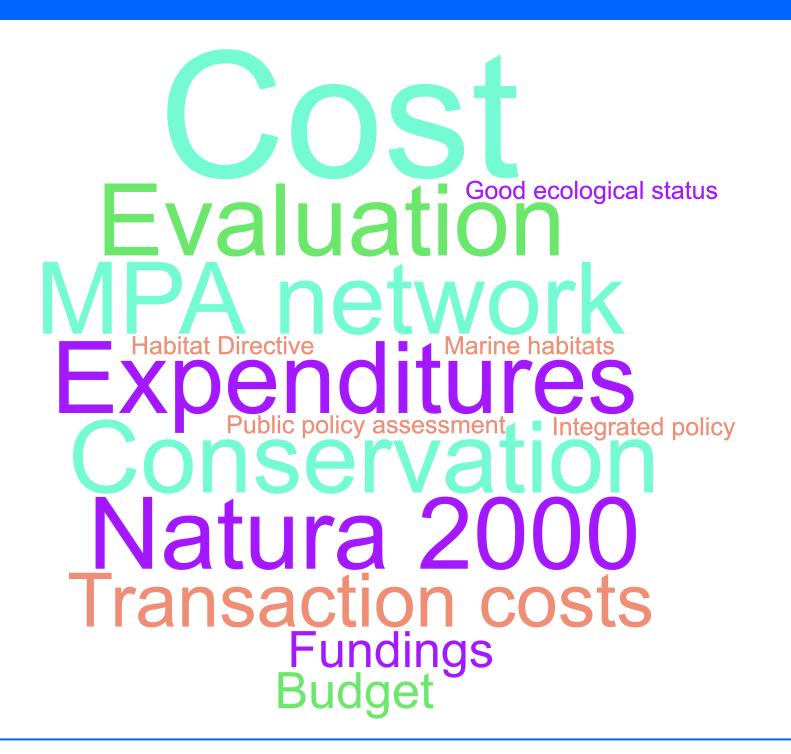
# **Evaluation of the cost of marine habitat conservation** in France: application to the Natura 2000 network Scemama Pierre, Rivallin A, Kermagoret C, Alban F. & Mongruel R

## INTRODUCTION

The Life Marha project aims to optimize the implementation of the Habitats Directive to enhance marine habitat conservation within the Natura 2000 network. Cost evaluation is necessary to support this policy. However, the integrated nature of marine conservation policies and the diversity of governance within Natura 2000 lead to fragmented data on management actions. Here, we present a dual approach for assessing the cost of marine habitat conservation.



#### **COST OF NATURA 2000 TOOL**

Double bookkeeping approach (employment/resources)

$$COST = \sum_{i} COST_{N2000} = \sum_{j} FUND_{N2000}_{habitat_{j}}$$

	Type of data	Limits	Estimations	Cost
Employment side	Cost of Natura 2000 management actions	Absence of reporting of incurred expenses	Extrapolation based on managers interviews	9 270 k€ - 11 050 k€
Resources side	Available funds for Natura 2000 habitats	Funds not exclusive to marine habitat	Contribution of funds to Natura 2000 habitats	7 790 k€ - 10 660 k€

#### **COST OF HABITAT CONSERVATION**

COST = COST×*Contrib* marine habitat conservation conservation

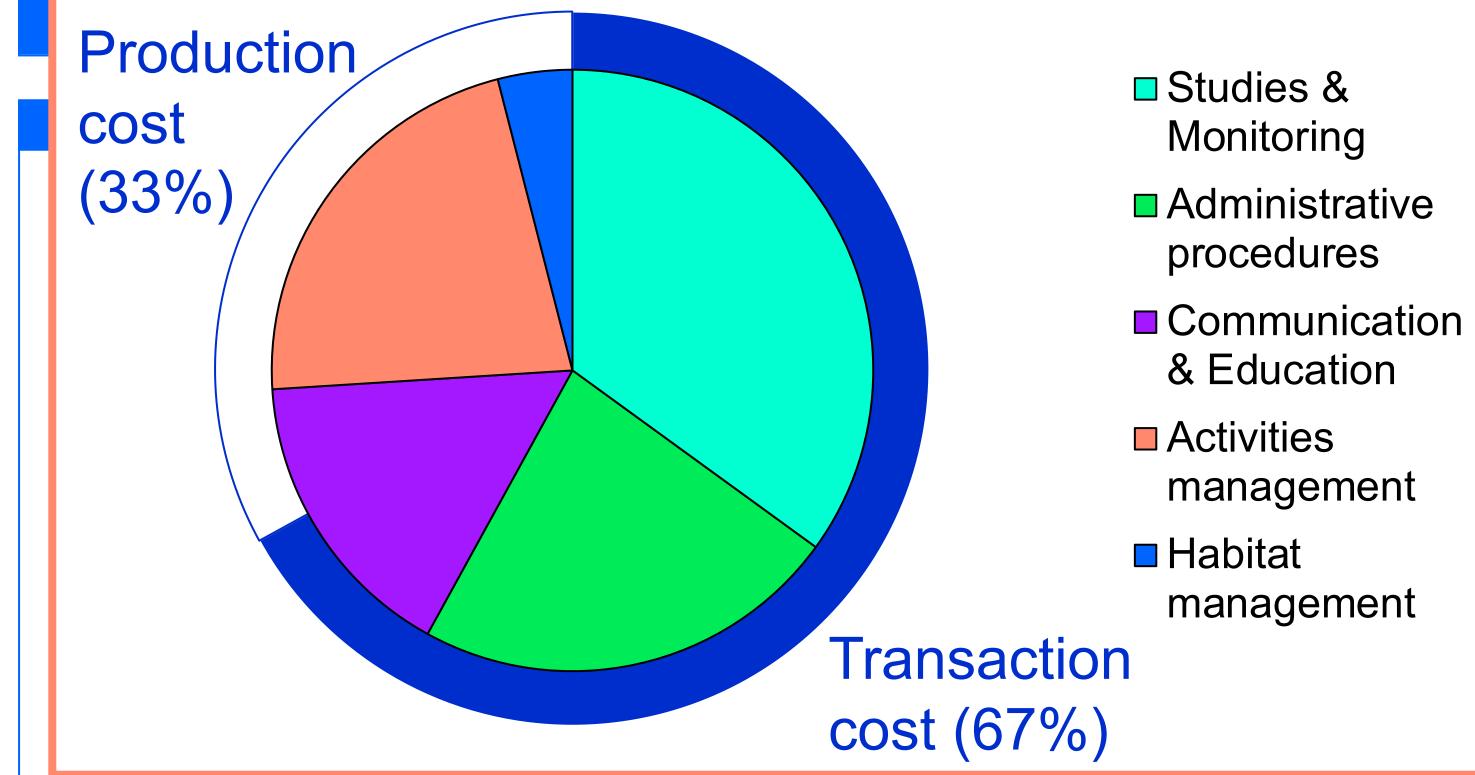
#### Fig.1 – Repartition of marine environment preservation cost

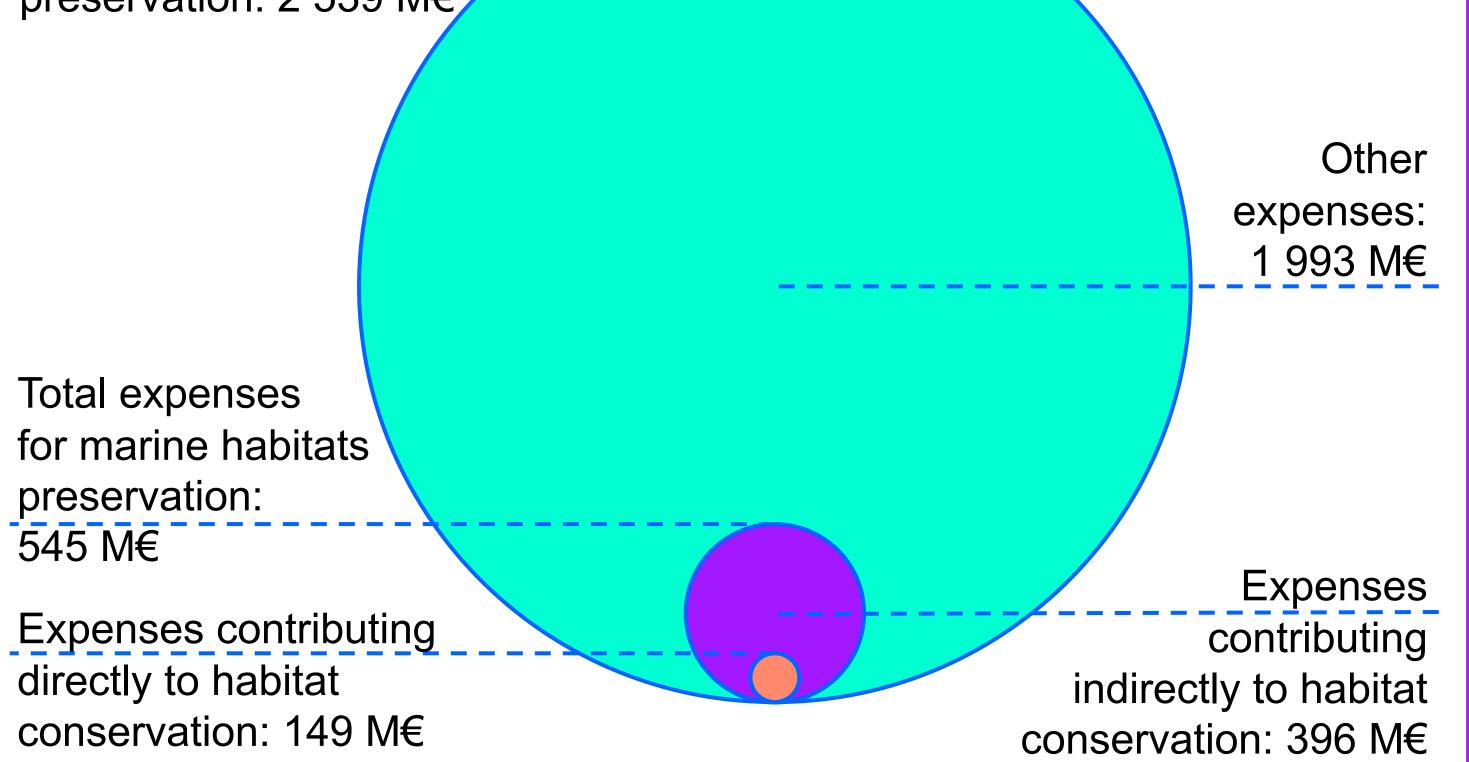
Total expenses for marine environment preservation: 2 539 M€

Type of data: socio-economic analysis of the integrated marine conservation policy (MSFD). Limits of data: covering all the issues and ecological compartments of the marine environment.

**Estimations:** Based on the contribution of expenses to habitat conservation

Fig.2 – Transaction cost approach





From 2012-2018, transaction costs accounted for 67% of total expenditures, rising to 80% when including state services' activity. This indicates that the Natura 2000 network has been prioritizing deployment over direct habitat and activity management.

### **Further information**

Started in 2016, the Life MarHa project aims to restore and maintain favorable conservation states of marine habitats (www.life-marha.fr). As part of the project, we developed a comprehensive economic program to support its objectives, including ecosystem services assessment, cost-based approaches, and agent-based modeling.



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