IMAGINE:

A set of tools and methods to assist integrated coastal zone management in the Mediterranean



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Caution

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Abstract

The Blue Plan in conjunction with Dr Simon Bell (Bayswater Institute, UK) has developed the Imagine approach in order to address sustainable coastal zone management needs in the Mediterranean. This approach facilitates the shaping of a sustainable development vision and area project by engaging stakeholders within a participatory process intended to describe, assess and examine the past, present and future levels of sustainability of a local system by means of indicators, setting goals and monitoring the system's progress towards sustainable development. Based on systemic and prospective analysis, indicators and the concept of sustainability threshold, it is a dynamic, participation-based process which draws on the expertise of local stakeholders. The afore-mentioned elements are initially described before implementation is explained in relation to an Imagine exercise in Algeria (2003-2004). The conclusion summarizes the contribution made by the method within an integrated coastal area management project and the difficulties encountered.

Key-words

Systemic, prospective, sustainability, indicators, participation, coastal area, Integrated Coastal Zone Management (ICZM), Algeria, Mediterranean.

Résumé

Pour répondre aux besoins de gestion durable des zones côtières en Méditerranée, le Plan Bleu et le Dr Simon Bell (Bayswater Institute, Royaume Uni) ont développé l'approche *Imagine* qui permet de mobiliser les acteurs pour construire, dans une démarche participative, une vision de développement durable et un projet de territoire, de décrire, évaluer et explorer le niveau de durabilité d'un système local dans le passé, le présent et l'avenir, à l'aide d'indicateurs et d'aider à choisir des objectifs à atteindre et à suivre les progrès du système vers le développement durable. Elle repose sur l'analyse systémique, les indicateurs et la notion de leur seuil de durabilité, la prospective. C'est un processus dynamique et participatif qui s'appuie sur l'expertise des acteurs locaux. Après une description des points ci-dessus, on explique le déroulement de l'approche à partir d'une application de *Imagine* en Algérie (2003-2004). En conclusion, on résume les difficultés de mise en oeuvre ainsi que les apports de la méthode dans un projet de gestion intégrée des zones côtières.

Mots clés

Systémique, prospective, durabilité, indicateurs, participation, zone côtière, Gestion Intégrée des Zones Côtières (GIZC), Algérie, Méditerranée.

Introduction

In common with all other coastlines, the Mediterranean coasts are exposed to various human pressures leading to the on-going degradation of the marine and coastal environment.

For several decades the general trends underway around the Mediterranean coasts have been evolving in a clearly unsustainable manner (Grenon, Batisse, 1989). Covering over 46 0000 km of coast, this area is becoming increasingly built-up. In 2000 the Blue Plan recorded almost 2 300 major coastal settlements, an average, in other words, of one every 20 km, including 584 coastal towns of over 10 000 inhabitants, 750 marinas, 286 commercial ports, 13 gas plants, 55 refineries, 180 thermal power stations, 112 airports, 238 desalination plants, etc. (Benoit, Comeau, 2005).

By 2025 the number of people permanently living in the Mediterranean coastal regions¹ is set to increase by 1.4% per annum to the South and East, reaching 108 million, whilst stabilising at about 68 million to the North of the basin. The marked linear spread of coastal urbanisation is coming about apace. Whereas it was estimated that in 2000 more than 40% of the Mediterranean coasts were built up, it is forecast that on average a further 200 km per year of coastline will be built over by 2025, in other words an additional 5 000 km or so.

The Mediterranean Action Plan² supports the Coastal Area Management Programme (CAMP) as a means for addressing these general trends, the aim being to assist Mediterranean countries in developing strategies and procedures for the sustainable management of their coastal zones, identifying and implementing the relevant methods and tools, and contributing to capacity building at local, national and regional level. One of the CAMP's main aims is to create an Integrated Coastal Zone Management (ICZM) process.

One of the major elements within the process consists of the joint consideration of possible futures, bearing in mind past developments and the current situation in the areas in question. Brainstorming amongst the various local stakeholders comprises a crucial stage in the process, facilitating joint assessment of the general trends and mechanisms affecting the coastal area under consideration. It allows the long term consequences of action taken today to be examined, thus making it possible to seek alternative paths towards a desirable future. It is for this purpose that within the CAMP framework and in conjunction with Dr Simon Bell the Blue Plan³ has developed the Imagine approach, which proposes a set of tools and methods to describe, assess and explore the level of sustainability of an eco-socio-system in the past, present and future, using indicators and applying a participation-based approach which considers stakeholders as experts at their own level.

The Imagine approach was thus designed with a view to helping to establish an integrated coastal zone management process in the Mediterranean through engaging relevant stakeholders in the prospective consideration of their area's future sustainability. The description of what would be a desirable future and the tasks to be implemented in order to achieve it are just some of the expected outcomes, along with a set of sustainability indicators comprising a dashboard to monitor the area's progress towards sustainable development.

The Imagine approach has been implemented in Malta (2000-2002), Lebanon (2002-2003), Algeria (2003-2004), Slovenia (2005) and Cyprus (2007) within integrated coastal zone management projects under the CAMP.

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¹ Mediterranean coastal regions: administrative units at NUTS 3 level (nomenclature for territorial units for statistical purposes) or equivalent (département, province, nome, wilaya, governorate, etc.).

² http://www.unepmap.org/html/homeeng.asp

³ <u>http://www.planbleu.org/</u>

I. Implementation and features of the Imagine approach

The *Imagine* approach was specifically developed to ensure that the Blue Plan's contribution to the sustainable management of the Mediterranean coastal zones under the CAMP proved optimal in terms both of the results achieved (exploring the long term relations between the environment and development) and their production (in other words by working on a cross-cutting basis involving all the stakeholders and the full range of activities for a given area), all within a restrictive institutional and financial context. This said, the *Imagine* approach could be implemented anywhere, even within organisations or institutions, in so much as it brings several stakeholders together in the long term strategic consideration of a complex issue.

The *Imagine* approach is implemented in four stages (Figure 1), with each stage including one workshop for everyone participating in the process (or two for stage 3). The workshop provides an ideal forum for focus groups and for summarising discussion, whilst the intervals between workshops allow results to be consolidated and the remaining work to be prepared.

The four stages of *Imagine* can be broken down as follows:

- 1) Reflect and understand. Reflecting upon and understanding the system;
- 2) Connect and investigate. Linking comprehension of the system to the sustainability indicators, studying them, establishing their band of equilibrium and portraying them using the AMOEBA diagram;
- 3) Model and explore. Modelling and exploring the future of the territorial system under consideration using the scenario method;
- 4) Do and suggest. Suggesting and acting by establishing an action plan for sustainable local development, including monitoring the territorial system's progress towards sustainable development using variations in indicator values compared with sustainability thresholds.

The symbol for infinity (Figure 1) is the *Imagine* logo in so far as any territorial project is constantly evolving. Once structured and implemented, any such project will sooner or later need to be assessed, updated and revised. The symbol for infinity suggests that the *Imagine* approach could be reused to this end by reimplementing its four stages.

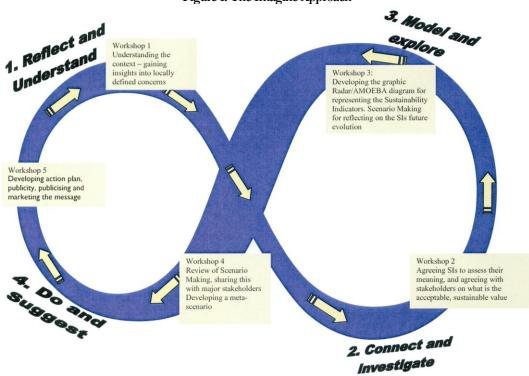
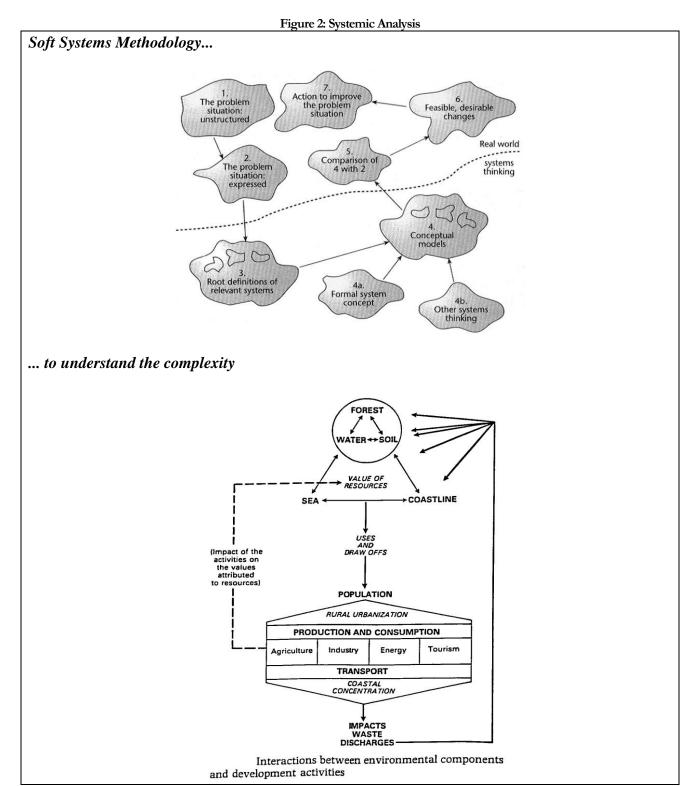


Figure 1: The Imagine Approach

The Imagine approach draws first and foremost on systemic analysis, which provides insight into a complex situation in its entirety and renders it intelligible. Analysis of the relations between environmental components, population and development activities borrows from the soft systems methodology (Checkland et Scholes, 1990). Systemic thinking facilitates understanding of the complexity of the real and enables its portrayal in simplified form, which can then be handled by producing different hypotheses of evolution. It enhances understanding of the entity under observation (Figure 2):



From Checkland, 1981 & Plan Bleu, 1989

The *Imagine* approach is part of this methodological framework, which has the advantage of combining several formalised tools to produce knowledge on the one hand and a procedure, a logical sequence of steps on the other so that a group of stakeholders affected by a complex issue (in this case territorial and coastal) is able to shape a common, structured vision of a desirable and feasible future. Thus fulfilling the Blue Plan's "specifications" for its work in the CAMP, it becomes possible to:

- Describe a complex phenomenon or reality by simplifying it,
- Gain intricate knowledge of the various elements comprising the system, the links between them and their significance to potential changes to the system,
- Establish which stakeholders control these elements,
- Identify general trends, constraints, processes underway and the seeds of change.

Moreover, and in order to establish a collective uptake framework for a territorial issue, from the very outset *Imagine* involves as many stakeholders as possible by engaging representatives of the social and techno-administrative groups involved to a greater or lesser extent in the future and management of the area in question. This participatory approach draws on the expertise of local stakeholders and allows them to design their own territorial project. Besides encouraging stakeholder involvement in a project of relevance to their future, it also prompts "decompartmentalisation" between disciplines, cross-fertilisation between several points of view and helps reconcile conflicting objectives. Workshops organised under *Imagine* thus bring together players from different sectors and backgrounds (public, professional, associations, etc.), providing them with the opportunity to establish mutual understanding by giving joint consideration to their common future.

A further feature of *Imagine* is the use of indicators and the assessment of a sustainability threshold for each of them. Since the Rio conference (1992), the principle of sustainable development has been climbing ever higher up the international agenda. Sustainability indicators (SI) measure progress or delays along the path towards sustainable development, in other words in the economic, social and environmental fields. The "Driving force – Pressure – State – Impact – Response" (DPSIR) framework is commonly used to select the indicators. At brainstorming sessions held during workshops, project stakeholders select what they deem to be the most appropriate and reliable indicators; group dynamics reduce the "subjectivity" of each expert taken individually. This joint working context is also effective for measuring sustainability: the group estimates the minimum and maximum values which the indicator can achieve; it subsequently assesses the ideal value which constitutes the indicator's point of maximum sustainability, before establishing a band/belt of equilibrium around this value, in other words the interval of sustainability between the indicator's upper and lower sustainable values (Figure 3).

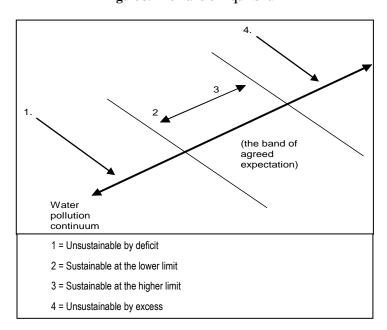


Figure 3: The Band of Equilibrium

An AMOEBA4 or Radar type graph is used to display all the indicators simultaneously (Figure 4), allowing their position to be compared with the band of equilibrium and an image of the system's overall sustainability. In an ideal vision of sustainability all the indicators should fall within the band of equilibrium. Any deviation either above or below indicates the non-sustainable level of the corresponding values and should lead to the decisions giving rise to such deviations being scrutinised and solutions sought which would allow the indicator value to be brought back inside the band of equilibrium.

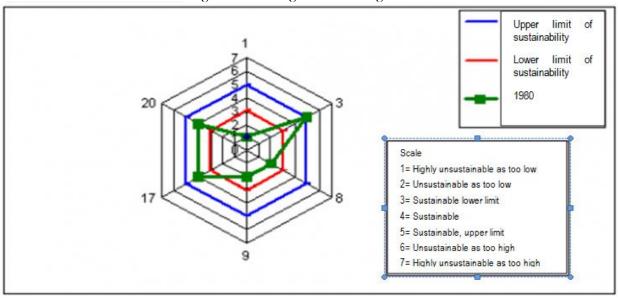


Figure 4: Radar diagram - CAMP Algeria 2003

Indicators: (1) Sand extraction; (3) Sandy coastline where bathing is prohibited; (8) Drinking water supply; (9) Sewerage system; (17) Urbanisation rate; (20) Built-up coastline.

Once the system has been recognised and the indicators and their sustainability thresholds defined, *Imagine* uses prospective analysis tools to explore the future, which can still be imagined albeit not identified as such. Indeed, drawing on knowledge of past trends and the current situation acquired during the preceding stages of *Imagine*, the stakeholder group can design possible and/or desirable futures. The scenario method, one of the best known tools in prospective analysis, is based on the choice of evolution hypotheses, a time horizon and the elaboration of a pathway from present to future using "If...Then" type reasoning. The stakeholder group is thus able to look ahead and explore what might happen if a given decision were taken in order to establish a final image of the area in question: if nothing changes, this is a trend scenario; if action is taken then one or several alternative scenarios emerge. To quote Michel Godet, the aim is "to enlighten current action in view of possible futures". He draws a distinction between the stage of prospective consideration as such, which seeks to answer the question "What might happen?", and the stage of preparing to act, where the question is rather "What can be done?" followed by "What are we going to do?" and finally "How do we do it?". Combining the scenario method with strategic thinking allows potential future changes within the system to be imagined by projecting past trends using various hypotheses of evolution, as well as the identification of action to be taken in order to reach possible and desirable situations. A logical multi-step sequence produces the action plan, from formulating the problem through to making the strategic choices (Figure 5). A degree of similarity exists between the four stages of Imagine (Figure 1) and those of strategic prospective analysis.

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⁴ AMOEBA was initially developed by Ten Brink (Ten Brink et al., 1991) and in Dutch the acronym stands for "general method for ecosystem description and assessment". It is commonly used in *Imagine* to refer to an AMOEBA-like diagram, something similar to the "blobs" used in systems diagramming.

1. Problem formulated

4. Dynamics of context in relation to environment key variables

7. Evaluate options

8. Strategic choice

9. Plan of action

Figure 5: Strategic prospective analysis (adapted from Godet, 1997)

Brainstorming within the group of stakeholders involved in the local sustainable coastal management project allows the long term consequences of individual projects to be explored and contradictory objectives or conflicts over the use of resources between the various projects identified. By focusing on sustainability issues within a coastal zone it provides a powerful tool towards consistency.

II. Implementing *Imagine*: the "Algiers coastal area" CAMP experience

1. Reflect and understand

During this first stage, rich pictures (Checkland et al., 1990) are used to support participants in graphically portraying complex situations and gaining an understanding thereof. Rich pictures help sum up the real situation perceived by the stakeholders in the shape of a freehand cartoon-type representation. It is a form of simplification, which whilst acting as an icebreaker also encompasses the various elements comprising the system and the links between them. The following example (Figure 6) clearly shows the various stresses to which the terrestrial, coastal and marine ecosystems in the Algiers coastal zone are exposed (Larid, 2003).



Figure 6: Rich picture identifying main coastal issues of the "Algiers coastal zone" CAMP (2003)

The rich picture lays the foundations for subsequent work. The priority issues relating to the situation can be inferred from it, as well as the main action to be taken in order to remedy them. Participants attach the indicators which best describe them before subsequently drafting a statement explaining the aim of the territorial project in respect of these issues and tasks. A collective vision is thus established of the objectives to be reached, constraints to be overcome, the stakeholders and beneficiaries of the desired change. Participants are then in a position to pool these elements to shape the project, thereby ensuring a high degree of consistency amongst the objectives.

2. Connect and investigate

During the second stage, participants determine the ten to twenty key indicators which are representative of the system; then they establish the indicators' band of equilibrium and plott them on an AMOEBA graph in order to show the system's sustainability at some given date. To facilitate selection of the key indicators, participants may draw up a feasibility grid in order to check that the proposed indicators can actually be calculated, that the data is available and accessible, etc.

In the case of the "Algiers coastal zone" CAMP, when plotted on an AMOEBA diagram (Figure 7), the key indicators (Table 1) reveal the zone's non-sustainability in 2003, since virtually all the indicators lie outside the band of equilibrium: eleven indicators are not sustainable by-deficit, nine by excess, whilst only one falls within the band of equilibrium.

Table 1: The key sustainability indicators for the Algiers coastal zone (Larid, 2005)

No.	Indicators	No.	Indicators
1	Coastal dune conservation	12	Built-up coastline
2	Sandy coastline where bathing is prohibited	13	Urban green areas
3	Land cover	14	Proportion of clean vehicle fuel
4	Rational use of underground water resources	15	Nitrate content of groundwater
5	Water pricing	16	Farming land lost through urbanisation
6	Drinking water supply	17	Coastal and marine protected areas
7	Sewerage system	18	Erosion of sandy coasts
8	Wastewater treatment	19	Marine biodiversity
9	Solid waste collection	20	Remediation of industrial pollution
10	Urbanisation rate	21	Number of people per dwelling
11	Unemployment rate		

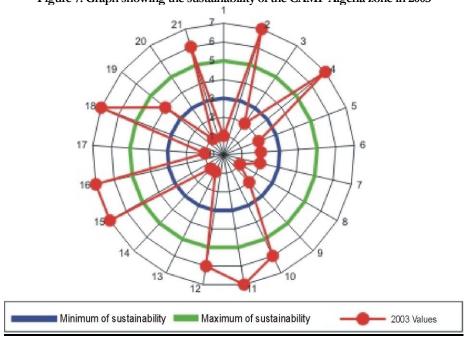


Figure 7: Graph showing the sustainability of the CAMP Algeria zone in 2003

This type of diagram helps determine whatever action urgently needs to be taken to bring the indicators back within the band of equilibrium and to assess which sustainability gains would be the most immediate or least difficult to attain: it might seem, for example, that it would be faster and/or less expensive to improve the performance of the indicators closest to the upper and lower sustainability values rather than immediately tackling the indicators with extreme values. Conversely, it would also be possible to immediately address the worst-performing indicators to avoid encouraging further deviation, which will only become more difficult to reverse the longer it persists.

3. Model and explore

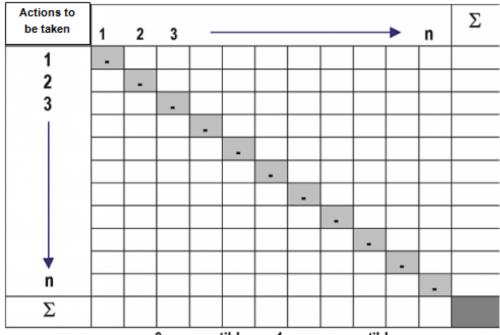
The third stage in the implementation of *Imagine* addresses prospective analysis as such, using scenarios. Participants initially convene in focus groups to work out mini-scenarios for each key indicator. The various groups subsequently hold a brainstorming session to identify risks of incompatibility between the hypotheses per indicator and to eradicate or curb them by changing their course, thereby establishing a consistent overall scenario for the zone in question.

This methodology was chosen in light of the Blue Plan's experience with prospective analysis exercises covering complex systems such as the "Algiers coastal zone" eco-socio-spatial entity: group brainstorming is more effective when it focuses on an objective linked to a single key indicator; action required to reverse major trends emerges more clearly and is better understood. The important point during this stage is that action towards ensuring sustainability per key indicator should be compatible. Achieving overall consistency during the second stage requires the action plans for each key indicator to be analysed, for which purpose a matrix of the various actions at global level can be drawn up and implemented (Figure 8). Potential inconsistencies are addressed in order to establish what measures should be taken and what provisions introduced in order to eliminate them, weighing up whether to take action by indicator or to combine.

It should be pointed out that other prospective analysis exercises⁵ have followed more or less the same approach, confirming the Blue Plan's choice of methodology.

⁵ The European Commission's "Europe 2010 Scenarios", for example.

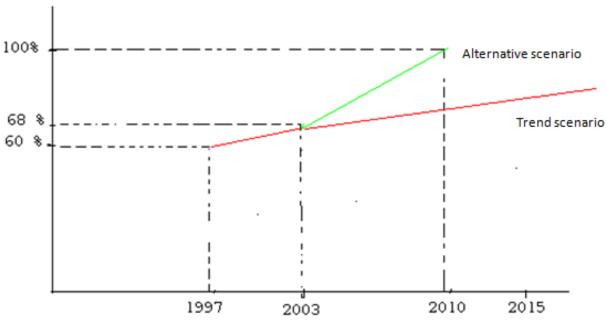
Figure 8. Matrix of consistency between actions in the global scenario



0 : compatible - 1 : non compatible

In the Algeria CAMP, mini-scenarios were drawn up for each key indicator as far as 2015. Figure 9 provides an example of mini-scenarios regarding solid waste collection. Table 2 sums up the hypotheses underlying each scenario as well as the action to be taken to bring the indicator in question back on track towards a more sustainable alternative future.

Figure 9 Mini-scenarios up until 2015 for solid waste collection in the Algiers coastal zone (Larid, 2004)



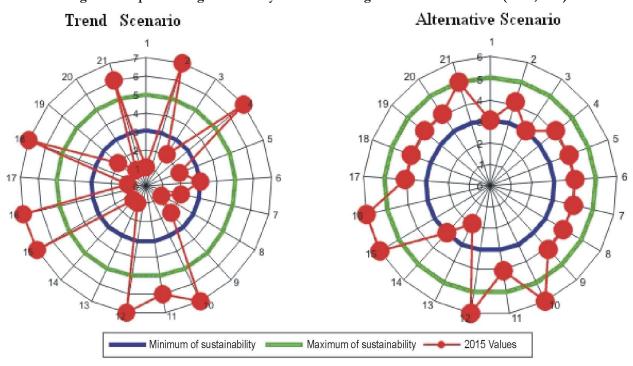
Prospective analysis of the « solid waste collection » indicator

Table 2 Hypotheses and actions for the "Solid waste collection" indicator

Trend	Alternative	Action				
-Solid waste collection: total achieved around 2030	-Drawing up of a master plan -Means for collection consolidated and	-Drawing up and implementation of a national solid waste management				
-On-going shortage of local authority	updated	policy				
funding and supervision	-Encouragement of private investment	-Promotion of inter-communal solidarity				
-Outdated fleet of vehicles	-Selective sorting gradually becomes	-Promulgation of implementing texts for the solid waste law				
-Non-concession to private sector	more widespread	-Tax collection system				
-No tax collection	-Media involvement (including TV)	-Implementation of a "Solid waste management" master plan -Municipalities well-equipped with material means				
-Lack of civic-mindedness	-Municipal police trained in environmental protection					
-No awareness-raising	-Involvement of national waste agency					
	-Education and awareness raising (schools)	-Training of local stakeholders				
	(-Citizen information and awareness raising				
		-Sector contracted out				

The corresponding AMOEBA diagrams show the degree of sustainability for the entire zone in the case of the alternative scenario and the trend scenario for 2015 (Figure 10). Extending the trends does not render the territorial system any more sustainable, since only one indicator (drinking water supply) grazes the band of equilibrium at its lower limit. In the alternative scenario, action taken leads to a marked improvement in sustainability: twelve indicators are re-established with a sustainable score, one is at the upper limit, three at the lower limit and those which still lie outside the band of equilibrium have nonetheless progressed towards greater sustainability. For the eight indicators on the limit or outside sustainability, a time horizon extended by a decade or more is required before the return to a sustainable situation can be envisaged. However, some situations such as built-up coastlines and coastal dunes would appear to be irreversible or barely retrievable.

Figure 10 Graphs showing sustainability in 2015 in the "Algiers coastal zone" CAMP (Larid, 2005)



4. Do and suggest

During the final stage, participants draw up a plan of action towards the more sustainable development of the territorial system based on the alternative scenario, the overall consistency of which has been checked in consideration of the compatibility matrix (Figure 8). They also establish a programme for marketing and publicizing the results of the *Imagine approach*.

In order to highlight priorities or rather the most "profitable" forms of action in terms of their impact or influence on the indicators, all actions with underlying evolution hypotheses for the alternative scenario are listed and clustered. A matrix is then used (with actions on the horizontal and key sustainability indicators on the vertical axis) in order to identify strong links between areas of action and indicators (Table 3). The purpose is to establish the potential impact of each area of action on each of the key indicators. Required actions can consequently be classed in order of priority, with a distinction being drawn between actions and measures: the former apply to specific operations requiring appropriate financing, whilst the latter are of a statutory, administrative or institutional nature and do not require specific financing (Table 4).

Table 3 Matrix linking indicators and strategic actions - CAMP Algeria, 2004

												- 0/1							
Key sustainability indicators																			
Areas of	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	∑ of relations
action (strategy)																			
usion (suutogy)																			
Sewage treatment	1	1		1	1		1					1	1	1		1			9
Wastewater recycling	1	1		1															3
Water savings (waste)	1	1	1		1		1				1				1				7
Water quality	1	1			1	1													4
Resettlements of slums			1	1	1		1			1					1		1		7
Local funding			1	1	1		1	1			1	1	1				1		9
Impact assessment (TEZ: Tourism Expansion Zone)								1	1	1		1		1		1		1	7
"Coastal law" implementing texts								1	1	1		1	1	1		1		1	8
Defence and protection of sandy coasts					1		1	1	1			1		1		1			7
Adapting town planning instruments								1	1	1	1	1		1	1	1		1	9
Land Use Planning Policy	1		1	1			1		1	1		1		1	1			1	10
Associations (NGOs)					1		1	1	1	1	1	1	1	1		1	1	1	12
Protection of sensitive natural sites					1			1	1			1		1		1		1	7
Environmental data management	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
Environmental fees and taxes	1	1		1	1												1		5
Environment fund	1				1	1		1			1	1		1		1	1	1	10
Integrated solid waste management	1						1										1		3
Environmental monitoring and watching	1				1	1		1	1	1			1	1		1	1	1	11
Setting up of SMEs (young people)			1	1	1		1				1	1	1	1	1		1	1	11
Reforestation programme							1	1			1			1				1	5
∑ of relations	10	6	6	8	13	4	11	11	9	8	8	12	7	13	6	10	9	11	

Table 4. Classification of actions and measures to be taken in order of priority, CAMP Algeria, 2005. Caption: TEZ: tourist expansion zone

	Area of action		Measures and devices
1.	Setting up of SMEs (priority Young People)	1.	Environmental data management
2.	Sewage treatment	2.	Associations
3.	Protection of sensitive natural sites	3.	Environmental monitoring and watching
	Habitat programme	4.	Environment fund
4.	Resettlement of slums	5.	Land use and spatial planning policy
	Defence and protection of sandy coasts	6.	Adapting town planning instruments
5.	Water saving		"Coastal" law implementing texts
6.	Water quality		Local funding
7.	Reforestation programme	7.	Environmental taxes and fees
	Combating industrial pollution	8.	Impact assessments of TEZ
8.	Wastewater recycling		•
	Integrated solid waste management		

In the case of the Algiers coastal zone, the alternative scenario, in other words the zone's desirable future, was built up on the basis of the presented results, thus making it possible to understand the actions, their knock-on effects in terms of the sustainability of the system, the stakeholders and the implementation context. The approach and the ensuing product consolidate learning towards the joint uptake of the "Algiers coastal zone" territorial project. There is no doubt that as a tool to assist decision-taking the work conducted can guide the region's future development programmes. It is also important to note that calculating and plotting the key indicators at various points of the pathway towards 2020-2025 provides a dashboard which can be used to assess the course and where necessary tweak it back into line towards the desirable future.

The final stage of *Imagine* consists of marketing and publicizing the results of the approach as well as drawing up a communication strategy to prompt decision makers to include the territorial system studied in a pro-active approach, channeling its development towards sustainability, which would guarantee the genuine implementation of the action plan drawn up using the *Imagine approach*. This strategy needs consideration of the message to be transmitted, the targets it addresses, the means for publicizing it as well as the identification and appointment of the body or institution responsible for ensuring the implementation of the chosen action as well as the monitoring of the key indicators pertaining thereto.

Conclusion

Three essential points emerge from the experience with testing implementation of the approach on the ground in terms of the objective set for *Imagine* and bearing in mind the expected results, in other words engaging relevant stakeholders in joint reflection about a desirable future for their area in order to propose action and monitoring indicators:

- The effective involvement of several stakeholders from various sectors who convene, often for the first time, to address a territorial management issue;
- The relevance of the method and its stimulating effect, as well as the fact that it is perfectible, hence the scope for improving and enhancing knowledge;
- The results, in the form of an action plan ranked by priority and linked to sustainability indicators, which nonetheless raises the issue of actual implementation and monitoring.

Difficulties encountered during the implementation of *Imagine* in the ICZM projects in Malta, Lebanon, Algeria, Slovenia and/or Cyprus largely related to:

- Choice of key indicators. Besides the economy, society and the environment, they should also cover governance, with these four families being virtually equally represented.
- Determining the band of equilibrium. For certain indicators (for example exceptional marine species) no sustainability interval is possible, since it is the existing situation which needs to be preserved.

- Data availability. This is a recurrent problem, particularly for retrospective data which is nevertheless
 essential in order to identify trends.
- Dovetailing the timing of the various activities under an ICZM project. *Imagine* draws on the work of focus groups which, in turn, benefit from the results particularly in terms of prospective analysis. The timetable of work must be both strict and flexible.
- Multi-thematic participation. Thematic experts are not highly available by definition, being involved with other projects. It is always difficult to develop loyalty in a multi-disciplinary working party.

Imagine provides crucial input into ICZM projects in respect of the following:

- Breaking down barriers between specializations and/or sectors. This assessment emerges unanimously for those ICZM projects where the *Imagine* approach was used: it opened the way for joint discussion of the concerns of each discipline, promoting mutual understanding regarding the purpose of each theme.
- The systemic nature. This approach enables participants to readily grasp the systemic nature of sustainable
 development issues, since it provides a clearer overview of the relations between the various elements of
 the system and makes for better identification of priorities and stakes.
- The prospective dimension and the notion of sustainability threshold. Sustainability established for
 yesterday, today and tomorrow provides markers to guide ICZM, which indicate the path to be followed in
 order to guide management activities in a coastal zone onto a sustainable development course. They also
 make it possible to check that the ICZM process is coming about under the necessary conditions of
 sustainability.

Besides the afore-mentioned points, the adaptability of *Imagine* and its flexibility in terms of its potential uses within a wide range of applications should also be underscored: the approach has proven eminently adjustable to any situation, its "toolbox" allowing it to respond in real time to various demands, such as paying closer attention to certain aspects such as the notion of sustainability threshold or, on the contrary, making rapid headway on certain better known aspects such as indicators.

Far from being set in stone, the idea behind the *Imagine* approach is one of on-going improvement, with each workshop and each additional application driving progress and providing a further source of enhancement. Intended for use within the framework of an ICZM project, it also lends itself to all types of local planning and development projects.

Finally, it is worth mentioning that an *Imagine-Organisation* version has been developed and successfully applied to various institutions /organisations seeking to give strategic consideration to their future.

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