DeCyDe

a participatory method for “measuring” sustainability through a friendly, flexible and adjustable, self-assessment, tool

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DeCyDe is a practical method that can be implemented to give a “number” to a problem or an issue, i.e. to have a measure, to understand the size or the scale of a state/condition, especially in cases where everything is subjective or difficult to quantify.

Why DeCyDe?
Decide, Cy for Cyprus!

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The DeCyDe approach is in line with the trend of public policies to move from a purely conceptual and theoretical view to a more pragmatic approach, based on empirical evidence.

More than 10 years of implementing and improving simple decision support methods in real cases, led to the development of DeCyDe: a clear method and a friendly decision support tool, flexible to accommodate different kinds of decision problems when multiple decision alternatives exist

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Important questions:

- “who are the Decision Makers”
- “what are their competences”

Usual problem:

- Sophisticated and complicated decision support tools for decision makers who do not have the competences

- Result?

Decisions are based:

- Decision makers intuition
- Decision makers judgment
- Interests
- Ignorance
- Lack of having the “entire picture”
- Piece-meal solutions

DeCyDe structure: four steps

- Step 1: The data base
- Step 2: The setting of of criteria/ parameters
- Step 3: weighting factors
- Step 4: input of data to the decision support tool

All the steps are self-contained because they can be used *per se*, each step giving specific results.

Step 1: The data base – the baseline study

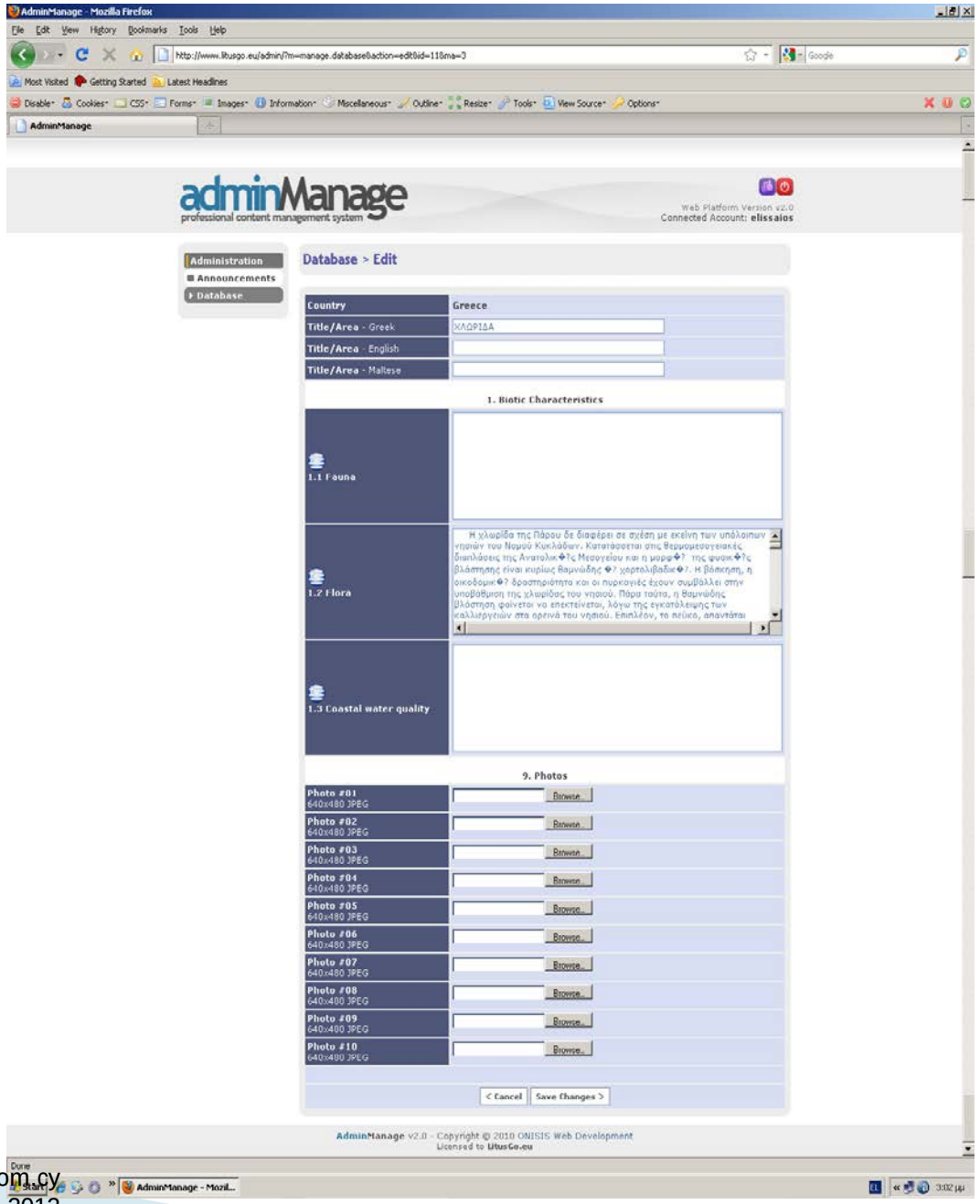
- Major problem in decision making: the lack of consistent data or the low quality of existing data.
- The Data Base of DeCyDe is built specifically and dedicated for every case that the method is implemented
- Structure of Data Base: is the product of the identification of the problem and the gap analysis of the needs and the parameters that are involved in the specific decision process.

Step 1: The data base – guarantee for unbiased process

- The Data Base provides the set of “core” data that are needed in order to **guarantee the unbiased** character of the results of the decision process.
- It is very usual that the decision makers believe something which is not the reality but rather their perception.
- “Picture” existing situation and understand the problem through numbers.

Example: the web data base that was developed for LitusGo

www.litusgo.eu



LitusGo Local Info Data Base – the fields

- Biotic characteristics
  - Fauna
  - Flora
  - Coastal water quality
  - Nature protection areas
- Physical characteristics
  - Geology of the area
  - Coastal morphology – erosion trends
  - winds and waves
- Socio-economic characteristics
  - Demographic description
  - Human activities – employment
  - Land uses
- Development trends
  - Sustainability in the development of the area (present and predictions).

- Environment/ Resources Management
  - Water management – consumption patterns
  - Waste water management
  - Waste management
  - Energy management
  - Transport schemes
- Cultural heritage:
  - Archaeology
  - history of the area
- Stakeholder participation
- Legislation/ policy issues
- Issues and challenges

Step 2: Criteria/ indicators

- each case under examination, is structured and modeled
- Part (a): **Addressing the multiple dimensions and/or perspectives of each case**
- Part (b): **The "Scoring" of the criteria/parameters**

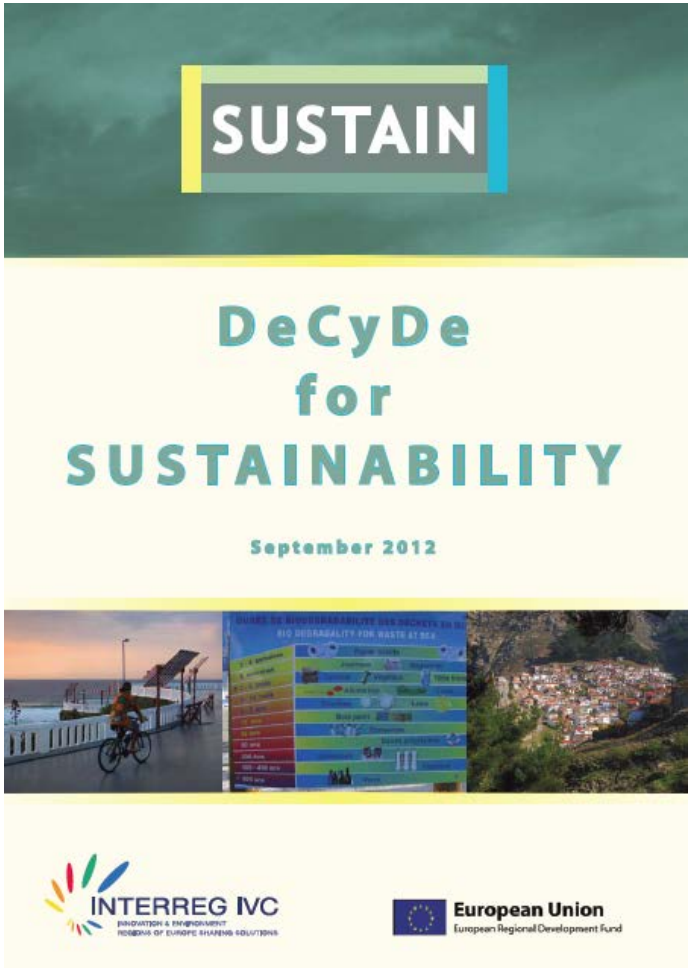
2 (b):
The “Scoring” of the criteria/parameters
THE INNOVATION

- The “scoring through ranges” approach
  - converts state-of indicators into sustainability indicators.
  - the score attributed immediately gives **a reference value and relevance** instead of just a snap-shot single figure which stands for nothing but itself.

“scoring through ranges”

- **a reference value and relevance**
- **Different kind of activities become comparative,** instead of just a snap-shot single figure which stands for nothing but itself.
- Ranges according to Directives, national legislation

Implementation in SUSTAIN PROJECT:
DeCyDe-for-sustainabiltiy



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3	Change at the coast	Units	Scoring Ranges							Indicator Score
	4. Coastal Erosion	% of coastline that is eroded	<70%	49-40%	41-30%	29-20%	19-6%	>5%	No Data	5.50
			1	2	4	6	8	10	0	
			1							
	5. Length of artificially defended coastline	% of coastline that has hard coastal defences	>80%	79-60%	59-40%	39-20%	19-5%	<5%	No Data	
			1	2	4	6	8	10	0	
								10		

1	Demography	Units	Scoring Ranges							Indicator Score
	1. Demographic dependency	% of population over 65 and under 18 years old	>60%	51-60%	41-50%	31-40%	21-30%	20%<	No Data	4.00
			1	2	4	6	8	10	0	
					4					

SELF -ASSESSMENT AND SCORING FOR SUSTAINABILITY RESULTS		
PILLARS	INDICATORS	Indicators Score
ECONOMICS	Economic Opportunity	3.00
	Land Use	10.00
	Tourism	4.00
	Transportation	1.00
		18.00
ENVIRONMENTAL QUALITY	Air Pollution	10.00
	Biodiversity and Natural Resources Management	7.75
	Change at the coast	5.50
	Energy & Climate Change	7.33
	Land use	10.00
	Public Health and safety	10.00
	Waste Management	4.67
	Water resources and Pollution	8.20
		63.45
SOCIAL WELL-BEING	Demography	4.00
	Equity	8.00
	Education and Training	10.00
	Local and cultural identity	0.00
	Public Health and Safety	7.00
		29.00
GOVERNANCE	Policies/ strategies for sustainability	4.86
	Monitoring tools for sustainability	0.83
	Human resources capacity building	1.00
	Implementation of good management practices	1.00
	Stakeholder involvement/ public participation	7.00
		14.69
TOTAL	**125.14**	

Step 3: Weighting

- Concept of Compare couples (Saaty's method)
- the decision makers can evaluate and assess a large range of concepts, of actions, of policies

ECONOMICS

	Economic Opportunity		Fisheries & Aquaculture		Land Use		Tourism		Transportation		Weight Coef
	score		score		score		score		score		
Economic Opportunity	1	0.4	9	0.3	7	0.4	1	0.3	9	0.3	0.35
Fisheries & Aquaculture	1/9	0.0	1	0.0	1/7	0.0	1/9	0.0	1/3	0.0	0.03
Land Use	1/7	0.1	7	0.2	1	0.1	1	0.3	9	0.3	0.17
Tourism	1	0.4	9	0.3	9	0.5	1	0.3	9	0.3	0.39
Transportation	1/9	0.0	3	0.1	1/9	0.0	1/9	0.0	1	0.0	0.05
Total	2.37		29.00		17.25		3.22		28.33		0.99
Total check	1.00		1.00		1.00		1.00		1.00		

Scores – continuous scale

1/9	1/7	1/5	1/3	1	3	5	7	9

less important — more important

1/9 και 9	(extremely)
1/7 και 7	(very strong)
1/5 και 5	(strongly)
1/3 και 3	(moderately)
1	(equally)

Participation process

- Structured workshops
- Trained Facilitator
- Groups of decision makers/ stakeholders max. 7 persons

Open-air process for decision support tool implementation

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Valorisation/ evaluation of DeCyDe

- SUSTAIN: implemented in 12 cases
- Limassol, through Human Resources Development program of vital importance
- LitusGo, part of the capacity building process: Pafos, Paros, Kirkop-Malta
- DeCyDe-for-waste
- Very positive evaluation results

North Ireland

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Implementation and evaluation

PAROS

LIMASSOL

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Capacity building through DeCyDe implementation

Pilot case: Pafos

LitusGo capacity building Manual (www.litusgo.eu)

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- DeCyDe is a method that aims to facilitate decision makers and decision actors in the decision process
- at the same time sets their actual participation as a prerequisite for the success of the method.

- A friendly to use and rapid implementation tool, respecting time limitations (which is one of the major problems of participation in decision support systems
- DeCyDe is characterized by flexibility and adaptivity: it is a multi – task/ multi-purpose/ multi-use decision support method which can be implemented in any case that decision or assessment is needed

Thank you

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