Vanuatu's small-scale fisheries' catch is over 200 per cent higher than the numbers reported between 1950 and 2014 by the United Nations Food and Agriculture Organization on behalf of the country.

According to a new study by the Sea Around Us and several French and Vanuatu scientists, almost eight out of 10 residents of the archipelagic country are involved in at least one form of fishing and most of what truly local fisheries catch goes to their own household consumption.

Over the last few years, subsistence fisheries caught approximately 7,000 tonnes of fish every year. This means that fisheries resources play a highly important part in food security as well as economic livelihood in this country.

While Vanuatu has significant tuna resources within its large Exclusive Economic Zone, which are heavily exploited for export by foreign and Vanuatu-flagged industrial fleets, much of the local food supply comes from small-scale fisheries. "Most of the subsistence catches take place in shallow waters and consist of
finfish, shellfish, and octopus. According to our estimations and available data, these catches have followed an increasing trend over time throughout the country, which is entirely driven by the growth of the rural human population in coastal villages,” says Marc Léopold, lead author of the study and a researcher with the Institut de Recherche pour le Développement of France. “The problem is that local institutions are not keeping track of household catches at a national scale and such lack of data hinders any kind of effort to set national management strategies for this fishery.”

Regardless of the increase in the amounts of fish caught for family consumption, the study revealed that these catches increased more slowly than Vanuatu’s population, which suggests a decreasing per capita consumption. “This is why the systematic collection of official statistics is so important. People’s food security is at stake here,” says Lincoln Hood, one of the co-authors from the Sea Around Us at the University of British Columbia.

The study, which was published this week in Frontiers in Marine Science, also presented a disturbing trend within small-scale, shallow-waters fisheries. That is, the alarming decline in some invertebrates caused by overfishing. “Specifically, the sea cucumber and green snail exports collapsed in the 2000s leading to national closures of the fisheries in 2008 and 2005, respectively. Trochus resources, on the other hand, have been showing signs of depletion since the 1960s,” says Dirk Zeller, co-author and Professor of Marine Conservation at the University of Western Australia.

“By having access to more accurate data and estimations, such as those presented in our study, authorities should be able to develop useful fishing rules that would allow them to rebuild overexploited stocks and better manage shallow export fisheries,” notes Zeller, who also leads the Sea Around Us – Indian Ocean.

This article originally appeared on the website of the Sea Around Us project at the University of British Columbia and the University of Western Australia.