First assessment of recreational fisheries in French Caribbean territories

Première évaluation de la pêche récréative dans les territoires français caraïbéens

Primera evaluación de la pesca recreativa en los territorios franceses del Caribe

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EXTENDED ABSTRACT

Recreational fishing is a traditional activity all along the French coastline, including overseas territories (Guyane, Martinique, Guadeloupe, La Réunion, Mayotte, Saint-Pierre-et-Miquelon, Nouvelle-Calédonie, Polynésie française...). In mainland France, national surveys started in 2004 due in particular to Common Fisheries Policy and Data Collection Framework. Outermost regions are not concerned yet by these regulations, so the activity is poorly known in these territories. In 2020, a new pilot study called RECREAFISH has been implemented by Ifremer to collect data about marine recreational fisheries for the first time in the 4 French Caribbean territories: Guadeloupe, Martinique, Saint-Martin and Saint-Barthélemy.

In France, recreational fishing is subject to management rules such as closed areas, restrictions on gears, minimal size catch, closure period, catch limits... There has been a permit requirement in place for freshwater recreational fisheries, but no licensing system nor registry for marine recreational ones (Herfaut et al., 2013). So, the RECREAFISH project started by a screening survey which was conducted by telephone with the company BVA (pool institute) in November and December 2020, in order to estimate the number of marine recreational fishers, characterize their profile and evaluate some perceptions of the activity. 3 500 interviews were thus conducted in the 4 islands and required more than 99 000 phone contacts. As a result, an average rate of 7% of recreational fishermen over 15 years old in French Caribbean households has been established, with differences from one island to another. Three main fishing methods were identified, fishing from the shore (including shellfish gathering), fishing by boat and spearfishing (Ropers, 2021). During the year 2020, the first French lockdown caused a noticeable impact in the practice in all the French Caribbean territories, characterised by a significant decrease of the fishing trips frequency in March. Recreational fishermen were then recruited starting January 2021 to describe their monthly catches based on log-books during one year. The national experience showed that involvement of citizens through diary surveys is the best solution for countries like France which doesn't have permits (Bellanger and Levrel, 2017). This second phase collected data on fishing sessions: fishing zones, methods, gears, catches (quantities, species, sizes, kept/discarded individuals), expenditures... Panel data was corrected by weighting the fishers and using the values of some variables of adjustment which were known both for the sample and the population: fishing frequency and fishing mode.

In Martinique, with a total estimated population of 25 000 recreational fishers, 543 tons [CI 95%: 477; 627] of catches were extracted during the year 2021, including a wide range of species (Maillard, 2022). Compared to professional fishing, 22% of total landing catches in Martinique comes from recreational activity (Baudrier et al., 2022). Catch per unit effort from boat are more important than shore fishing, and very regular recreational fishers are much more efficient than occasional ones. Total expenditures estimations from log-books have reached 7,14 million euros. They are only based on a few costs, easily assessed by recreational fishers (transport, fuel for boat, fishing gear, logistic) and also confirm the value of this activity. The results of the study revealed the importance of the system for selecting participants, that should be based on probability sampling and no spontaneous volunteering. This two-steps survey was implemented, according to the recommandations of the WGRFS (Working Group on Recreational Fisheries Surveys) from ICES (International Council for the Exploration of the Sea), and meets european regulatory requirements. The RECREAFISH project highlighted the necessity to raise awareness regarding the regulation of the practice, particularly with closed areas, prohibited species and minimal size catches. It indicated the social and economic importance of the activity and clearly demonstrated the need for regular monitoring and field work in order to sustainably manage both the activity and fisheries resources in French Caribbean islands (Baudrier et al., 2022). This first survey should be strengthened with innovative tools like online reporting system in order to better assess marine recreational fishing in these territories.

KEYWORDS: assessment, recreational fisheries, French Caribbean

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