Title: Assessing the Socio-Economic Impact of Marine Protected Areas on Local Fishing Communities. Two West-African Case Studies

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Abstract: From an economic point of view, marine protected areas (MPAs) may be considered as public investments in marine and coastal ecosystem conservation. Several criterions may be used to establish a typology of costs and benefits generated by these investments. One of them is the geographical scale. This criterion is critical for the social acceptability of MPAs: contrasting with the very broad scale of a large class of benefits expected from environment conservation measures (particularly in the case of existence values), most restrictions to human activities imposed by these measures have a local character. This discrepancy is likely to undermine the support of local populations, unless they feel that the restrictions they are asked to suffer for the sake of conservation are balanced by some tangible benefits at their own scale. Economic benefits obviously pertain to this category. In this paper, we address the question of the socio-economic impact of an MPA on local fishing communities, on the basis of two West-African case studies: one is located in Mauritania (Parc national du banc d’Arguin, PNBA), the other one in Senegal (Aire marine protégée communautaire de Bamboung, AMPCB). These two MPAs, which are very different from each other in several respects, have been investigated in the framework of an interdisciplinary project dedicated to the impact of MPAs on fishing and ecosystem conservation (Amphore project, funded by the French National Research Agency). In each case, we focus on the question of the trade-off between fishing restrictions that are imposed on local communities for the sake of ecosystem conservation, and the benefits they are likely to derive from the MPA. The Mauritanian case study is entirely focused on the impact of the MPA on fishing: drastic limitations apply to the activity of fishing communities living within the park, but they are balanced by the monopoly which is granted to these communities on the fishing activity within a considerable part of the Mauritanian coastal sea. We analyse the impact of these two regulations on fishers incomes with the help of a database of small-scale fishing that makes it possible to compare fishers incomes inside and outside the park. The Senegalese case study encompasses both fishing and non-fishing effects of the MPA on local populations. The Bamboung MPA is characterized by a fishing ban, supported by financial compensations intended to foster the development of ecotourism in the area. We analyse the trade-off between these two sides of the MPA on the basis of a field-survey of local populations.