Assessing sustainability and strengthening operational policies

An European project aiming to develop a universal tool to help deliver sustainability on Europe's coasts

Ioannis Dimitriadis Oceanographer Alan Pickaver Sustain Project Manager Coastal & Marine Union (EUCC)





3- year project part-funded by the European Regional Development Fund through the INTERREG IVC program, the kick-off event took place in Cyprus about one year before.

Aims to bring about

0

-----> a high level of environmental protection

- - economic prosperity through

Twelve European partners will be working together, in the team include eight regional and local authorities under the lead of the Coastal & Marine Union (EUCC).



Objectives

The key objective is to create a fully implementable POLICY TOOL, applicable for all 22 coastal states of the EU, which will ensure that the integrated management of coastal issues will be both measureable and sustainable.

A set of criteria which are readily measurable and which cover both the threats of unsustainable development and the opportunities, provided by a sustainable future, which face all coastal authorities and communities throughout Europe.





Innovation

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

Indicators are developed with and for local authorities

Clearly to understand, simple and easy to apply from a person with medium education

- Evaluate and guide to sustainability
- Application is part of learning progress



Example: How it works until today

Climate Change:

1. Number of 'stormy days'

2. Rise in sea level relative to land

- 3. Length of protected and defended coastline
- 4. Length of dynamic coastline
- 5. Area and volume of sand nourishment
- 6. Area of protected sites within an 'at risk' zone
- 7. Value of economic assets within an 'at risk' zone

But:

Typical of single, ad-hoc measurements Give only a snapshot of the present problems Too specific to measure something general as Climate Change Completely out of sphere of influence of local/regional authorities Do not show that sustainability being reached



Example: How it will work with SUSTAIN

Suggestions for the Sustain Issue Climate Change which has four Sustain Indicators

Climate Change Greenhouse gas emissions	
	Anthropogenic pressure on natural resources (oil, gas,)
	Ecological footprint
	Effects (desertification, flooding, erosion)

A List of Specific Indicators:

Are there targets have been set for the reduction of the most important Greenhouse gases?

Are there targets have been set for the increase in renewable energy? Are there policies in place that reflect the targets that have been set? A sustainable carrying capacity has been determined and projections into the future made based upon expected development.

Is the current status of desertification, flooding, erosion known?

Is the baseline data available?

Is there monitoring of data made periodically to determine whether the targets are being reached?



Environmental Quality

	SUSTAIN ISSUE = 6	SUSTAIN INDICATOR (12)
	MANAGEMENT OF WATER	Quality and use
	QUALITY OF AIR	Contaminants (dust, light, noise, chemicals)
	WASTE MANAGEMENT	Waste & recycling
	CLIMATE CHANGE	Greenhouse gas emissions
		Anthropogenic pressure on natural resources (oil, gas,)
		Ecological footprint
		Effects (desertification, flooding, erosion)
	NATURAL LANDSCAPE	Morphological change on coast
		Conservation of natural assets
		The quality of beaches, dunes and cliffs
	BIODIVERSITY	Coastal habitats and species (incl. Invasive species)
		Protected areas

Of course some full-quantitative indicators based in local/regional level could be used , like: WDF and Bathing Water Quality for the Management of Water Issue

Economics

SUSTAIN ISSUE = 7	SUSTAIN INDICATOR (15)
FINANCIAL SUPPORT	European and national funding
TOURISM	Tourism pressure
	Seasonality
ECONOMIC DIVERSIFICATION	Jobs and staff
	Occupation
	Employment and unemployment
COASTAL DEVELOPMENT	Infrastructure
	Transport
	Mobility
	Land use (housing)
CONSUMPTION AND PRODUCTION	Use of local products
	Eco-systems services
	Energy
AGRICULTURE	Ecologically sound practices
FISHERIES/	Fish catches
AQUACULTURE	Aquaculture production

We try to keep the issues dimension in the right term

For the tourism pressure → The waste per tourist (wrong dimension) → The overnights per tourist (right dimension)

Governance

SUSTAIN ISSUE = 3	SUSTAIN INDICATOR (10)
IMPLEMENTATION of ICZM	Community participation
	Adaptive management
	Business involvement
	Spatial planning (population, construction and
	development on the coast)
and the second state of th	Influencing institutional and societal change of
	behaviour
	Information availability
NATURAL RISK, EROSION & RISK MANAGEMENT	Erosion management
endurantes in the same for the same have be shared	Natural, human and economic assets at risk
	Flood management
TIME FRAME FOR DECISIONS	Long-term perspective

Social-Wellbeing

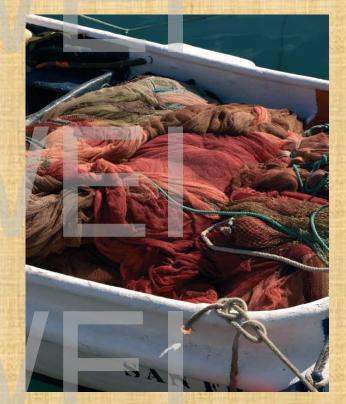
SUSTAIN ISSUE (5)	SUSTAIN INDICATOR (7)
PUBLIC HEALTH	Health & safety
QUALITY OF LIFE	Equal opportunities
a the line of the process of the process of the process of the line of the	Poverty
DEMOGRAPHY	Ageing society
	Population change
LOCAL & CULTURAL IDENTITIES	Cultural and natural heritage
	Education provision
EDUCATION AND TRAINING (FORMAL & NON-FORMAL)	Awareness

Possibly indexation system

 Scoring / rating system show how 'close' or 'faraway' an Authority is from its sustainable 'goal'
Yes (Positive) = 1 and No (Negative) = 0
Multi Criteria Analysis summarize and combinative in different scenarios like Equal scenario, Environmental Scenario etc.

Finally it will be create the Sustain Index, which will be classified in 5 divisions, as classification for the coastal zone quality

- 1) Bad
- 2) Low
- 3) Moderate
- 4) Good
- 5) High



Conclusion, as expected results

- A coherent, sustainable policy driven management tool.
- A new set of agreed indicators.
- Partners with increased sustainability through exchange of experience.
- To contribute this tool to implement in the EU Sustainable Development Strategy, especially in coastal areas.

For more information www.sustain-eu.net and www.io-warnemuende.de





