



Innovative participatory methodologies review

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S.C. 9.6

Diamond Room I, Adaptation Futures Conference

Rotterdam, The Netherlands

The research leading to these results has received funding from the European Commission's Seventh Framework Programme under Grant Agreement No. 308337 (Project BASE).



When?

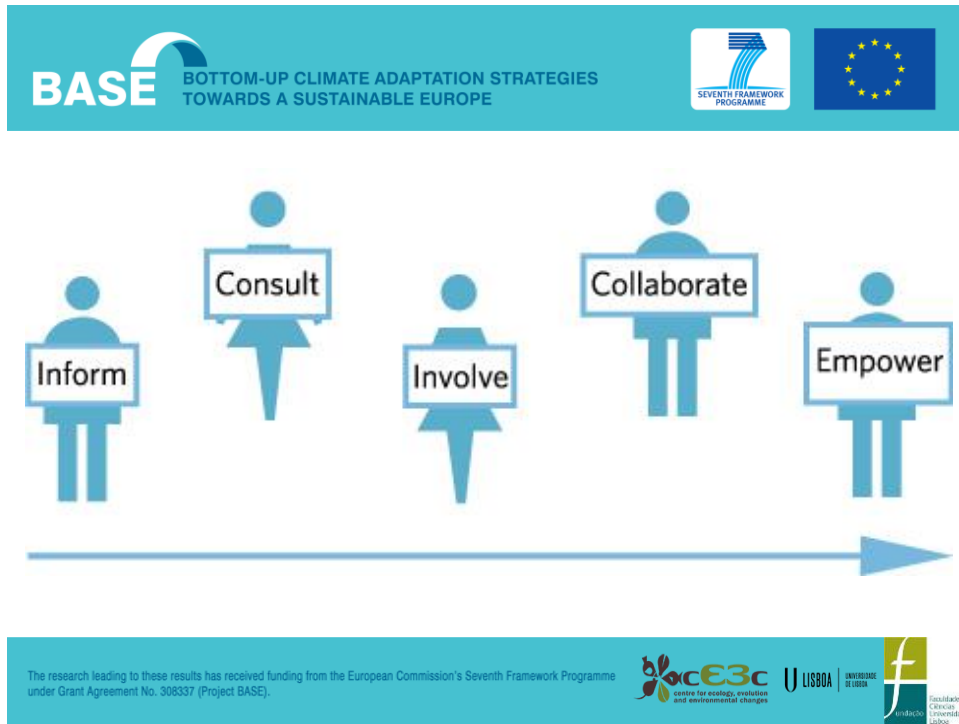
Who?

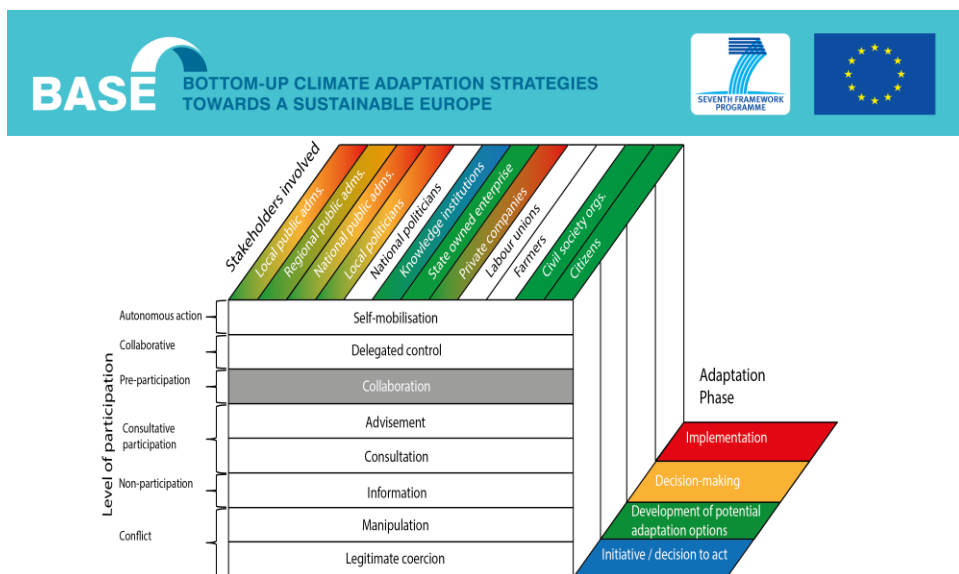
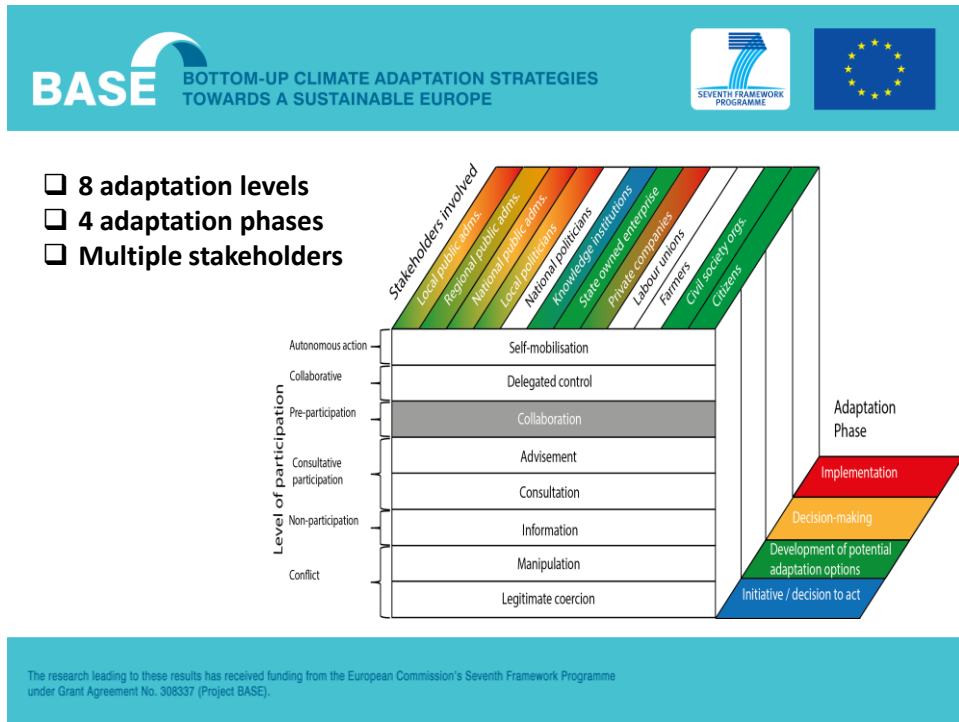
How?

Why?

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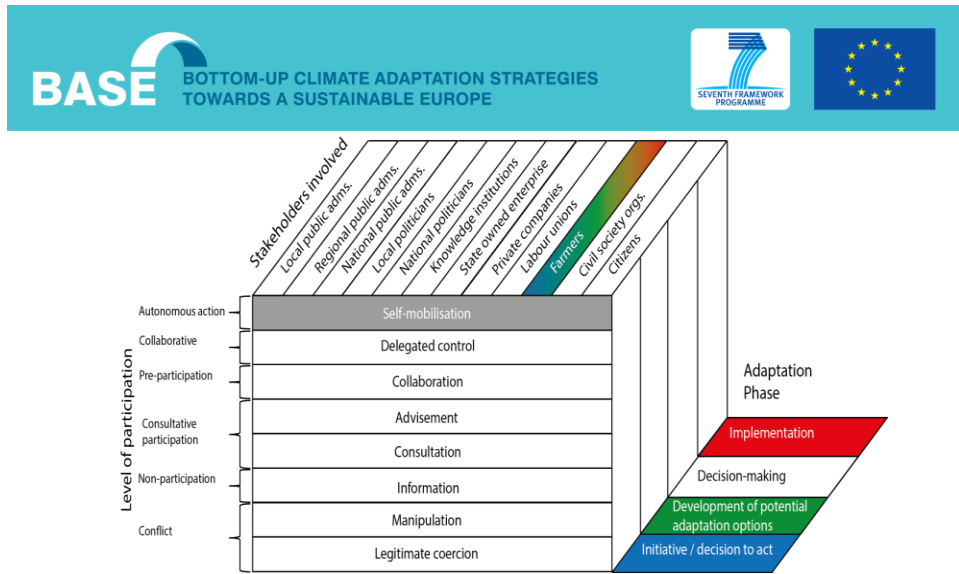






Participation Matrix for the South Aveiro Coast case study. BASE Deliverable 5.3 (2015)

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Participation Matrix for the South Moravia case study. BASE Deliverable 5.3 (2015)

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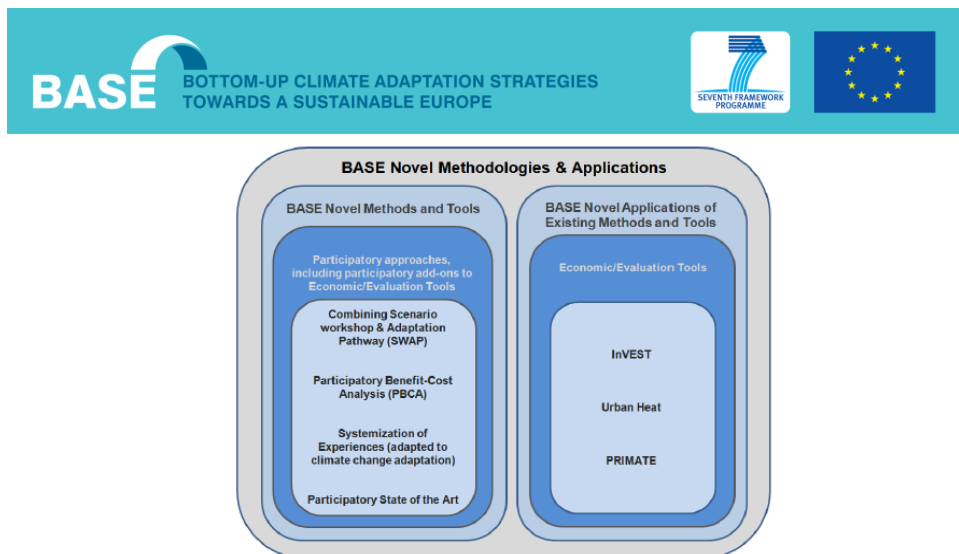


Figure 2-5 Novel approaches & applications of existing tools developed through BASE: Novel methods and tools for participatory approaches, including participatory add-ons to economic/evaluation; and BASE novel applications of existing methods and tools for economic/evaluation.

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PBCA – Participatory Benefit-Cost Analysis

The use of participatory methodologies for economic analysis in Cascais, Portugal

Alves F. M., Vizinho A., Campos I., Penha-Lopes G.,

Objective and concept

The **Participatory Benefit-Cost Analysis (PBCA)** is a hybrid methodology designed under FP7 project BASE by CCIAM for the participatory economic assessment of the costs and benefits of different adaptation measures. It was tested and used in the analysis of the Strategic Plan for Climate Change of Cascais.

It is a simple-to-use, resource efficient, solutions focused, pro-active, democratic tool for decision-makers.

The PBCA aims to combine the advantages and strengths of multi-criteria analysis (MCA) with the rationality of Cost-benefit Analysis (CBA), evolving from the simplicity of the Simplified Participatory Cost-Benefit Analysis (SPCBA) to deliver an all-in-one procedure for action-researchers working in climate adaptation.



Methodology

5-Step procedure

1. Stakeholder grouping (5-7 participants)
2. PCBA Matrix for one adaptation measure
3. Introducing discounting
4. Debate and selection of the discount rate
5. Final present value presentation by each group
6. Final present value comparisons and debate

Example of a PBCA Matrix: "Green corridors"

Effect description	ENV		SOCIAL		ECONOMY		Net Present Value (NPV)	Ratio B/C
	Short term (2014-2020)	Long term (2020-2050)	Short term (2014-2020)	Long term (2020-2050)	Short term (2014-2020)	Long term (2020-2050)		
BENEFITS	1	1	1	1	1	1	6.5	8.5
COSTS	1	1	1	1	1	1	8.5	4
Ratio B/C	0.67	3	0.17	2.5	0.71	1.1	7.13	1.762

Results

8 Adaptation measures analysed

Adaptation measure	CB short term	CB long term	Discount rate	Final present value (2014-2020)	Final present value (2020-2050)
Green corridors	0.5	2.50	-5%	1.8495879	0.979128
Reforestation of oak forest-Cascais Park	0.5	0.5	-5%	0.8491279	1.08025
Action plan to manage invasive species	0.70	3	-5%	0.90105	0.0205
Climate water pollution audits	2	2.42	1%	1.849179	1.34869
Setting measures to harmonize regarding good sanitation practices	2.25	3.5	1%	2.54025	1.69075
Regulations towards biosecurity	0.25	4.5	1%	4.18775	1.27525
Water surveillance system in the municipality	3.5	3.5	1%	3.87225	2.54075
Insurance covering campaigns for heat waves and heat stress	0.25	2.2	1%	1.3909	0.9426

Conclusions

- It's more about the process than the result itself;
- It can lead to counter-litigation, but intuitive, results, such as the selection of negative discount rates for some particular adaptation measures in some groups;
- Simple to use and understand, mainly if there is good facilitation/localization
- The introduction of the time-factor and the inherent use of a discount rate enriches the debate and contributes significantly to the usefulness and maturation of the tool;
- Inexpensive to use and implement as it can be applied in the context of an existing workshop and represent a 1-hour add-on to the program with minimum marginal costs;
- It allows stakeholders to point in the right direction regarding the most important effects of an action if deeper CBA is needed for quantitative valuation as well as identify expert shadow areas

SWAP – Scenario Workshop with Adaptation Pathways

Creating a common vision for coastal adaptation pathways in Portugal

Vizinho A., Campos I., Coelho C., Pereira C., Penha-Lopes G., Alves F., Fonseca, A.L., Haasnoot M., Santos F. D.

Objective

To create an adaptation plan to a highly vulnerable stretch of coast of 20km in the region of Aveiro, Portugal

Context

- Climate Change will create increased pressure in vulnerable coastal areas;
- Integrating climate change adaptation in coastal protection and planning is needed and requires innovation
- Research developed as case study of FP7 project BASE;
- Previously researched in projects CHANGE and Adaptalia

Case Study



Coastal stretch from Barra to Areôlo in the municipalities of Ilhavo and Vagos, in the region of Aveiro, Portugal. Includes Aveiro Delta. Projected high risk of flooding, destruction of houses, dune system and connection of sea and delta.

Methodology

SWAP methodology combines Scenario Workshop with Adaptation Pathways and was developed to create dynamic climate adaptation plans for specific territories.



The photo of stakeholders assessing their vision (left) based on the map of flood risk and overlapping (right) and coastline evolution. Bottom: photo of stakeholders discussing and choosing adaptation pathways for one of the sub-territories of coast inside the case study (left). Pathway chosen by participants in workshop in May 2014 and subsequent analysis to support decision-making (right).

In the first day of the Scenario Workshop stakeholders get together to create their common vision and describe it on the map.

On the second workshop day, a multicriteria analysis of adaptation measures was presented to stakeholders together with adaptation pathways for five coastal sub-territories, as well as a pre-identification of the most effective, cheaper and cost-effective pathways.

Stakeholders discuss and choose the best pathway.

Results

Results consist of dynamic plan based on an Adaptation Pathway for a stretch of coast (right image) and a map for any future time until 2100 with the adaptation measures in place (left image: map of year 2025).



Conclusions

- This combination of methodologies created positive synergies between methodologies, stakeholder participation, adaptation process and pathway definitions.
- Pivotal for the success of this research:
 - i) Strong engagement of stakeholders,
 - ii) recognized experts creating multicriteria and pathways,
 - iii) experienced facilitators,
 - iv) intense preparation.

Contacts

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www.base-adaptation.eu

Easy References online

Project CHANGING: <http://www.projectchanging.eu>
Adaptalia: <http://www.adaptalia.eu>
CCIAM: <http://www.cciam.eu>
Adaptation Pathways: <http://www.adaptation-pathways.eu>



**BOTTOM-UP CLIMATE ADAPTATION STRATEGIES
TOWARDS A SUSTAINABLE EUROPE**




1. Workshop PECAC 2.0
16th of July, 20 Participants, DNA Cascais
2. Workshop GREENFEST (TURISM)
13rd of October, 30 Participants, Estoril Congress Center
3. Workshop PECAC 2.1 Biodiversity Cluster
05th of November, 227 Participants, Cascais Ambiente
4. Workshop Neighborhood Tutors
5. Workshop PECAC 2.1 Water Cluster
19th of November, 10 Participants, DNA
6. Climate Change Questionnaire
04/11/2014 99 Valid Answers
7. Workshop PECAC 2.1 Education
27th of February 2014, 17 Participants, DNA
8. Workshop PECAC 2.1 Health
23rd of February 14, 18 Participants, DNA
9. Questionnaire to the Population

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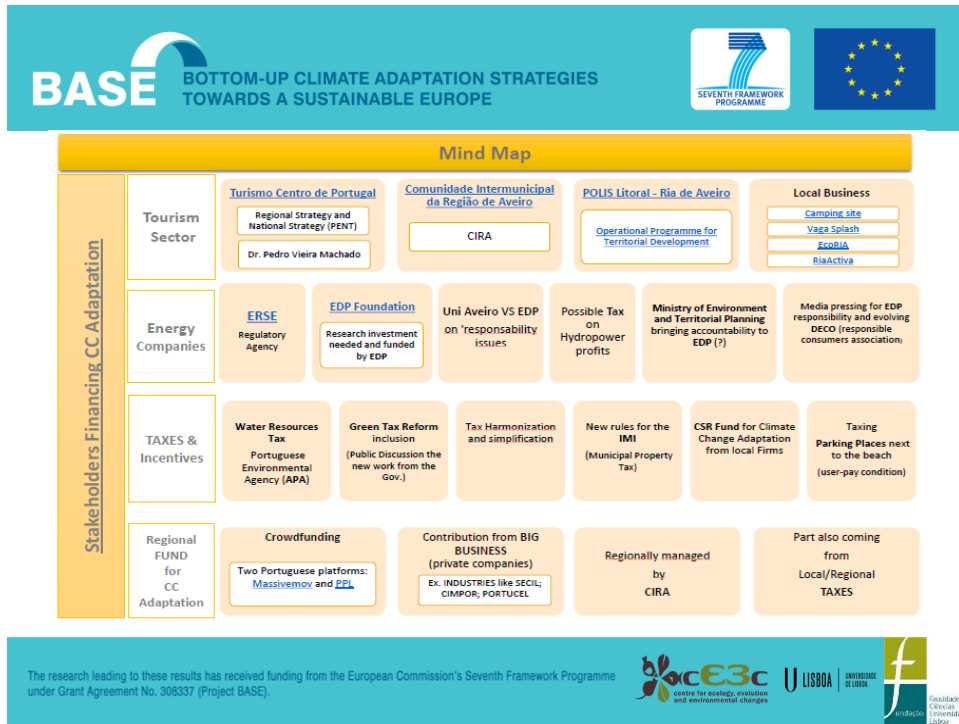





Who and how to involve stakeholders (other than the central government) in investing in coastal adaptation measures?

What investment opportunities to you see for coastal adaptation to climate change?

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Recommendations – Policy Makers

Participation shall:

- Politically anchored
- Economic incentives
- Selecting participants
- Complement with quantitative expert analysis
- Clear objective of the process
- Timing
- Participation is giving power and receiving support

Participation can:

- Reduce the cost
- Find synergies with other areas
- Help prioritize
- Cost effective long term planning
- Improve decision making
- Unfold complex systems
- Develop new solutions

Recommendations – Practitioners

Participation planning should:

- Clear vision for the process
- Balance between quantitative and qualitative results
- Tailor the process to the participants and stakeholders
- Use experienced facilitators
- Define the time frame of the process
- Have the time needed for the process
- Co-create a common knowledge base
- Involve, empower, let go



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Concluding remarks

- ✓ Adaptation is happening planned or not – planned is better
- ✓ Participation of stakeholders is needed to ensure cost-effective adaptive measures and high quality when applied well
- ✓ Cost-benefit analysis combined with participatory processes can elucidate important values otherwise not apparent in the CBA
- ✓ Participatory methods should be tailored to the situation - be aware that the methods can also be misused and abused and not contribute positively to the decision-making

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BASE at the AF2016 Conference and EXPO

BASE results are presented in:

- Sessions SC 9.13: "Adapting scientific methodologies - how to compare & evaluate case studies as well as integrate & upscale data and information?"
- Session SP 9.6: "Local climate change adaptation: barriers and enablers for mainstreaming and implementation"

Visit the **BASE space** at the „Food, forestry and rural livelihoods" pavilion of the EXPO

Learn about **BASE agriculture case studies** across Europe:

- Climate adaptation in two Danish rural municipalities (Holstebro & Lolland), Denmark
- South Moravian and Ústí Region, Czech Republic
- Tagus Water District
- Adaptation of water for rice in a coastal wetland, Doñana, Spain

Wednesday 11 May (16:15 – 17:15): join us at the **Tool Shed** to hear about the **BECCA** and **PBCA** adaptation tools developed within the project

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BASE Interactive Policy Workshop | 09 June | Brussels

Objective: The interactive discussion will allow stakeholders to share experiences and knowledge on European adaptation in policy and practice. Objective is to **shape a series of recommendations** to support the review and future format of the European Adaptation Strategy.

Topics: Participants will discuss a range of topics, including the impacts and risks of climate change, the sectoral costs and socio-economic benefits of adaptation and the implications for policy making from EU to municipal level. Focus will be placed on adaptation in **agriculture, cities and water** with practical examples from a range of European case studies.

WHEN Thursday, 9 June 2016, 9:00 – 17:00

WHERE Les Ateliers des Tanneurs, 58-62 Rue des Tanneurs, 1000 Brussels, Belgium

INFO visit www.base-adaptation.eu or contact us at BASE-policy-workshop@ecologic.eu

Workshop modules include:

Presentations on Climate Adaptation in a European Context

Hans Sanderson, Aarhus University
Marco Gemmer, DG Research and Innovation
Bea Yordi, DG Climate Action

'ConverStations' on Implementing Adaptation

Participatory small table discussions on key challenges and opportunities. Multiple inputs from European case studies on water management, cities and agriculture

Discussion on Tools for Economic Evaluation and Financing

Claus Kondrup, DG Climate Action
Michael Mullan, OECD

Policy Recommendations to Inform the EU Adaptation Strategy

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Contacts

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