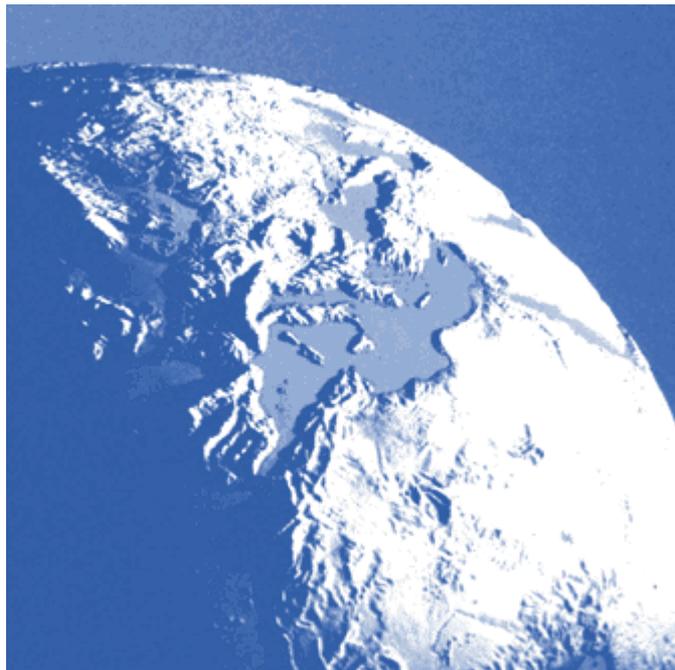




A Practitioner's Guide to 'Imagine' The Systemic and Prospective Sustainability Analysis



Blue Plan Papers

The Guide to 'Imagine' was prepared for Blue Plan by Dr. Simon Bell, Open Systems Research Group, Open University, UK, in collaboration with Elisabeth Coudert, Blue Plan.

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**A Practitioner's Guide to 'Imagine'
The Systemic and Prospective Sustainability Analysis**

Blue Plan – October 2005

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Foreword

To improve its systemic and prospective approach at the local level the Blue Plan, jointly with Dr. Simon Bell of the United Kingdom's Open University, has tested, tried and consolidated the 'Imagine' method of analysing systemic and prospective sustainability in Coastal Area Management Programmes (CAMPs) implemented by the UNEP/ Mediterranean Action Plan in Malta, then in Lebanon, Algeria and Slovenia.

This new, now published method has been developed thanks to the active participation and enthusiasm of the local teams that have implemented it, in particular their team leaders, as well as associate experts. Above and beyond the report's main authors –Simon Bell of the Open Systems Research Group at the Open University in the United Kingdom and Elisabeth Coudert of the Blue Plan– we would also like to mention in the chronological order of their contribution Stephen Morse of Reading University (UK), Anthony Ellul of MEPA (Malta), Heba Hage and Muzna Al-Masri of MADA (Lebanon), Mohamed Larid of ISMAL (Algeria), Farid Yaker of ENDA (Europe) and Igor Maher of RRC (Slovenia).

'Imagine' also received unstinting support from the Regional Activities Centre of the Priority Action Programme (PAP/RAC, Split, Croatia) concerning its seamless inclusion within the framework of the CAMPs.

'Imagine' is a participatory method based on sustainable development indicators. It enables any group of actors from varying perspectives but all involved with a given area to enhance their awareness, together, of current changes and the risks involved in present trends and to set measurable progress goals in the medium and long term in economic, social and environmental planning.

Its brief is to be widely used in all integrated management programmes of coastal areas, especially in the MAP's CAMPs. And more broadly speaking it may well prove useful in any other local management/development project.

The Blue Plan and Dr. Simon Bell are anxious to promote its dissemination and use while keeping it constantly up to date.

*Guillaume Benoit
Director, Plan Bleu*

Summary

The purpose of the Mediterranean Action Plan's Coastal Area Management Programme is to help Mediterranean countries implement a sustainable management process for their coastal areas. This in particular implies thinking collectively about possible futures by taking into account past developments and the present situation of the area in question. To do so and right from the very start, the Blue Plan has assisted teams involved in the CAMPs to use the systemic and prospective approach so as to highlight priorities, forecast negative developments and suggest action to be taken to establish sustainable development in the Mediterranean's coastal areas.

What do we mean by sustainable development? The Blue Plan adheres to a definition that is a blend of what you find in the Bruntland Report and at the FAO, **"sustainable development is one that respects the environment, is technically appropriate, economically viable and socially acceptable, making it possible to meet the needs of present generations without jeopardising the ability of future generations to meet their own needs"**.

In this framework the 'Imagine' analysis of systemic and prospective sustainability now proposes a set of tools and methods (a methodological corpus) to describe, assess and examine the level of sustainability of an eco-socio system in the past, present and future by means of indicators and a participatory process that considers local actors to be experts at their level.

'Imagine' is an innovative method that relies on the four following basic notions:

- The systemic approach that makes it possible to study a coastal area as a whole
- The prospective and scenario methods to clarify present actions in the light of future images
- The indicators and concept of sustainability to position ourselves in the process of sustainable development
- Participatory methods that rely on the expertise of local actors and give them the means to design and control their own management/development.

'Imagine' includes four stages implemented in five workshops. It is a dynamic process and a lively method in constant development according to the different frameworks in which it is used. Virtually every workshop, or almost, contributes its share of improvements.

To sum up *'Imagine'* very quickly, we might say that it means having a good understanding of the issues at stake and the actors involved, then of defining the indicators that describe the situation as completely as possible. To determine its sustainability, a minimal and maximum value is given to each indicator, between which the criteria for adhering to sustainable development are assessed. This is what is called the Band of Equilibrium. Diagrammatic representation of all indicators compared to this Band provides a visual image of the "sustainability" of the area at the time in question.

Retrospective data makes it possible to identify and show current developments and the weighty trends for the key indicators. Projecting the latter into the future by answering the question "*If... then...*" (e.g. *If* the urbanisation rate continues at this pace, *then* it will reach such-and-such a value and will have such-and-such an impact), a trend image of the future and its sustainability is obtained up to a set time period. Then with more desirable developmental assumptions for each key indicator an alternative and more "acceptable" image is built of the future from an economic, social and environmental point of view.

The micro-scenarios worked out for the key indicators make it possible to build overall scenarios (meta-scenarios) for the entire area under study, then to investigate all their implications. In answering the question "*What do we do if...?*" (e.g. *What* actions might we undertake *if* we want to substantially reduce the loss of fertile lands through urbanisation?), actors develop action programmes to be implemented in order to attain greater sustainability in the area under consideration. Assigning quantified goals to be reached in a fixed time frame for each key indicator constitutes the basis of a trend chart for monitoring the progress or delays towards the sustainable development desired.

Designed as iterative, the 'Imagine' process has to be re-implemented periodically to re-assess the "sustainability" of the area in question in the light of socio-economic –even geopolitical– changes that may have affected it in the previous period.

1. Background to the Practitioner's Guide

The methodology set out in this handbook was originally concerned with sustainable development. More specifically, the Systemic and Prospective Sustainability Analysis (English), or Analyse de Durabilité Systémique et Prospective (French) or SPSA/ADSP, now called 'Imagine' (same meaning in English and French) has been specifically designed to provide stakeholder groups with a means to undertake an holistic review of their context and to engage in a decision making process which will assist them in gaining insights and hopefully control over their own sustainable development.

1.1. 'Imagine' – An overview

Step by step, the 'Imagine' process is designed to facilitate team formation and to provide such groups of stakeholders and facilitators with the capacity to:

- Review their social, economic, environmental, historical, political and technical context
- Assess the issues of concern to them
- Abstract from these issues a series of elements which are agreed to define the sustainability of the context
- Structure these items into a series of measurable sustainability indicators
- Agree on what would constitute a sustainable¹ measure for each indicator. In this process the stakeholders set out on a scale, what any given measure for an indicator would mean in terms of being un-sustainable by deficit, sustainable and un-sustainable by excess.
- Assess, from gathered data, the actual values of the indicators – and set it out on the scale
- Present this information in a simple but deeply informative, graphic diagram called a Radar diagram or AMOEBA²
- Inform wider stakeholder groups concerning the present situation respecting the sustainability of the context
- Develop future scenarios derived from the 'Imagine' process
- Set out policy implications derived from the overall analysis
- Market and publicise the outcomes.

'Imagine' is more fully described elsewhere (Bell and Morse 1999; Bell and Morse 2003; Plan Bleu 2005) and can be seen as being based on three existing systemic approaches:

- Systems Analysis (among a wealth of alternative texts see: Simon and Le Moigne 1991; Senge, Ross et al. 1994; Beer 1999)
- Soft System Methodology (Checkland 1981; Checkland and Scholes 1990)
- Prospective / Scenario Making (Schwartz 1991; Godet 2001; Godet, Monti et al. 2004).

It also includes a toolkit of tools and techniques including Indicator development, Active Listening (Gordon 1970), Structural Analysis Matrix, Risk Analysis (Hughes and Cotterell 1999), Logical Framework (Coleman 1987; Cordingley 1995; Gasper 1997; Bell 2000; Gasper 2000), and Focus Groups.

In essence, the 'Imagine' approach is a participative approach to understanding difficult issues. It is intended to be 'handed over' to local stakeholders, and to provide a means to enable long-term sustainability to be owned and developed by and for these specific stakeholder groups.

In collaboration between Simon Bell and Blue Plan 'Imagine' has been developed and applied in the Mediterranean region, i.e. in Malta, Lebanon, Algeria and Slovenia on a series of Coastal Area Management Programs (CAMP) within the Mediterranean Action Plan context.

¹The exact nature of what sustainability constitutes is discussed in some depth in section 2.2.3

² The Radar diagram or "AMOEBA" diagram is described in section 3.4

The experience of the first three CAMPs has been constructive and generally positive. However, with a view to fine tuning the approach, a workshop was held in Sophia-Antipolis (France), in October of 2004, in order to bring together 'Imagine' practitioners from the original three CAMPs (Malta, Lebanon and Algeria), Blue Plan staff, the Director of the Priority Action Programme (PAP) and Simon Bell, in order to define the strengths and weaknesses of 'Imagine' as it was rolled out in each of the three projects, and to seek to develop and improve it for the future.

Key themes for 'Imagine' as presented at the end of the Workshop were as follows, 'Imagine' must have:

- Clarity of process – a four-fold structure:
 - Understand the context and possible futures
 - Develop the SIs and produce graphic presentations of indicators
 - Explore the future, develop scenarios, choose a desirable and possible scenario as a suggestion for policy
 - Market and publicise the results and process
- Comprehensive but flexible application – developing the concept of different modes of application depending on the contingencies of each context
- Readily transferable tools and techniques
- Conformity to existing SI process whenever possible
- Inclusion of Scenario Making from the beginning.

It is the objective of this report to set out the essential handbook for the realisation of 'Imagine'.

1.2. Aims and learning points of this manual

This manual is concerned with the clear and concise explication of 'Imagine' as a learning methodology for the empowerment of stakeholder groups. More specifically, the aims for the manual are to:

- Introduce the intellectual requirement for 'Imagine'
- Demonstrate the value of 'Imagine'
- Discuss and describe the various tools within 'Imagine'
- Discuss and describe the craft skills needed to perform 'Imagine'
- Provide the reader with all the tools necessary to undertake an 'Imagine' activity within their project context.

When the reader has completed absorbing the contents of this manual, it is the expectation of the authors that she/he will:

- Be aware of the essential background for 'Imagine'
- Be capable of recognising the context in which 'Imagine' is of value
- Identify the main concepts of the 'Imagine' approach
- Be capable of understanding the fundamental principles of 'Imagine'
- Be able to set out the 'Imagine' approach for a context which is of importance to her/him.
- Be able to apply, in a simplified manner, and reflect systemically, the main concepts of 'Imagine'.

2. Intellectual rational for eclectic 'I imagine'

2.1. 'I imagine' – How did we get here?

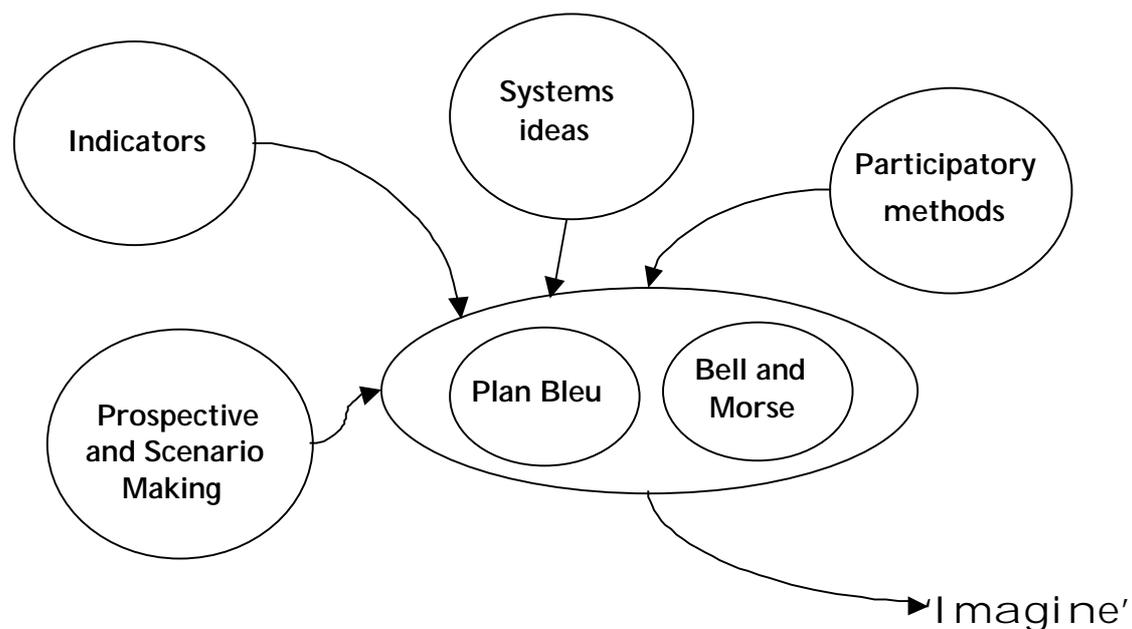
'I imagine' arose from an eclectic and syncretic process, from combining a series of ideas, methods and experiences, from both the Anglophone and the Francophone communities.

2.2. 'I imagine' – The foundations of the approach

Essentially, the 'I imagine' approach arose from the combination of the work and practice of Simon Bell and Stephen Morse and Blue Plan. These two sources, building from four different intellectual / practical domains – from a wide range of different literatures and practices produced the first working model of 'I imagine'. The four underlying domains (Figure 1) are:

- The Systems Approach
- Prospective and Scenario making
- Sustainability Indicators
- Participatory methods.

Figure 1 The basis for 'I imagine'



2.2.1. The systems approach

Key to the development of 'I imagine' is the global phenomena known as the systems movement and the plethora of ideas and practices which can be loosely put under the heading 'the systems approach'. Drawing on established authors and authorities in mixed language traditions³, 'I imagine' contains strong systems tendencies – most pertinently in its focus on:

- Seeing 'systems' as objects of joint understanding in the world
- The identification of problems of high priority
- The importance of relationships in studying dynamic processes

³ See for example: Bertalanffy 1968; Cleland and King 1970; Rosnay 1977; Checkland 1981; Foerster and Varela 1981; Beer 1985; Bawden 1990; Checkland and Scholes 1990; Le Moigne 1990; Lapierre 1992; Senge, Ross et al. 1994; Fals Borda 1996; Bawden 1997; Stowell, Ison et al. 1997; Flood 1998; Flood 1999.

- The value of thinking holistically in group work
- The need for autonomy and inclusion in decision making
- The use of graphic images and diagrams in the development of purposeful action.

Systems thinking is far more than even all of these epithets, but it is fundamentally a means to understand the world as shared perceptions of systems, to engage with complexity, to solve problems and to address issues of perspective and context.

Systems thinking and systems practice can assist in the understanding of the past, present and future (in the short term), Scenario Making can also assist with the consideration of future states and activities in the mid and long term.

It is important to recognize that the 'Imagine' approach draws heavily on both the theoretic foundations of the systems movement but also espouses the practical applications of these theories in good practice in problem solving. In this sense it draws on a number of traditions and established forms of systems thinking⁴.

2.2.2. The Scenario Planning and Scenario Making literature

In the development of any plan it is advisable to be aware of the future world which your planning will have to cope with. One of the great weaknesses of organisations is their resistance to changes in the context in which they are embedded. For sustainable development it is important to develop future plans which are capable of meeting the needs of tomorrow as well as yesterday. Scenario Making is one means to grapple with the tricky issue of possible futures but it is wise to be aware of the words of Michel Godet – a major thinker in the 'French School' of Scenario Planning – Prospective: "*Unfortunately there are no statistics for the future*". (Godet, Monti et al. 1999), and Matzdorf and Ramage have said: "*No-one can predict the future. Many people have tried – from prophets to mathematicians – but most predictions go awry. However we can identify a number of possible futures, and especially the areas in which major change is likely to occur. Scenario Planning is one way of doing this*" (Matzdorf and Ramage 1999).

One of the founders of Scenario Making, Peter Schwartz, in an interview (Dearlove 2002) described the spirit of contemporary Scenario Planning as follows: "*there is a recognition that big complicated methodologies and elaborate computer models are not the optimal way. It has moved away from formal planning-like processes more toward a thinking tool. And it is not much more profound than that. So it's a methodology for contingent thinking, for thinking about different possibilities and asking the question 'what if?'*".

Going on to think about Scenario Making as an art or a science, Schwartz says: "*That's why I called my book *The Art of the Long View*. The second thing that is quite important is it has moved away from a focus on the external world toward the internal world of the executive*".

In this handbook, we are concerned with the internal world of the local participant in sustainable development practices as well as the executive, and Schwartz went on to describe the application of Scenario Planning in these terms: "*This was Pierre Wack's big insight at Shell. The objective is not to get a more accurate picture of the world around us but to influence decision making inside the mind of the decision maker. The objective of good scenarios is better decisions not better predictions*".

In this handbook we are seeking to apply Scenario Making in this mode - to improve decision making. Matzdorf and Ramage, as advocates of the Schwartz approach, have described the scenario approach as follows: "*Scenarios are alternative images: possibilities, not predictions. Scenarios are not just wild guesses or science fiction stories. However vital imagination is to the process, there are some rules that need to be followed if scenarios are to help in strategic planning. In particular, we believe it is not useful to develop just one or two scenarios. Some approaches to Scenario Planning use an optimistic one, a pessimistic one and the status quo, or two opposing scenarios. Schwartz argues, by contrast, that a range of different scenarios helps people to 'think*

⁴ For an example of this linkage in a variety of systems approaches, see: Rosenhead and Mingers 2001.

outside the box', rather than in 'black-and-white' opposites, making it possible for planners to develop strategies for many different futures rather than just for one or two options. Scenarios should help managers to become aware of the mental models and frames of reference they operate in, and not leave them caught up in their 'mental ruts'" (Matzdorf and Ramage 1999)⁵.

Originally Scenario Planning was developed for strategic organisational planning. It is also highly valuable for sustainability planning as has been shown in the literature on the subject and has been experienced in Blue Plan projects in the present and past⁶.

Both systems thinking and Scenario Making have their values, but in the development of 'Imagine' the context was all important. This context can be broadly stated as being the understanding of sustainable development in a given location. Sustainable development is understood via sustainability indicators arising from systems thinking and Scenario Making.

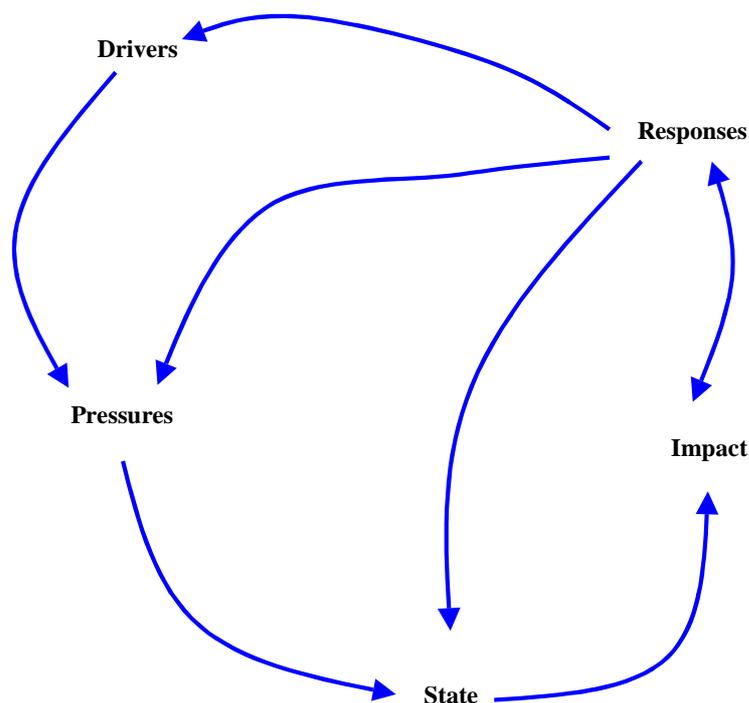
2.2.3. The Sustainability Indicator context

The following section draws heavily from the book written by Bell and Morse (1999).

One approach to gauging progress towards sustainable development is the use of Sustainability Indicators (SIs), and there are many published lists or matrices of SIs dating back at least a decade. Some examples and discussions can be found in the extensive literature⁷.

The pressure, state, impact, response, driving force model (Figure 2) for the deriving of indicators is now well established.

Figure 2 Classical Driving force-Pressure-State-Impact-Response (DPSIR) model for indicators of sustainable development



Source : derived from Smeets and Weterings 1999.

⁵ See also: de Geus 1988; Schwartz 1992; van der Heijden 1994.

⁶ See: Gonod 1990; Schwartz 1991; Schwartz 1992; Barney, Blewett et al. 1993; Gaudin 1993; Godet 1993; UNESCO 1994; van der Heijden 1994; Godet and Beffa 1995; Lanquar 1995; Giget and Godet 1996; PNUE 1996; Godet 1997; Ramade 1997; Villeveille 1997; Bailly 1999; Courson 1999; Godet, Monti et al. 1999; Godet 2000; Godet 2000; Matzdorf and Ramage 2000; Attane and Courbage 2001; Chermack, Lynham et al. 2001; Kaivo-oja 2001; Mack 2001; Martelli 2001; Mercer 2001; De Montgolfier 2002; Dearlove 2002.

⁷ See for example: Liverman, Hanson et al. 1988; Moffat 1992; Izac and Swift 1994; Mitchell, May et al. 1995; Gilbert 1996; Harger and Meyer 1996; Hardi and Zdan 1997; Pinfield 1997; Rennings and Wiggering 1997.

Such models have been the basis for the formulation of numerous variations of Sustainability Indicators such as those produced by the UK Department for Rural Affairs www.sustainable-development.gov.uk/indicators, the United Nations www.unep.org/project_manual/, the OEDC www.oecd.org/dataoecd, etc.. Further, the nature of such indicators and their rationale is explained in a host of texts and web sites e.g. <http://org.eea.eu.int/>.

However, a complication arises in that sustainability incorporates many dimensions, including emotive and normative issues such as the 'quality of life' (Cutter, 1985; Crilly et al., 1999; Kline, 2000) and the 'management of expectation' (Bell and Morse 1999). Such issues cannot easily be encapsulated in simple indicators or prioritised in any objective sense of the word (Mitchell *et al.*, 1995; Stirling, 1999). Indeed, summarising complexity into simple numbers can be dangerous, but does condense information into a form that can be accessible to the non-specialist. Nevertheless, despite the problems that are inevitable in the use of simple indicators for something so complex, the focus upon SIs appears to be irresistible. In large part this is a reflection of the huge appeal of the basic ethos of sustainable development, and its particular resonance with the collective psyche of the western world. Given this pressure, it has to be said that SIs are the most logical way to proceed, especially given the long and successful (in terms of widespread use) history of indicators in environmental management, economics, social science, policy etc.

Yet while examples of SI frameworks are legion – and expanding rapidly – there has been relatively few examples of SIs being used by politicians and decision makers at a senior level to routinely influence policy or as management tools (Pinfield 1997; Stirling 1999; Rigby, Howlett et al. 2000). On the surface this may be puzzling when one considers that for the most part SIs have been established in a more 'top down' (also referred to as 'external' or 'expert') mode by natural and social scientists and planners. An 'expert' led process of SI generation may, at least on the surface, be thought to appeal to managers and policy makers.

One comment on this can be found in a recent review: *"Much of the measurement of indicators has, at the end of the day, largely resulted just in the measurement of indicators. The actual operationalisation of indicators to influence or change, for instance, policy is still in its infancy."* (Rigby et al. 2000).

This is sobering given that SIs have been with us for over two decades, and much resources have been allocated to the development of SI frameworks. What is the problem? This question has been addressed by others, including a vigorous debate within many journals, and some have suggested that in part it may be due to a historical and continuing technical emphasis on improving measurement rather than 'use' (Pinfield, 1996). In our view there have been two dominant facets of this emerging debate on 'use' that one can trace back to the early days of SIs some 20 years ago:

- 1) the need for clear and simple presentation of SI frameworks
- 2) the need for participation on behalf of those who are intended to ultimately benefit from the SIs.

Presentation has tended to revolve around the use of diagrams, tables (Crilly, Mannis et al. 1999) or even an integration of SIs into a single value for sustainability. A simplified presentation does inevitably mean a reduction in information conveyed and a pre-condition that the information presented will conform to the assumptions and mindset of the gatekeeper of the SIs. It could also do the opposite – providing attractive, simple and persuasive diagrams that are based on incomplete and/or inaccurate data sets.

The argument for participation is convincing (Brugman 1997; Pinfield 1997). After all, if one is to really make SIs effective then one should include the views of those who are ultimately intended to benefit from them. As well as the moral side to this, there is the realistic view that if these groups are involved and engaged in SI conceptualisation and development then it is far more likely that they will use and appreciate the results. The desirable result may well be a two-way interaction, with both groups 'participating and learning'. But this opens up another of the platforms for 'Imagine' – the need for participation.

2.2.4. The Participatory Approach (PA) to projects

The purpose of participatory analysis is to provide a place in project development processes for stakeholders to be engaged in all issues which analysis and design involves and reveals. This is the minimum requirement. Beyond this narrow view participation can lead to wide-scale understanding by stakeholders of each others views and values, a compassion for sensitive issues and a truer understanding of the real worries and concerns which lie beneath the surface of environmental and organisational change which can be experienced as brutal or insensitive.

Participatory analysis is really a collection of sub-tools and their application and use cannot be set out dogmatically. Different circumstances will require different combinations and sequences.

The majority of the sub-tools used in PA are not uniquely of value to Sustainable Development (SD) as such – in fact they have been notably under-utilised in much SD. Rather they have been used by facilitators and trainers in many diverse places to engage local populations and to initiate conversations about the change processes which are envisaged (for example see: Pickles 1995; Chambers 2002). The potential use of PA are set out in section 4. of this handbook.

2.3. 'Imagine' in context

The 'Imagine' approach is intended to provide insights and purposeful ways for communities to assess, measure and have real input to sustainable development. However, no-matter how good the approach, and no matter how complete the toolkit, any method applied to develop purposeful development is still dependent upon issues in the wider environment. These include such issues as:

- The political will of decision makers to embark on sustainable development
- Local buy-in of stakeholders to the 'Imagine' process
- Long term commitment of decision makers to the outcomes of the process
- A desire in decision makers to see real outcomes and changes and to provide leadership in sustaining them beyond the short life term of the project.

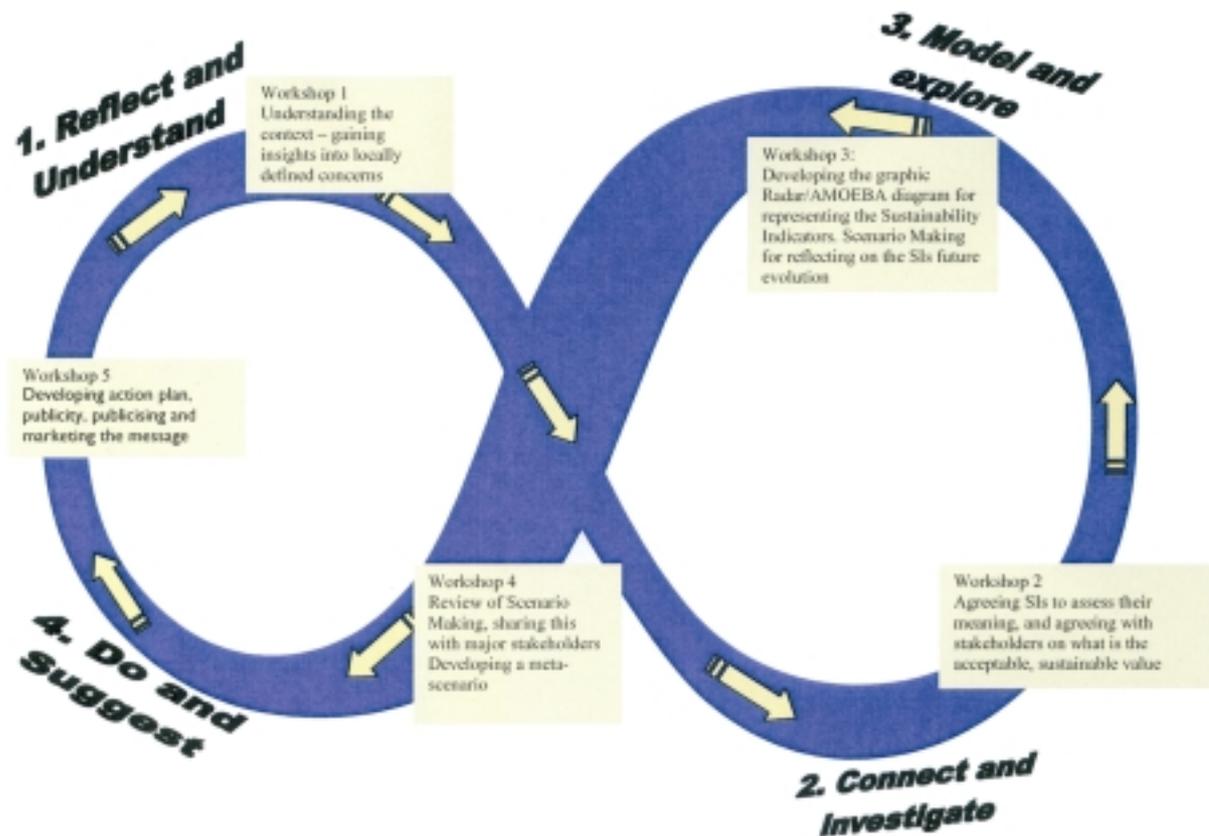
These in turn require courage and energy on the part of any project team engaged in sustainable development.

These are all issues which lie outside the remit of the 'Imagine' method itself but should be monitored and taken into account in the development of any project.

3. 'I magi ne' – A systematic and systemic approach

'I magi ne' is represented by the infinity symbol – which has been used as its logo since it was applied in the Mediterranean. However, in the current handbook, an attempt has been made to simplify the stages of the approach, linking each to one of five workshops, rolling out the four phases of 'I magi ne'. Figure 3 shows this new format.

Figure 3 'I magi ne'



Rather than the original format of twelve stages – which was academically accurate and rendered the approach a defensible intellectual methodology, the four phase representation undertaken in five workshops is more accurate as a pragmatic device and this in turn answers one of the main criticisms of 'I magi ne' raised by practitioners – that it was too academic.

The four fold representation of 'I magi ne' focuses on:

- Reflecting on and understanding the context by gaining the insights and knowledge of the area and the stakeholders concerned
- Connecting with and investigating existing and new SIs and setting bands of equilibrium
- Modelling and exploring via Scenario Making – this stage is also concerned with developing the AMOEBAs graphic presentational diagram⁸
- Doing and suggesting: developing the action plan for sustainable local development, including the continuing use of 'I magi ne' and monitoring the progress of the project area towards sustainable development.

⁸ To be introduced and explained in section 3.4

The final phase also includes instituting a process of assessment of indicators and renewal leading from and assisting in the development of publicity, publicising and marketing the outcomes of 'Imagine'.

Figure 3 depicts the overall structure of 'Imagine' – the following sections go on to explain the stages and sub-stages of the methodology in more detail.

3.1. The main stages, administrative details and key tools

'Imagine' depends on participation and inclusion in the development of the process. It is important that the participatory workshops include all those individuals and stakeholders present who can participate most usefully in all deliberations. Participation at workshops can be seen to work at up to six levels (Table 1).

Table 1 Participation at Workshops

Level	Key people involved
1 Foundation team	Project management officials, main consultants plus key local counterpart (the local person who is to be the 'Imagine' expert in-location)
2 'Imagine' team	Will always include the Level 1 group. These are the main people in-area of interest who will use and apply the methodology
3 Wider project team	Includes representatives from all aspects of the project
4 Expertise team	Includes those selected by the Level 1 – 3 teams as having distinct knowledge, and expertise that will assist the project
5 Stakeholders	Includes those with an interest / stake in the project process
6 General public	All those with any interest in the process of the wider project

These six teams will be referred to in the following breakdown of the methodology.

In sections 3.2 to 3.5, the five workshops are elaborated – initially as an overview table and then subsequently as a more detailed explanation.

Central to the use of 'Imagine' is the application of problem structuring methods, tools and techniques. These are set out in detail in the following four sections. They are described briefly in the following Table 2. It should be noted that these tools and techniques are available for use if required. Similarly they do not have to be applied in all cases.

Table 2 Tools and techniques used in 'Imagine'

Tool / technique used in 'Imagine'	Context for use	Skills needed
Soft Systems Methodology (SSM), partially adapted but focusing on <ul style="list-style-type: none"> - Rich Pictures - Root Definitions - Activity Models 	SSM is used in an adapted form throughout the methodology. Rich Pictures can crop up in workshops (WS) across the project. Other elements can be used throughout too.	Level 1 – 3 teams get inducted into SSM in WS1. Stakeholders and technical experts (Levels 4 and 5) are passive users, not needing to know how it is done. SSM can be used, for example in WS1, 4 and 5, in Presentation 2, for details see CD ⁹ .
The first two columns of the Logical Framework (LF), relating to the Purpose, Outputs and Activities	Used in WS1 and WS2 if needed. It can be a help in getting the right indicators at the right level.	No need to train most people. Familiarity with LF is widespread. Basic information is provided in Presentation 2.
Active Listening and Sustainability Therapy	Used in small group facilitation, when needed.	Uncomplicated analysis skills needed. Contained in Presentation 3.
Sustainability Indicators and key indicators	Used by large and small groups to arrive at the focus areas of concern for the areas covered by the thematic teams. Key indicators go beyond this, encompassing the local project as a whole.	Some basic guidance in the use of indicators and their general application in Sustainable Development contexts, for example in Presentation 1 and Presentation 2.

⁹ All the presentations are contained in the CD which accompanies this manual.

Band of Equilibrium	Essential part of WS2.	Uncomplicated analysis skills needed but teaching the main elements can be demanding to the facilitator. Contained in Presentation 4.
'Imagine' Feasibility Study	Used in WS2 and WS3, but may not be essential.	Uncomplicated analysis skills needed. Contained in Presentation 4.
Matrix / Matrices	Possibly used in WS1 and WS2 but certainly applied in WS3 and WS4.	Capacity to compare and relate different indicators, to cluster and prioritise these indicators and to make relations between indicators and strategic actions arising from Scenario Making. See Presentation 5.
AMOEBAs ¹⁰ and / or Radar diagrams	Used in WS2 and WS3. It is essential that all core team and stakeholders have an understanding of the presentational values of AMOEBAs and radar diagrams.	Uncomplicated diagramming technique. Contained in Presentation 6.
Scenario Making	All core team members would need to know how to do this. Introduced in WS3 and used in WS4.	Contained in Presentations 7 and 8. But could make use of SSM as a tool. This is contained in Presentation 2.
Marketing and promotion	All core team members would need to see this and consider the key questions it raises in WS5.	Uncomplicated approach to thinking about who needs to know what. Contained in Presentation 9.

'Imagine' is presented below as five workshops and four work periods between workshop phases – and one post project phase. Each workshop or post workshop phase has its own aim and learning outcomes. It would be expected that, depending on the context for the use of 'Imagine', the workshops may need to be flexible, allowing some carry-over, or clipping of individual stages, but in effect 'Imagine' could conceivably be accomplished in an adapted form in four workshops, the last one being set aside for a marketing and publicising event, so the structure advocated here is probably flexible enough to accommodate the needs of most contexts.

Assuming that each of the workshops is contained in a two days event, the agendas for these events are provided and links to example PowerPoint presentations used in the Slovenia project are set out as illustrations of use in the CD which accompanies this handbook.

¹⁰ AMOEBAs here is originally taken from the diagram style developed by Ten Brink et al (Ten Brink, Hosperi et al. 1991) meaning, in Dutch, 'general method for ecosystem description and assessment'. However, in this handbook, we use it extensively as a diagram style, to mean an AMOEBAs shape rather like the 'blobs' used in much systems diagramming.

3.2. Reflecting and understanding the context

Workshop n°	Approximate time in the project process	Who are involved and what tools do they use?	The aim of the workshop or transition period between workshops is to:	Learning points At the end of the workshop or transition period, those attending will have achieved:
WS1	Ideally this event occurs as one of the first activities under the project auspices. Nominally known as month 0.	<p><u>Participants</u> Levels 1 – 3 'Imagine' teams representing all thematic teams and municipalities involved in the wider project.</p> <p><u>Tools</u> Rich Picture, Active Listening, Sustainability Therapy, Tasks and Issues, Root Definitions, Activity Plans. Some presentation on what is meant by SD and indicators will/may be needed.</p>	<ul style="list-style-type: none"> familiarise all representatives of all aspects of the context agree main themes relating to sustainable development (SD) start considering indicators which may measure the agreed present vision of SD develop visions or Root Definitions which could inform future Scenario Making – this is not a detailed view, merely a means to start 'thinking ahead' for the project area set out action plans for 'Imagine' on how these visions may be achieved. 	<ul style="list-style-type: none"> an understanding of individual and collective views of SD – including knowledge of actors, conflicts, forces for change, stakeholders, etc. cohesion as a group understanding of the main themes of SD in the context Root Definition(s) of a sustainable future Action plans on how the project/sub-projects may contribute towards the achievement of this future preliminary list of indicators related to the action plan commitment in the core team to the 'Imagine' process understanding of what is needed for the achievement of the aims of Workshop 2.
Activity between WS1 and WS2	Between months 0 and 2.	<p><u>Participants</u> The Level 1 and 2 teams are engaged in contacting technical experts and reviewing indicators already in place.</p>	<ul style="list-style-type: none"> engage in work on the action plan begin to collect indicators discuss likely indicators with technical experts review indicators that already exist with country and regional agencies. 	<ul style="list-style-type: none"> initial work on the action plan a coherent initial list of indicators views and understandings of technical experts on the indicators collected an assessment of what SIs are already available, locally, nationally and regionally.

Main themes, key tools and techniques¹¹

The theme for the workshop is "Reflecting and Understanding" and to do this effectively the workshop makes use of Soft Systems Methodology or SSM, applied in a Focus Group type format (see section 4.1.2 for details). SSM is adapted for the purposes of the workshop but essentially comprises three main tools:

- Rich Pictures. These are an informal diagramming style which act both as an icebreaker to proceedings and as a means to 'sweep in' conflicts, problems, concerns, ideas, emotions and anxieties; and to share these with the team who are brought together. Generally at this stage the thematic / municipality teams are engaged in considering each of the main thematic areas. The pictures developed by the teams provides an opportunity for all those assembled to share their ideas and put them down together. The picture often has an almost magical property of allowing a diverse

¹¹ All tools are described in more detail in the presentations set out in the CD.

group to put all their ideas down on one sheet and to listen to each other.

- From the Rich Picture come a series of **tasks** (things to do) and **issues** (problems) which the participants are then encouraged to prioritise – firstly into the key '**system of interest**', which can be a brief statement of intent, and then into a more clearly defined **Root Definition** – this is the vision, or key idea behind the 'Imagine' as applied to each of the thematic teams in the project. The Root Definition contains six key elements: **B**eneficiaries, **I**mplementors, **T**ransformation, **A**ssumptions, **O**wners and **C**onstraints (**BITAOC**) which have been previously developed by stakeholders. The Root Definition provides a view of the project and a view of what it is trying to achieve.
- This is then supplemented by an **Activity Model** or **Conceptual Model** of how the Root Definition is to be achieved.

In making use of these tools the team identifies main issues and concerns. The thematic teams are also made familiar with the use and development

of Sustainability Indicators and begin to think ahead to what indicators they might use to look at and understand their own thematic areas.

During the transition period between WS1-WS2 it is expected that the Level 2 team will contact technical experts to feed in their ideas for workshop 2.

The SSM process provides an opportunity for the group gathered together to think not just of what is the current situation but also, to consider the future and what might be. This is an option open to the facilitator but it can be of value, when the first Rich Picture has been produced, to set out a second picture of how the context might look in three years – for example – when the current project is concluded. This does provide an opportunity to think in a positive way, about the potential values and problems for the project.

The workshop may also make use of Active Listening if sharing ideas is a problem.

3.3. Connecting with and investigating existing and new SIs and setting Bands of Equilibrium

Workshop n°	Approximate time in the project process	Who are involved and what tools do they use?	The aim of the workshop or transition period between workshops is to:	Learning outcomes At the end of the workshop or transition period, those attending will have achieved:
WS2	Month 2 of the project.	<p><u>Participants</u> Level 1 – 3 for day 1 and the morning of day 2, and wider stakeholder community – levels 4 and 5 for pm of day 2.</p> <p><u>Tools</u> Brainstorming, team dynamics, clustering and prioritising indicators*.</p>	<ul style="list-style-type: none"> reviewing the common set of SIs, up to 100 agree on a core set of representative SIs, between 10 and 30 set the band of equilibrium for the key indicators agree the calibration of the reference points for each indicator – this can be set at seven or four points on the scale** let the wider stakeholder community comment, interpret and suggest changes to the core group of indicators. 	<ul style="list-style-type: none"> agreement (from representatives of Level 1 – 5 teams) on the objectives for the indicators for the ongoing process agreement on a representative sample of indicators agreement on a core set of indicators Bands of Equilibrium for the key set of indicators the calibration of the key indicators on the scale comment and suggestion for change from the wider stakeholder community.
Activity between WS2 and WS3	Between months 2 and 5.	<p>The Level 1 and 2 teams will:</p> <ul style="list-style-type: none"> review the feedback from the first stakeholder meeting held at the end of the 2nd workshop and make any necessary changes to the core SIs see that data is collected for the core SIs ensure that data is organised into the scale. 	<ul style="list-style-type: none"> be prepared for the next workshop. The focus for WS3 is the development of example AMOEBA or Radar diagrams as a basis for Scenario Making. The WS must be supplied with: <ul style="list-style-type: none"> historic data for the core indicators data linked to the scale. 	<ul style="list-style-type: none"> agreement on the meaning of the stakeholders changes historic data effective scaling of the data for each indicator.

* Agreeing what constitutes the sustainable value for indicators. Feasibility Analysis for the agreed key indicators; meeting management for feedback on the core indicators from the stakeholder group; possibly selective use of LogFrame as a means to decipher different types of indicator.

** The seven point scale is ideal but a four point scale is a minimum. The four point scale would constitute values for each indicator: minimum, minimum sustainable, maximum sustainable and maximum.

Main themes, key tools and techniques¹²

Key tools for this stage are again Focus Group type meetings to brainstorm the main indicators and to set them out in terms of priority.

Three tools are suggested following the preliminary brainstorming:

- 'Imagine' Feasibility Analysis – checking that suggested indicators can actually be gathered – that data is available, etc.
- Band of Equilibrium is set for each of the agreed indicators and a scale is produced for each which clearly shows what would constitute a value which is sustainable or not.
- Log Frame. It is not suggested that the LF needs to be applied in full, but it can be of value to use the first two columns of the Framework as a means to discriminate between indicators which are definitely

¹² All tools are described in more detail in the presentations set out in the CD.

Performance focused or Performance Indicators (PI), or measures of Impact – Impact Indicators (II) as opposed to Sustainability Indicators (SI). But this is an optional tool and does not necessarily have to be used.

Some skills in running larger workshops are required for the meeting of wider stakeholders.

The Level 2 team will also need to be sure that the Feasibility Analysis is adequate to prepare them for the task of providing the scale to each indicators assessment and measurement – this comes up more fully in Workshop 3.

3.4. Modeling and exploring with Radar diagram or AMOEBA and Scenario Making

Workshop n°	Approximate time in the project process	Who is involved and what tools do they use?	The aim of the workshop or transition period between workshops is to:	Learning outcomes At the end of the workshop or transition period, those attending will have achieved:
WS3	Month 5.	<p><u>Participants</u> Level 1 - 3 teams plus any special invitations to Level 4.</p> <p><u>Tools</u> The main tools used are the AMOEBA tool software or Excel Radar diagrams and Scenario Making. Matrix.</p>	<ul style="list-style-type: none"> • imagine and visualise possible futures. To do this the workshop participants produce AMOEBA for the present, the past and - making use of Scenario Making, several futures based on key indicators • introduce the use of a matrix to compare and contrast key indicators and their inter-relationships. 	<ul style="list-style-type: none"> • a clear and agreed view of the AMOEBA representing the past for the project context • a clear and un-ambiguous view of the present position for the SD of the project context • a series of scenarios on key indicators for the future for the SD of the project context • the development of a matrix indicating inter-relationships between indicators.
Activity between WS3 and WS4	Months 6. - 7	<p>Level 1 – 3 teams.</p> <p>Scenario Making and facilitation skills.</p>	<ul style="list-style-type: none"> • publicise the work done so far and to encourage stakeholders to attend the next workshop. • prepare the AMOEBA and the story that the Scenario Making tells • prepare a complete version of the indicator matrix. 	<ul style="list-style-type: none"> • commitment from major stakeholders to attend the next workshop • a consistent story based on historical and present data and on future scenarios • a clear idea of indicator relationships.
WS4	Month 7.	<p><u>Participants</u> Level 1 – 4 team members (Level 4 by invitation) for most of the two days and major stakeholders representing level 5 for one session on day 2.</p> <p><u>Tools</u></p> <ul style="list-style-type: none"> • workshop and facilitation skills • marketing and publicity skills • earlier tools used, including: matrix, AMOEBA and Scenario Making may well be used again. 	<ul style="list-style-type: none"> • tell the story of the work achieved so far, of the past, present and possible future scenarios • elaborating on the scenarios from the key indicators, design a meta-scenario for the area of project as a whole • inform stakeholders of the scenarios • gain the feedback from stakeholders. 	<ul style="list-style-type: none"> • a greater understanding of the SD past, present and possible future for the project context • opportunity to feedback views on the project to the wider 'Imagine' teams.

Activity between WS4 and WS5	Months 8 – 10.	Level 1 – 3 teams. Marketing and publicising skills.	<ul style="list-style-type: none"> • begin the process of outreach of the 'I imagine' process. This process needs to be shared with the rest of the wider project and the outcomes of the Scenario Making process should be presented to local and national media. • the ownership of 'I imagine', for a second cycle of use, should be discussed with relevant Ministries and pressure groups. • agreement of funding the ongoing presentation of 'I imagine' should be agreed. 	<ul style="list-style-type: none"> • knowledge of outreach channels for the products of 'I imagine' • contact with outreach opportunities • awareness of costs of outreach • establishment of the sustainable, ongoing development of the existing project and of 'I imagine' into new projects.
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Main themes, key tools and techniques¹³

There are four significant tools to be used in these two workshops:

- 1) Setting Bands of Equilibrium (BoE) as explained in section 4.4. The key Sustainability Indicators developed are each assessed in terms of four or seven possible values. For example, if the indicator was car ownership in the East of England then the present value of this indicator might be 1.7 per head of population. A four fold scale might be as follows: 1 = .25, 2 = 1.25, 3 = 1.7 and 4 = 2.25. Where values between 1 and 2 are seen as being unsustainable by deficit, more cars are needed than this, given present conditions. 3 to 4 are unsustainable by excess. Too many cars are on the road. Points 2 to 3 are sustainable – so our score of 1.7 is just in the sustainable range. The setting of the BoE is a task for the Level 1 and 2 teams – in consultation with experts from Level 4.
- 2) Developing AMOEBA or Radar diagram. The manner in which 'I imagine' presents indicators has historically, primarily been by means of the AMOEBA diagram or Radar diagram. The power of this form of presentation is that all indicators can be shown in one diagram, and they can be compared to other indicators and related to the notional 'sustainable' band represented by the BoE. In workshops the AMOEBA tends to be drawn by hand – and this is often a good energising tool for engaging participants in

discussion. However, the AMOEBA can be drawn, using either specialist software or by Excel's graphing capacity.

- 3) Matrix comparison of key indicators inter-relationships / dependencies is described in more detail in section 4.5
- 4) Scenario Making is described in detail in section 4.3.

¹³ All tools are described in more detail in the presentations set out in the CD.

3.5. Doing and suggesting: developing the action plan for sustainable local development

Workshop n°	Approximate time in the project process	Who is involved and what tools do they use?	The aim of the workshop or transition period between workshops is to:	Learning outcomes At the end of the workshop or transition period, those attending will have achieved:
WS5	Month 11.	<p><u>Participants</u> Level 1 – 6 teams are present for some part of the workshop: Levels 1 – 4 throughout, Levels 5 and 6 for some part of day 2.</p> <p><u>Tools</u> Meeting management skills.</p>	<p>Assuming that this workshop is not just for 'Imagine' but also for the local development project as a whole:</p> <ul style="list-style-type: none"> • develop marketing and publicising possible actions arising from the results of the 'Imagine' work to provide messages to strategy makers and the general public, including: <ul style="list-style-type: none"> ○ inform all project key players of the outcomes of 'Imagine' ○ set out future marketing strategies ○ provide a costed outline for the marketing campaign ○ assess the existing indicators for redundancy ○ propose a monitoring programme for the indicators, a reporting time and a means for revisiting the process. 	<ul style="list-style-type: none"> • outline marketing ideas for publicising the message of the 'Imagine' both to policy makers and to the general public, including: <ul style="list-style-type: none"> ○ a deeper appreciation of the 'Imagine' outcomes ○ a clear, costed outline of the proposed marketing strategy for the outcomes of 'Imagine' • indication of the change of indicators for 'Imagine' if there is to be a second cycle of the method • official agreement in order to implement the monitoring programme.
Post WS activity	Month 12+.	As an aspiration, Level 2 team is now established under the ongoing funding of Ministry or NGO.	<ul style="list-style-type: none"> • engage in a review of the existing indicators, renews those that are redundant and establishes the ongoing process of development of annual/bi-annual SD indicator development 	<ul style="list-style-type: none"> • the means to achieve a sustainable development plan via indicators • the means to sustain the core team and necessary funding.

Main themes, key tools and techniques¹⁴

The main skills and key tools to be developed in this workshop relate to marketing and publicising. This handbook comes with a presentation in which marketing is presented at an introductory level. The key theme is the understanding of the message, the market and the means to get the message to the market. The main means to achieve the marketing process is in the management of important meetings of stakeholders and managers (representing all kinds of actors in the context) in the

sustainable development project process. This should result in continuing the planning of marketing strategies and developing follow-up models for the sustainability indicators.

This workshop should be an open, free discussion of the next logical steps for local sustainable development - hopefully making use of the 'Imagine' process, however, it may well be that the process may cease at this point, due to a lack of investment for the future.

¹⁴ All tools are described in more detail in the presentations set out in the CD.

4. Key skills

4.1. Key skills for the facilitator

4.1.1. Facilitation

The quality and value of the use of 'I imagine' is as much an emergent property of good craft skills in facilitation as much as it is the use of the tools. Some general craft skills in the running of participatory events have been set out by Robert Chambers as some general do and don't items – these items are addressed to the potential facilitator. Chambers argues that when engaging stakeholders in processes which are relevant to their experiences of sustainable development:

"Don't

rush
lecture
criticise
interrupt
dominate
sabotage
take yourself too seriously".

Chambers goes on to say:

"Do

Use own best judgement at all times
Introduce yourself, establish rapport
Respect, be nice to people
Ask them (refers to those who are generally seen as being more important asking those who are conventionally seen as less important) relationship, such as 'what is your view?', 'how would you think of doing this?', or 'how did I behave?'
Facilitate
Empower and support, be confident that 'they can do it'
Hand over the stick (has literal and metaphorical meanings. Literally, it means handing over a stick, baton, pointer, pen, chalk or other symbol of authority or means of expression. Metaphorically it means transferring authority or initiative).

And,

Be sensitive
Share
Watch, listen, learn
Embrace error – learn from mistakes
Relax
Unlearn, abandon preconceptions
Be self-aware and self-critical
Triangulate (means seek multiple perspectives to cross check, qualify and correct)
Seek optimal ignorance (means not finding out more than needs to be found out, or not measuring with more precision than is necessary).
Be honest
Improvise
Be optimally unprepared and flexible
Have fun, joke, enjoy
Innovate and invent – try new things, be bold, take risks."

(Chambers 2002)

Most if not all of these avowals relate more to craft skills and the outcomes and confidence resulting from practice. In participatory work the old adage: 'its more important to get the process right than the answer' comes into its own. Participatory analysis primarily involves the analyst in gaining the trust and

the input of stakeholders. What that produces is of secondary importance. In a sense, if we ask/invite stakeholders into the process we are not assuming what they will tell us or come up with. To become conversant and proficient in participatory tools you need to practice them in participatory contexts.

Possibly the most vital skill for any facilitator in 'I imagine' is the running of small group events or Focus Groups. Some general rules and guidance are set out below.

4.1.2. Focus Groups

Focus Groups are a recent addition to what are often referred to as semi-formal analysis techniques. Formal techniques include statistics and standard questionnaire and interviews. Informal techniques include items such as folk stories and the night halt. Focus groups come somewhere between the two.

Historically Focus Groups are based in market research and were developed to gauge reaction of customers to new products. The key to the use of the tool is the focus on reactions of stakeholders to potential changes. It is of greatest value when a change process is about to occur and is generally understood but stakeholder reaction to this change is not so well understood. In this case the group of stakeholders is assembled and the participants in the event are invited to discuss among themselves how they feel it will affect them. The conversation ideally would be recorded when necessary and the permission of all those at the meeting will need to be solicited first.

When is it relevant to apply Focus Groups?

- When a difficult issue needs to be reviewed
- When fresh insight is needed
- When inclusion is the primary requirement
- When ideas are muddled
- When people are in conflict and need to bring ideas together.

Details of application

- Focus Groups are usually for small numbers. Ideally eight to ten stakeholders are selected and brought together (higher numbers makes it very difficult to clearly understand who is saying what and why). A specific topic is set out to this selected group. A rule of Focus Groups is that everyone present should participate – there should be no spectators. Participants are asked for:
 - ideas
 - issues
 - insights
 - experiences.
- There is usually a discussion leader and the role of this person is to focus and structure the range of the debate. Generally a number of such sessions will occur with different groups of participants and the various outputs will be compared.

Benefits. There are a wide range of possible benefits arising from the use of this approach. For example:

- The range of stakeholders is increased by expanding the range of those involved in the analysis
- Views are interchanged
- Hidden problems can be revealed
- Local knowledge can help to formulate policy.

Problems. The problems of Focus Groups can be as follows:

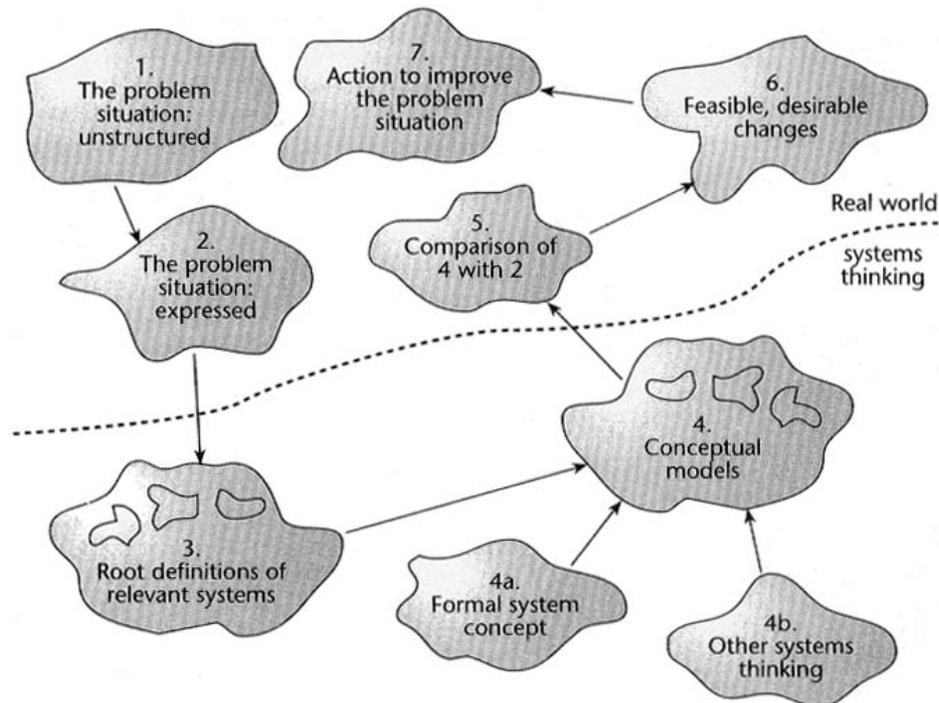
- Dominant members can lead the discussion to support their own views so careful discussion leadership is essential
- Personal bias and/or prejudice can spoil discussion
- The event can lead to prejudice forming not brainstorming
- The experience of the group can alienate some stakeholders if they feel that they have not been heard.

4.2. Introduction to the use of Soft Systems Methodology (SSM)

An important aspect of 'I imagine' as set out and experienced in this handbook, is the application of aspects of Soft Systems Methodology (Checkland 1981).

Soft Systems Methodology or SSM, is used in a variety of ways in 'I imagine', although, the use is somewhat idiosyncratic to the specific needs of the kinds of processes encountered. SSM, as classically understood, is set out in Figure 4 below.

Figure 4 Classic SSM



Source: Checkland 1981

However, from the point of view of 'I imagine', the main value of SSM lies in three key tools:

- Rich Pictures - usually used in stage 2 of SSM (see diagram) - expressing the problem situation
- Root Definitions in stage 3
- Conceptual or Activity Models, as used in stage 4.

These three tools, and examples of their use in 'I imagine', are set out below.

4.2.1. Rich Pictures in 'I imagine'

Rich Pictures are used to show and begin to understand complex and complicated situations. They are an attempt to encapsulate the real situation through a no-holds-barred, cartoon representation of all the ideas covered already – layout, connections, relationships, influences, cause-and-effect, and so on. As well as these objective notions, Rich Pictures should depict subjective elements such as character and characteristics, points of view and prejudices, spirit and human nature.

The main elements of a Rich Picture (adapted in part from Lane, Armson et al. 1999) might be:

- pictorial symbols
- keywords
- cartoons
- sketches
- symbols
- title.

The picture might also include metaphors and parables of behaviour.

Some examples of Rich Pictures produced in 'I imagine' processes follow (Figure 5 and Figure 6).

Figure 5 Rich Picture used in Scenario Making, Malta 2002

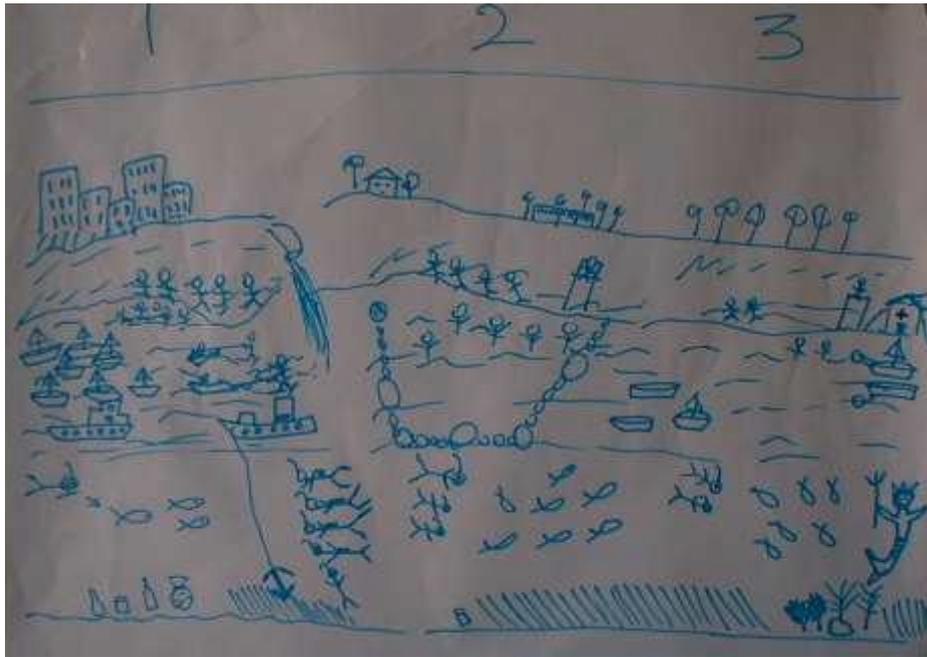


Figure 6 Rich Picture used in Project Scoping, Lebanon 2003



The Rich Picture is the basis for further work - but chiefly in 'I imagine', it is the prompt for teams to consider:

- What issues and forces are operative in the project context?
- What problems for sustainable development does the context face?
- What indicators might be usefully applied to assess on-going sustainable development?

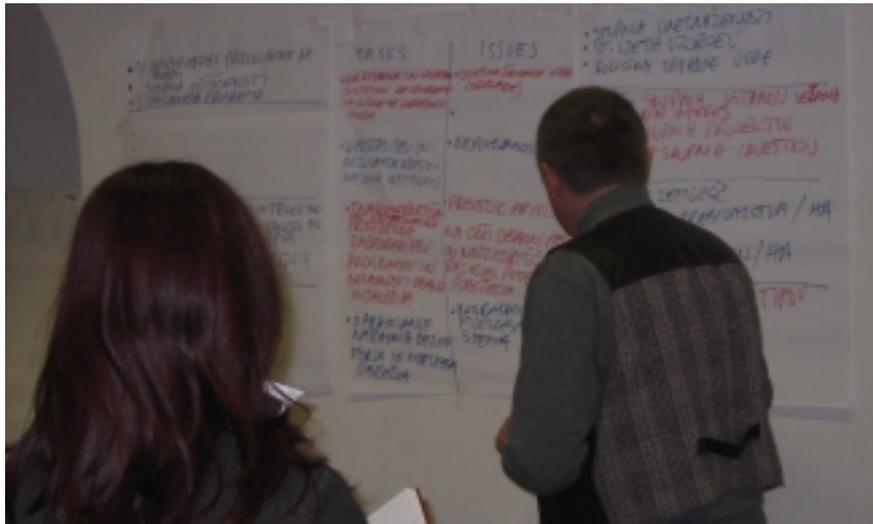
4.2.2. Root Definitions

If the Rich Picture provides 'I imagine' workshop participants with the opportunity to consider the depths and intricacies of the context, then the Root Definition, as adapted for this process, provides participants with the space and time to consider what they specifically would like to see the project they are working on achieve.

In 'I imagine' Root Definition follows from Rich Picture in Workshop 1, in order to provide participants with an early opportunity to think ahead. In order to develop a Root Definition the workshop participants are asked to engage in the following process:

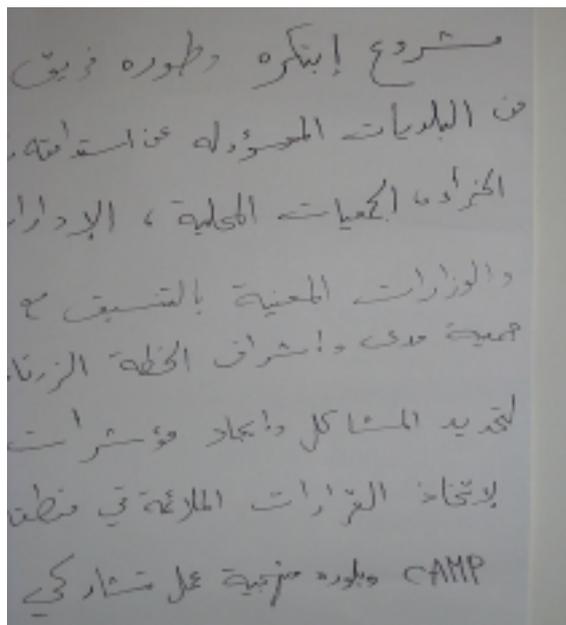
- 1) Consider the Rich Picture and draw out four major issues (problems in the context) and tasks (things that need doing). Set these out as a list.
- 2) Take the tasks and issues and develop three sustainability indicators for each (Figure 7).

Figure 7 Tasks and Issues and indicators - CAMP Slovenia 2005



- 3) Returning to the tasks and issues, present them in the form of a single statement - along the lines of: "a *****¹⁵ system, designed to achieve, undertake, engage with (tasks) whilst managing, coping with, averting, removing (issues)". This simple act of producing a statement takes the team away from the list and encourages, to some extent, a collective and unified view of the sustainable development context (Figure 8).

Figure 8 A statement - CAMP Lebanon 2002

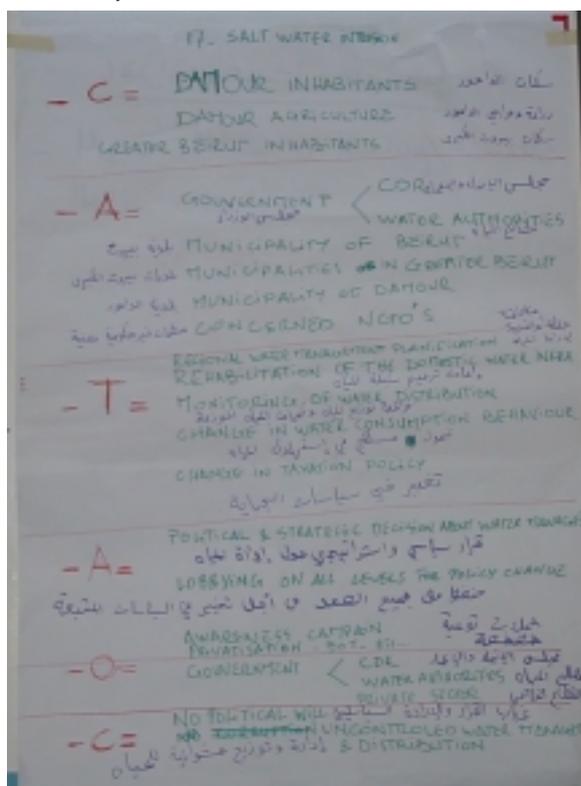


¹⁵ where this signifies the name of the sustainable development project in question.

- 4) Now examine this first statement and derive from it the following six items:
 1. The **Beneficiary(ies)** / **Customer(s)** for the project
 2. The **Implementer(s)** / **Actors** for the project
 3. The **Transformation** that the project is expected to achieve
 4. The major or key **Assumption** behind the transformation
 5. The **Owner** for the eventual project
 6. The major **Constraints** on the project (but not time or money).

These six features – called **BITAOC** or **CATAOC** in 'I magi ne' - when clearly understood by the team, provide coherence to the aims of the project and these can now be set out in a single statement - which is the root definition (Figure 9).

Figure 9 Example of CATAOC taken from CAMP Lebanon 2002



- 5) The Root Definition usually takes a form like the following:
 "A (label) project, undertaken by (Implementers) for (Beneficiaries) in order to achieve (Transformation), whilst taking into account (Assumptions), and managing (Constraints), with eventual ownership being taken by (Owner)".

This brief statement is an agreed and specific output from the Workshop and indicates that the collaborating teams have a clear notion of what they are trying to achieve.

An example of a Root Definition is set out below, as developed in Malta in 2000:

"A Sustainable Coastal Management Project, owned by MAP/Government, developed by CAMP teams with local stakeholders, for affected interest groups, to achieve balanced development and integrated policy making, assuming public participation, support and political will under constraints of social inertia, economic growth pressures and sectoral thinking."

4.2.3. Activity Models

With the Rich Picture of 'what is' and the Root Definition of 'what might be' now developed, the last aspect of SSM used in 'I magi ne' is the Conceptual or Activity Model. This sets out in a general way, the activities that need to be undertaken by the various teams in the project in order for the Root Definition to be achieved.

The usual process advocated is as follows:

- 1) Brainstorm the necessary activities that need to be undertaken - the rule here is that all participants are encouraged to put in ideas to this process and that all activities are accepted at

this stage - they should be set out on post-it notes, and the first word on each post-it should be a verb - forcing what follows to be an activity.

- 2) When the brainstorming is thought to have run its course, then the participants are encouraged to cluster the activities into families of related ideas.
- 3) When this is achieved, the families are arranged in terms of priority and time - thus providing the team with a time-line of prioritised activities to undertake in subsequent weeks. This form of ordering is shown in Figure 10.
- 4) As a final exercise, the top level activities for each family can be selected and arranged in sequence, to provide an overview of the necessary activities to be undertaken. An example of a top level Activity Model is set out below (Figure 11).

Figure 10 Ordering the activities – CAMP Malta 2000

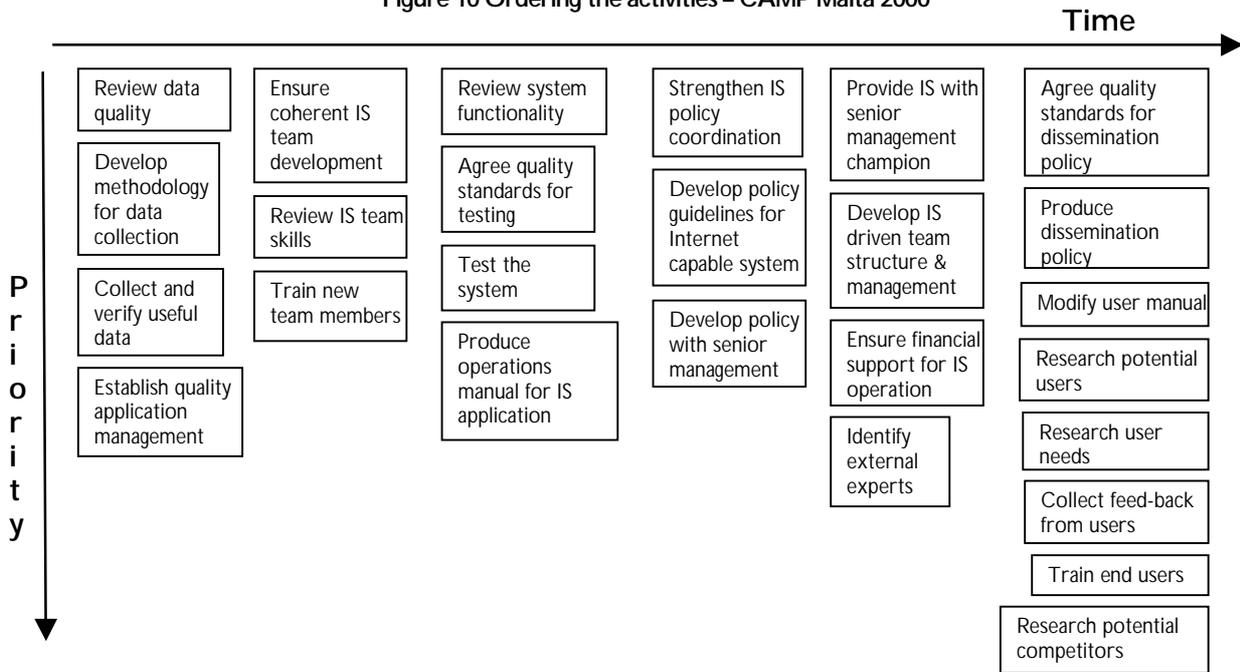
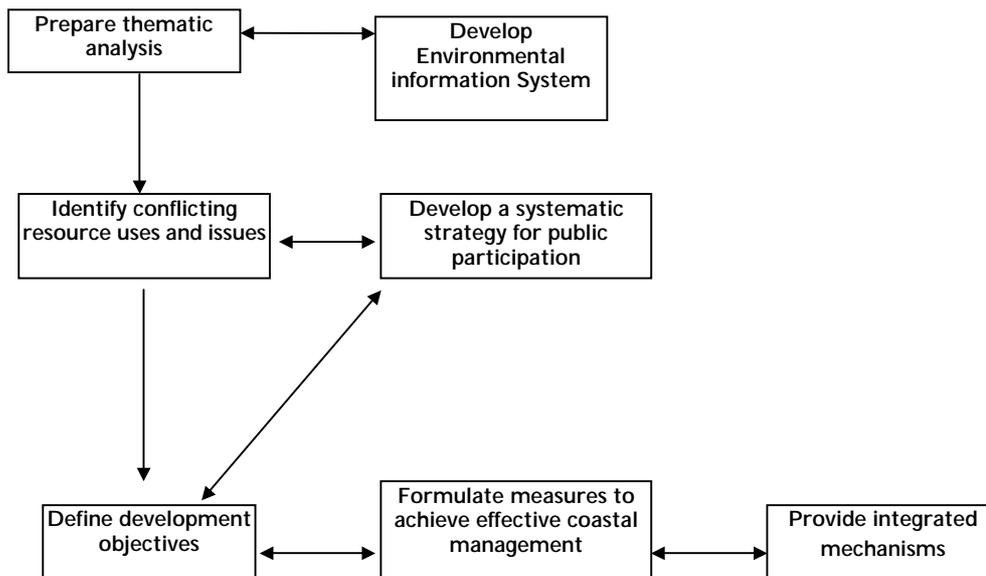


Figure 11 Top level Activity Model for Sustainable Coastal Management, CAMP Malta 2000



4.3. An introduction to Feasibility Study

Feasibility Studies have many incarnations in the modern project world, in 'I imagine' they have a very specific meaning.

Essentially, when the sustainability indicators have been selected and agreed the team need to know:

- the **upper and lower limits** of the indicator (the Band of Equilibrium)
- if the indicator **relates** to any existing indicators
- **what** the unit of measure is
- **when** the indicators are to be measured
- **how** the indicator will be undertaken
- **who** undertakes the verification of the indicator
- **who** will sustain the indicator into the future and
- his **confidence** in attaining the indicator (1- 10, where 1 is low and 10 is high).

The final value, the level of confidence that the team have in gaining the indicator is key, all the other exercises are merely forerunners to establishing this measure.

Of course, the statement will be subjective to the team at the time, but it does mean that those in the workshop have every opportunity to accept or reject certain indicators.

Figure 12 Feasibility Study - CAMP Lebanon 2002

Indicator	Lower Limit	Upper Limit	Correspond to	Unit of measurement	Timeline (When)	Means of Measurement (How)	Institutions in charge of measuring (who)	Feasibility
% of agricultural land classified for organic produce	5%	15%	BP 51	Ton / ha	June 2003 & every 2 years	Field survey + soil analysis	Municipality, CAMP team, Agriculture faculties, Agricultural expert.	7
Agricultural agenda and marketing					Every year		Ministry of Agriculture	
Size of agricultural land cultivated from total agricultural land	60%	80%		M ²	June 2003 & every 2 years	Field survey + army + remote sensing	Municipality, CAMP team, Surveying expert.	5
Amount of water actually used compared to the amount that should be used per hectare	0.8	1.2		Litres	June 2003 & every 2 years	Field survey + study	Municipality + agricultural engineer.	5
% Of artificial coastline from total coastline	30%	40%	LEDO 66 BP 27	% Or ratio (km/km)	Nov. 2003, then yearly	Remote Sensing Centre	Satellite images or aerial photography	8
% Of green spaces (public gardens, reforestation) from total area	1.5 m ² / Person	3.5 m ² / Person			March 2003 then yearly	Field Survey + municipal records	Municipality + CAMP team	9
% Of joint activities between municipality and local groups and NGOs from total number of projects	30%	50%		Number of projects	March 2003 then yearly	Municipal records and annual reports	Municipality.	9

4.4. An introduction to Band of Equilibrium

A major innovation of 'I imagine' is the establishment of a Band of Equilibrium or BoE for each indicator. The purpose of the band is to allow the participants in the workshop to agree a 'sustainable value' or band of values for each indicator, irrespective of the actual returned value of the indicator when measured.

For example, fertility rate (number of children by fertile woman) is a useful indicator to consider. If the minimum return for this indicator was 0 (no children/fertile woman) and the maximum value was 8, it is established that a sustainable response to female fertility is 2.1 children. This number allows for the replacement of the parents and allows for accidental death etc. Of course the rate 2.1 is arguable. It depends on the affluence of the parents, the risks in the environment, the health of the population, the socio-economic and cultural conditions of the society etc. So, 2.1 is not an unarguable figure but it is a

guide. For 'I imagine' the sustainable Band of Equilibrium for fertility rate might be said to be a range from 1.9 to 2.3.

It needs to be emphasized that not all indicators will have a range for the band. For example, some indicators may have a single value for the acceptable and sustainable parameters for the band, e.g. in some cases for bio-diversity, all existing species are essential and a band indicating a higher and lower limit would be spurious.

Different stakeholders might have different concepts and argue for more or less, but the establishment of the band – and its agreement by those in the workshop at the time – is critical.

From experience it is not too difficult to establish bands for indicators such as fertility. Depending on the values and beliefs of those in the workshop, other indicators might be seen as being more problematic, for example, urban percentage of the coastline, number of tourist beds, street lighting. But, the truly valuable return on the exercise to establish the BoE for any given indicator, is the discussion which arises, and the debate about values for sustainability.

Figure 13 Ideal values and Band of Equilibrium values from a team on CAMP Slovenia - 2005

INDIKATOR	IDEAL	SPREJ.	NEPREJ.
1. CENA BENJAMIN	40	< 50	> 70
2. KRAVNA IN. PISUS ZELJNO	10	> 6	< 2
3. SOVINE IN BIJ. ENERGIJA	50%	20%	< 5%
4. DELOVA SILA % UNAPREDE	5%	< 10%	< 4%
5. GOSTOTA POSELITELI	50	> 50	< 20
6. ŽISTILVE NA PRATE	100%	100%	< 100%
7. INERVA MIGRACIJA	10%	25%	> 50%
8. JAVNI PROJEZI	90%	30%	< 10%
9. VPELEČNA IN JAVN. KAPITAL	40%	20%	< 10%

4.5. Introduction to the use of Matrix Development

The development of a structural analysis matrix¹⁶ – seeking links between indicators - it has several clear intentions:

- To show the correlation of some indicators
- To indicate dependencies between indicators
- To present some view of key indicators
- To represent the relationship between indicators and other items – e.g. strategic action plans arising from scenario making.

Figure 14 below shows one partial example of such a matrix. The Figure shows part of the matrix table. Participants in Workshop 3 or 4 are asked to specify which indicators have strong relationships with

¹⁶ Of course it may not be developed or may be developed in a different workshop. It is not a core tool and can be used in a variety of places and times.

other indicators. In this case it can be seen that indicators from quite different thematic areas of the project – for example Tourism and Sustainable Coastal Management – are related and in some way cross-cutting for the project as a whole.

The development of a matrix of this kind helps to build links across the project and also to guide the project teams in deciding on key indicators, or a small and select group of indicators which might be considered as proxy-indicators for the project as a whole.

Figure 14 Part of an Indicator Comparison Matrix from CAMP Malta 2001

		1	2	3	4	5	6	7	8	9	10	11	12	13
	SUSTAINABLE COASTAL MANAGEMENT													
1	Scheduled/protected areas in NW	Black	Green	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow
2	Applications granted - agriculture	Green	Black	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow
3	Abandoned agricultural land	Yellow	Red	Black	Yellow	Red	Yellow	Yellow						
4	Fish farms in the NW	Yellow	Yellow	Yellow	Black	Red	Yellow	Yellow	Red	Yellow	Red	Yellow	Yellow	Yellow
5	Bunkering operations in NW	Yellow	Yellow	Yellow	Red	Black	Yellow	Yellow	Red	Yellow	Red	Yellow	Yellow	Yellow
6	Hardstone quarries	Red	Yellow	Green	Yellow	Yellow	Black	Yellow	Yellow	Red	Yellow	Red	Red	Yellow
7	Cars travelling through the NW	Yellow	Yellow	Yellow	Yellow	Yellow	Black	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green
8	Marine vessels in the NW	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Black	Yellow	Yellow	Yellow	Yellow	Yellow
9	Full time farmers	Green	Green	Yellow	Yellow	Red	Yellow	Yellow	Black	Yellow	Yellow	Yellow	Yellow	Yellow
10	Fish catch	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Yellow	Yellow	Black	Yellow	Yellow	Yellow
11	Tourist accommodation occupancy - winter	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Black	Green	Yellow
12	Employment in tourism	Yellow	Green	Black	Yellow									
13	Population growth in the NW	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Black
14	population density in NW	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Green
15	Full time fishermen	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
16	Beach closure	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow
17	Tourist resident ratio -summer	Yellow	Green	Red										
18	Marine conservation/protected areas	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Green	Green	Yellow
19	Diving in the NW	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Red	Yellow	Red	Green	Green	Yellow
	TOURISM AND HEALTH													
20	Gastroenteritis cases	Yellow	Red	Yellow										
22	Pest control	Yellow	Green	Yellow										
23	Sea water quality	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow
	SOIL EROSION & DESERTIFICATION													
24	Rills and gullies	Red	Red	Green	Yellow	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow
25	Monetary compensation for storm damage	Yellow												
26	Breaches in rubble walls	Red	Red	Green	Yellow									
27	Hunting and trapping sites per catchment area	Red	Red	Green	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow
	INTEGRATED WATER RESOURCES MANG.													
28	Quality of drinking water	Yellow												
29	Use index	Yellow												
30	Water consumption	Yellow	Green	Yellow	Green									
31	Pollution in groundwater	Yellow	Green	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Red	Yellow
	MARINE CONSERVATION AREAS													
32	phc in effluent (bunkering)	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Red	Yellow	Yellow	Red	Red	Yellow
33	Marine vessels in MCA	Yellow	Yellow	Yellow	Red	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Red	Yellow
34	Complaints by visitors	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Green	Yellow	Yellow	Green	Red	Yellow

Another use of matrixes arose in CAMP Algeria (Figure 15).

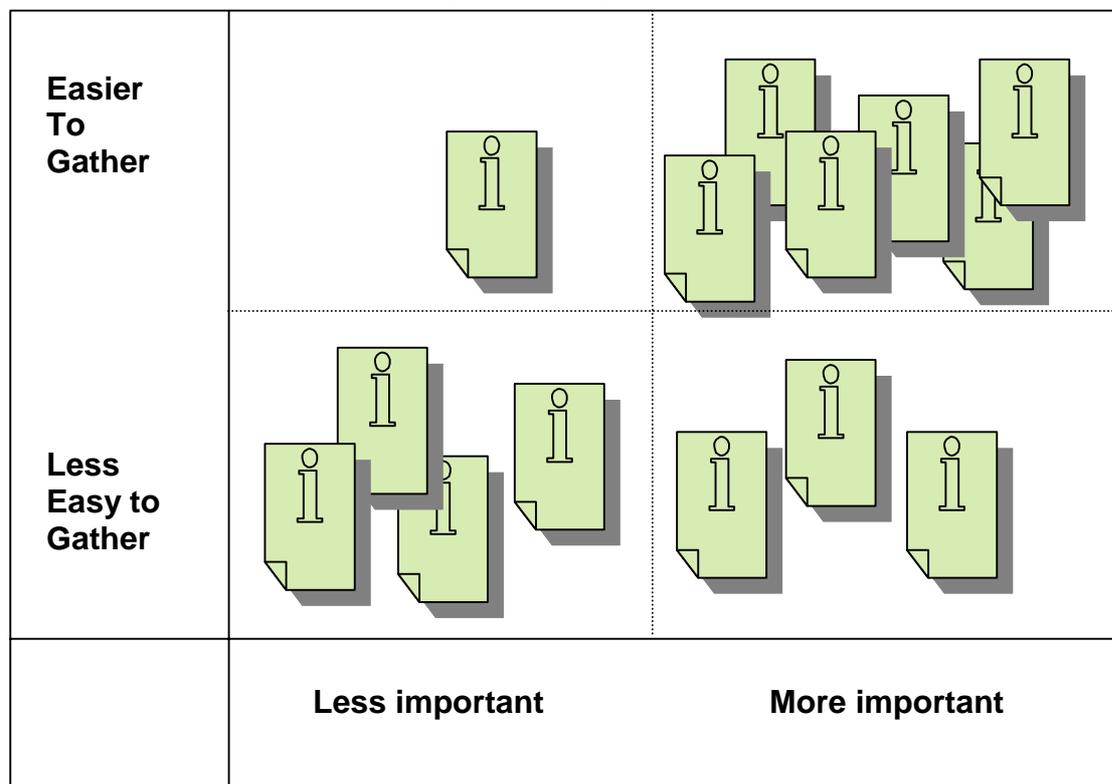
Figure 15 Matrix comparing indicators and strategic actions - CAMP Algeria, 2004

Indicateurs – clés de durabilité	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Σ Des relations	
Domaines d'Actions (stratégie)																				
Epuration des eaux usées	1	1		1	1		1					1	1	1		1				9
Recyclage des eaux usées	1	1		1																3
Economie de l'eau (gaspillage)	1	1	1		1		1				1				1					7
Qualité de l'eau	1	1			1	1														4
Lutte contre l'habitat précaire			1	1	1		1			1					1		1			7
Moyens financiers locaux			1	1	1		1	1			1	1	1				1			9
Etudes d'impacts (ZET)								1	1	1		1		1		1		1		7
Textes d'application 'loi littoral'								1	1	1		1	1	1		1		1		8
Déf.et protec. Littoral sableux					1		1	1	1		1		1	1		1				7
Adaptation instrum. urbanisme								1	1	1	1	1	1		1	1	1		1	9
Polit. Aménagt. Du Territoire	1		1	1			1		1	1		1		1	1				1	9
Organisat. associatives (ONG)					1		1	1	1	1	1	1	1	1		1	1	1	1	12
Protection sites nat. sensibles					1			1	1			1		1		1		1		7
Gestion des données environnt.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
Taxes et redevances environnt.	1	1		1	1														1	5
Fonds pour l'environnement	1				1	1		1			1	1		1		1	1	1	1	10
Gestion intégrée déchets solid.	1						1												1	3
Suivi et Surveill. environnement	1				1	1		1	1	1			1	1		1	1	1	1	11
Créations PME (jeunesse)			1	1	1		1				1	1	1	1	1			1	1	11
Programme de reboisement							1	1			1			1					1	5
Σ Des relations	9	6	6	8	13	4	11	11	9	8	8	12	7	13	6	10	9	11		

In this case, the indicators can be assessed to see how many relate to scenario actions. Similarly, scenarios can be seen to be assessable by a number of indicators. Resulting from this comparison, the frequency of use of indicators gives a measure of value and the frequency of assessability of scenarios provides a quality assessment of the overall value of the various scenarios.

Matrixes have a vast potential range of uses in 'I imagine'. To some extent they are used in Activity Modelling in SSM in order to rank activities on time and priority scales. Similarly, Sustainability Indicators can be ranked for importance in participatory workshops. One such example, used in CAMP Slovenia in 2005 is shown in Figure 16 below.

Figure 16 Ranking Sustainability Indicators



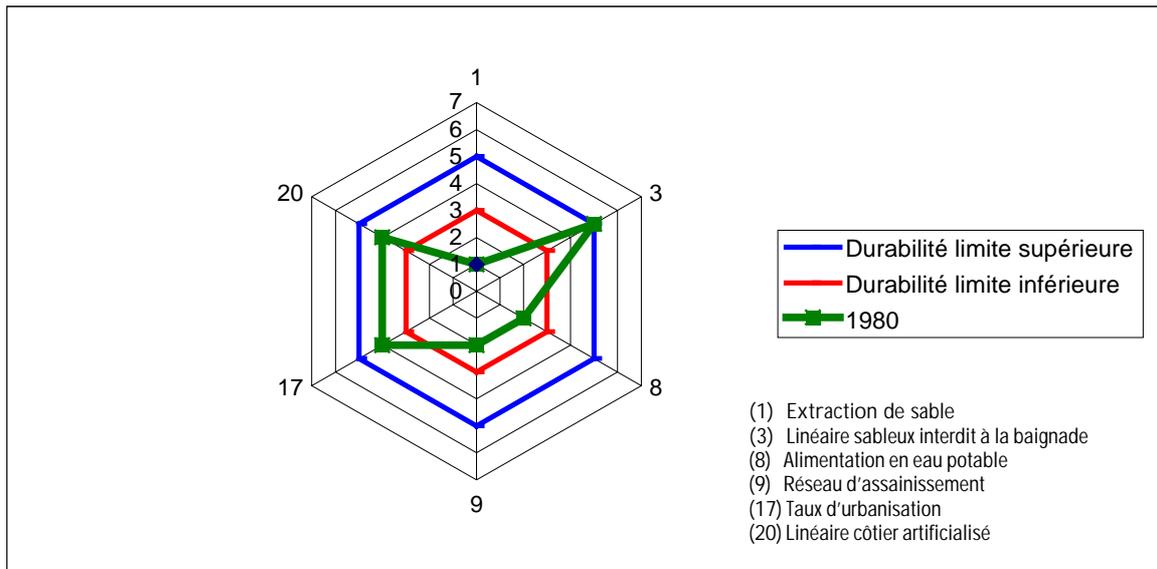
4.6. An introduction to AMOEBA / Radar diagrams

The main means to present Sustainability Indicators in 'I imagine', is by use of the AMOEBA or Radar diagram. The diagram type allows all key indicators to be shown in one diagram, allowing them to be compared against each other and against their respective Band of Equilibrium. The exercise is primarily participatory, resulting in hand drawn diagrams (Figure 17). They can also be usefully reproduced in Excel (Figure 18).

Figure 17 Example of hand drawn AMOEBA - CAMP Lebanon 2002



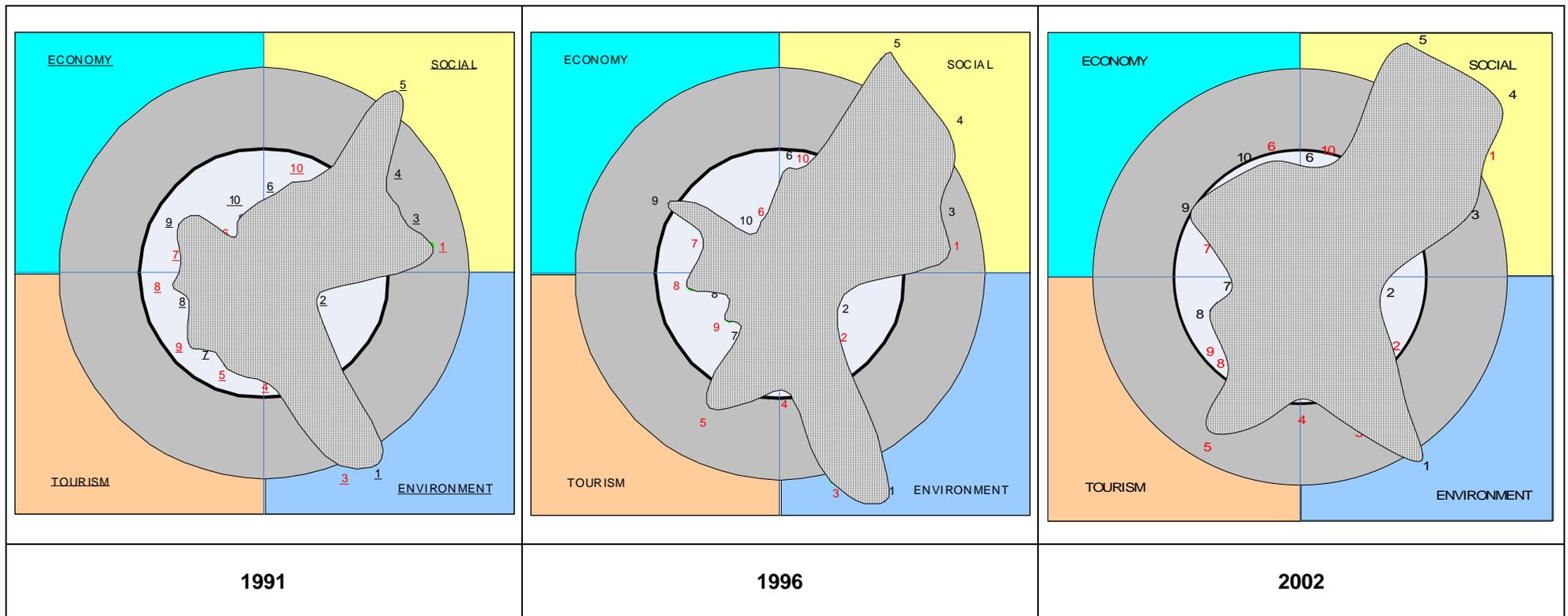
Figure 18 Radar diagram - CAMP Algeria 2003



The diagram shows the scatter of the indicators as they stand at the time of measurement, but the diagram also allows for easy comparison with the BoE. Ideally, in the sustainable world view of those working in the project, the indicators should describe a circle within the BoE. Any variance from this, either in deficit or in excess shows a non-sustainable return on the indicators value. This in turn leads to a further consideration of the indicators meaning and on potential policy decisions which need to arise if the value of the indicator is to be brought within the BoE.

The three AMOEBA shown Figure 19 were derived from CAMP Slovenia, and show the changes from 1991 to 2002 in twenty indicators drawn from both coastal and karst regions. The AMOEBA are eloquent in demonstrating changes in indicators in specific sectors (economy, etc) and fluctuation over time.

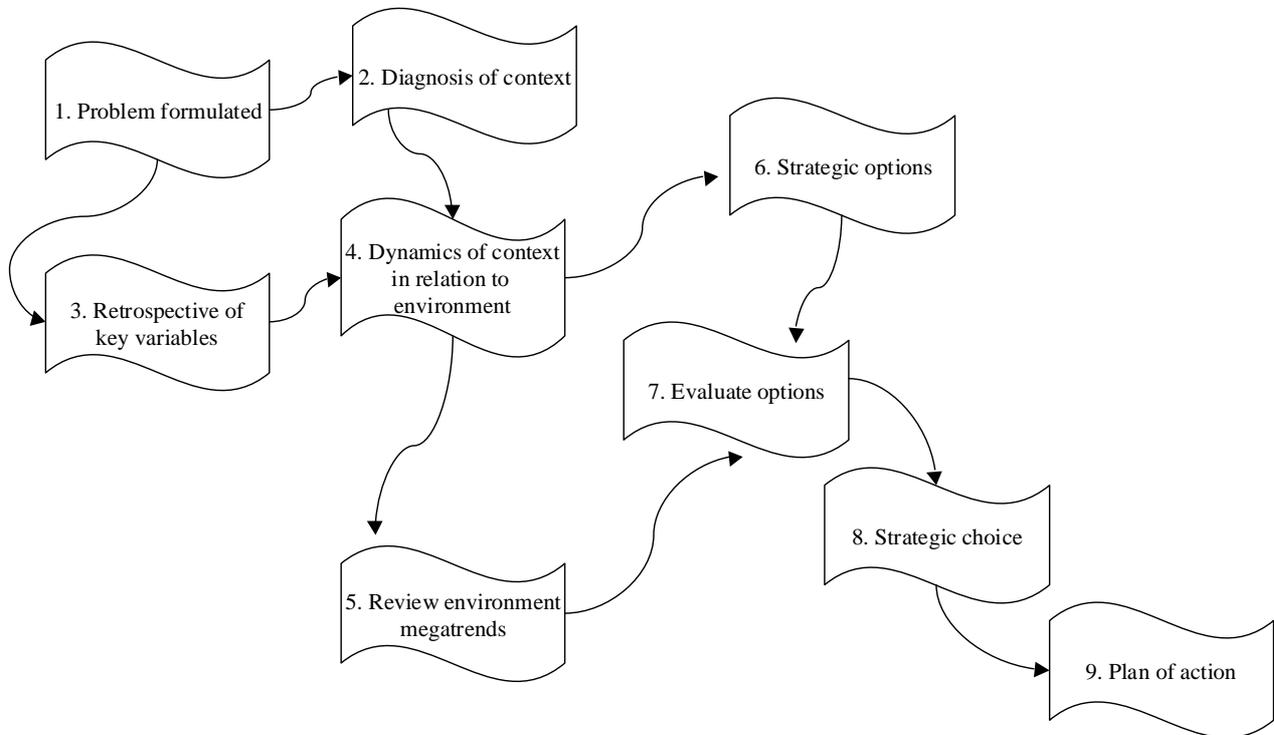
Figure 19 AMOEBA Primorska – Kras – Brkini, CAMP Slovenia 2005



4.7. Introduction to the use of Scenario Making

There is no single view or idea of what constitutes Scenario Making – rather there are a range of interpretations and approaches. Giget and Godet have presented one overall schema which I have adapted (Figure 20).

Figure 20 Scenario Making complete process (adapted from Godet 2000).



The process can be seen as a flow of activities working from a problem review – such as a lack of strategic planning information for regional managers. This then develops through various diagnosis stages, e.g.

- key variables may be the various categories of information identified as lacking
- the diagnosis of context being the review of current practice
- the dynamics of context in relation to environment being the pressures from competition and the opportunities of tourism or fish farming (for example)
- the review of environmental megatrends may in this case require some research into the current competitive environment and the expected capacities of the project area.

These stages result in the presentation of strategic options (e.g. balancing risks of the various options and potentiality of the new technologies) and finally of developed scenarios. Giget and Godet go on to seek strategic choice and action planning for that choice. It is very important to understand however that the range of approaches to Scenario Making means that no two authors will quite agree on all stages or elements of this process. Another approach arises from the work of Matzdorf and Ramage (Matzdorf and Ramage 1999; Matzdorf and Ramage 2000). These authors have suggested a Scenario Making process which strives to achieve a vision of a range of scenarios but does not extend into action planning.

The approach to Scenario Making adopted here is an adapted method, which we have found flexible and capable of transfer in the brief workshops in which 'Imagine' is usually presented. It should be noted that Scenario Making usually takes place in Workshops 3 and 4.

Stages of the workshops

The Scenario Making approach set out here has four stages to it. How long is spent on each depends on the overall time available: as little as two hours (which restricts the depth, and requires very strict time discipline) or a whole day. A suggested schedule for a day workshop follows:

1) Introduction and analysis of driving forces – arising from SIs

The introduction gives participants who are new to Scenario Making enough background information and knowledge of the concept to enter into the process. Participants need to understand that the Scenario Making process:

- Requires forward thinking
- Involves imagination and a creative capacity
- Needs participants to work together and listen to each other's views.

The Scenario Making process, coming in Workshop 3, usually requires, for coherence and consistency, that the teams which worked together in Workshops 1 and 2 be re-formulated and that they be reminded of the SIs which have already been developed by these teams, although this is not always possible. In this case it is important to allow the reformulated teams to know all that happened in the earlier workshops and be allowed to comment and edit that work. This process can add to the workload for the workshop but is vital if participants are to feel that they own the outcomes. Each team should already have produced and agreed some key SIs – these are the basis for the Scenario Making process. The SIs have already involved people in gathering as much data as possible about the locations past, current and changing environment, stakeholders and driving forces.

In Workshop 3 the participants are also asked to identify any new or emerging processes or forces that might influence the Scenario Making process. The major outcome of this first stage is clarity of thinking in the various Scenario Making teams regarding which four or five key indicators which are going to act as the basis for the remainder of the workshop.

2) Rich Pictures and brainstorming for possible futures

This is the bridge from the present to the future. The teams work on new Rich Pictures, based on the messages which the key indicators are telling. It is ideal if the teams produce two Rich Pictures – which represent two scenarios for the future. A method to achieve these is as follows:

- Consider the four/five key indicators and the recent results of these indicators
- Consider forces and processes in the environment
- Make some assumptions about what the key changes will be in the next three or four years
- Present the arising situation in a rich picture
- When this is achieved, go back to the SIs and re-consider them
 - Allow different interpretations of the SIs message to arise in brainstorming
 - Allow new and different assumptions about the future conditions of the location to arise
- Now, draw this future as a scenario.

There is a natural tendency for this process to result in a positive and a negative future scenario. This is not a bad thing, but it is often more realistic if the two scenarios each contain positive and negative aspects.

3) Reporting back on scenarios

This is a useful time for the various teams to report back to colleagues in the workshop on their findings so far. The two scenarios can be presented as two worldviews or overviews of the possible future situation – but it is useful if the team can agree which of the two they think to be the most likely.

4) Discussing where we go next

Finally, the teams can consider how these scenarios come together. In Workshop 3 the various teams feed back two scenarios each – giving a preference of one or other. The workshop can now look for links and similarities between the scenarios. Particular attention can be paid to:

- Correspondences in future views
- Similarities in terms of underlying assumptions and judgments
- Dissimilar views and assumptions
- Major expected changes.

This mutual work will be of value in Workshop 4, when a meta-scenario is expected to be produced.

Box 1 Example of a three-way scenario exercise undertaken in CAMP Malta 2001

Tourism accommodation occupancy - winter

The second SI discussed referred to the level of occupancy of tourist establishments during the winter season. The North West is a seasonal resort and high occupancies are achieved during the summer months. Occupancies during the winter months are low and recent data has shown that average occupancies are decreasing. This SI has taken the average occupancy for all forms of accommodation. During the winter months there is a decrease in usage of self-catering accommodation and therefore hotel accommodation experience an above average level of occupancy. For the sake of this exercise we will stick to the occupancy in hotel accommodation. The following three scenarios were identified.

Scenario 1: Stabilisation of hotel occupancies at current levels

This would require more promotion to attract increased levels of tourists since the average length of stay has been decreasing and more tourists would be needed to sustain current levels. The development of new hotels bringing new beds onto the market is also contributing to the difficulty existing establishments are having in keeping occupancies at acceptable levels during the winter months. Establishments should have to resort to further discounted rates to maintain current and better levels of occupancy. New products to attract tourists during this season need to be developed since the main product offered is summer based.

Scenario 2: Occupancy levels experience a slight increase

This can be achieved with a restructuring of the accommodation offer in the area, particularly to cater for the demands of the winter tourist through innovative facilities and activities. This will also entail a moratorium on new beds with some flexibility being given to existing establishments that wish to re-develop and thus offer a better product. The current bed capacity can be reduced with the removal of low standard accommodation facilities and their redevelopment into other sectors/ facilities.

Scenario 3: A significant increase in hotel occupancy levels

This would require a total moratorium on accommodation development coupled with a reduction to acceptable levels of the current accommodation provision. This should improve occupancies not only in the winter months but also during other seasons. The North West constitutes almost 40% of total accommodation. This level places pressure on existing establishments to achieve acceptable occupancies during the low season. The resort needs substantial improvement to change its image from a seasonal mono-functional resort to an all year round multi functional destination. This will also ensure that hotels achieve better rates.

The Meta-Scenarios

The team-level scenarios produced in Workshop 3 will, of necessity, show a range of different perceptions and assessments concerning the future for the project area. In Workshop 4 the original scenarios are presented again but now, the overall team is asked to agree on meta-scenarios or over-arching scenarios.

To arrive at the scenarios it is necessary to:

- Re-appraise the preferred scenarios which arose from the previous workshop

- Draw out the main themes, pressures, forces, agencies and changes which are agreed across the team
- Discuss the emergent properties of these themes.

Develop at least two scenarios based upon these themes. The scenarios should include:

- The main elements of the expected future
- The key changes relating to the present situation
- The main processes, organisations, people and agencies which are expected to be important.

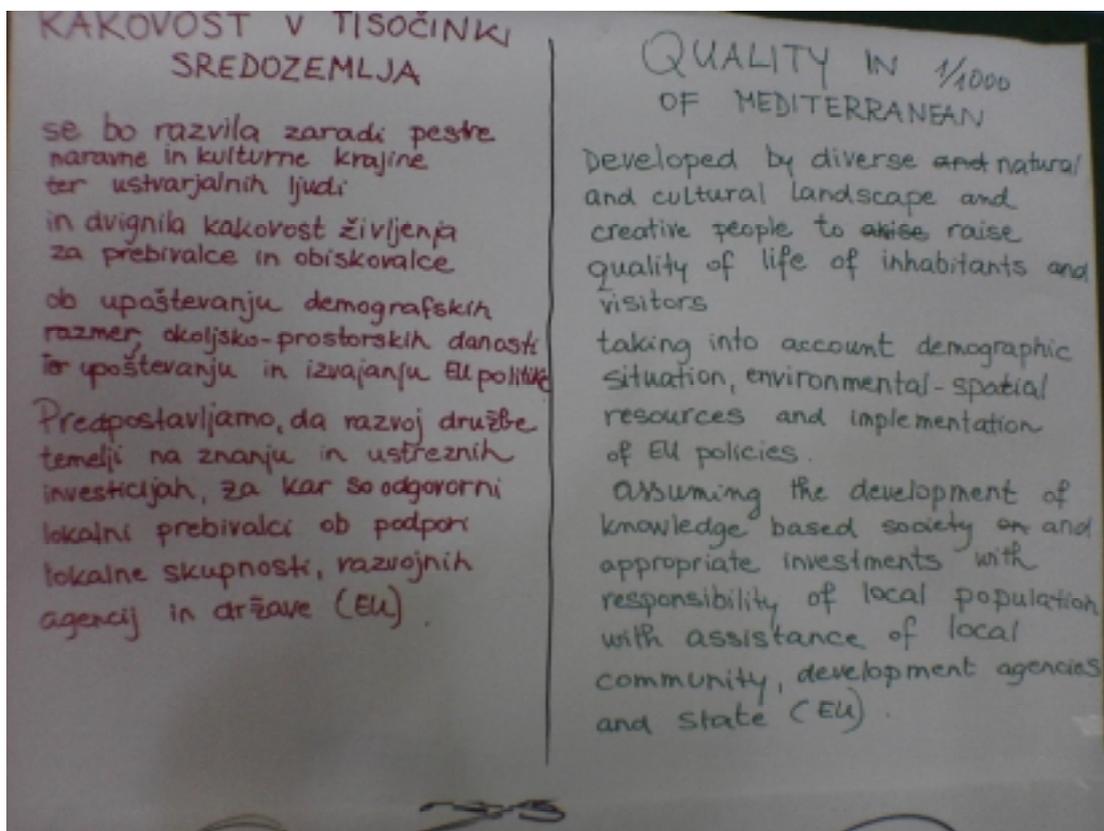
The meta-scenarios should be presented as possible futures and should be agreed to by the majority if not all those participating at the workshop.

If the meta-scenarios are drawn from a Rich Picture, it is useful to provide a means to tell the story of the picture. This formalises the picture and makes its content more accessible to those who were not included in the workshop. A means used to do this in the Slovenia CAMP, was to develop an adapted Root Definition (see the section on SSM) such as as follows: a *catchy title* scenario, produced and developed by *implementing forces and drivers*, for *stakeholder groups* in order to realise certain transformations whilst recognising that a series of constraining forces and powers *exist*, taking into account *assumptions for the development of the of the scenario* with responsibility for the situation held by *policy owners*.

The basic elements of the statement are:

- Catchy title – necessary to sum up and explain the direction of the scenario
- Stakeholder groups
- Implementing forces and drivers
- Transformations
- Assumptions for the development of the scenario
- Owners – policy owners
- Constraining forces.

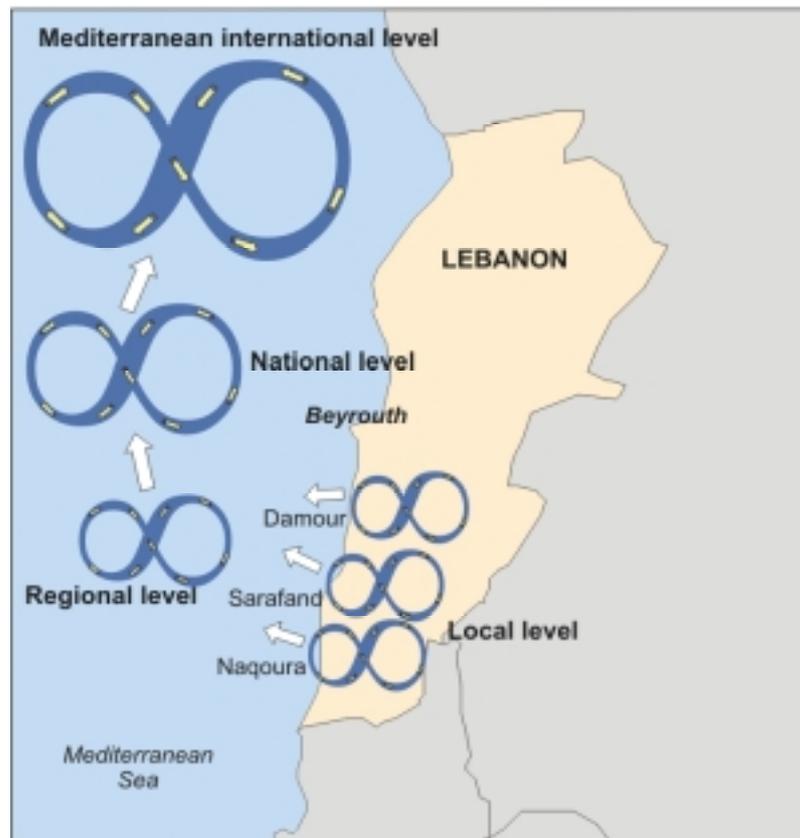
Figure 21 One of the two Slovenian meta-scenario Root Definitions (in Slovenian and English)



5. Applying 'I magne' hierarchically.

'I magne' can be developed for different levels of application. This implies nesting or allowing different levels of use of the methodology for different scales and values of use. As presented, 'I magne' could be applied for various scales of user on a continuum of use. Figure 22 provides one view of this application.

Figure 22 Nested uses of SPSA



The diagram represented here is a simulation but shows a process whereby the outcomes of local level 'I magne' presentations could be used as feeders for regional and then national or even international 'I magne' project presentations. Similarly the process could be reversed, international 'I magne' could feed down to national, regional and local levels. The variation would not be in terms of the 'I magne' process, rather it would be in terms of

- the stakeholders included
- the SIs developed
- the scenarios presented
- the publicity and marketing.

The primary competence or craft skill for those engaged in nesting 'I magne' would be in producing some degree of correspondence between the presentations at each scale. For example, the practitioner might attempt:

- To include some stakeholders who could be called upon to participate at workshops at more than one level
- To produce SIs that scaled up and down with consistency
- To elaborate scenarios which had local, national and regional significance
- To provide marketing messages relevant across regions as well as within localities.

These themes would need to be ascertained early in the use of 'Imagine'. The primary question for the Level 1 and 2 'Imagine' teams would be: "Are we working to one scale only or are we expecting nesting of outcomes". The answer to this question would influence the form, content and outcomes of the 'Imagine' workshop in question.

Appendix 1. Timetables / Agendas for the five workshops

Workshop 1.

Day 1	
9h00 – 10h30 :	Opening session (30') <ul style="list-style-type: none"> ▪ Project context introduction ▪ Project Implementers introduction Session 1: Introduce the whole 'I magne' process (60') <ul style="list-style-type: none"> ▪ Presentation ▪ Round table: questions and responses
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	Session 2: 'I magne' phase 1- Reflect and understand on the present situation (1h 45') <ul style="list-style-type: none"> ▪ Rich Picture
12h30 – 14h00	<i>LUNCH</i>
14h00 – 15h30 :	Session 3: 'I magne' phase 1- Reflect and understand on the present situation (following, 1h 30') <ul style="list-style-type: none"> ▪ Tasks and Issues
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h30 :	Session 4: 'I magne' phase 1- Reflect and understand - considering indicators (following, 1h 45') <ul style="list-style-type: none"> ▪ Sustainability Indicators - SIs ▪ Clustering and prioritising SIs
Day 2	
9h00 – 10h30 :	Session 5: 'I magne' phase 1- Reflect and understand - how to proceed? (following, 1h 30') <ul style="list-style-type: none"> ▪ BITAOC (Beneficiary, Implementers, Transformation, Assumption, Owner, Constraints)
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	Session 6: 'I magne' phase 1- Reflect and understand - how to proceed? (following, 1h45') <ul style="list-style-type: none"> ▪ Root Definition
12h30 – 14h	<i>LUNCH</i>
14h – 15h30 :	Session 7: 'I magne' phase 1- Reflect and understand - what to do next? (following, 1h 30') <ul style="list-style-type: none"> ▪ Activity Plan ▪ Logical Framework
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h30 :	Session 8: 'I magne' phase 1- Reflect and understand - review and agree (following, 1h 45') <ul style="list-style-type: none"> ▪ Review of the work done ▪ Work to do

Workshop 2

Day 1.	
9h00 – 10h30 :	<p>Opening session (30')</p> <ul style="list-style-type: none"> ▪ Project context - what has happened since the last workshop? ▪ Project Implementers introduction <p>Session 1:</p> <ul style="list-style-type: none"> ▪ Presentation Indicators - selection and addition ▪ Round table: questions and responses
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	<ul style="list-style-type: none"> ▪ Session 2: Band of Equilibrium - short list ten indicators
12h30 – 14h00	<i>LUNCH</i>
14h00 – 15h30 :	<ul style="list-style-type: none"> ▪ Session 3: Band of Equilibrium - Establish for the ten
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h00:	<ul style="list-style-type: none"> ▪ Session 4 Band of Equilibrium - Feasibility study
Day 2	
9h00 – 10h30 :	<ul style="list-style-type: none"> ▪ Session 5: Roundup of previous days discussions ▪ Band of Equilibrium
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	<ul style="list-style-type: none"> ▪ Session 6: Preparation for the afternoon session
12h30 – 14h	<i>LUNCH</i>
14h – 15h30 :	<ul style="list-style-type: none"> ▪ Session 7: Meeting with wider stakeholders
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h00:	<ul style="list-style-type: none"> ▪ Session 8: Roundup and review of the Workshop

Workshop 3.

Day 1	
9h00 – 10h30 :	<p>Opening session (30')</p> <ul style="list-style-type: none"> ▪ Project context - what has happened since the last workshop? ▪ Project Implementers introduction <p>Session 1:</p> <ul style="list-style-type: none"> ▪ Presentation: AMOEBA - presenting SIs ▪ Round table: questions and responses
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	Session 2: Preliminary Structural Matrix for presentation and coherence
12h30 – 14h00	<i>LUNCH</i>
14h00 – 15h30 :	Session 3: AMOEBA and Matrix
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h00:	Session 4: Introduction to Scenario Making
Day 2	
9h00 – 10h30 :	Session 5: Scenario Making
10h30 – 10h45	<i>COFFEE-BREAK</i>
10h45 – 12h30 :	Session 6: Scenario Making
12h30 – 14h	<i>LUNCH</i>
14h – 15h30 :	Session 7: Scenario Making
15h30 – 15h45	<i>COFFEE-BREAK</i>
15h45 – 17h00	Session 8: Roundup and review

Workshop 4.

Day 1	
9h00 – 10h30 :	Opening session (30') <ul style="list-style-type: none"> ▪ Project context - what has happened since the last workshop? ▪ Project Implementers introduction Session 1: Scenarios and meta-scenarios <ul style="list-style-type: none"> ▪ Presentation meta-scenarios ▪ Round table: questions and responses
10h30 – 10h45	COFFEE-BREAK
10h45 – 12h30 :	Session 2: Meta-scenarios
12h30 – 14h00	LUNCH
14h00 – 15h30 :	Session 3: Meta-scenarios
15h30 – 15h45	COFFEE-BREAK
15h45 – 17h00:	Session 4: Introduction to marketing
Day 2	
9h00 – 10h30 :	Session 5: Meta-scenarios
10h30 – 10h45	COFFEE-BREAK
10h45 – 12h30 :	Session 6: Preparation for the stakeholder session
12h30 – 14h	LUNCH
14h – 15h30 :	Session 7: Stakeholder session
15h30 – 15h45	COFFEE-BREAK
15h45 – 17h00:	Session 8: Roundup and review

Workshop 5.

Day 1	
9h00 – 10h30 :	Opening session (30') <ul style="list-style-type: none"> ▪ Project context - what has happened since the last workshop? ▪ Project Implementers introduction Session 1: Marketing and Publicising <ul style="list-style-type: none"> ▪ Presentation: Selling the message - what do we have to say ▪ Round table: questions and responses
10h30 – 10h45	COFFEE-BREAK
10h45 – 12h30 :	Session 2: Making the campaign
12h30 – 14h00	LUNCH
14h00 – 15h30 :	Session 3: Making the campaign
15h30 – 15h45	COFFEE-BREAK
15h45 – 17h00 :	Session 4: Making the campaign
Day 2	
9h00 – 10h30 :	Session 5: Where do we go next
10h30 – 10h45	COFFEE-BREAK
10h45 – 12h30 :	Session 6: Key 'I imagine' outcomes
12h30 – 14h	LUNCH
14h – 15h30 :	Session 7: Reflections on the process
15h30 – 15h45	COFFEE-BREAK
15h45 – 17h00 :	Session 8: What next? Comments, questions and feedback on the 'I imagine' process

Appendix 2.

Glossary of terms and meanings for 'Imagine'

Active Listening	The means to ensure that participants in a workshop are effectively 'hearing' each other.
Activity Model	Part of SSM – the purposeful activities necessary to achieve an agreed transformation.
AMOEBA	This is a form of diagram, originally developed by Ten Brink and his team (Ten Brink, Hosperi et al. 1991) in the assessment of ecosystems. The diagram shows indicators as 'arms' protruding from a central point. It is similar to the more conventional Radar diagram. In this text the diagram style is referred to as an AMOEBA, meaning a blob-type diagram, as used in many forms of systems diagramming.
Band of Equilibrium	BoE is the point on the four-fold scale developed for each SI, which is expected to show the sustainable level for the indicator – this is set at points 2 – 3 on the scale.
Feasibility Analysis	The means to assess potential SIs. FA attempts to answer the questions: who will gather the SI, how, when, can the SI be measured effectively and is this sustainable?
Focus Group	A qualitative data collection exercise for a group of stakeholders, brought together to discuss, work on, a given issue.
Logical Framework	LF is a four by four matrix for organising the main themes of a project – hierarchically in terms of goal, purpose, output and activity, and organisationally as narrative, risks or assumptions, indicators of achievement and means of verification.
Root Definition	A tool in SSM. A means to specify a purposeful way forward for a team.
Scenario Making	A variety of methods developed to assess the potential future condition and value of a place, ecosystem, etc.
SSM	Soft Systems Methodology. A problem solving approach developed by Professor Peter Checkland.
Sustainability Indicators	These are the indicators set out by the teams working in the project – which, from their perspective, provide a good measure of the sustainability of that context. Such indicators are ideally developed as Mitchell argued (Mitchell, May et al. 1995): "Stakeholder (should) reach a consensus on the principles and definitions of sustainable development that are used and the objectives of the sustainability indicators programme".

Appendix 3.

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Appendix 4. Acronyms and abbreviations

AMOEBA	'general method for ecosystem description and assessment' (in Dutch)
BITAOC	Beneficiaries, Implementors, Transformation, Assumptions, Owners and Constraints
BoE	Bands of Equilibrium
CAMP	Coastal Area Management Programs
CATAOC	Customer Actors Transformation, Assumptions, Owners and Constraints
DPSIR	Driving force-Pressure-State-Impact-Response
EEA	European Environment Agency
ENDA	Environment Development Action
FA	Feasibility Analysis
ISMAL	Institut des sciences de la mer et de l'aménagement du littoral
LF	Logical Framework
MADA	Lebanese NGO
MAP	Mediterranean Action Plan
MCA	Marine Conservation Areas
MEPA	Malta Environment and Planning Authority
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
ONG	Organisation non gouvernementale
PA	Participatory Approach
PAP	Priority Action Programme
PI	Performance Indicators
PNUE	Programme des Nations Unies pour l'Environnement
RRC	Regional Development Center
SD	Sustainable Development
SI	Sustainability Indicators
SSM	Soft Systems Methodology
UN	United Nations
UNEP	United Nations Environment Programme
WS	Workshop
ZET	Zone d'Extension Touristique

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Mediterranean Action Plan

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Blue Plan

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When the Mediterranean countries, concerned by the degradation of their natural link and common heritage –the sea, signed the Barcelona Convention and launched their Mediterranean Action Plan (MAP), they wished this Plan to include a specific component for exploring possible future open to the Mediterranean Basin, so as to support decisions in favour of a sustained socio-economic development without harming the environment.

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