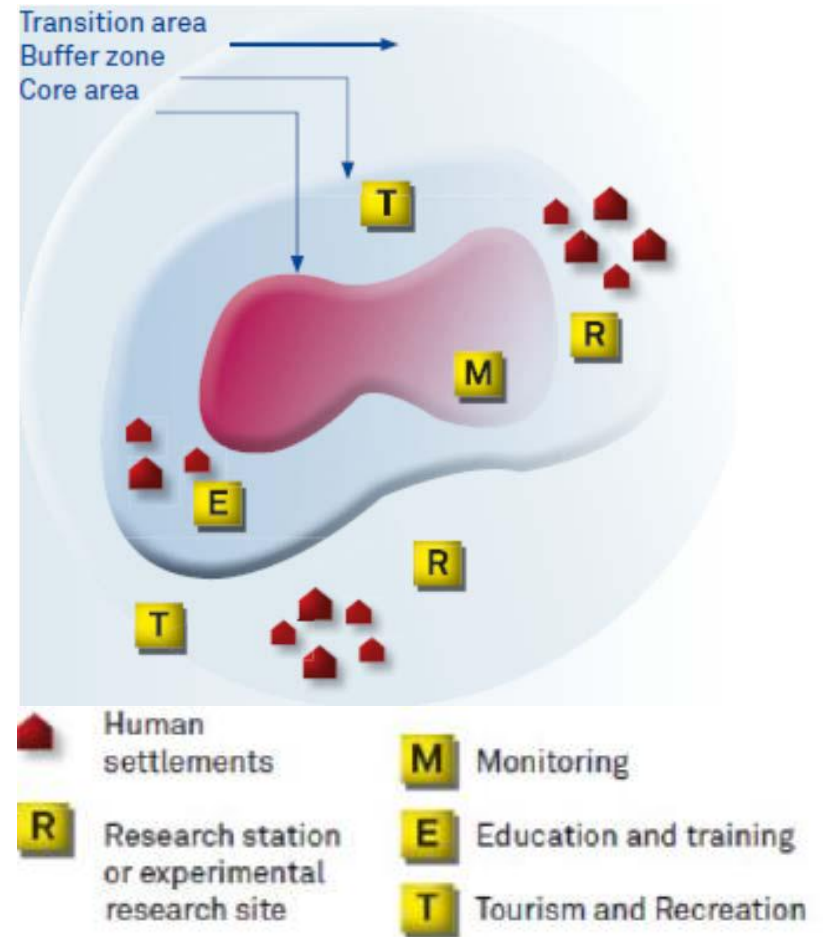


Many of the specific activities to achieve the SDGs could (and should) be included within the Integrated Plan.

The “Man and the Biosphere” (MAB/UNESCO) approach



The concept of
differentiated intensity
of management: in
 $C \gg B > A$



Integration and various aspects of management

Management includes the sum, or better, the “cluster” of all kinds of measures, approaches and tools, employed in order to handle them in the most appropriate way. Most often management is defined through five functions: to plan, to organise, to equip, to direct and to control.

“Integrated management” allows for more complete understanding and accurate representation of the whole, respecting, however, the differentiations within it. It is still a “coordinated” approach but is not a “homogenous” one.

On the other hand, the “holistic” approach considers the “holon” (the whole), as an entity recognizing that the whole includes and represents more functions and characteristics than the sum of its parts/components.

Obviously, the two approaches are complementary.

The Sustainable Development Objective of Integrated Plans

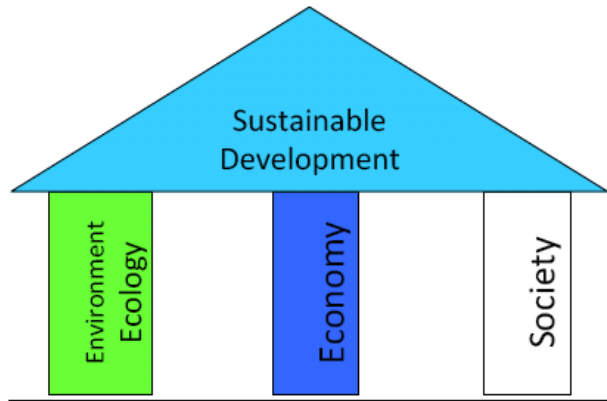


Figure 7: The Sustainable Development and its pillars according to Rio (1992)

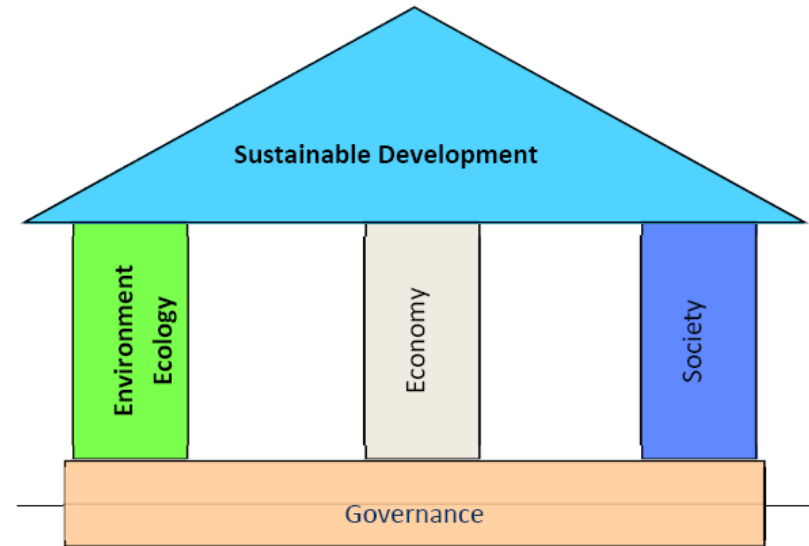


Figure 8: The proposed place of Governance in the Sustainable Development Structure

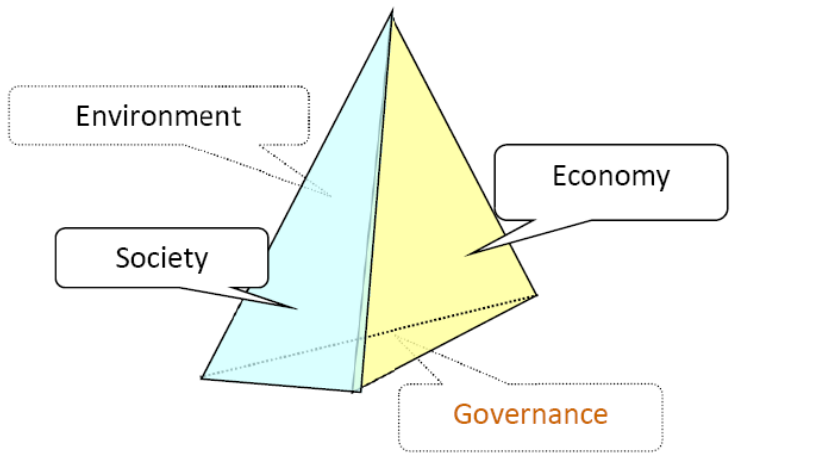


Figure 9: The tetrahedron of Sustainable Development: the new structure for Sustainable Development

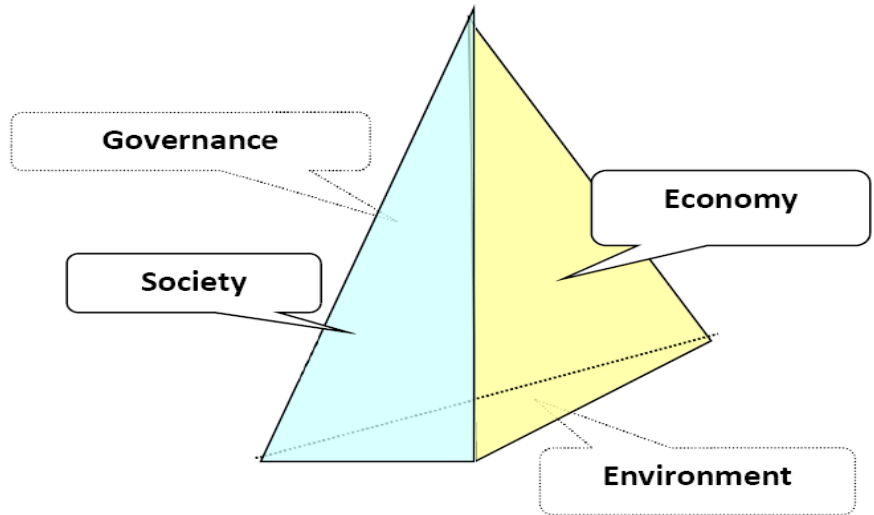


Figure 10: The "anthroposphere" based on the natural environment

The Role of Governance

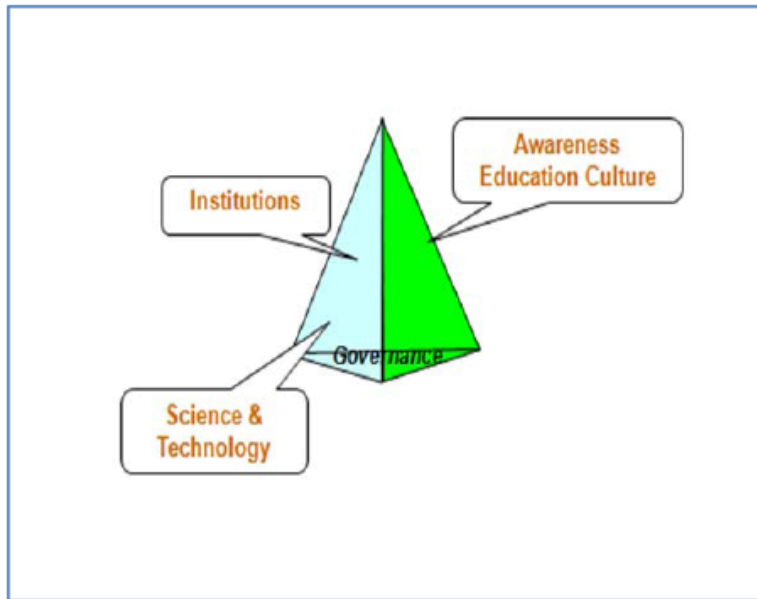


Figure 11: The analysis of Governance, Tools to Obtain Sustainable Development

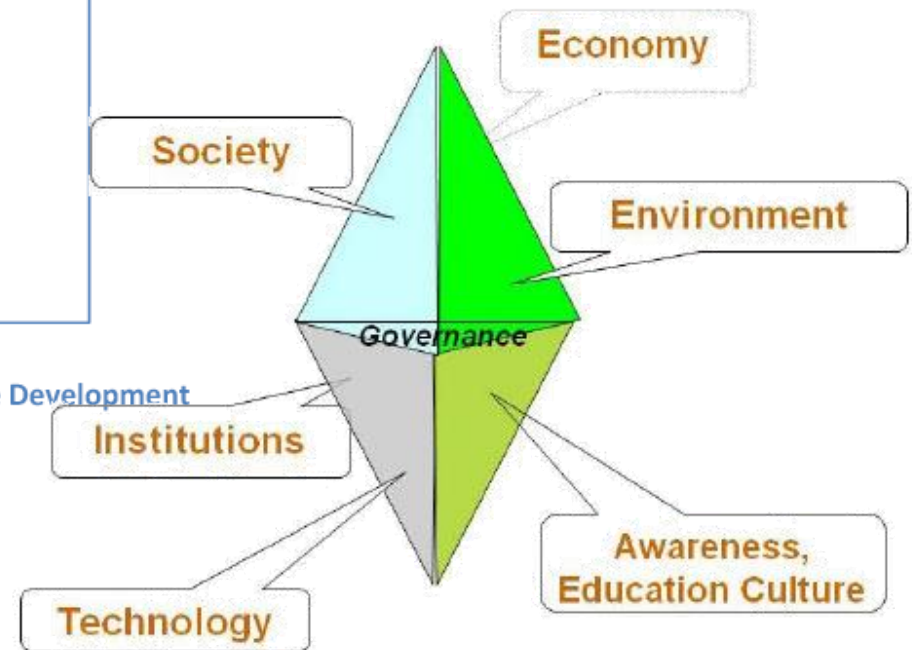
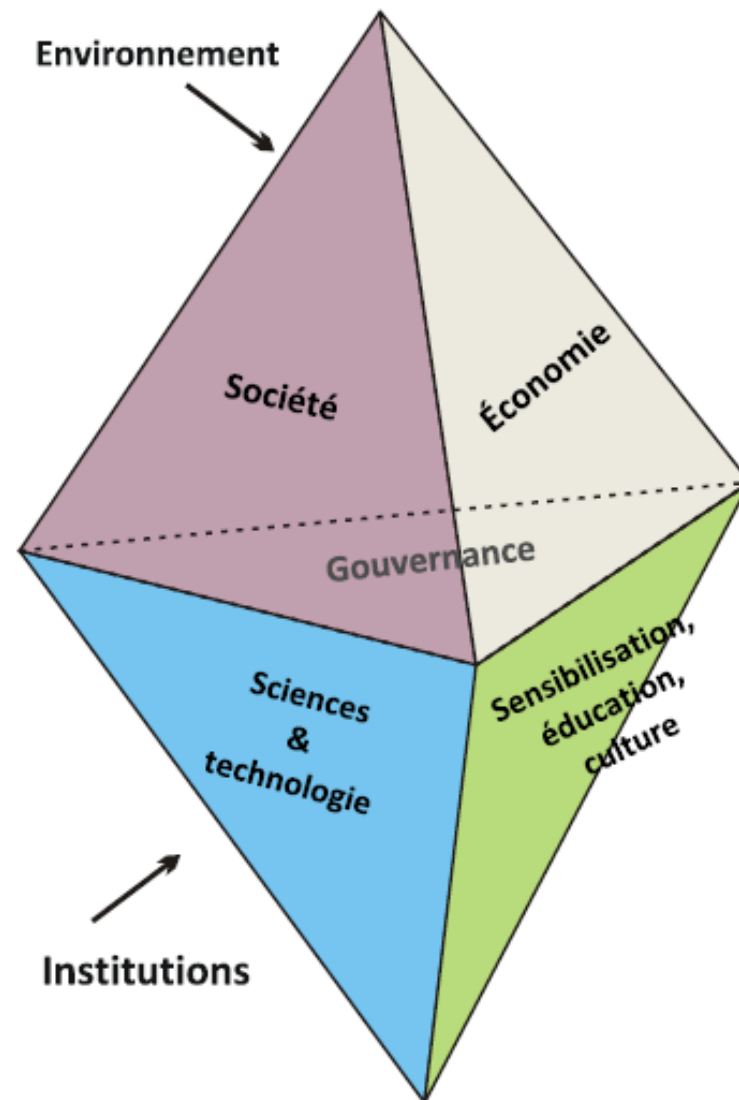


Figure 12: Sustainable development and tools to achieve it



An Integrative Methodological Framework (IMF)

for coastal, river basin and aquifer management
Towards converging management approaches
for Mediterranean coastal zones



Un Cadre méthodologique intégratif (CMI)

pour la gestion des zones côtières, des bassins
hydrographiques et des aquifères
Vers des approches de gestion convergentes pour
les zones côtières méditerranéennes



Specific Objectives of the IMF

The specific objectives of the IMF are to:

1. Provide the rationale and the technical tools for a collective and coherent response to the multiple policy goals and directives that relate to the utilization, development and protection of coastal areas at national and local level and their natural and ecological resources.
2. Ensure that policy instrument mixes are consistent and mutually supportive.
3. Produce policy outcomes appropriate to specific coastal zone problem context.
4. Secure best knowledge base and support the interdisciplinary approach needed for the successful preparation of an integrated Plan.
5. Add value to individual approaches in order to obtain maximum synergy responding to the principle that *'the whole is greater than the sum of the parts'*.

Specific Objectives of the IMF

6. Satisfy different legal requirements through a shared, efficient and effective use of often limited human and logistical resources available for such process, including reducing costs for planning and particularly for the setting and implementation of management options identified in the Plan.
7. Respond effectively to the more dynamic environment resulting from climate change and development impacts.
8. Achieve shared ownership by the involved sectors through better coordination and integration of them in the planning process.
9. Achieve sustainable coastal development in the Mediterranean estuaries and wetlands.
10. Simplify monitoring, evaluation and reporting.

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (1/7)

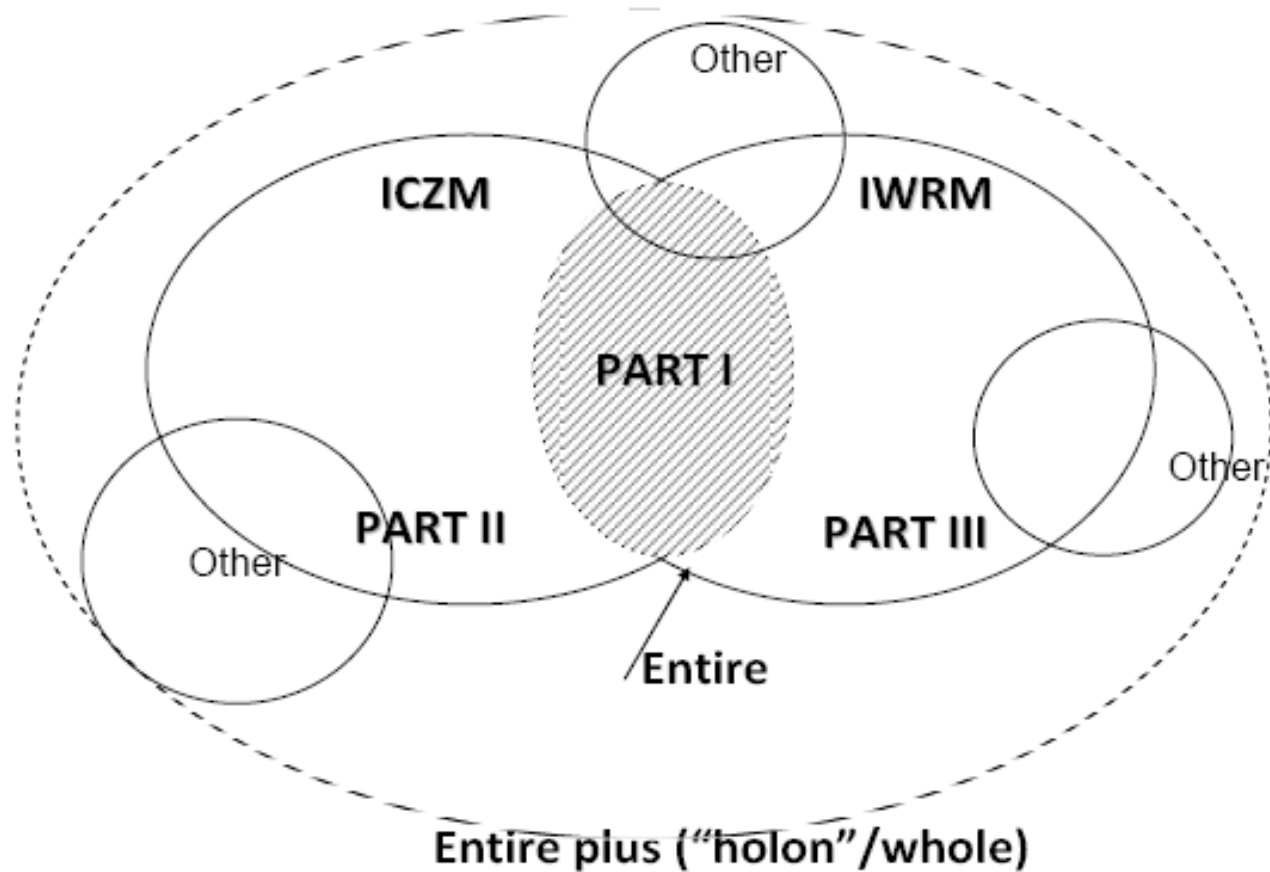


Figure 13: Visualisation of ICZM, IWRM and other management practices

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (2/7)

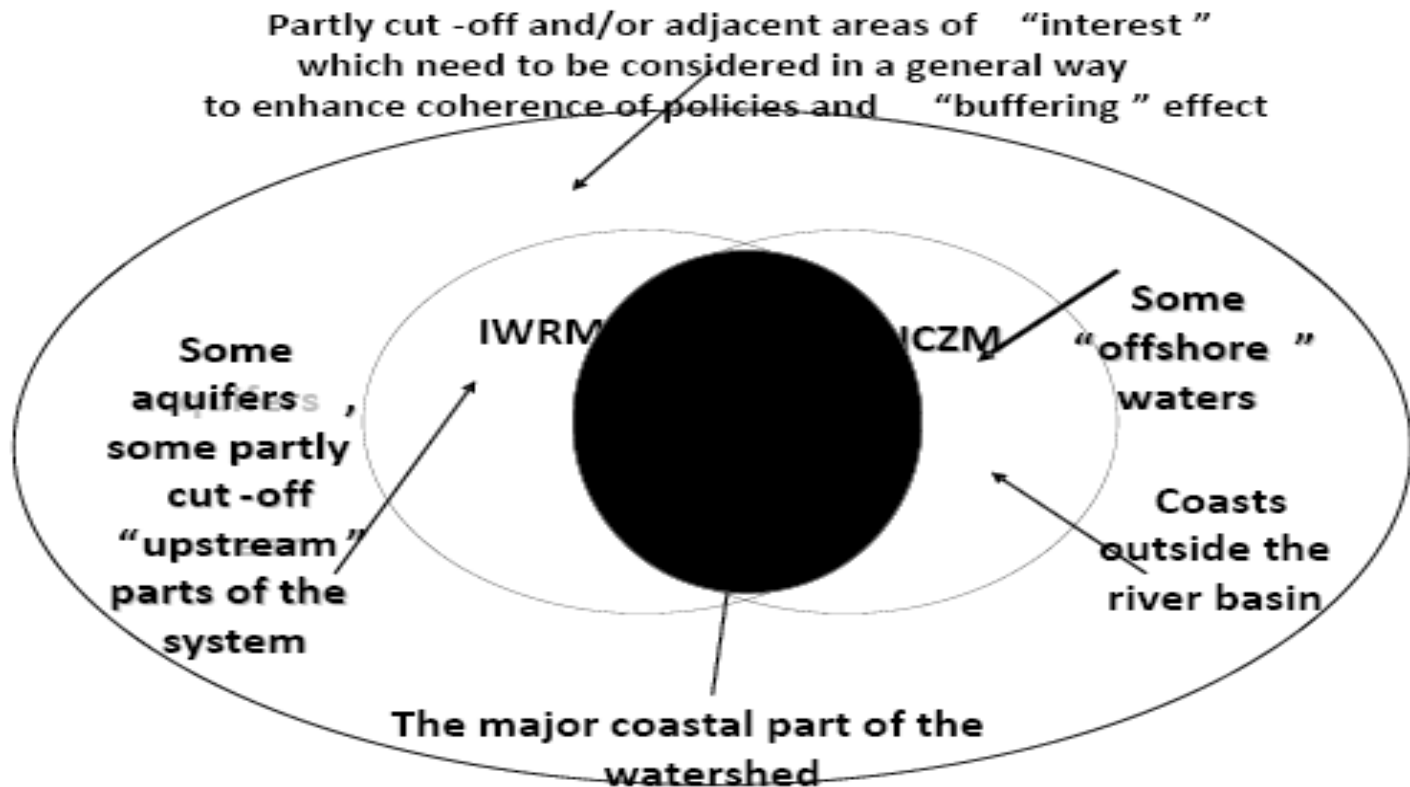


Figure 14: Integration and Geographical Coverage

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (3/7)

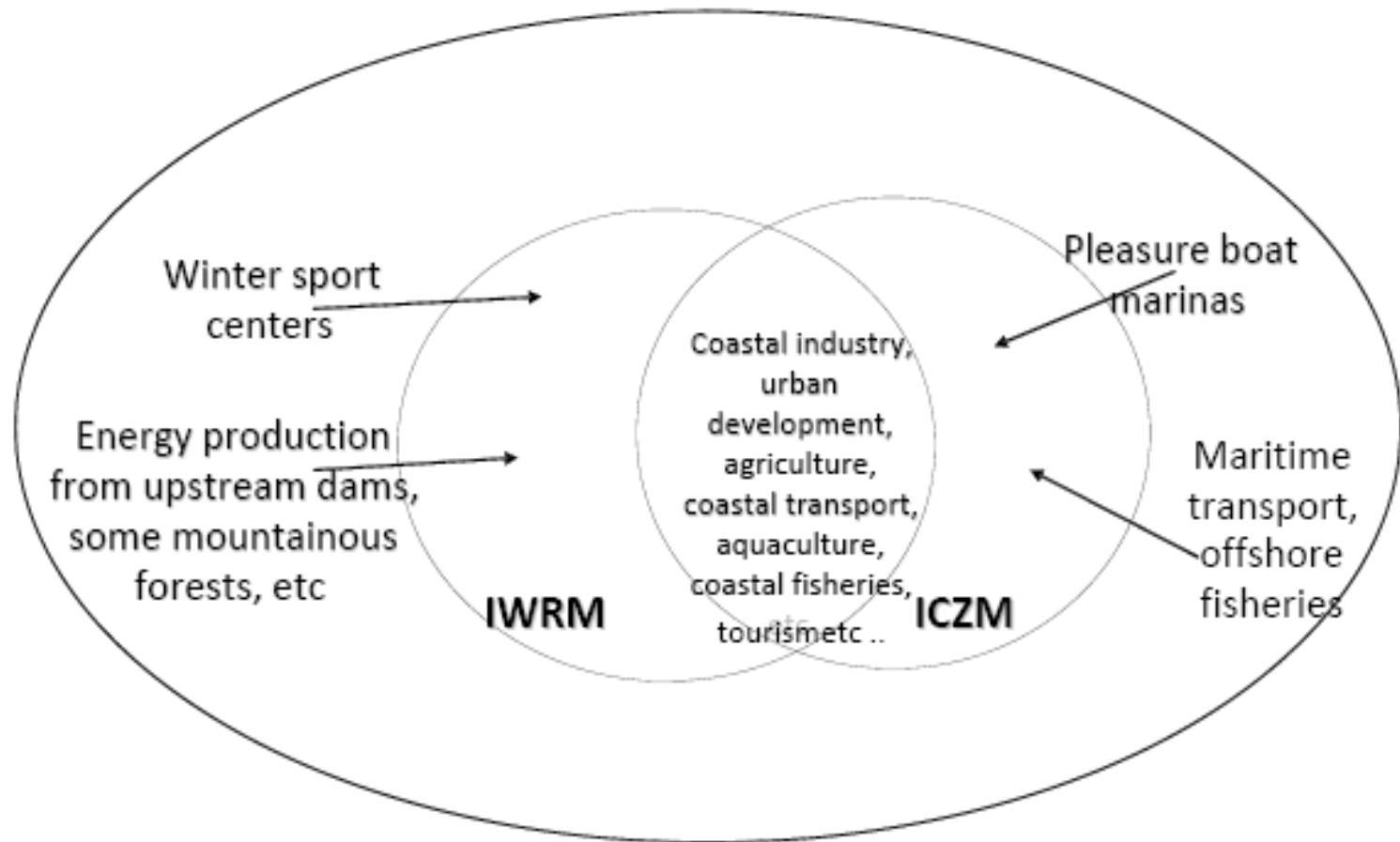


Figure 15: Integration across sectors

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (4/7)

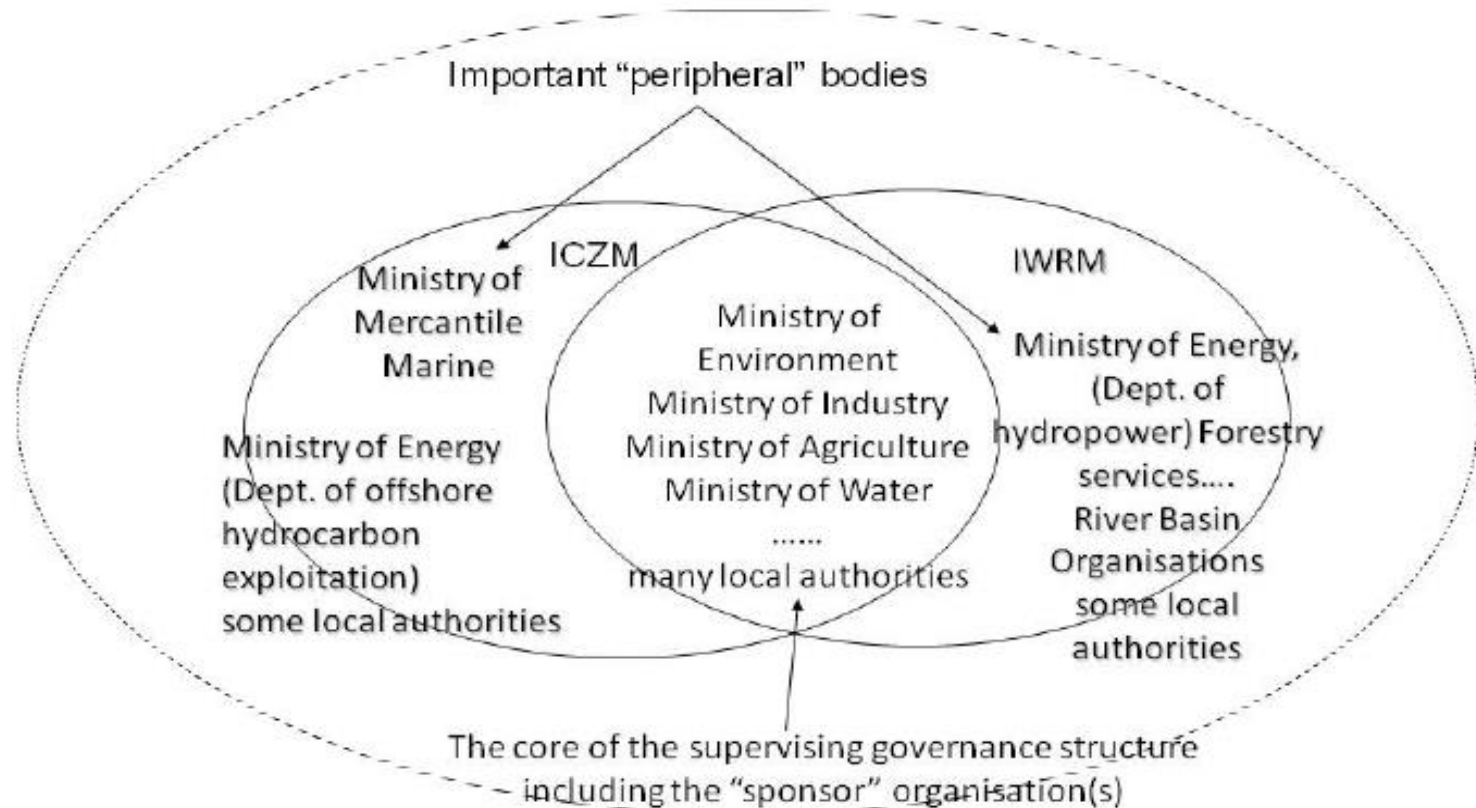


Figure 16: Coordination for Integration

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (5/7)

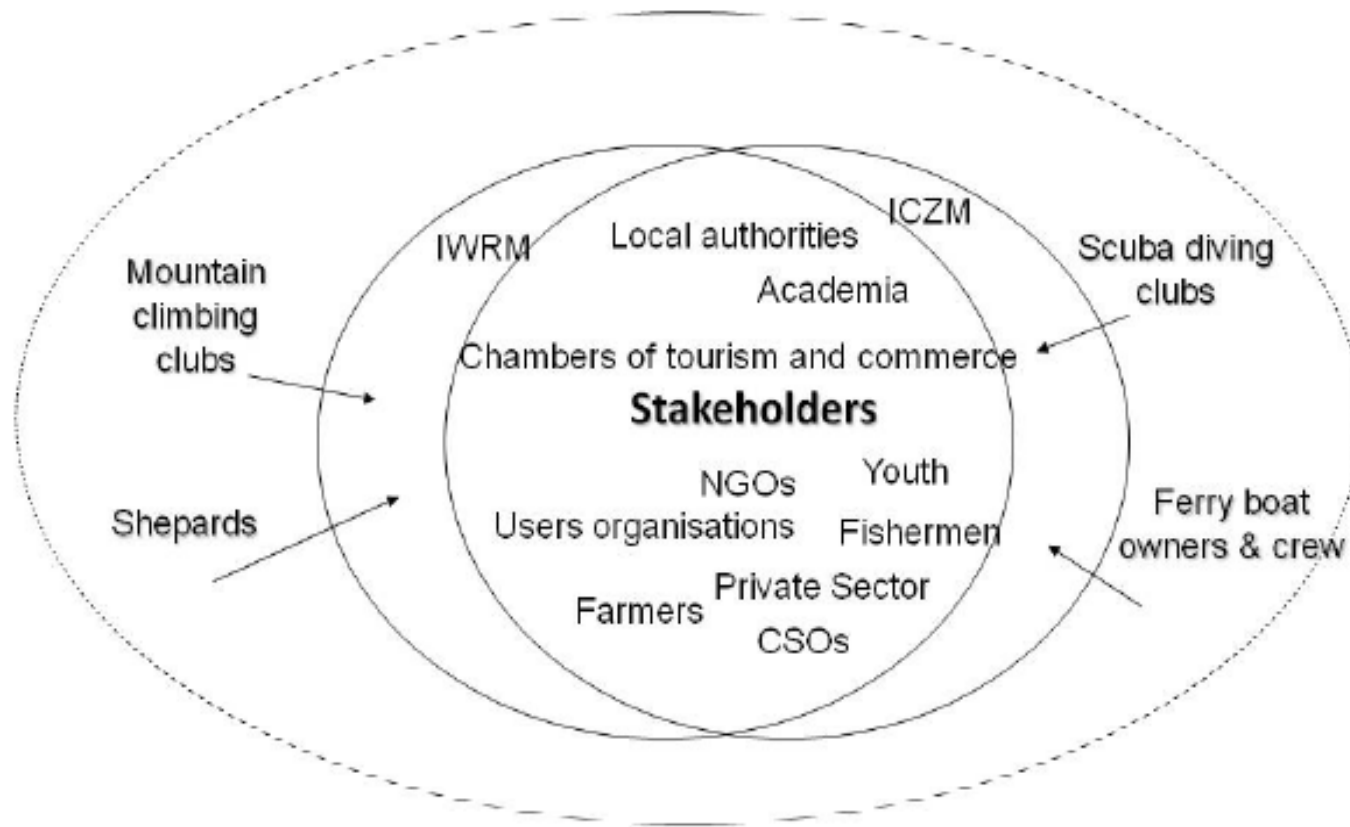


Figure 17: Stakeholders involved in Integration

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (6/7)

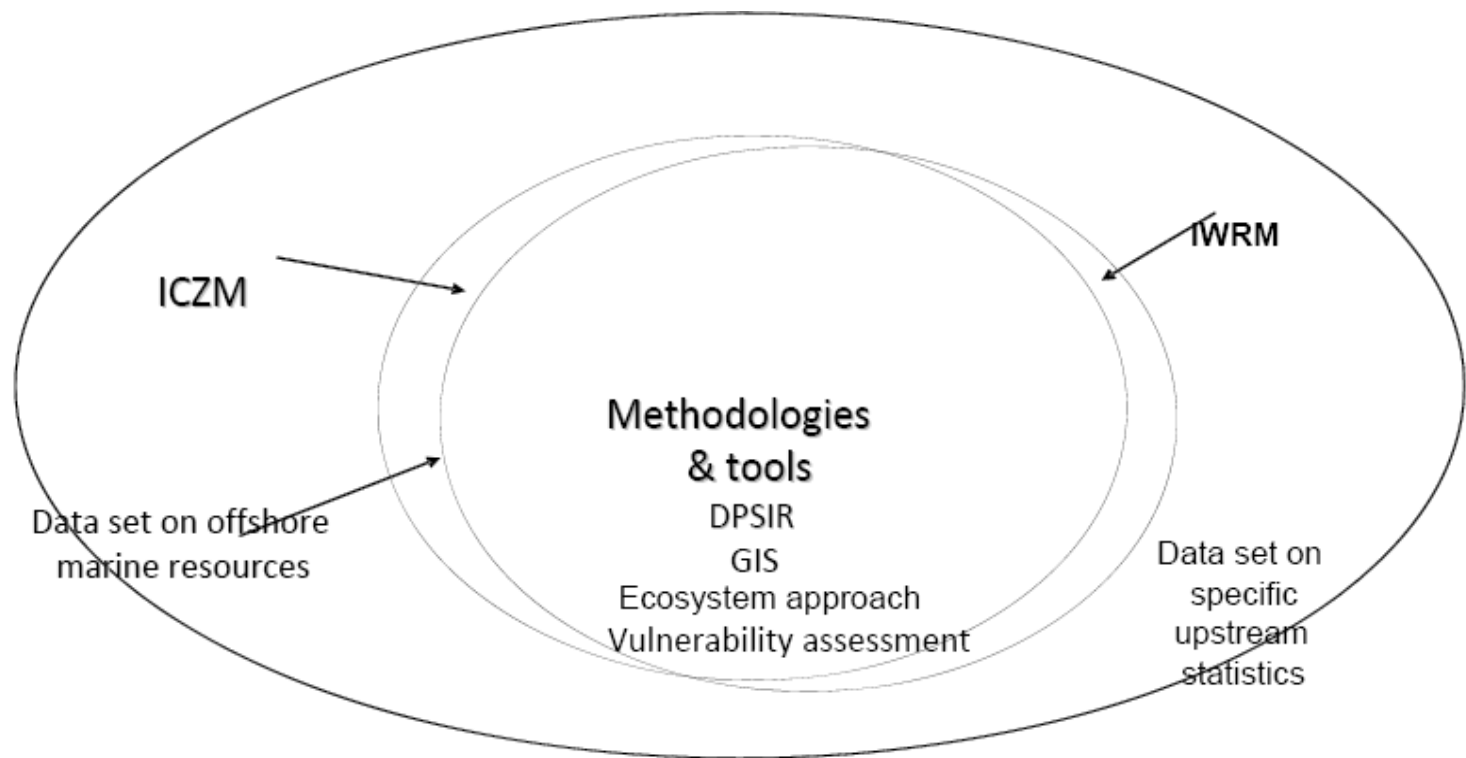
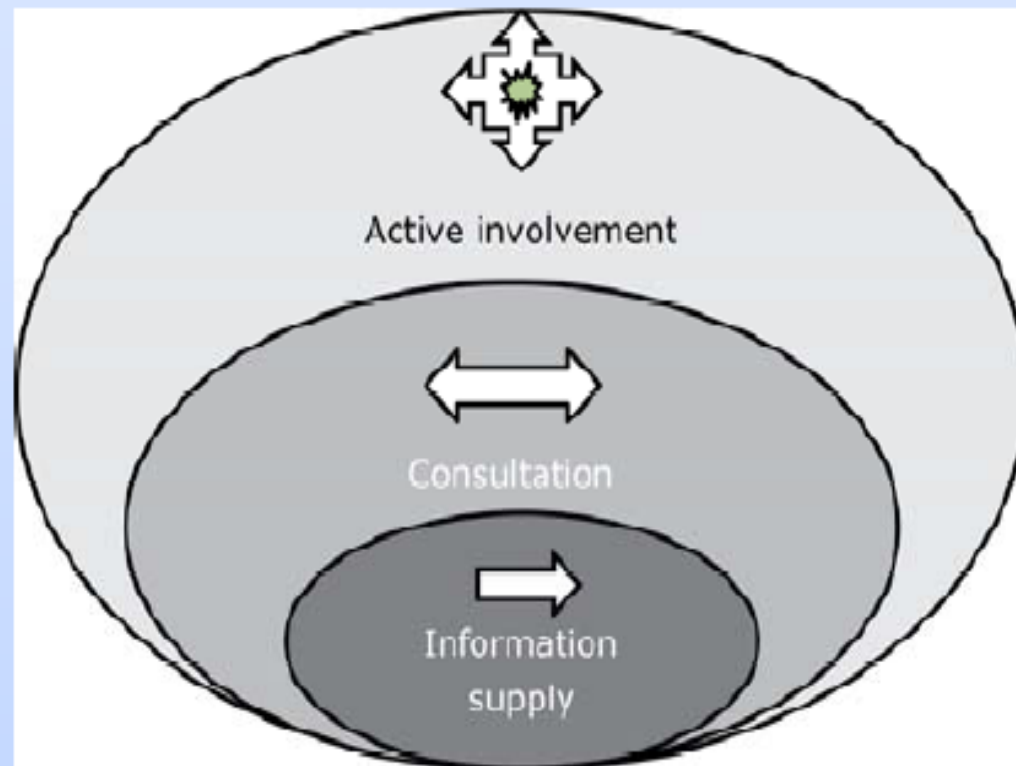


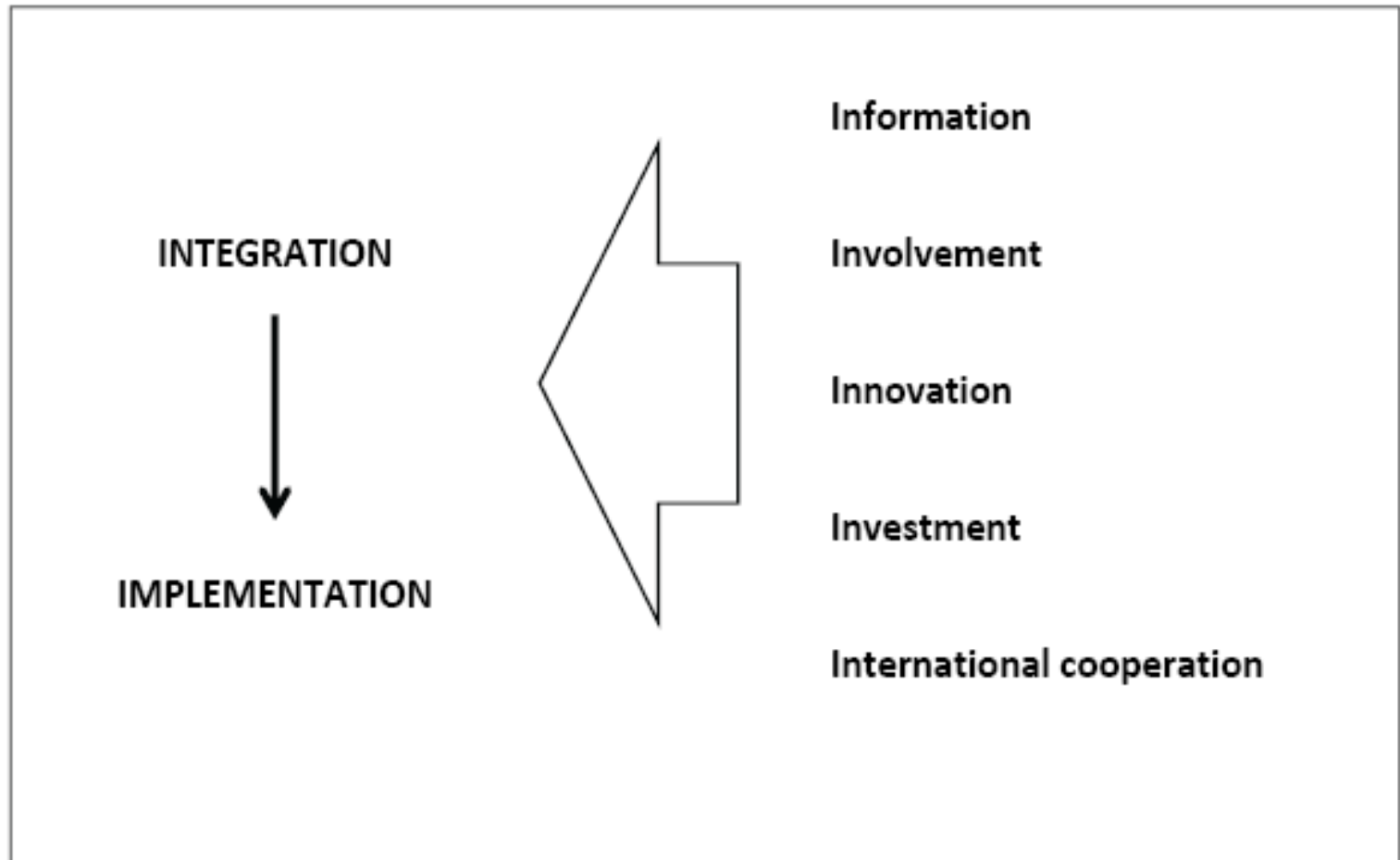
Figure 18: Methodologies employed for integrated planning and management

Various aspects of integration of IWRM with ICZM, EBA and other frameworks (7/7)

Figure 21: Three levels of public participation, after WFD Guidance document no 8 (CIS Working group, 2.9, 2003)

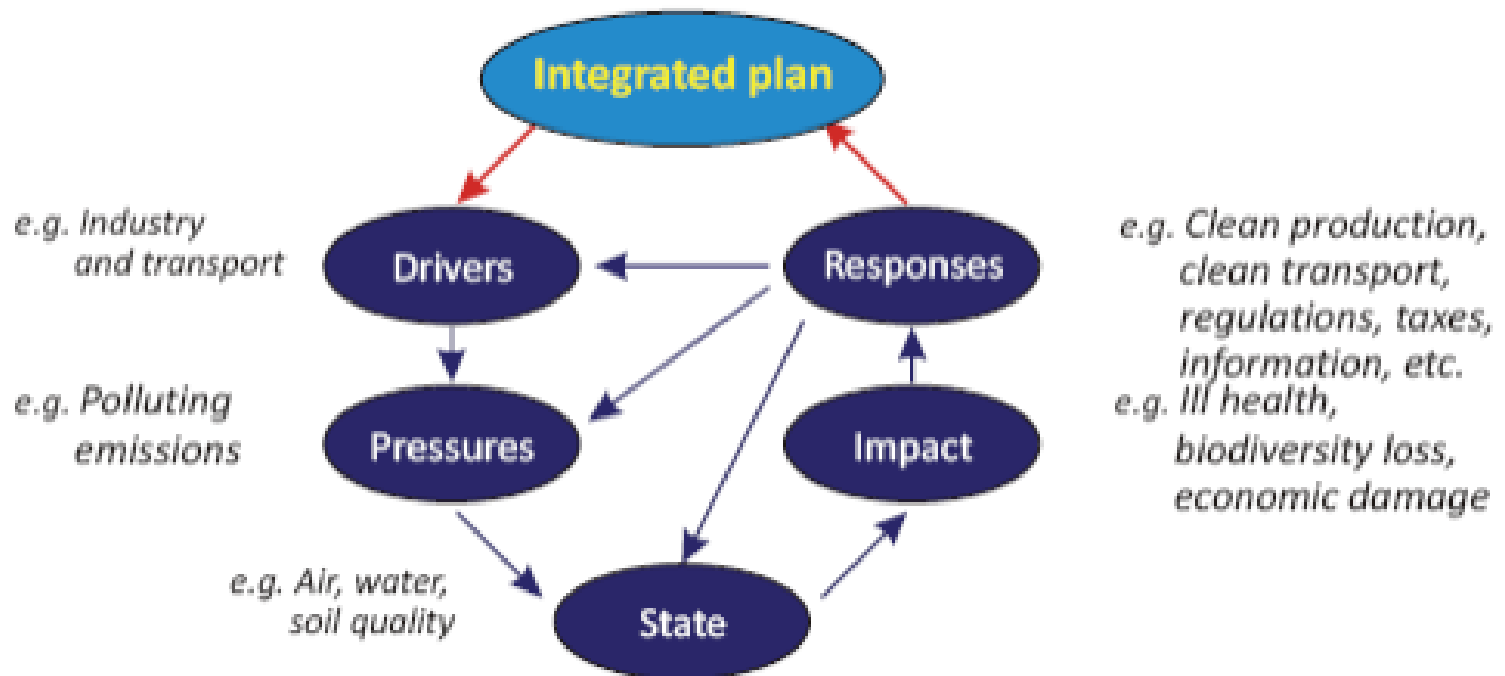


“Integrating the Integrated”: Common / The seven I’s



“Integrating the Integrated”: Common / DPSIR

Driving Forces-Pressures – State of the Environment- Impacts-Responses



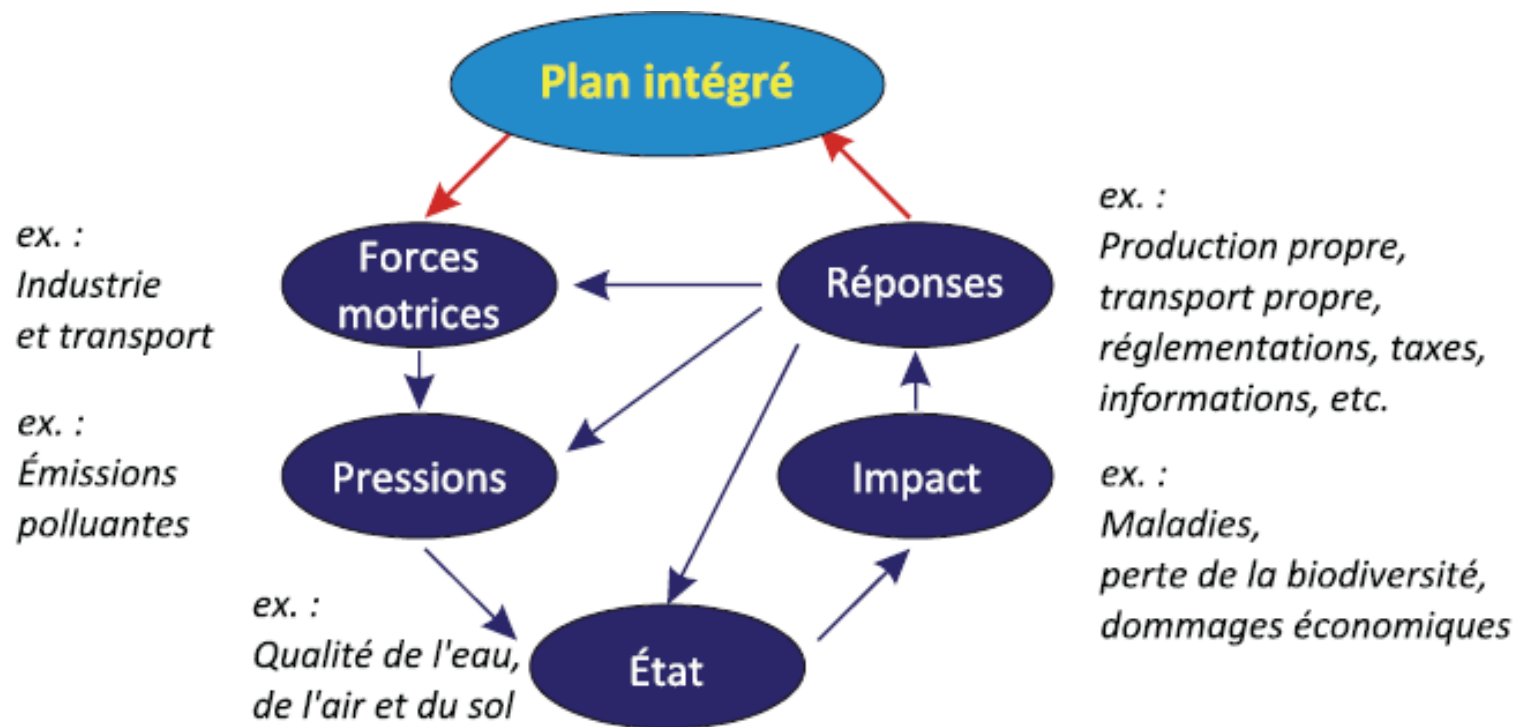
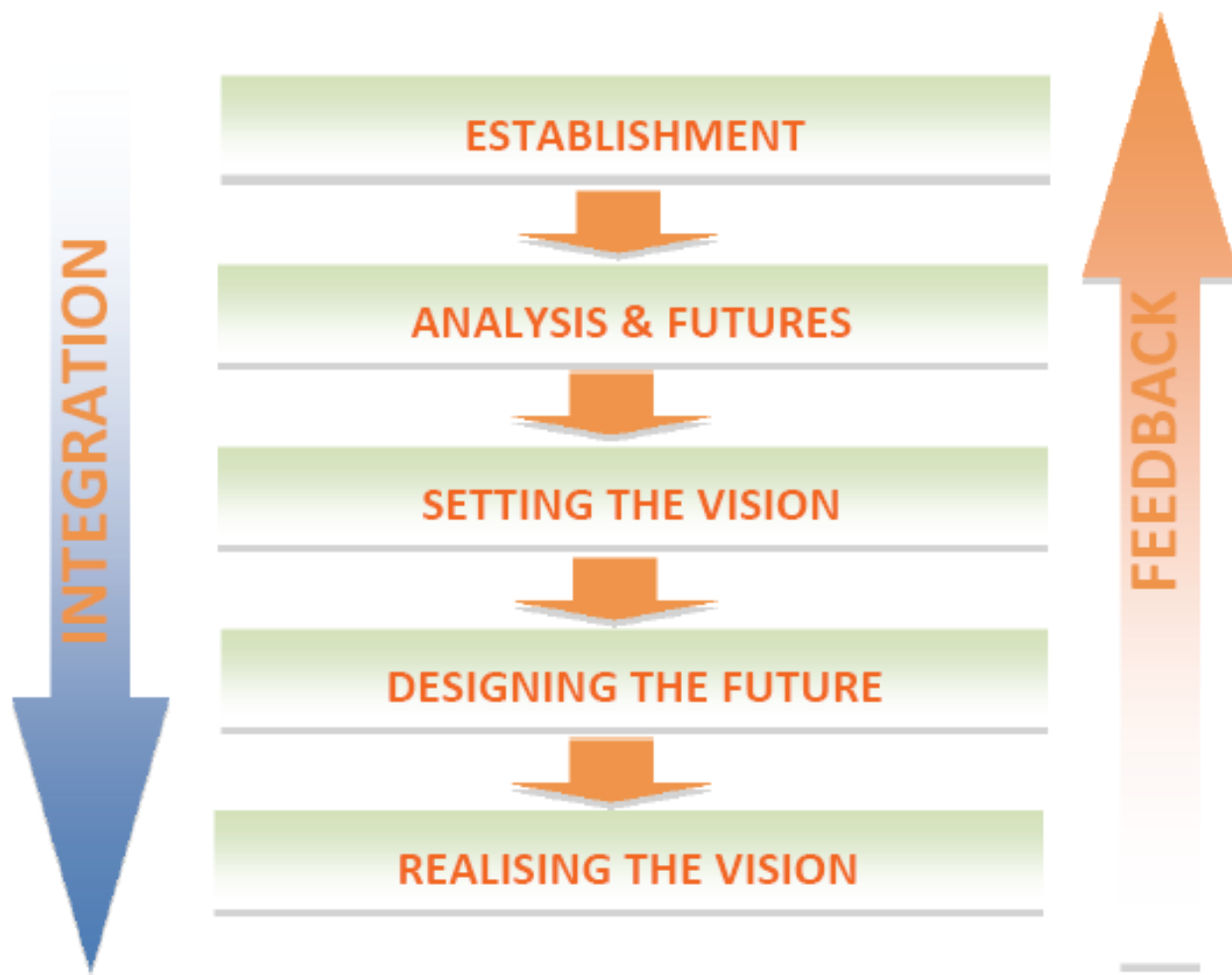
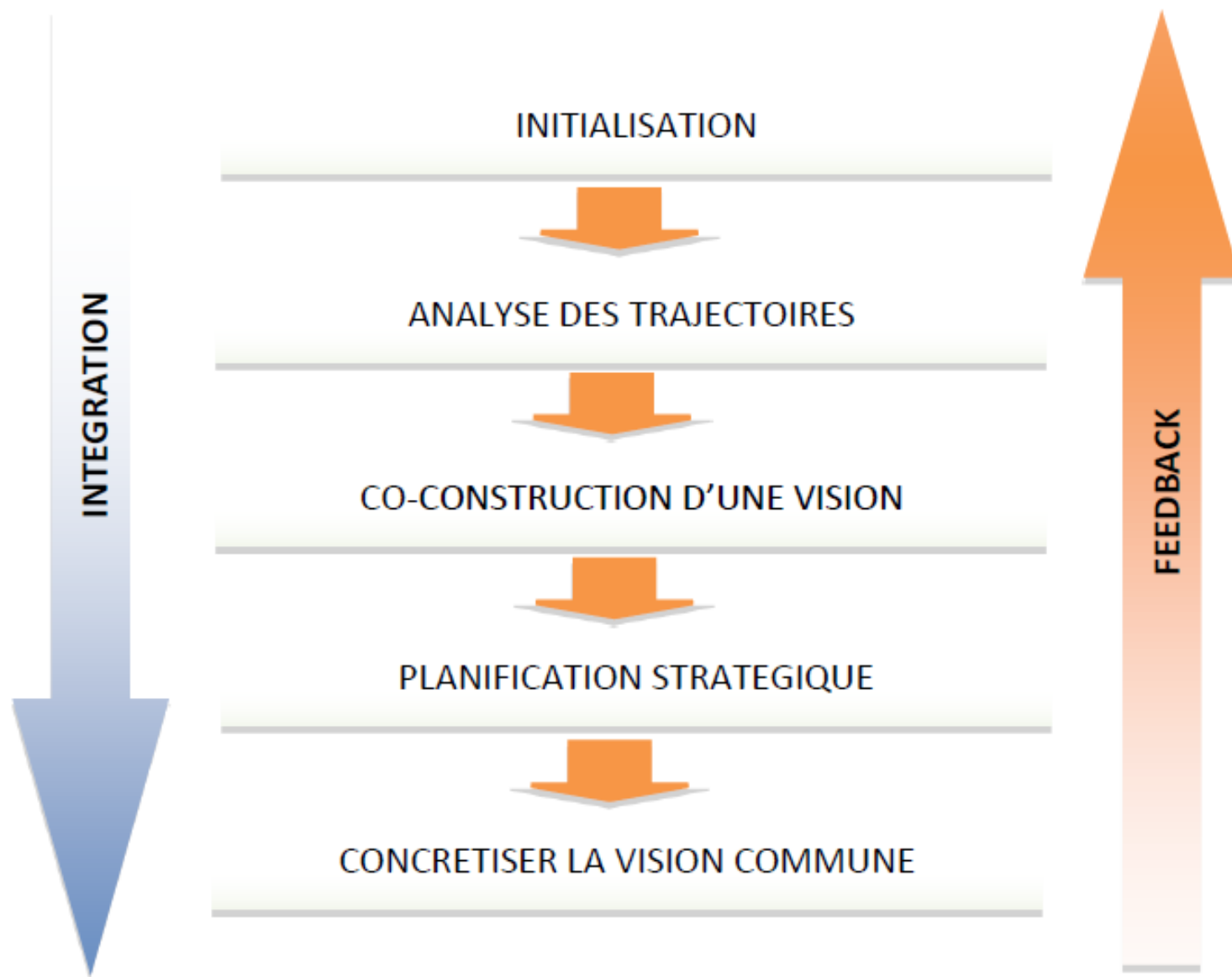


Figure 5.1. Le cadre FPEIR contribue à la préparation du plan intégré

Plan preparation overview/the 5 steps





“Integrating the Integrated”: Plan preparation overview/the 5 steps

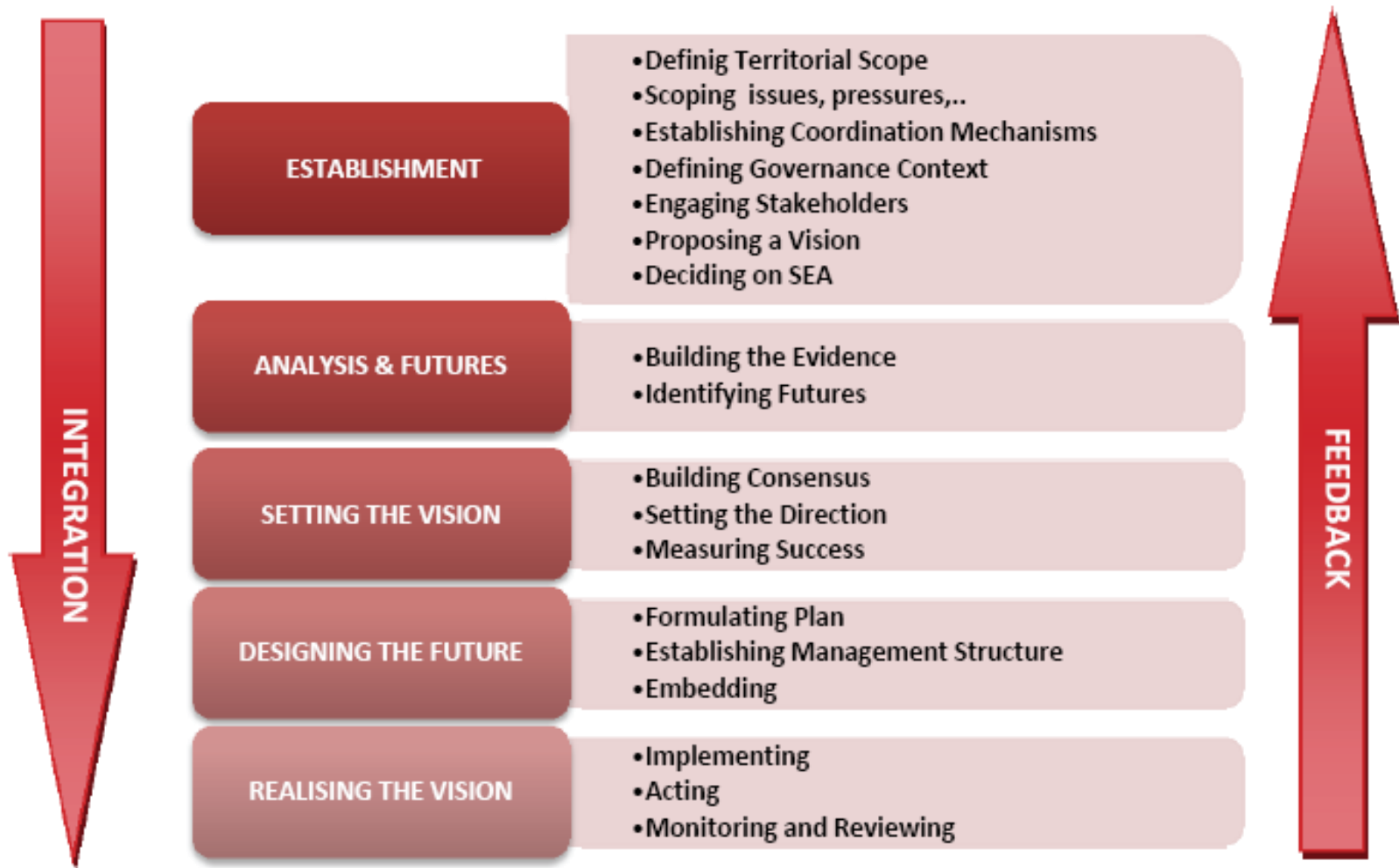
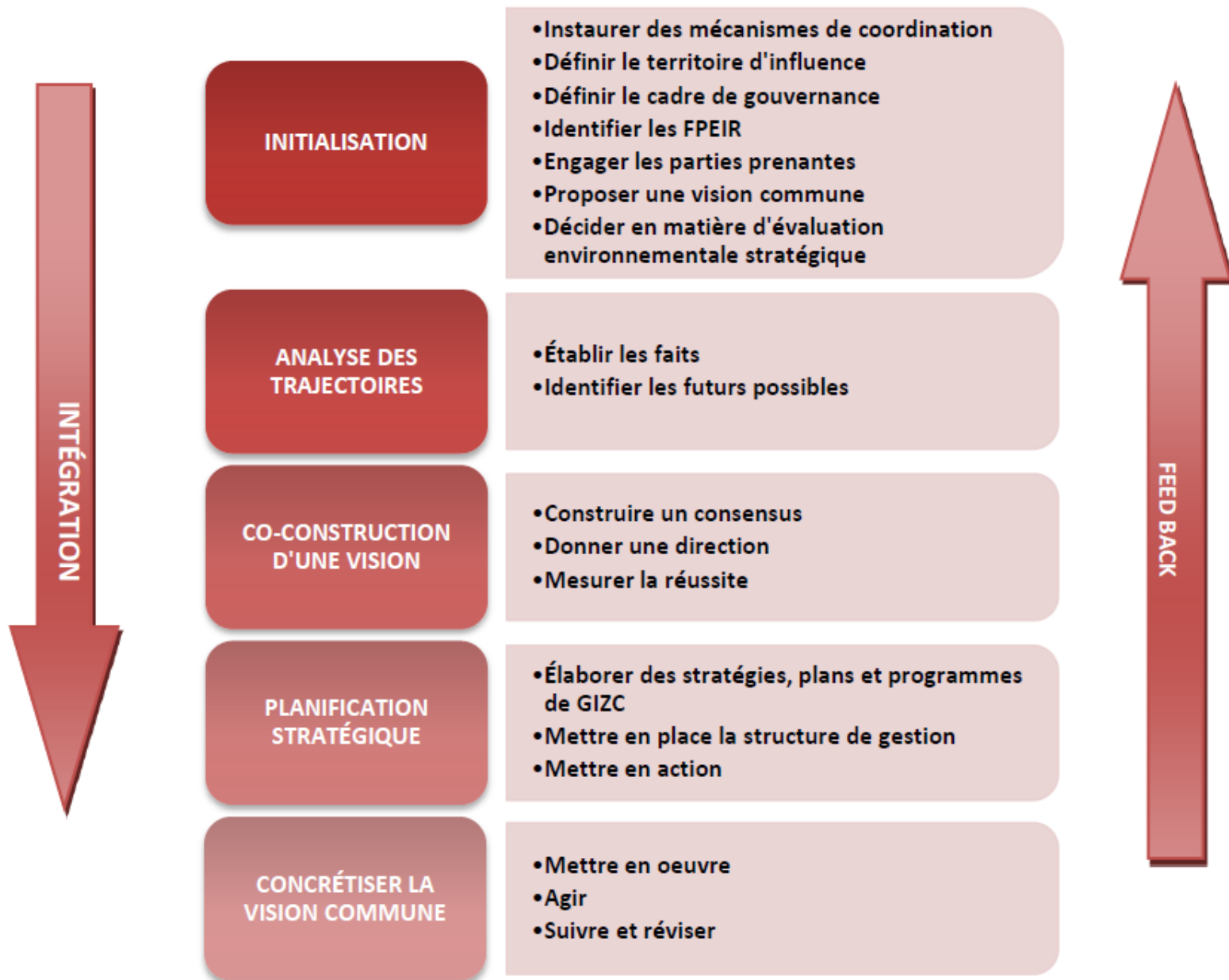


Figure 5.4. Plan preparation and implementation process: detail



1. Establishment

1. Defining the initial territorial scope by identifying the boundaries of the specific plan area (including its coastal front) and the ecosystems involved
2. Scoping of the major river basin issues
3. Defining the governance context
4. Engaging stakeholders and preparing communication strategy
5. Proposing a potential vision for the plan area
6. Deciding on Strategic Environmental Assessment (SEA).

2. Analysis and Futures

1. Building the evidence: closer analysis of key issues where needed and undertaking the DPSIR policy cycle, in more depth and detail.
2. Identifying futures: building alternative scenarios and, if conditions allow, testing (including pilot actions and identifying potential future funding sources).

3. Setting the Vision

1. Building consensus – reaching agreement among stakeholders and the wider community on the key problems, issues and priorities for the plan area
2. Preparing the vision statement (setting the direction) – observing the priorities and the consistency of the objectives of the plan
3. Measuring success – selecting the necessary set of (at least preliminary “core”) indicators to measure the success of both the planning process and its outcomes.

“Integrating the Integrated”: In conclusion

IWRM, ICZM, MSP, etc., taking into account Adaptation to Climate Change and Ecosystem Based Approaches, the MAB UNESCO BR, etc. if applied separately could result in overlapping and even competition among the different administrations responsible for their application.

However, all of them are in essence complementary and mutually supportive. The proper way to be implemented are through an integrative methodological framework (IMF) which could enhance effectiveness, efficiency, coherence and economy in human and economic resources.

Such an approach is proposed for the Rabat-Sale-Kenitra Region and this is why the Diagnostic Analysis has covered different relevant issues, identifying challenges and opportunities.

Thank you for your attention!
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