

Title: **Stock externalities of marine fisheries : the case study of the sea bass in the Nord east Atlantic**

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Abstract: The fundamental externality of a common property, that is considered a fishery, was introduced by Hardin (1968). One of the ideas presented by Hardin: the landings that one fisherman obtains depend on the mortality rate applied by him and by the one on the available biomass which depends on the total exploitation rate. Here we present a case study where the exploitation of the sea bass by many professional and recreational fishermen is analysed. The sea bass is a natural resource of economic importance exploited by professional fishermen since about thirty years. The sea bass is currently the fourth species in value landed by the professional fishermen in France. This species is captured with the line, the net and the trawl by more than 2 500 professional fishermen and more than 700 000 recreational fishermen. The economic problem results from the reciprocity of the negative externalities. The inshore and coastal fleets predominately target sea bass stocks and the total of the catches are not important. The inshore and coastal fleets are financially dependent on the sea bass. Other fleets catch the sea bass in small quantities but this is an accessory species. The stock externality problem in the international context (France, Ireland, United Kingdom) may be very difficult to solve. Here, externalities can be resolved by agreement between the different fleets involved.