

The SUSTAIN project

DeCyDe-for-Sustainability

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Sustainable development...



"... is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

EU Strategy for Sustainable Development COM(2001)264 final taken from the Brundtland Commission, 1987.



But....



Can sustainability be achieved?

Is it measurable?

Can you use precise science to measure something that cannot be precisely defined?

At the moment, to our knowledge, SUSTAIN is one of the few initiatives which is trying to measure sustainability.



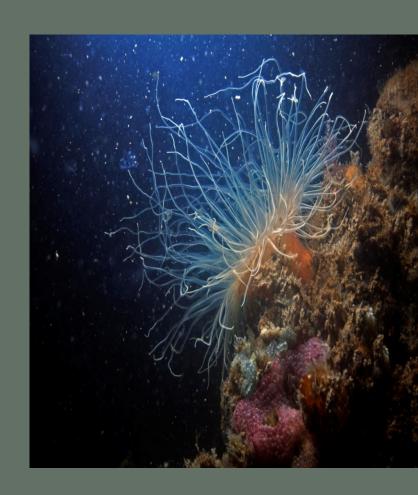
New indicators?

Many of the so-called sustainability indicators used today are very specific and many measure parameters which are beyond the sphere of influence of regional/local authorities.



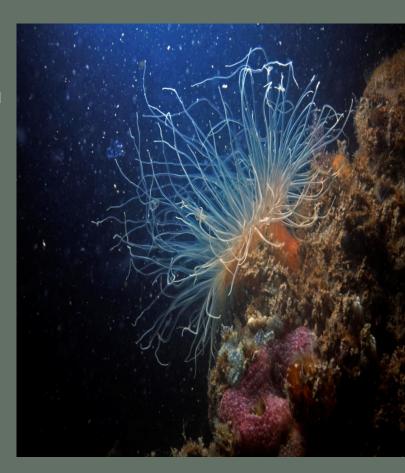
What have we done?

- 1. An overall, methodological approach.
- 2. A **policy** context.
- 3. Issues have been selected under:
 - Economics (5),
 - Environmental Quality (9),
 - Social Well-being (5),
 - Governance (5).
- 4. **Indicators** have been selected for these four pillars



What is new?

- 1. Governance has been dealt with through a checklist, not classical indicators.
- 2. The Issues and Indicators have been divided into Core and Non-core issues.
- 3. An **Indexing** (scoring) methodology which gives SD Index (score).



GOVERNANCE

to provide consistent management, cohesive policies, guidance, processes and decisions for the wise use of the coast

	ISSUE	No.	Question	Υ	N	DK
Ι	Policies/ strategies for sustainability	1	A sustainable development strategy which includes specific references to the coast and adjacent marine is in place?			
		2	There is effective political support for the sustainability process?			
		3	There are integrated, sustainability development plans?			
		4	The SUSTAIN Issues are covered by relevant policies at the local/regional level?			
		5	The SUSTAIN Issues are covered by relevant legal instruments at the local/regional level?			
		6	Guidelines have been produced by national, regional or local governments which advise planning authorities on appropriate sustainable uses of the coastal zone?			
		7	Strategic Environmental Assessments are used to regularly examine policies, strategies and plans for integration of sustainable activities?			
II	Monitoring tools for	8	Sustainability targets have been set for the SUSTAIN core and relevant optional indicators?			
	sustainability	9	The sustainability targets are regularly reviewed?			
		10	There is regular monitoring of the coastal area with respect to the SUSTAIN core and relevant optional indicators?			
		11	A report on the State of the Coast has been written with the intention of repeating the exercise every five or ten years?			
		12	Reviewing and evaluating progress in implementing sustainability criteria is regularly conducted?			
		13	Assessment of the SUSTAIN core and relevant optional indicators shows a demonstrable trend towards a more sustainable use of coastal and marine resources?			
Ш	Human resources capacity building	14	Local/regional administrations have adequate capacity of staff to deal with sustainability matters?			
		15	Local/regional administrations have adequate expertise available to deal with sustainability matters?			
		16	Staff are trained on coastal sustainability matters?			
		17	All the relevant administrative levels and departments are collectively working on sustainability matters?			
	Implementation of good management	18	There is an identifiable point of contact for coastal sustainability matters?			
TT 7		19	Existing instruments are being adapted to deal with sustainability management matters			
IV	practices	20	A long-term financial commitment is in place for undertaking initiatives which aim towards sustainability?			
		21	Integrated programmes on the coast are being carried out that improve the SUSTAIN core and relevant optional indicators?			
T 7	Stakeholder involvement/ public participation	22	All stakeholders involved in the SUSTAIN core and relevant optional indicators have been identified and are both informed and involved?			
V		23	Partnerships have been established between local authorities and communities for sustainability matters?			

There is a public participation process involving all necessary stakeholders, including business?

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ECONOMICS

to promote and support a vigorous and sustainable coastal economy

Examples of ECONOMICS issues and selected indicators

	Issue	Indicator			
1	Economic Opportunity	Employment by sector			
2	Fisheries & Aquaculture	Aquaculture production			
3	Land Use	People and assets at risk in in coastal areas			
4	Tourism	Tourism Intensity			
5	Transportation	Transport usage			



ENVIRONMENTAL QUALITY

to make available and promote sustainable environmental practices

Examples of Environmental Quality issues and selected indicators

	Issue	Core indicators
1	Air Pollution	Air quality
2	Biodiversity and Natural	Change of condition of coastal and marine
	Resources Management	habitats and species that have been identified
		as priorities for conservation
3	Change at the coast	Coastal erosion and accretion
4	Energy & Climate Change	Energy consumption
-		
5	Fisheries and Aquaculture	Fish catches of species taken from stocks
		outside safe biological limits
6	Land Use	Area of built-up land
7	Public Health and Safety	Human exposure to harmful noise levels
7		
8	Waste Management	Waste production and disposal method
9	Water resources and	Quality of bathing water
	Pollution	



SOCIAL WELL-BEING

to promote social unity and durability

Examples of SOCIAL WELL-BEING issues and selected indicators

	Issues	Core indicators
1	Demography	Demographic dependency
2	Equity	Actions for the promotion of equal opportunities and social inclusion
3	Education and training	Educational attainment of the population
4	Local and cultural Identity	Local products
5	Public Health and Safety	Provision of health care services



The 'DeCyDe for Sustainability' tool

MEASURING SUSTAINABILITY - THE SUSTAIN POLICY TOOL:

The 'DeCyDe for Sustainability' tool

It comprises three separate components:

- 1) setting strategic targets from within existing policy;
- 2) applying a sustainability indicator set; and
- 3)applying the decision support tool.



The 'DeCyDe for Sustainability' tool

Two methods have been combined for a participatory "scoring system" for decision-making at local level.



- 1.R.Eastman et.al. "GIS and Decision Making" United Nations Institute for Training and Research 1993
- 2. Saaty, T.L., The analytic hierarchy process, 1980

All you have to do is:

DeCyDe has three self-contained and inter-related phases:

- 1.to find the data relating to the indicators,
- 2.to score the indicators based upon the data,
- 3. to weight the Pillars and Issues.



SUSTAIN It is a five step process

- 1. Collect data for as many of the Core indicators as possible in the units mentioned in the Indicator Set.
- 2. Collect data for as many of the most relevant Optional indicators.

It should be remembered that a good set of data is crucial for the success of the remainder of the work.

- 3. Enter the value of each indicator into the relevant cell in the spreadsheet. The score is automatically attributed. As each score is entered, the overall scores will also alter automatically.
- 4. When all the scores have been entered, a single numerical figure is automatically generated.
- 5. Weight the Pillars and Issues.



The 'DeCyDe for Sustainability' scoring in Europe

The scores obtained by different Authorities in Europe when using 'DeCyDe-for-Sustainability' tool:

- 1. GREECE Samothraki (Local Authority): 85.34
- 2. PORTUGAL ARH Tejo-Tagus River Basin District Administration (Regional Authority): 80.26
- 3. ITALY Province of Teramo (Local Authority): 151.78
- 4. SLOVENIA Regional Development Centre Koper (Regional Authority): 92.25
- 5. UK Sefton Borough Council (Local Authority): 64.08
- 6. UK Down District Council, Northern Ireland (Local Authority): 111.76
- 7. CYPRUS Kouklia and Limassol (Local Authority): 67.54
- 8. THE NETHERLANDS Province Zuid-Holland (Regional Authority): 109.30
- 9. IRELAND Cork County (Local): 69.86
- 10. GERMANY Warnemuende (Local): 67.10
- 11. SPAIN Fuerteventura Island (Local): 110.55
- 12. FRANCE Cavalaire (Local): 97.62

Challenges



As with any indicator-based methodology the largest effort in measuring sustainability is collecting the relevant data for each indicator. In many cases,

- is quite dispersed and time to find the data is an essential part of the methodology,
- ➤ has often been collected by monitoring in units other than those specified in the various European Directives,
- ➤ is often only available from different years, and
- ➤ is only occasionally available at the needed spatial level i.e. it is available nationally or regionally but not locally and sometimes it is simply not available at all.



Conclusion



- Friendly-to-use, self-assessment tool.
- Participatory.
- Highly sensitive, flexible and adaptive but robust.
- After a baseline level is measured, further measurements show progress or otherwise.
- Allows predictions to be made based upon different policy options.

www.sustain-eu.net



Thank you



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