

HYBRID UNIVERSITY 2022:
Biosphere Reserves as Sites to develop Ocean Literacy
CYPRUS, 5-10 OCTOBER 2022

Integrated Management within BRs & the IMF approach

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BIOSPHERE RESERVES AND INTEGRATIVE MANAGEMENT FRAMEWORK

The management of a BR should integrate and combine existing provisions and plans of the area(s) in question and beyond.

In this approach the use of the Integrative Management Framework (IMF) is recommended. The IMF has been elaborated jointly by UNESCO (IHP), PAP-RAC of UN Environment/MAP and GWP-Med.

An Integrative Methodological Framework (IMF)

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



SPECIFIC OBJECTIVES OF THE MANAGEMENT PLAN BASED ON THE IMF (1/2)

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 the specific area.
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 MANAGEMENT PLAN BASED ON THE IMF (2/2)

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 development for coastal environments & water resources (including groundwaters), related to BRs.
10. Simplify monitoring, evaluation and reporting.

INTEGRATED MANAGEMENT APPROACHES

ICZM is a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.

IWRM is a process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems and the environment, including Coastal Aquifers and Groundwaters Management (CAGM).

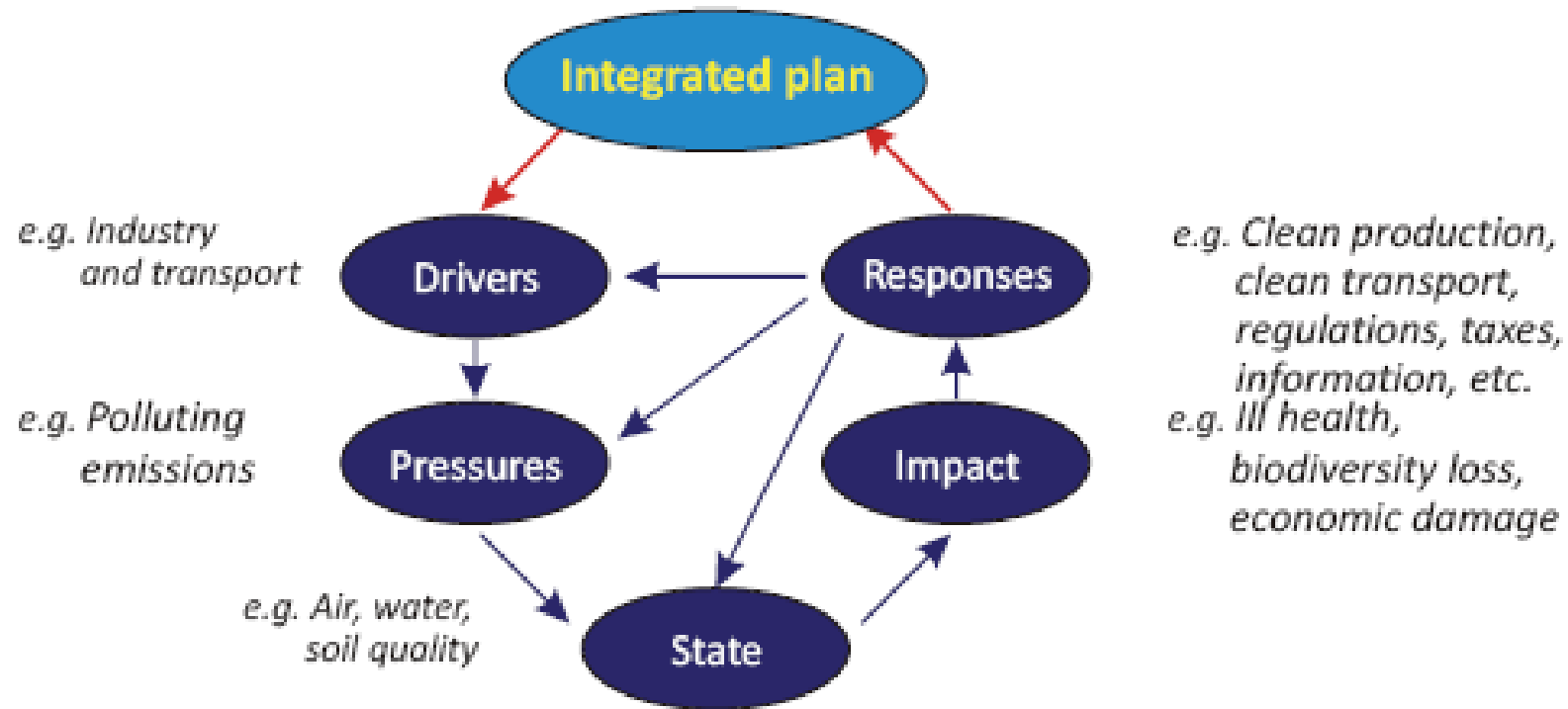
EBA is an integrated management approach that recognizes the full array of interactions within an ecosystem, including humans, rather than considering single issues, species, or ecosystem services in isolation; allows for consideration of resource tradeoffs that help protect and sustain diverse and productive ecosystems and the services they provide.

PRINCIPLES OF THE ECOSYSTEM BASED APPROACH

- 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.

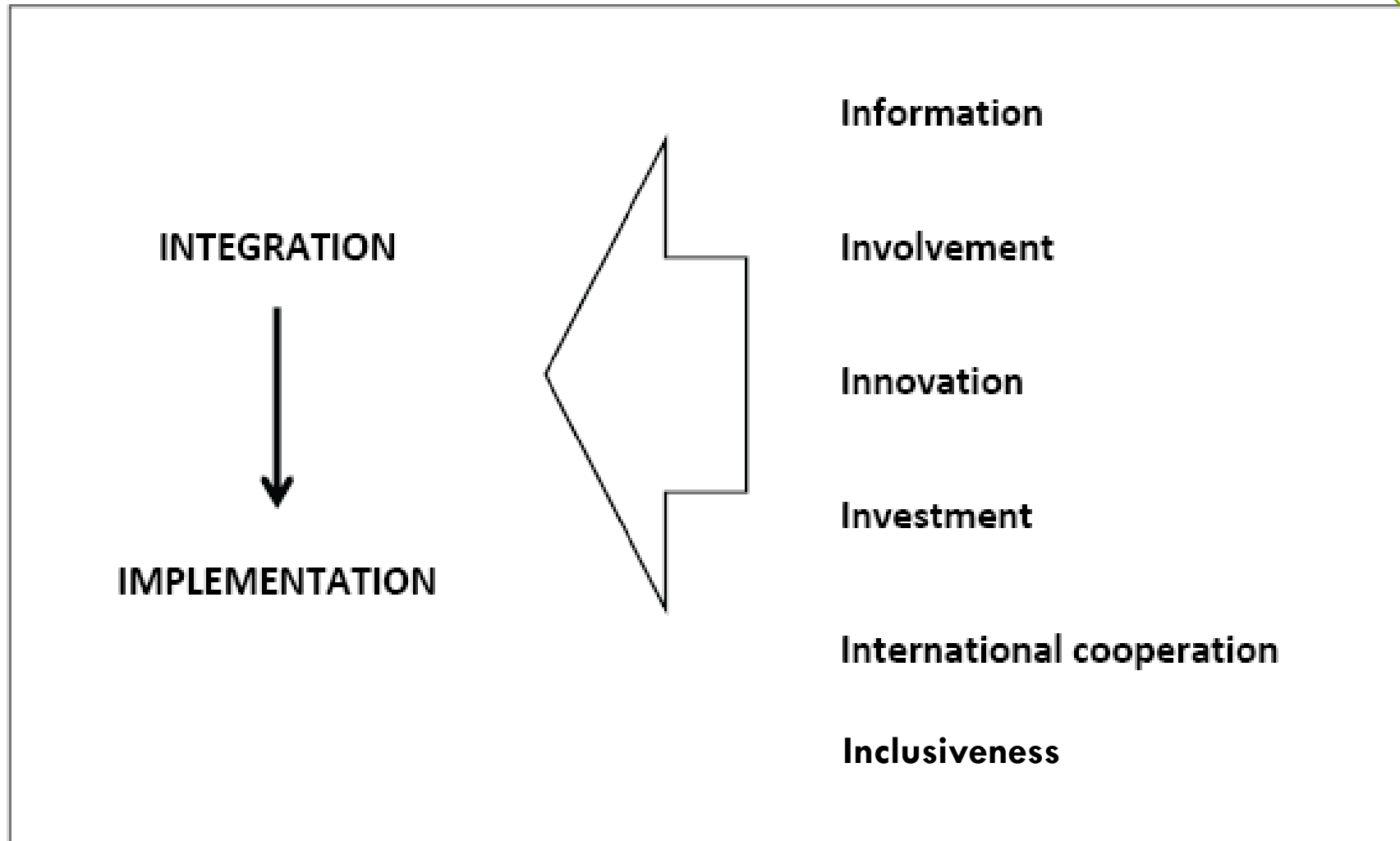
DPSIR FRAMEWORK

DRIVING FORCES-PRESSURES – STATE OF THE ENVIRONMENT- IMPACTS -RESPONSES



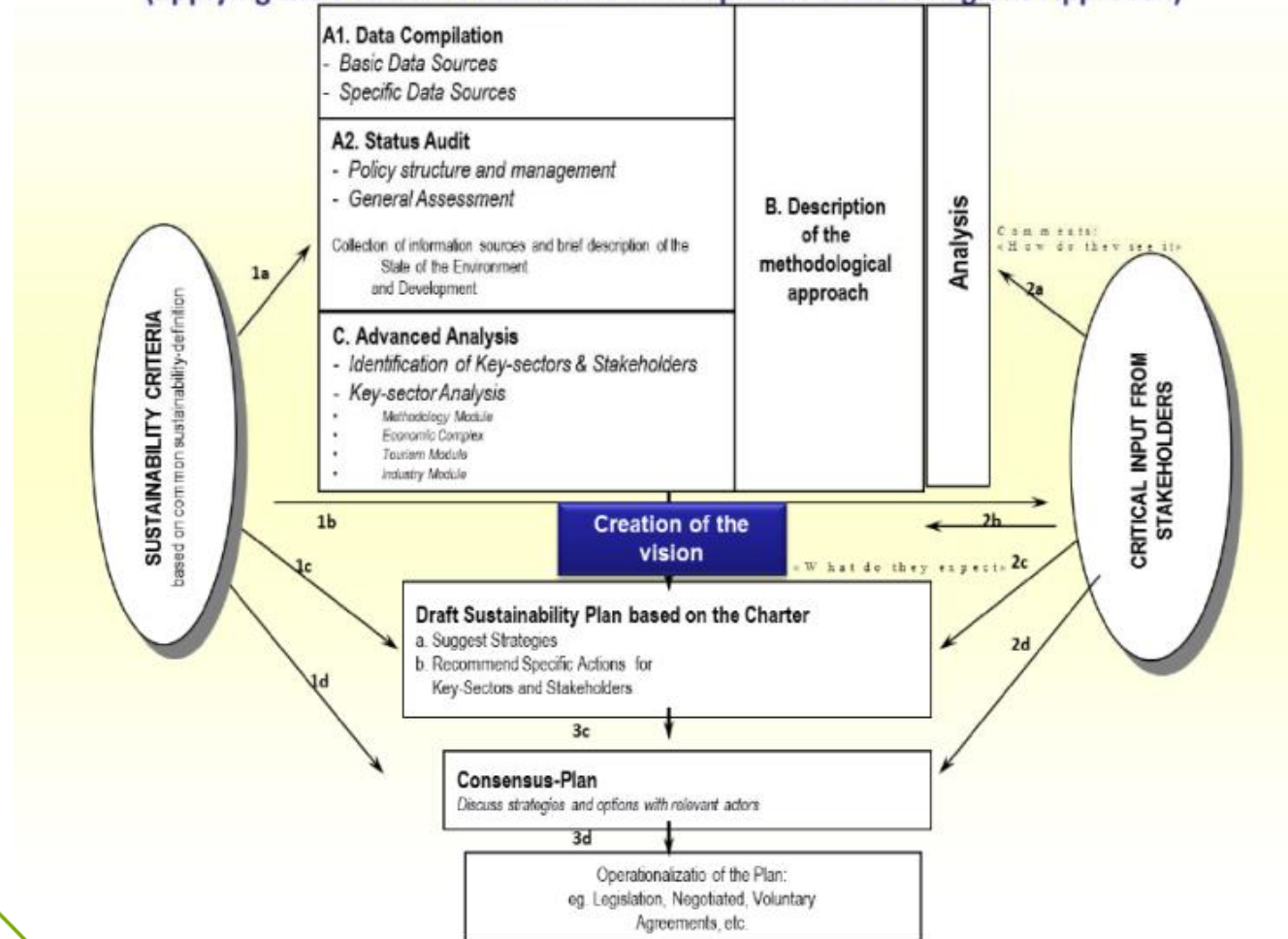
DPSIR Framework informs the preparation of the Integrated Plan

THE EIGHT I'S

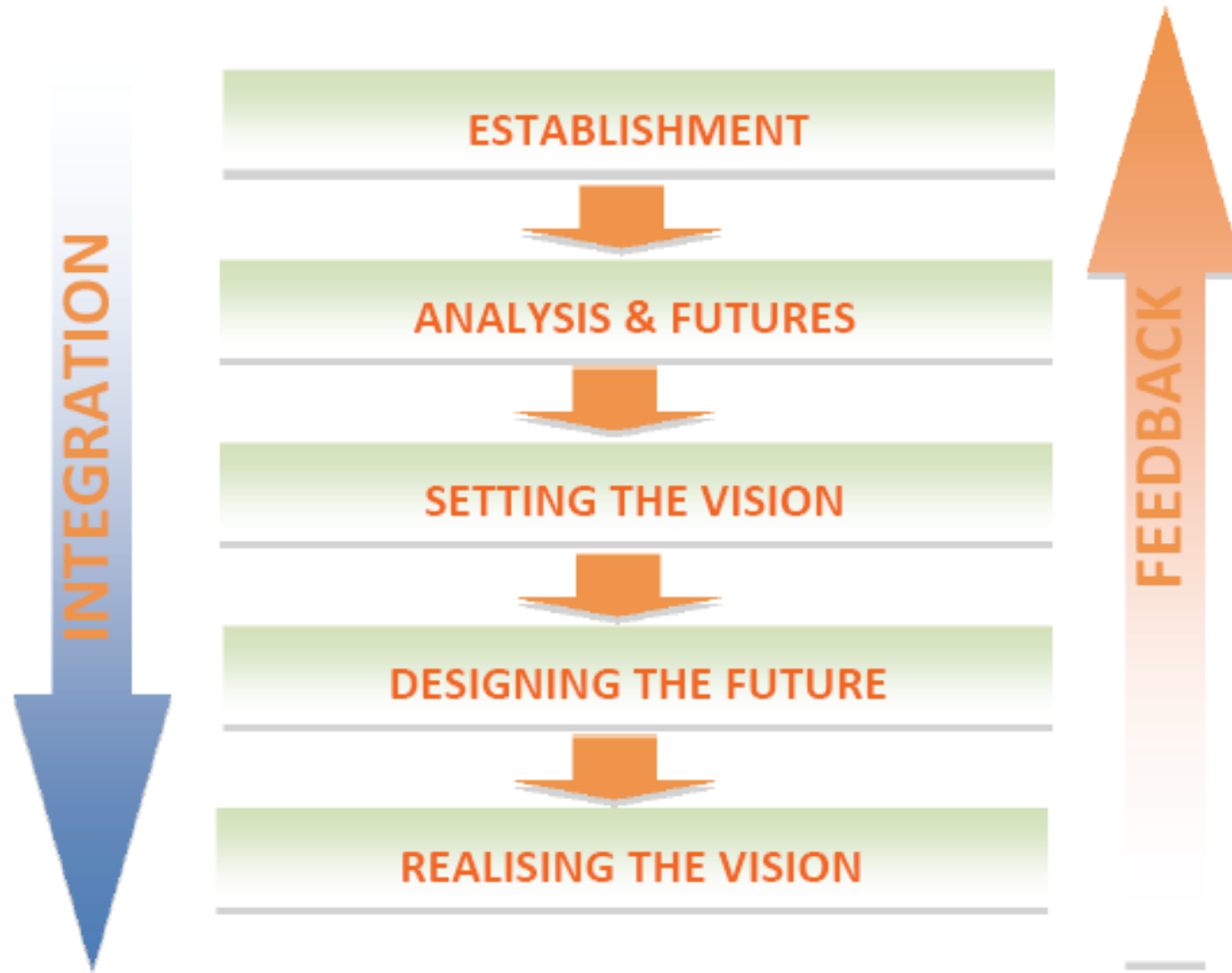


THE SUDECIR APPROACH FOR THE ISLAND OF RHODES (SUSTAINABLE DEVELOPMENT CITIES & REGIONS) PROCESS DIAGRAM

PROCESS DIAGRAM FOR LAKE BIZERTE
(applying the SUDECIR Sustainable Development Cities & Regions Approach)



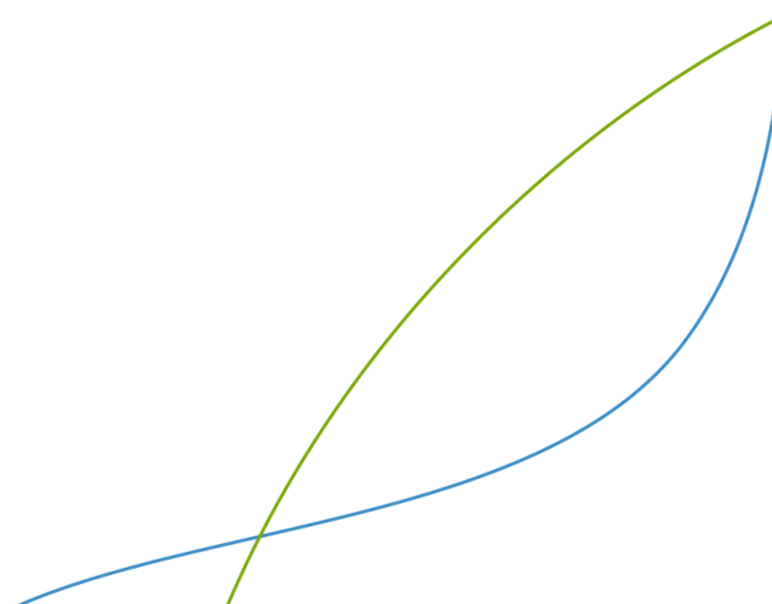
PLAN PREPARATION OVERVIEW



PLAN PREPARATION -DETAILS



1. ESTABLISHMENT

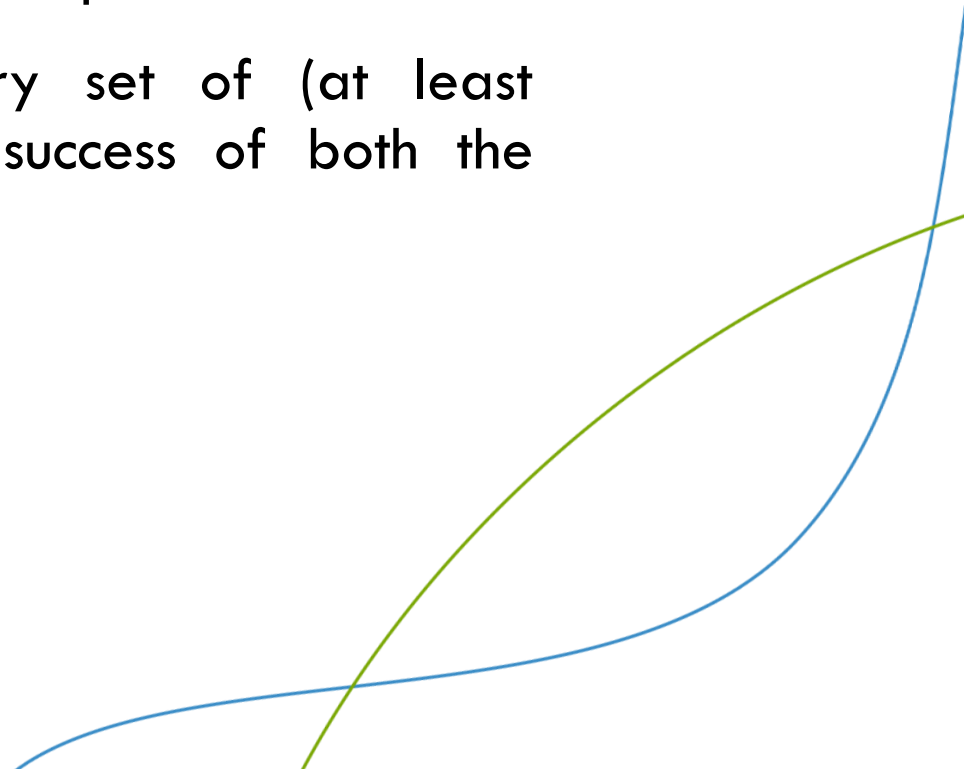
1. Defining the initial territorial scope by identifying the boundaries of the specific plan area and the ecosystems involved
 2. Scoping of the major river basin issues
 3. Defining the governance context
 4. Engaging stakeholders and preparing communication strategy
 5. Proposing a potential vision 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.
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.



4. DESIGNING THE FUTURE/THE PLAN

1. Formulating the Management Plan and pilot actions that may constitute the basis of a workplan, simultaneously observing the planning process and programme formulation
2. Establishing the inter-sectoral management/governance, facilitation and consultation structures for the long-term, post-plan period
3. Embedding-obtaining formal approvals for funding/institutional support and legal adoption

5. REALIZING THE VISION

1. To implement legal, economic and spatial instruments & management processes/mechanisms
2. To raise public awarenesss and enhance partnerships
3. To secure financing & investment
4. To monitor & review the implementation of the Plan providing constant feedback into the review of the plan and programme.

THE FEEDBACK

Assessment / Evaluation / Monitoring and Feedback against the
OECD / DAC Criteria:

Relevance

Effectiveness

Efficiency

Impact

Sustainability

Application of these criteria could show the extent to which the difficulties are addressed and the results of the interventions are consistent with the objectives and the expectations.

ADAPTIVE MANAGEMENT (1/4)

“**Adaptive Management**” is not another type of management but rather a quality that all integrated management plans should have. Key principles of the Adaptive Management are the following:

Flexibility and adaptability of the measures to implement ICZM and IWRM including groundwater management and any other compatible planning inputs.

Regular **update of sustainability targets** to take into account the changes observed (opportunities and bottlenecks) in the system.

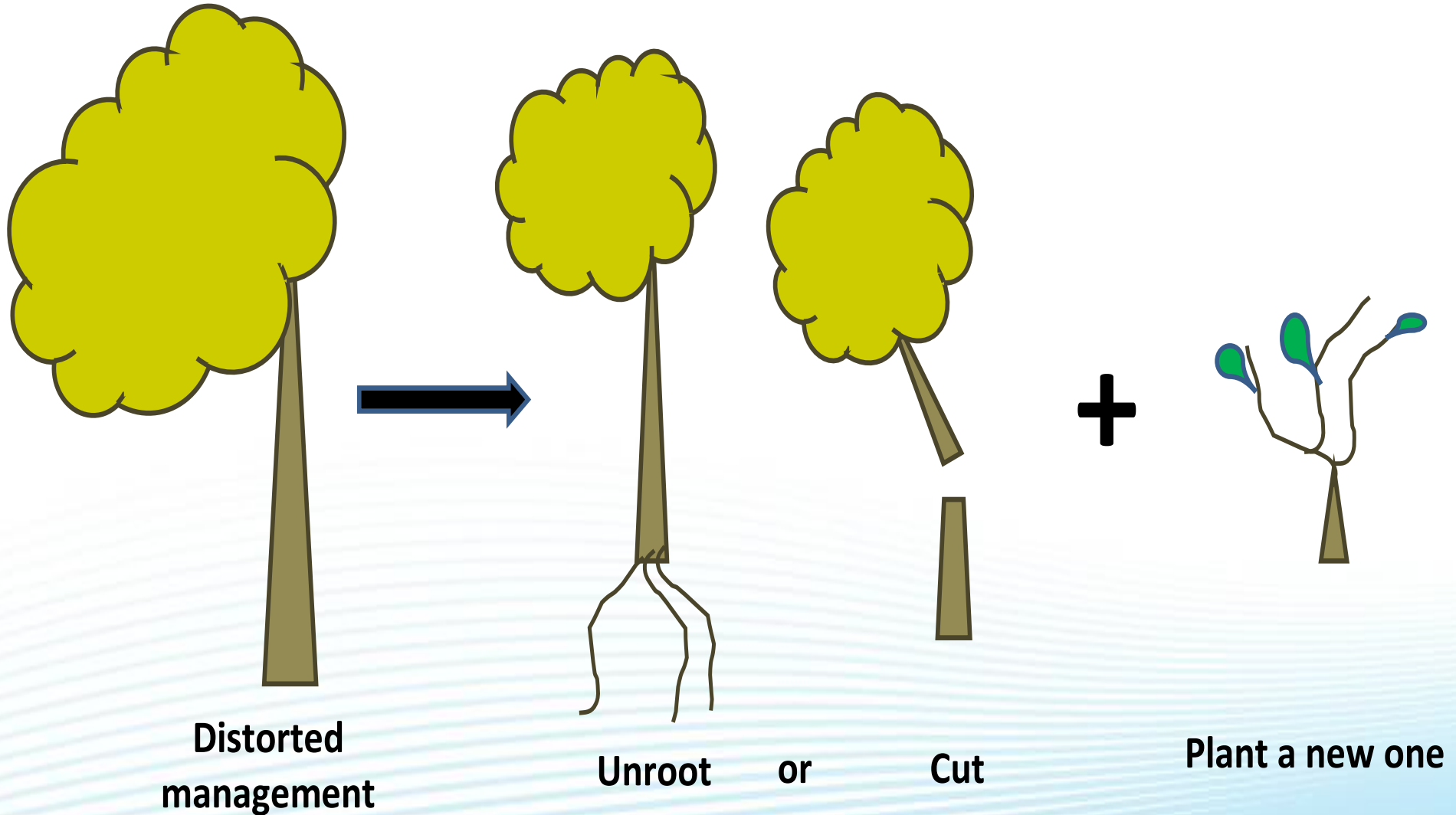
Provisions for integration of the **outcomes of future scientific research**.

The main instruments/methods employed for its implementation are:

- Monitoring programmes: measuring progress towards targets (GES or “fit for purpose/use”), using sets of targets
- Update and ameliorate strategies according to the outcomes of the monitoring process.

ADAPTIVE MANAGEMENT (2/4)

The Common Approach



ADAPTIVE MANAGEMENT (3/4)

The Usual Result...

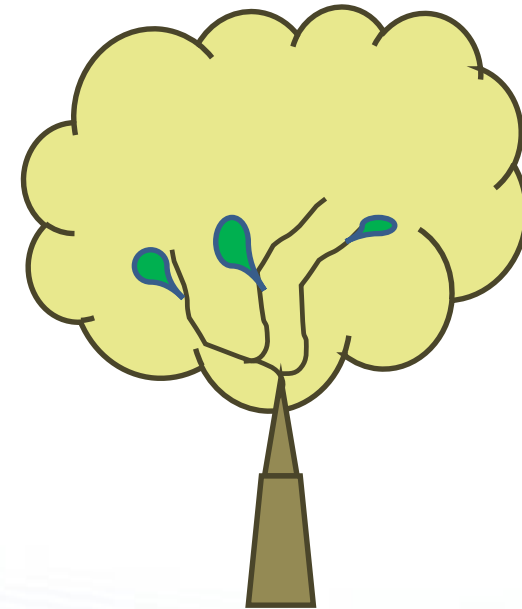


**The new
management
distorted due to
inherent
conditions**

or

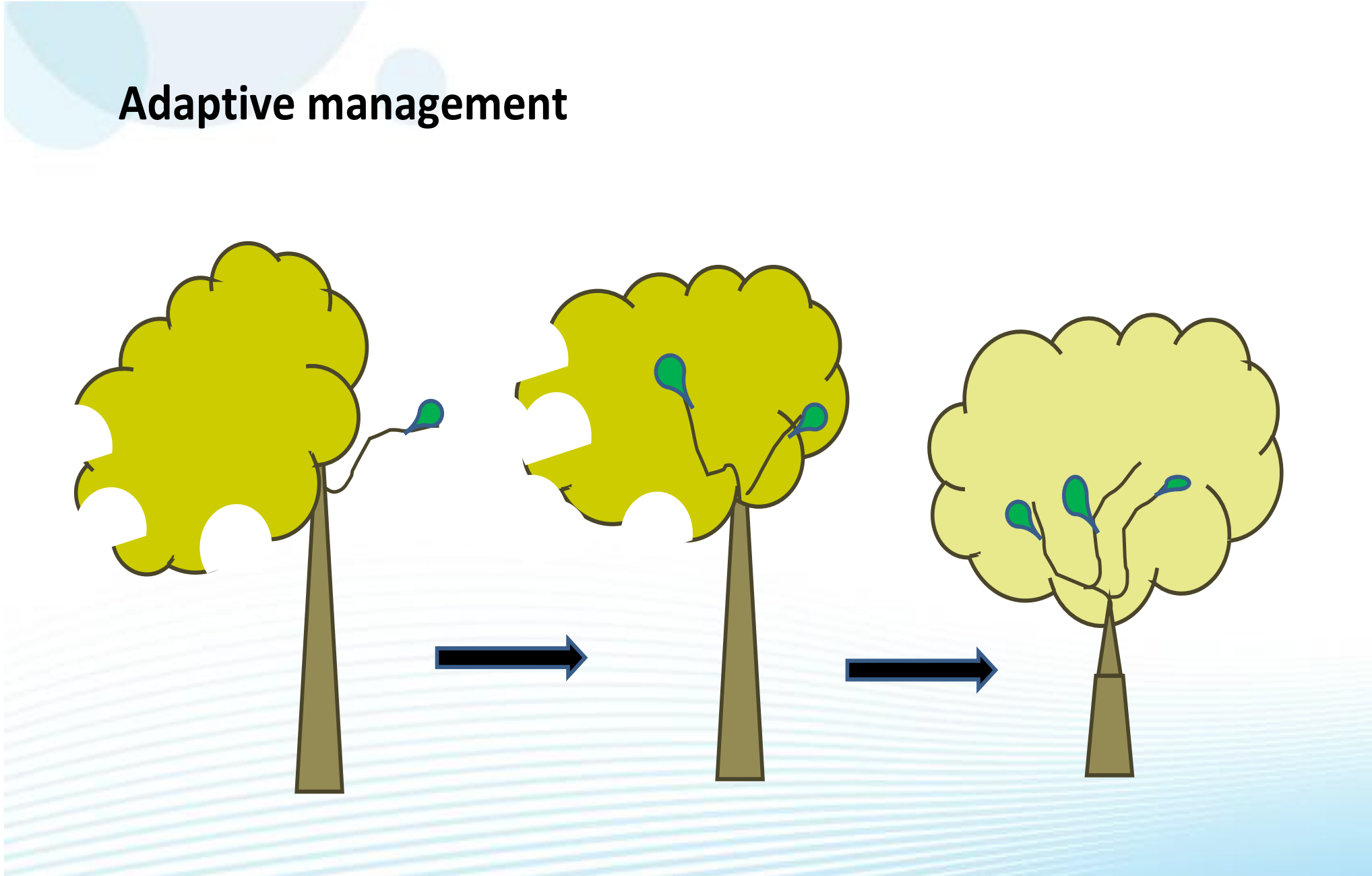
**Distorted due to
resilience of the
old system**

Very rarely...



ADAPTIVE MANAGEMENT (4/4)

Adaptive management



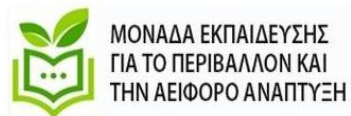


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Thank you

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MEdIES



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