

A framework for participatory analysis of trade-offs in landscape planning

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Structure of this presentation

- **South Africa (Giyani) Project and EU Sensor Project**
- **Framework for participatory analysis**
- **Method to apply the framework**
- **Research questions**

RURAL DEVELOPMENT PROJECT IN THE GREATER GIYANI AREA (SOUTH AFRICA)



This project aims to alleviate poverty and restore the ecosystem through a sustainable rural development plan

Objectives

- Identification of options for sustainable development of the area while taking into account competing interests
- Assessment of the ecological, social, economic consequences of possible options
- Identification of preferred option for development of the area



STUDY AREA:

- North East of Greater Giyani Municipality
- 12 Villages adjacent to Kruger National Park
- Extension: 450 km²
- Degraded dry savanna
- Very low socio-economic and ecological conditions



Sustainability Impact Assessment Tools

for Environmental, Social and Economic Effects of Multifunctional Land Use in European Regions

Key Objective

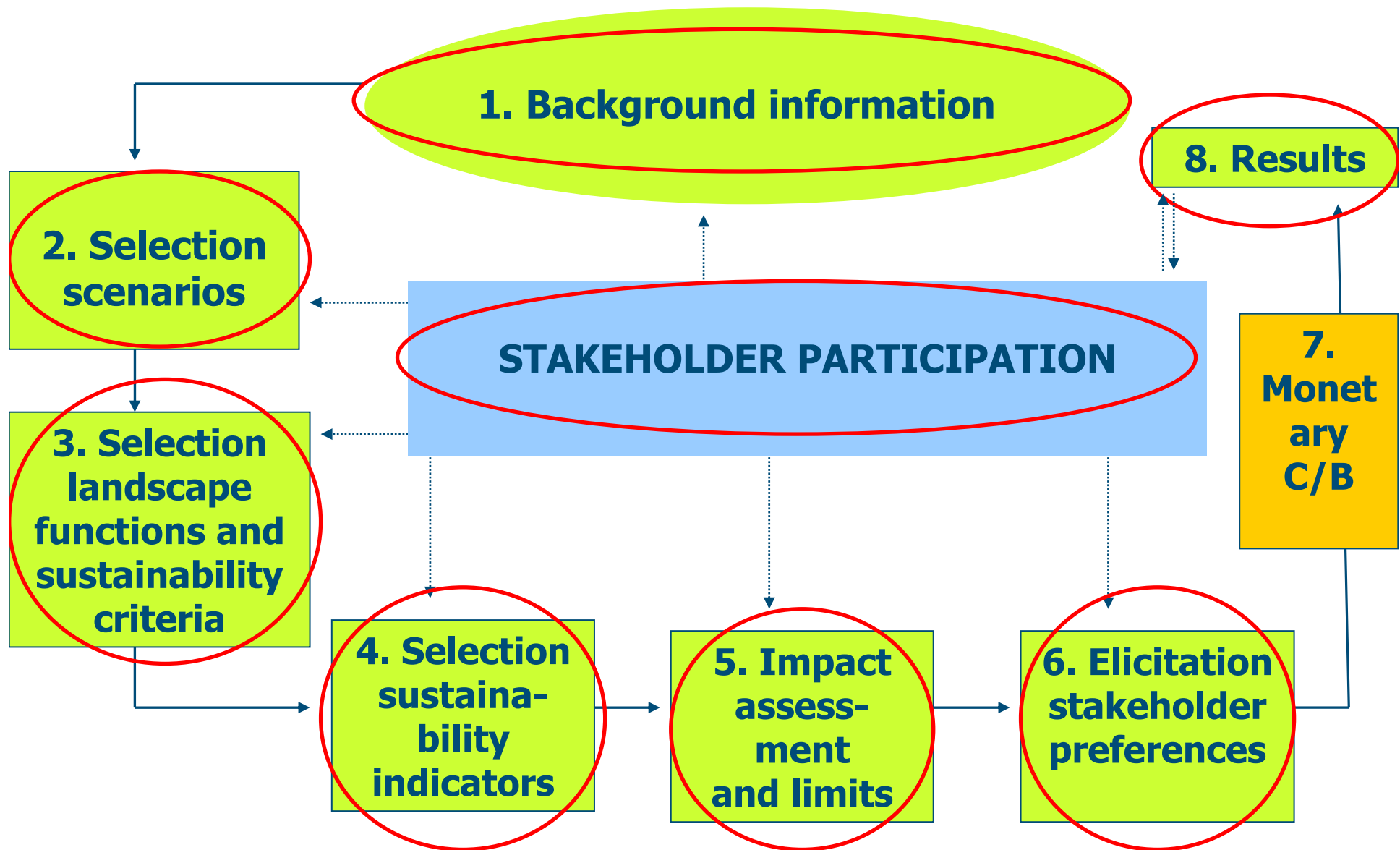
Develop science based forecasting instruments to support decision making on policies related to land use in European regions

Our role in SENSOR

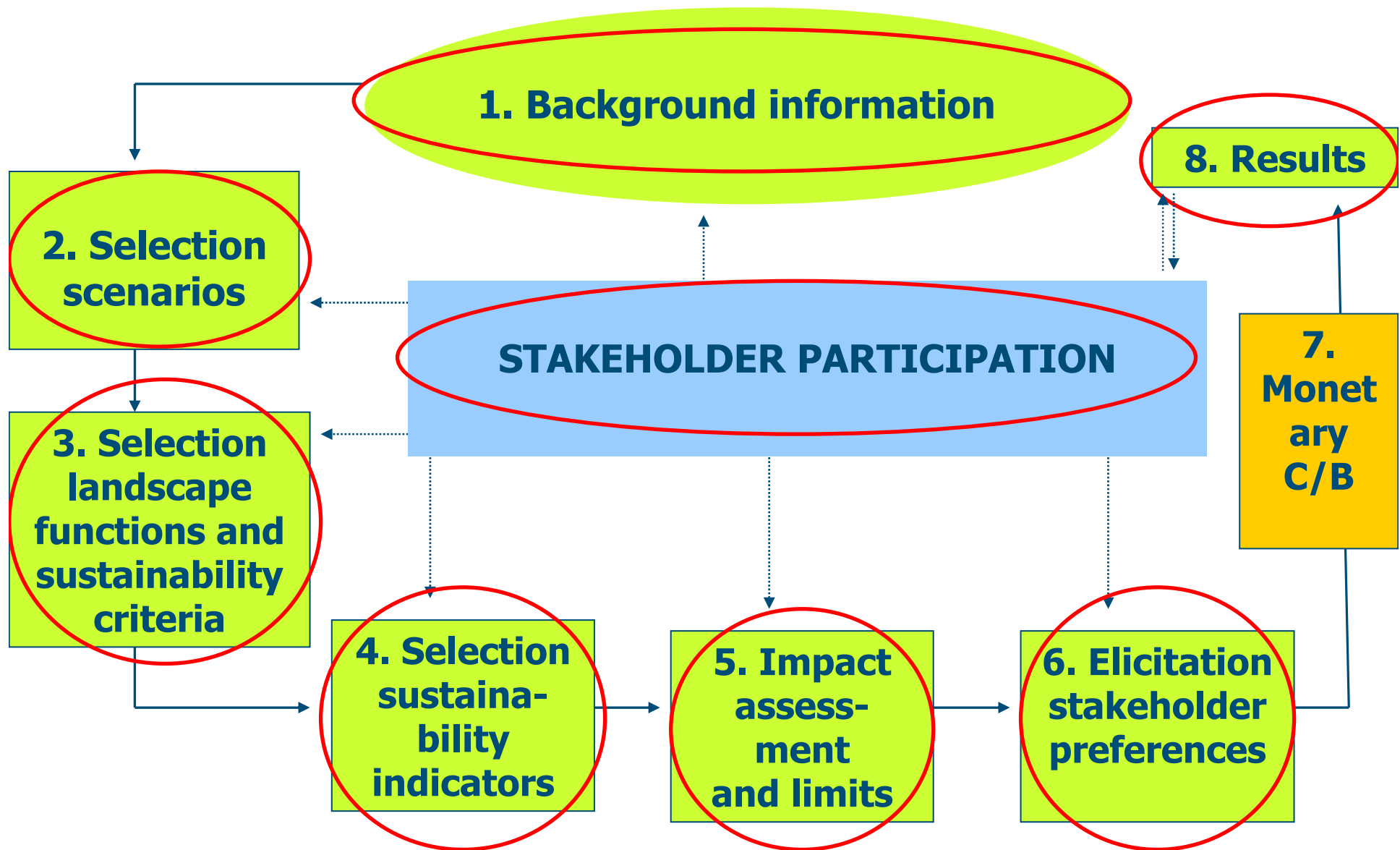
Develop a participatory method to assess stakeholder opinions, values and preferences for different policy scenarios

Participatory analysis - stakeholders workshops
Malta (May and Oct. 07) ; Estonia (Nov. 03-04); Silesia (Nov. 19-20)

<http://www.sensor-ip.eu/>



General framework



General framework

5. Impact assessment and Limits

	Functions	Criteria	Indicators	Unit	Scenario A	Scenario B	Scenario C	Limits to impacts
					I M P A C T S			
SOC	Human Health and Recreation	Well being	People accessing the country-side	-3/+3	-3	1	3	-1
ECON	Land based and Non-land based production	Contribution to the economy	GDP per capita	-3/+3	3	3	1	2
ENV	Support and Provision of Habitat	Bio-diversity	Quality of habitats	-3/+3	-3	-1	2	-1

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6. Elicitation of Stakeholder preferences

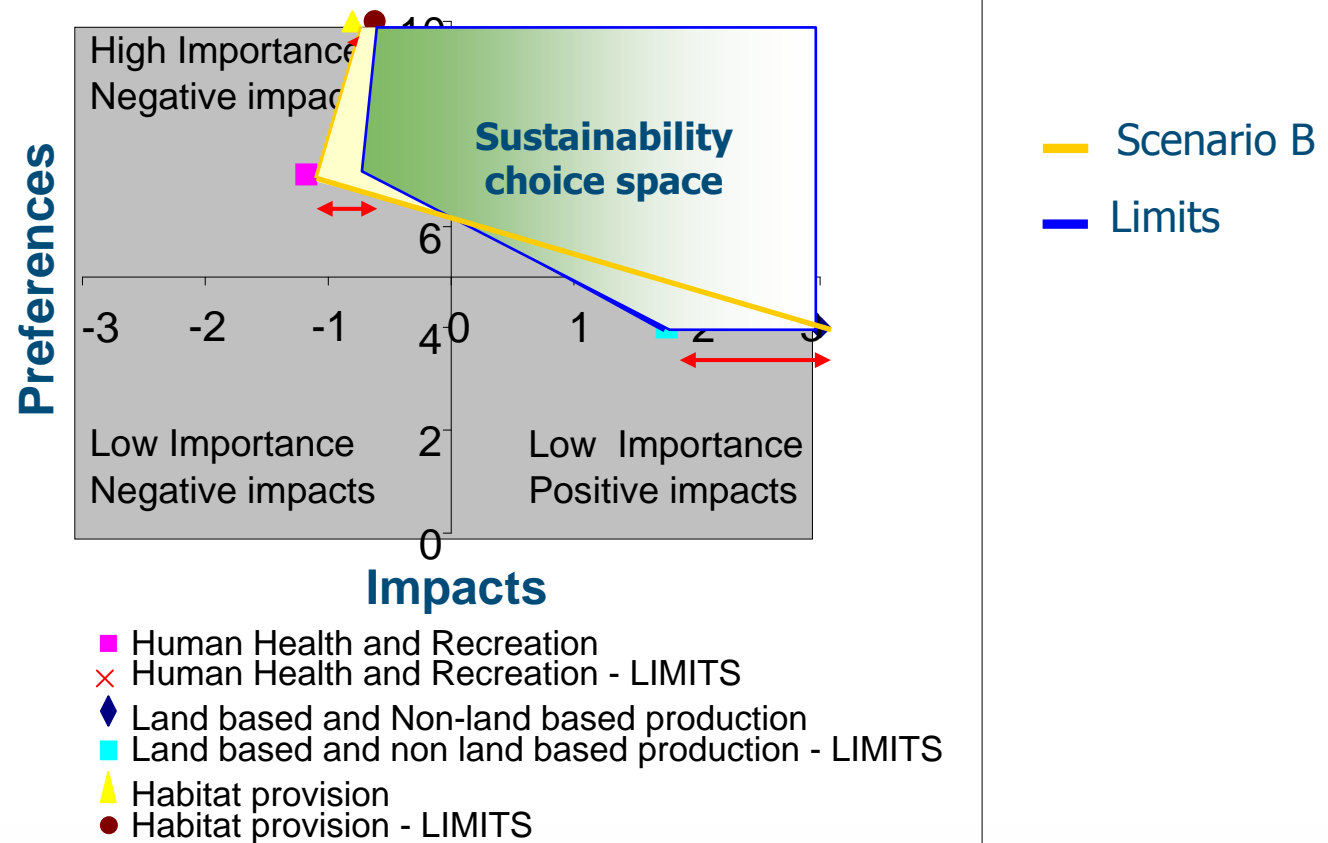
	Functions	Criteria	Worst Performance	Best Performance	Potential Benefit	Preferences (0-10)	Weights	Euro per unit	Potential benefit in Euro
SOC	Human Health and Recreation	Well being	-3	3	6	7	0.33	787	4725
ECO	Land based and Non-land based production	Contribution to the economy	3	1	2	4	0.19	1	2700
ENV	Support and Provision of Habitat	Bio-diversity	-3	2	5	10	0.48	540	2800

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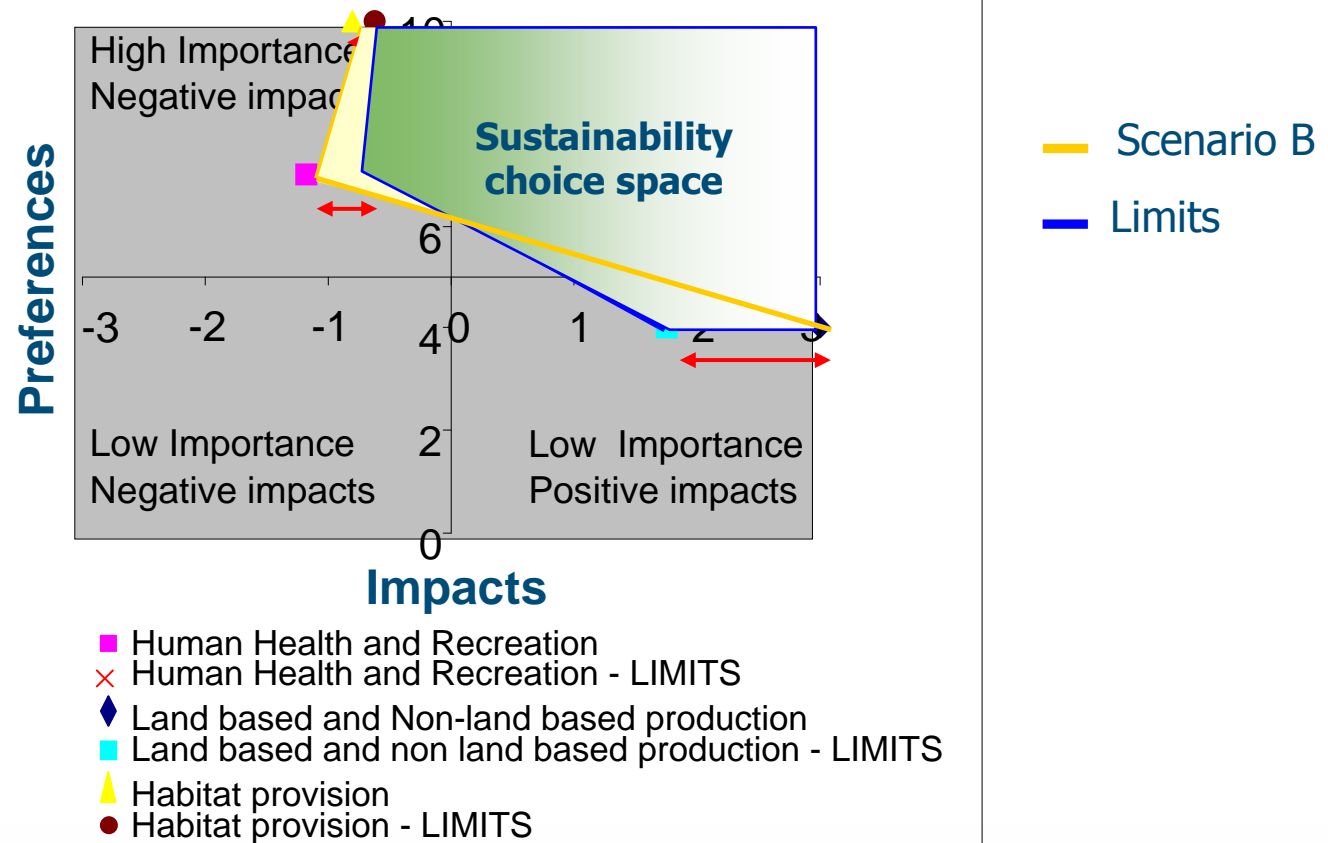
- Results (example) -

Impacts, Limits and Preferences - Scenario B -

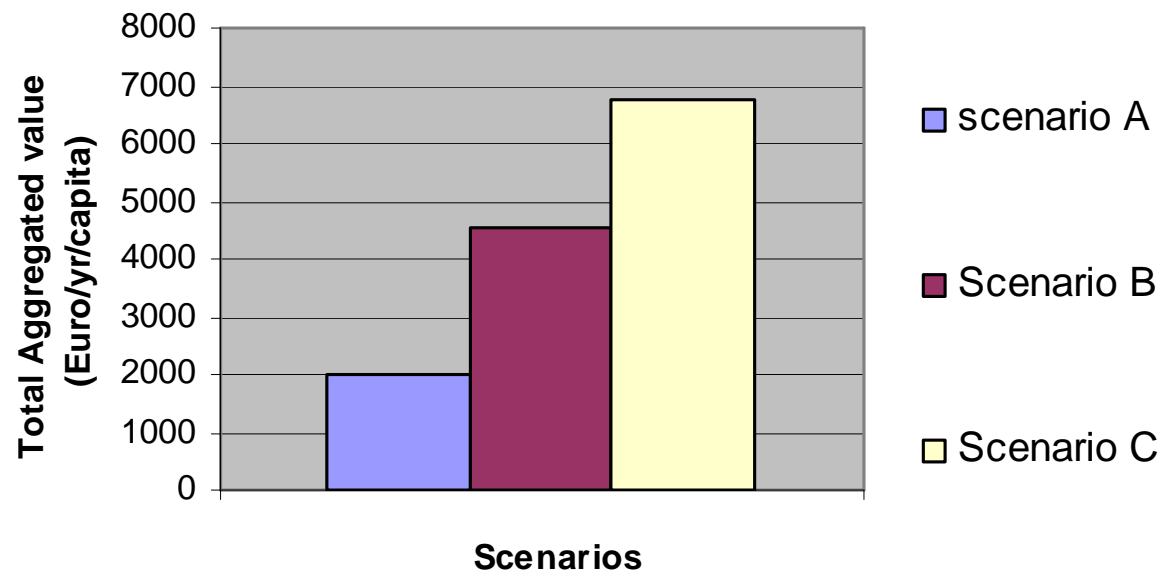


- Results (example) -

Impacts, Limits and Preferences - Scenario B -



**Total Aggregated Value
of monetary equivalents per Scenario
(based on preferences of stakeholders)**



Research questions to be further investigated

- How to assess preferences of stakeholders in a democratic manner?
- How to support construction of preferences?
- How to combine MCA with CBA?
- How to translate non-monetary costs and benefits into monetary terms?

THANK YOU for the attention!



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