

Title: **A comparative approach of long term changes in the characteristics of fisheries at a regional scale**

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Abstract: This paper addresses to a comparative approach of long term changes in the characteristics of marine fisheries at a regional scale, in three ecosystems: up-welling, tropical and temperate. The South Moroccan continental shelf, under the influence of the Canary current, where up-wellings take place, is the most productive part of the North-West African area. Sardine and cephalopods are the dominant pelagic species in biomass while sparids are dominant in groundfish communities. The continental shelf of Guyana is a tropical ecosystem under the influence of the Amazon estuary. The main commercial fishery is the shrimp fishery exploited by bottom trawlers. The continental shelf of the bay of Biscay is a temperate transition zone where fauna of subtropical, boreal and temperate origin can be found side by side. Nine major commercial species have been identified as a targeted production for a few segments of the French fleets. Two of them are pelagic: anchovy and sardine; four others are demersal: cuttlefish, seabass, pollock, and hake; the last three are benthic: monkfish (two different species), nephrops and sole. The comparison is based on the application of standard economic indices to the description of changes in the composition of landings in the three fisheries systems. Further analysis of the economic implications of these changes is based on the development of a simple bio-economic model of the value of landings, in relation to their composition in terms of fish size, which entails variations in first sale price of fish.