



Project-scaled ecosystem services assessment

LIFE+ Sustainable Ordunte
LIFE+ Tremedal

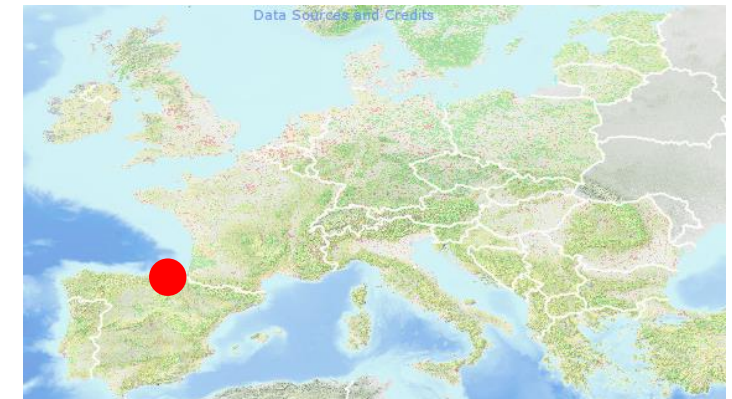


José María Fernández-García
jofernandez@hazi.es

LIFE Platform Meeting
Tallinn, May 2017



- SAC ES2130002
- 3,400 ha
- Forests (55 %) and mountain pastureland (45 %)

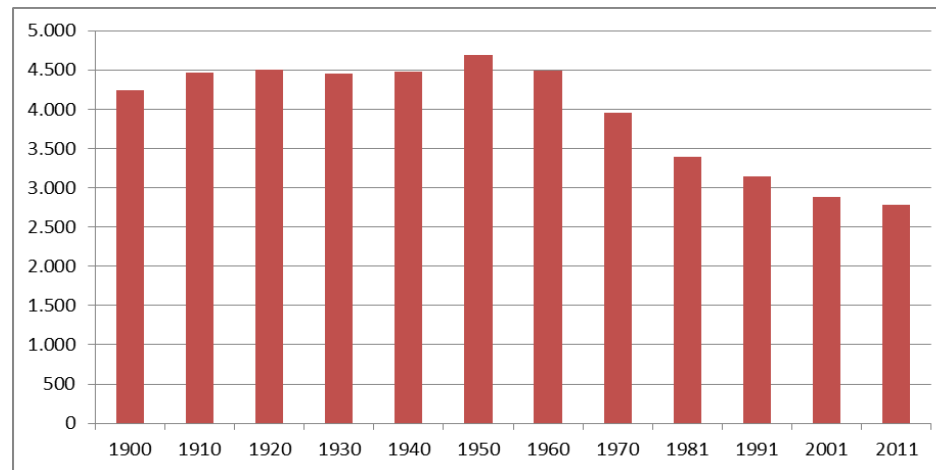






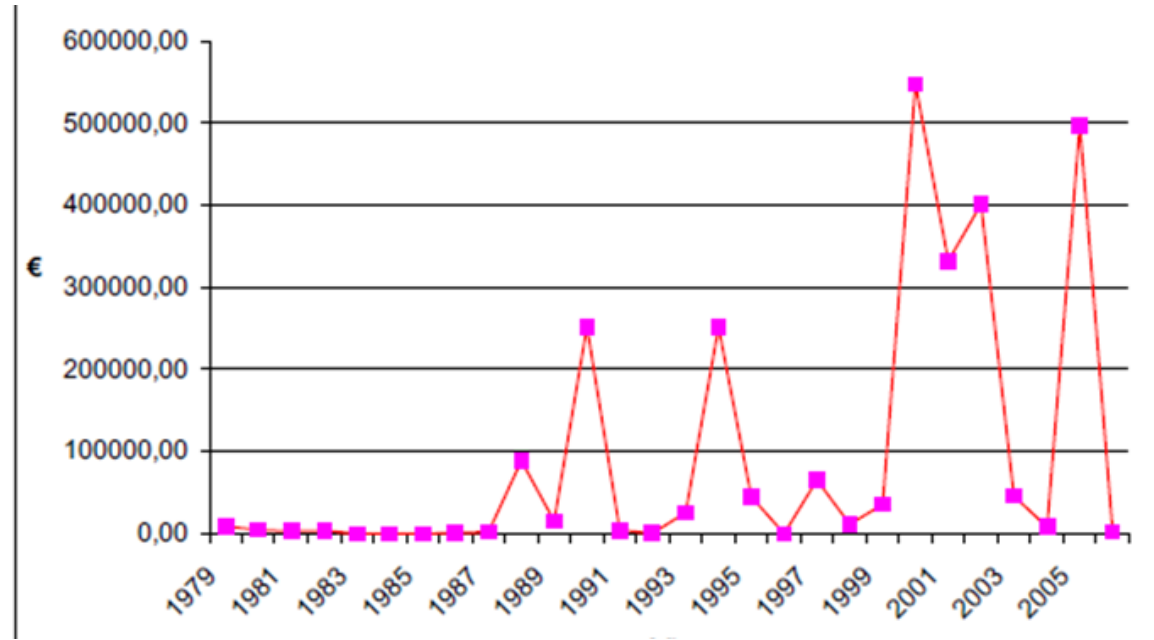
- Project duration 2012-2017
- The Provincial Council is the coordinating beneficiary
- Restoration of the blanket bog and moss mires
- Restoration of 210 ha of natural forests (beech and mixed deciduous) at the expense of commercial plantations (Monterrey pine and eucaliptus)
- Promote compatible livestock management and public awareness





- Long term decrease of the population
- Rural economy heavily dependent on livestock raising



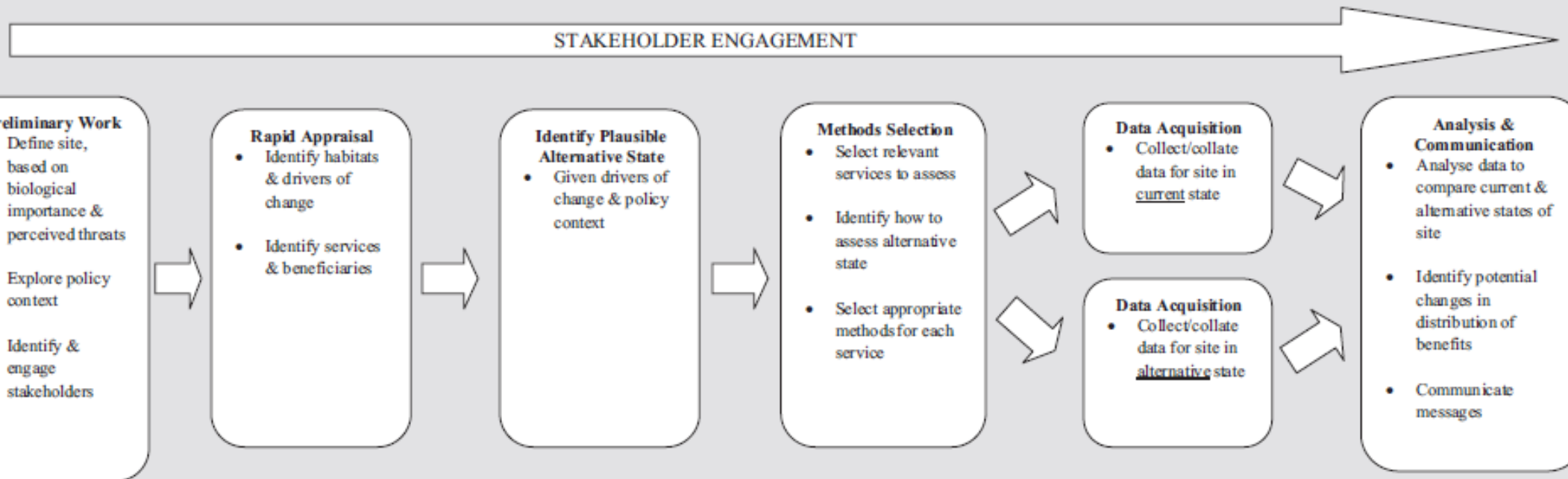


- Annual incomes based on forestry exploitation in public plantations.

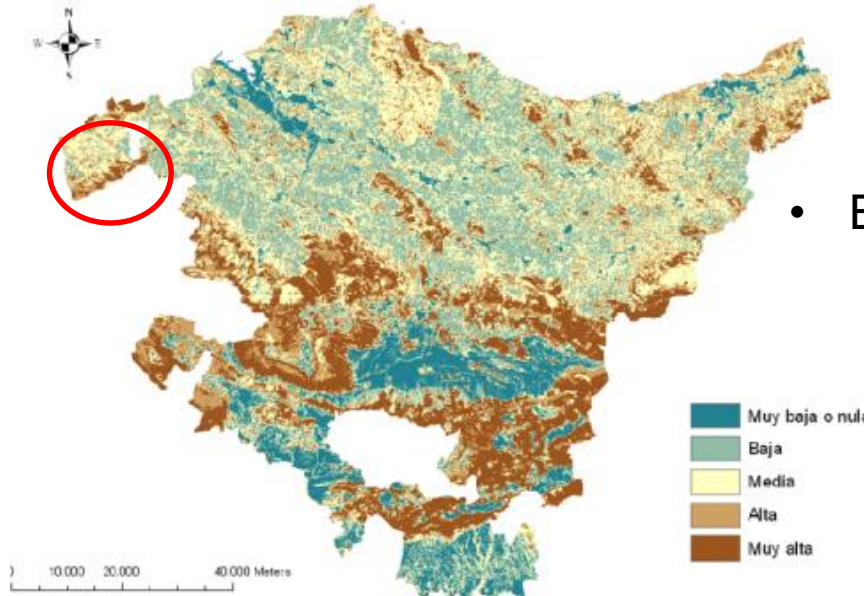




- **Set the objective:** which ecosystem services will be improved by the project, and to what extent (*ex-ante* assessment)
- Local, small study area
- Lack of detailed inventories and monitoring data for some socio-ecological processes, like grazing pressure
- Lack of detailed statistics and monitoring data for some socio-economic processes, like recreation
- Uncertainty over future economic scenarios (prize for timber, livestock regulations and markets)
- Unspecialised team project
- Search for an easy-to-implement toolkit

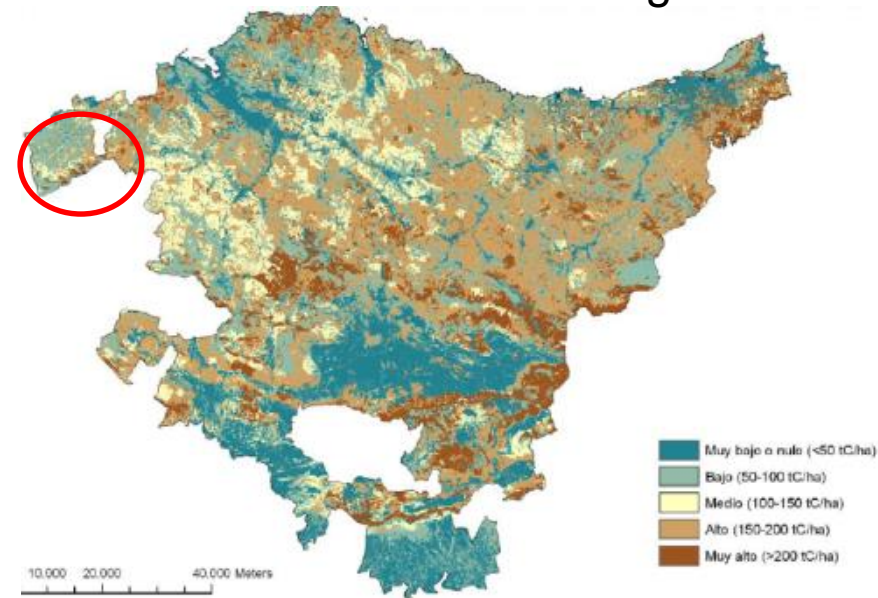


Peh *et al.* (2013). TESSA: a toolkit for rapid assessment of ecosystem services at sites of biodiversity conservation importance. *Ecosystem Services*, 5.

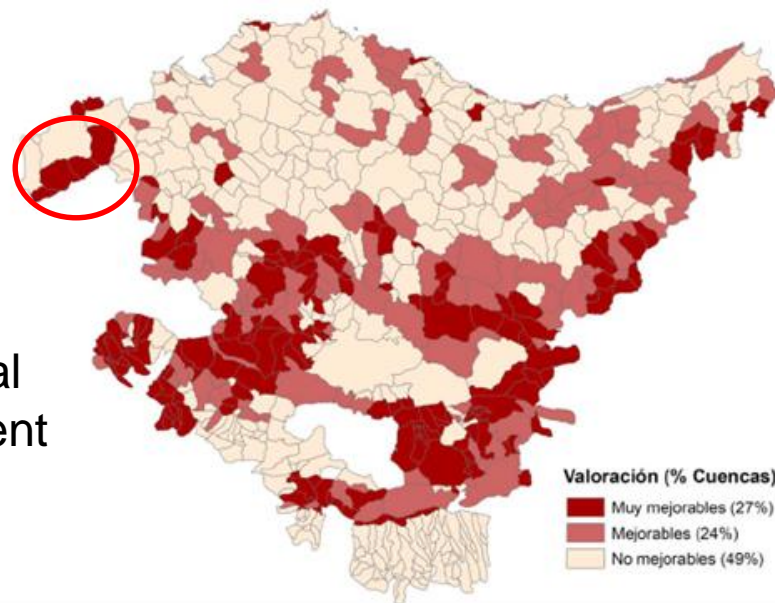


• Biodiversity

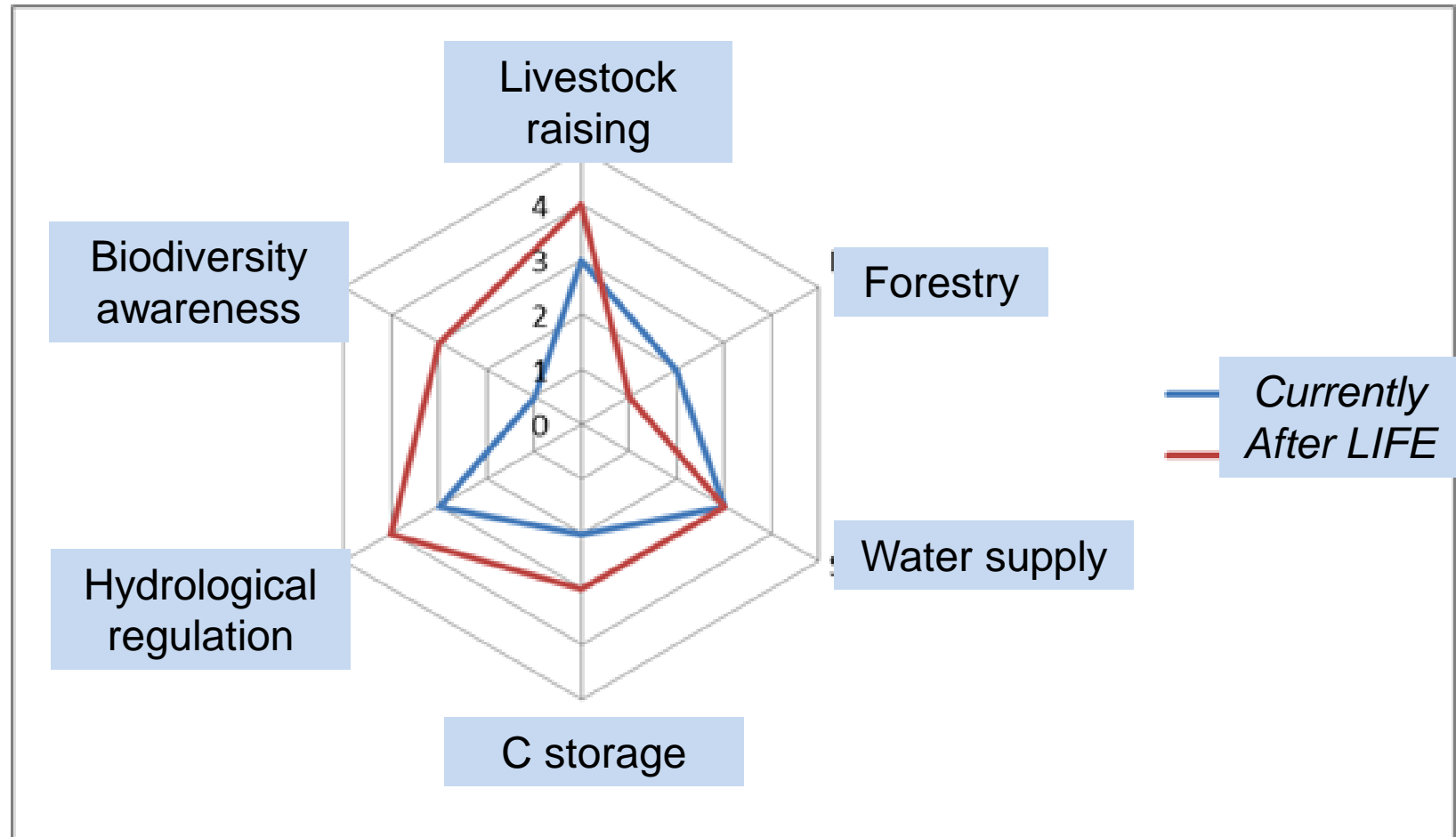
• C storage



• Room for recreational improvement

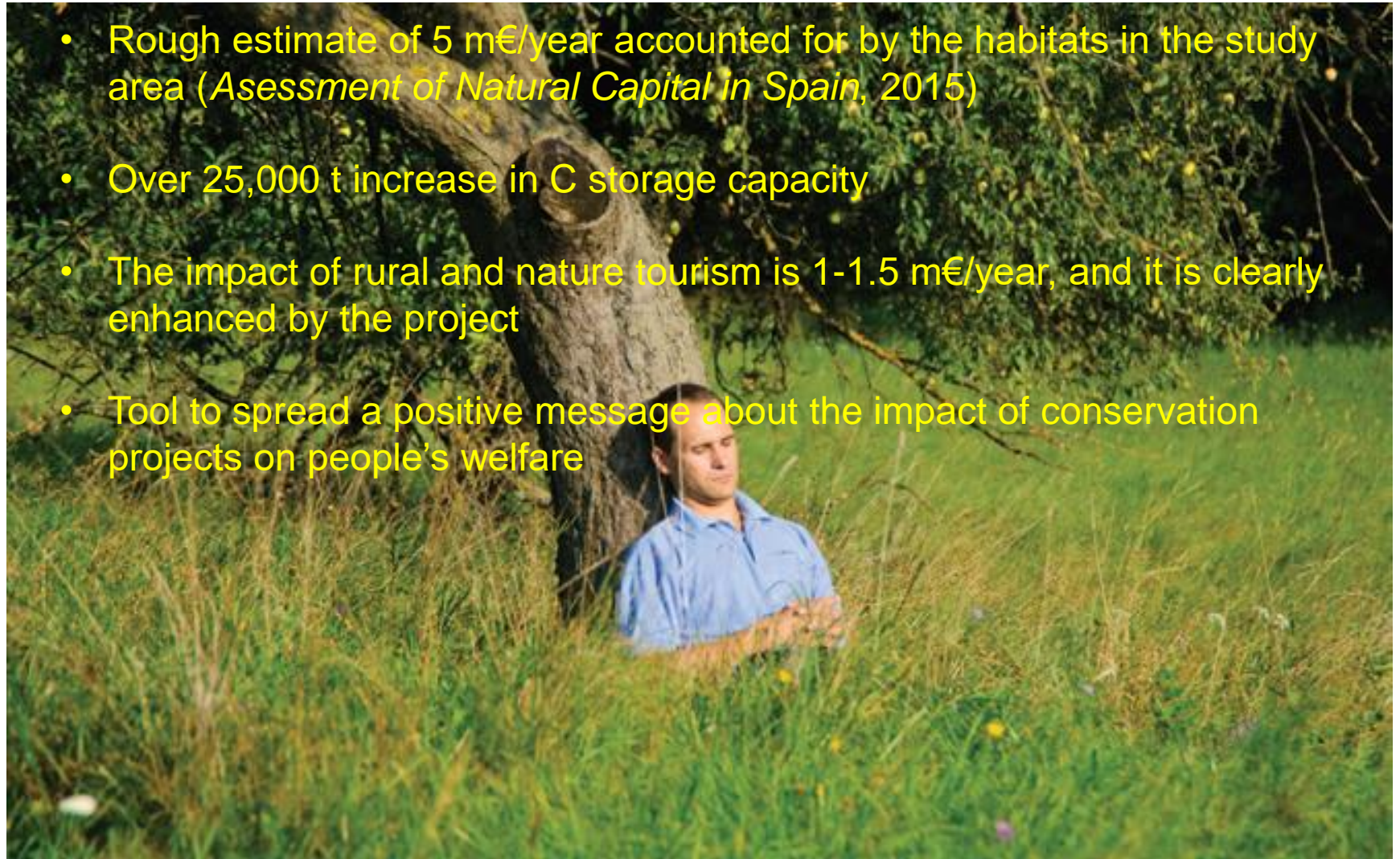


Millenium Ecosystem Assessment in the Basque Country (2014)





- Rough estimate of 5 m€/year accounted for by the habitats in the study area (*Assessment of Natural Capital in Spain, 2015*)
- Over 25,000 t increase in C storage capacity
- The impact of rural and nature tourism is 1-1.5 m€/year, and it is clearly enhanced by the project
- Tool to spread a positive message about the impact of conservation projects on people's welfare

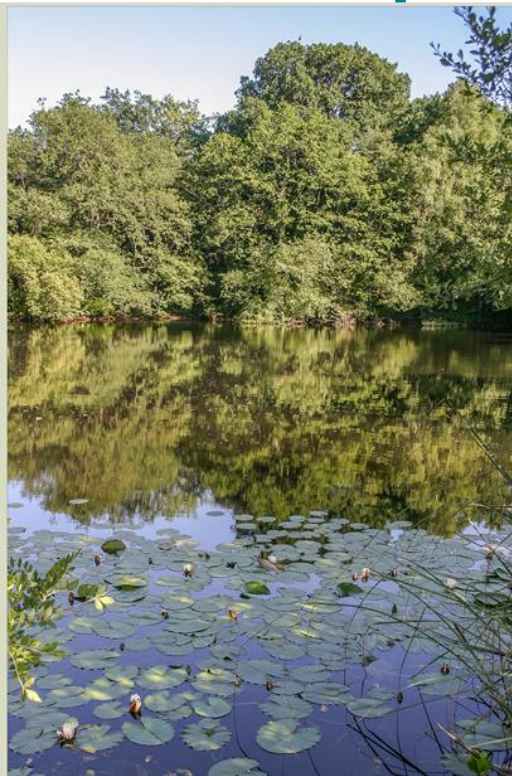




- 25 small sites, most of them classified as SCI and SAC
- 4,000 ha globally, particular sites ranging from 1 to 1,000 ha
- Peat bogs, calcareous fens, wet meadows and lakes



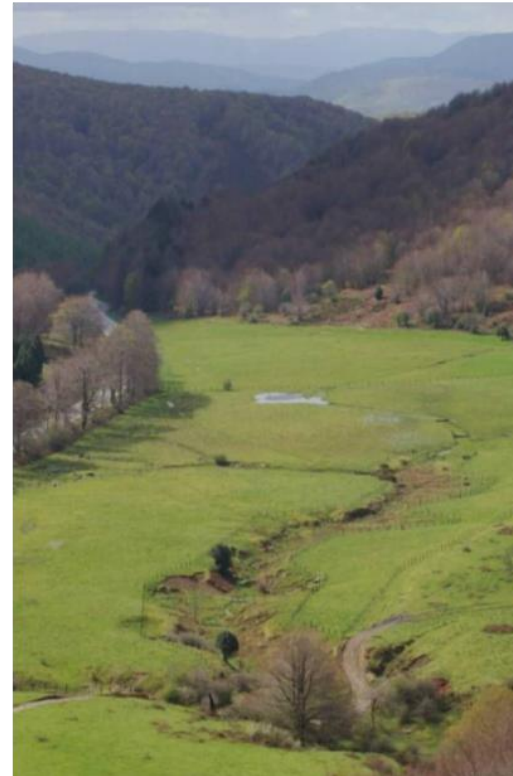
GALICIA



CANTABRIAN MOUNTAINS



NAVARRA

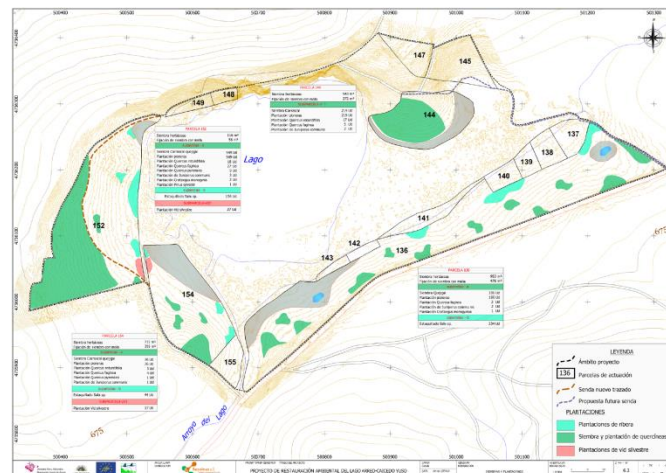


BASQUE COUNTRY





- Project duration 2012-2017
- Regional councils and research bodies
- Habitat restoration and control of invasive species
- Protection of endangered species at vulnerable sites
- Data gathering and environmental monitoring, to assess and adapt efficiency of conservation activities
- Public awareness





- **Set the objective:** which ecosystem services will be improved by the project, and to what extent (*ex-ante* assessment)
- Local, small study areas
- Separate, distinct study areas from every point of view: ecological, socio-economics, administrative, scientific knowledge
- Unspecialised team project
- Search for an easy-to-implement toolkit
- Need of common standards to coordinate the partial assessments

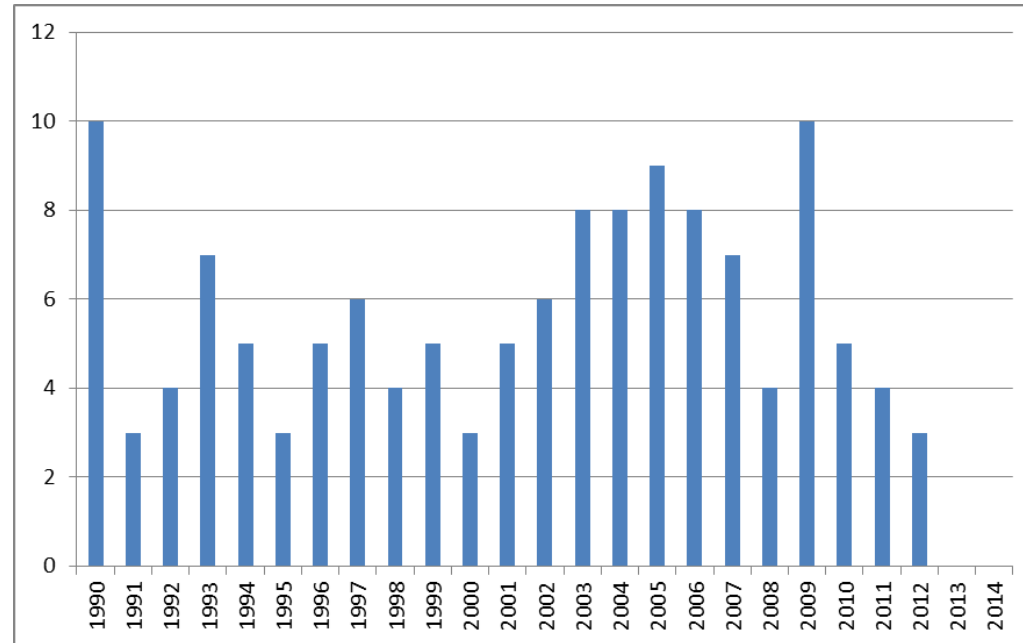


SERVICES	Institutions	Business	Farmers	Scientists	Tourists	Total (N=57)
Cultural and scientific	15		1	8	8	32
Education	13	2	2	6	8	31
Biodiversity conservation	6	1		7	9	23
Ecotourism and recreation	10	2	1	3	3	19
Hydrological regulation	3			3	2	8

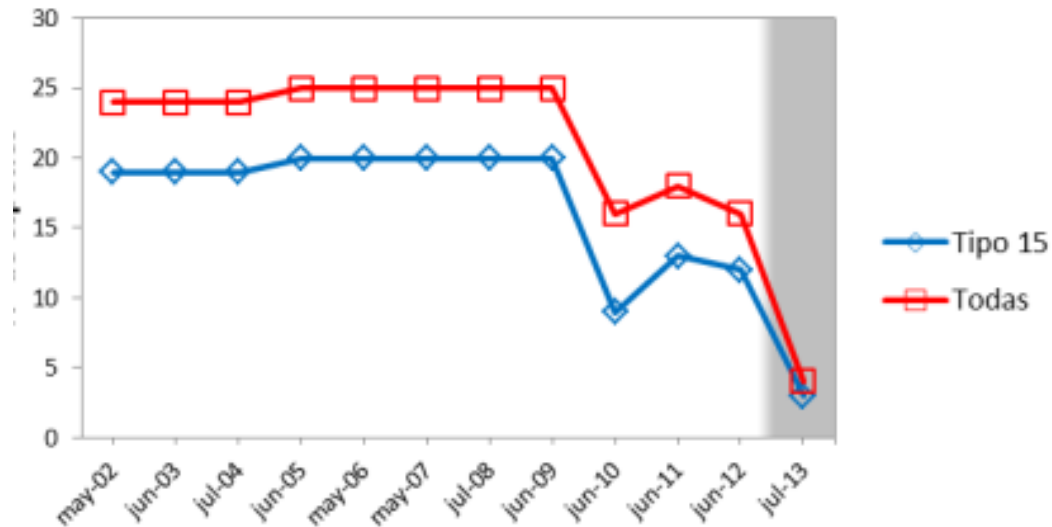
- Ecosystem services to be enhanced at the LIFE+ Tremedal sites



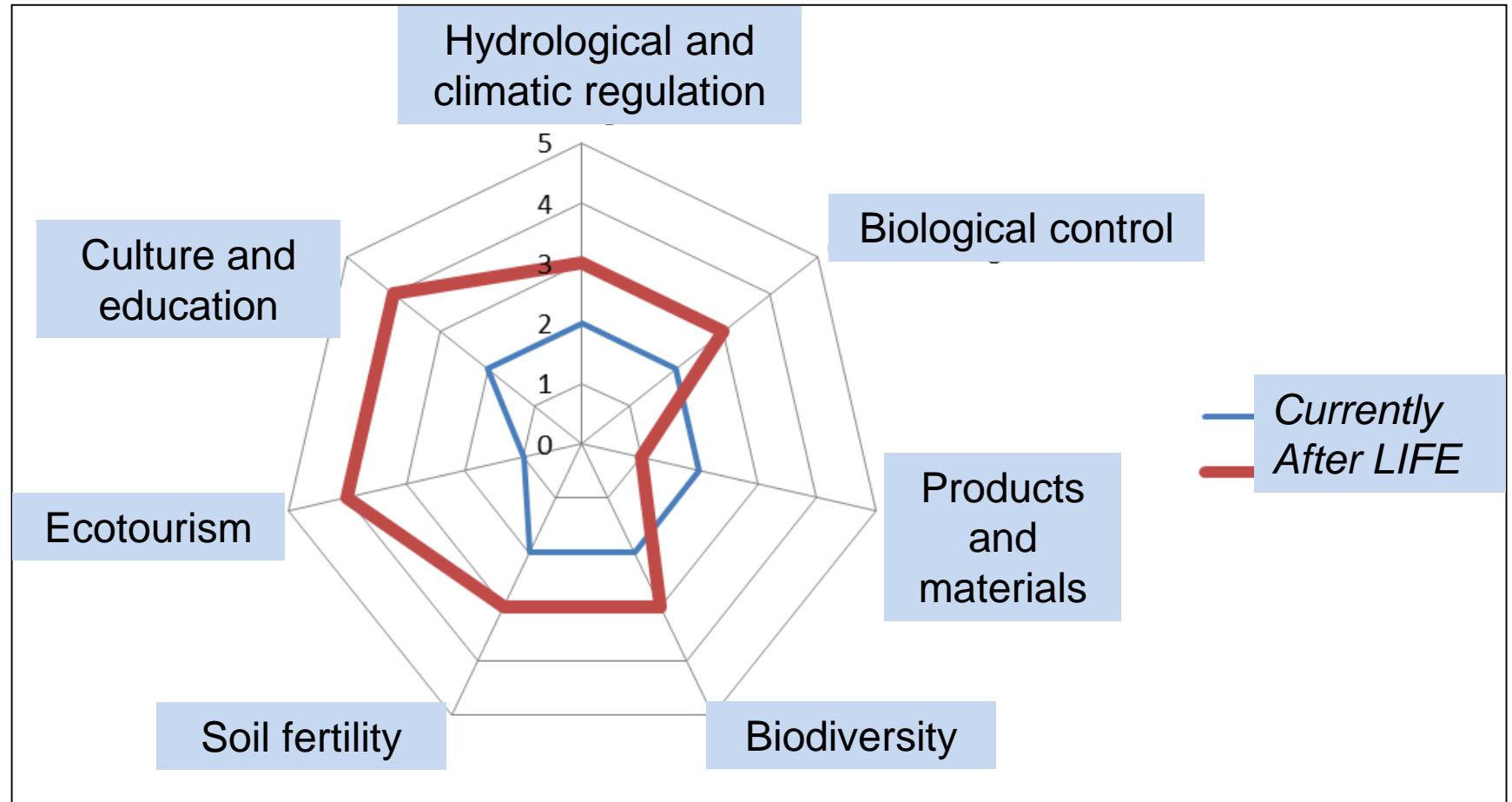
Affected current land- cover/land-use type	Expected change e.g. new land cover / land use / habitat quality	Main drivers causing this change (refer to table B)	Current % cover*	Alternative % cover	Change in % cover
Calcareous fens	Increase surface	LIFE +	1.3	1.5	15
Alkaline bogs	Increase surface	LIFE +	4.9	6	15



Breeding pairs of Coot *Fulica atra*



Richness of submerged macrophytes





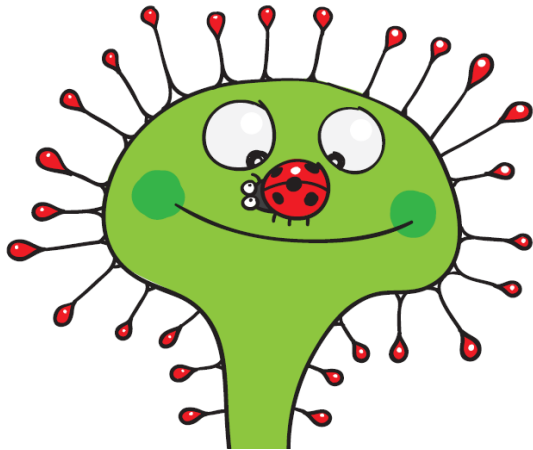
- The impact of ecosystem service enhancement by LIFE+ Tremedal is very relevant as for cultural/scientific and ecotourism, even at regional scale
- Regulating services may be relevant but at local scale, due to the small size of most sites





Acknowledgements:
Idoia Altuna, Mikel de Francisco, Ana Gracianteparaluceta, Dørte López-Pardo, Javier Pérez and partners of LIFE+ Sustainable Ordunte and LIFE+ Tremedal

More information:
www.bizkaia.eus/ordunte
www.lifetremedal.eu



Aitäh!
Thank you!

