

A reflection on establishing Marine Protected Areas using Marine Spatial Planning: Practical challenges and opportunities

Ana Nuno, Luísa Madruga, Andy Cameron, Frédéric Airaud, Claricela Andrade, Lodney Nazaré, Albertino Santos, Manuel Graça, Márcio Guedes, Nina da Rocha, Patrícia Puig, Katy Walker, Kieran Murray, Sérgio Rosendo & Berry Mulligan.

KEY GOALS



Marine biodiversity:
Protect diverse marine ecosystems.



Sustainable fisheries:
Ensure long-term fishery productivity.



Community livelihoods:
Support local communities depending on marine resources.

WHY?

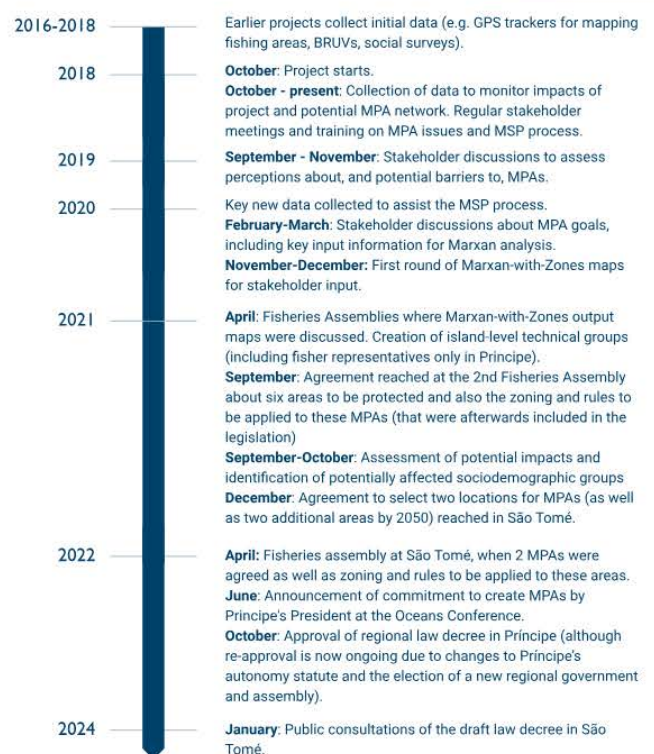
Social-ecological approaches, such as Marine Spatial Planning (MSP), are needed to robustly address conservation challenges. However, MSP and the establishment of Marine Protected Areas (MPAs) often occur in parallel - this is a **missed opportunity**.

Using [São Tomé and Príncipe \(STP\) as case study](#), we illustrate how a MSP framework was employed for identifying the **first MPAs in the country**.

HOW?

To inform the design of a network of MPAs, key steps included project consultations based on biological and social information overlaid using the tool *Marxan with Zones* with best available scientific knowledge.

Drawing on the experiences of people involved in this process, we reflect on the **main challenges and opportunities** in achieving social-ecological integration.



(SOME OF THE) KEY LESSONS

- Despite the many social, political and technical challenges, MSP has been essential in **bringing people and different types of social and environmental information together**. However, some goals (e.g. including the perspectives and needs of vulnerable groups) were more difficult to achieve.
- Trying to bring together marine conservation efforts on two islands resulted in two MSP initiatives running in parallel due to differences in governance, data availability, geography and threats. As a result, the **project became much more complex** than originally anticipated.
- Using an MSP framework as guidance provided a **logical sequence of steps** toward the project's goals, while emphasizing stakeholder engagement throughout.
- Strengthening the links between MPAs and MSP can help to **address some of the shortcomings** of MPAs (e.g. unintended consequences of MPAs due to displacement effects on fisheries).



CHECK OUR RECOMMENDATIONS HERE:
DOI: 10.1111/CSP2.13196

Funding: A.N. acknowledges the support of the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement SocioEcoFrontiers number 843865. This work was also financed by national funds through FCT—Foundation for Science and Technology (Portugal), within the scope of the project "UIDB/04647/2020" of CICS.NOVA—Centro Interdisciplinar de Ciências Sociais da Universidade Nova de Lisboa.

