

Title: **An integrated and statistical approach for the valuation of economic status of small scale fisheries**

Author(s): Fabienne Daures, Sylvie Van Iseghem, Sébastien Demaneche, Cécile Brigaudeau, Olivier Guyader, Emilie Leblond, Patrick Berthou

Abstract: The small scale fisheries are generally unknown over the world due to a crucial lack of data, and particularly costs and earnings data. This is also true for the European fisheries while vessels less than 12 meters represent almost 75% of the total European fleet. Faced to the increasing price of fuel and the depletion of traditional exploiting marine resources, fisheries managers need to know more about the small scale fleet, also in terms of its diversity. This paper first presents an integrated methodology, combining both biological and economic disciplines, used to collect data on small scale fisheries through questionnaires. The first set of collected data is used to produce a revenue model to assess individual earnings depending on technical characteristics and the fishing activity of the vessel. This revenue model allows then to assess the production of small scale fisheries per group of vessels. This revenue model is used in parallel to optimize the following sampling plans for collection of costs and earnings data. Implemented for 6 years in France, this system makes possible the assessment of total and per fleet gross value added and direct employment in the small scale fisheries. The results are presented in this paper and show the significant role of small scale fisheries in the French fishing sector.