

CONSENSUS ESTIMATES

OF IUU FISHING IN THE

PHILIPPINES



COUNTING THE COST OF ILLEGAL, UNREPORTED AND UNREGULATED FISHING IN THE PHILIPPINES

The U.S. Government has a decades-old strategic collaboration with the Philippine government and its partners to manage fisheries, protect habitats, and enhance the well-being of Filipinos. This is part of a wider development portfolio under the U.S. Agency for International Development (USAID) that aims to address biodiversity loss and illegal wildlife trade. Illegal, unreported, and unregulated (IUU) fishing ranges from unlawful activities of domestic small-scale fishing to more complex operations carried out by industrial fishing fleets.

Addressing IUU fishing is a long-standing policy commitment of the Philippine government. This is explicitly declared in the title itself of the amended Philippine Fisheries Code, which reads: "This Act shall be known as The Philippine Fisheries Code of 1998 as amended by Republic Act No. 10654, entitled 'An Act to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing'." To minimize destructive fishing, the government has spent billions of pesos in law enforcement that has resulted in hundreds of apprehensions and court cases.

But how much progress has the country really achieved to tackle IUU fishing? How well are the interventions working? And what else can we do to accelerate the reduction of the threat? Answering these questions requires quantifying the magnitude and impact of IUU fishing and not just the efforts to stop it. This is a daunting task. IUU fishing is hard to characterize. It is by nature complex and clandestine, which means data are hard to come by and to substantiate.

To report accomplishments, the Department of Agriculture's Bureau of Fisheries and Aquatic Resources (DA-BFAR) uses metrics based on input and effort, including number of patrols conducted, number of apprehensions, and fines collected. But outcome indicators are also needed to measure progress towards reducing IUU fishing. Despite clear evidence of declining fish stocks especially in the biologically diverse but fragile nearshore waters that small-scale fishers rely upon, IUU fishing itself has not been directly, or at least adequately, quantified.

USAID and DA-BFAR are committed to finding solutions to this challenge. We are working together to strategically quantify, assess and address IUU fishing in Philippine waters through a two-pronged approach: (1) by undertaking a quick, consensus-based IUU Fishing Quantification Workshop with experts and development practitioners; and (2) by developing an IUU Fishing Index and Threat Assessment Tool.

On September 2-3, 2020, along with Rare Philippines, the University of the Philippines (UP) Marine Science Institute, and the UP School of Statistics, BFAR and the USAID Fish Right Program documented IUU fishing quantification study in the Philippines, bringing together more than 50 panelists in a virtual Delphi workshop to generate consensusbased estimates of the quantity and value of illegal and unreported fish catch in the Philippines, and to discuss the local operational context of unregulated fishing.

UNREGISTERED FISHING

vessels are estimated to be as much as **30–47%** of the current municipal vessels in the BoatR system. There are also likely around

1,600 to 2,700

unregistered commercial fishing vessels.

UNREPORTED CATCH by commercial fishers ranges from 274,000 to 422,000 MT / year ULLEGAL FISHING by both municipal and commercial fishers is placed at 27 - 40% of Philippine fishers is placed at 27 - 40% capture fisheries production in 2019. By conservative estimate, this is valued at P42-63B

HARNESSING COLLECTIVE WISDOM The Delphi Method

The Delphi method is based on the principle that judgments from a structured group of individuals are more accurate than those from individuals or from unstructured groups. The consensus-building process involves consecutive rounds of questionnaires sent to a panel of experts and completed independently and anonymously by each panel member, with postround feedback reports shared with all members in anonymized form so individual panelists need not worry about repercussions for their opinions.

An online contingent valuation survey was first circulated online, generating responses from 110 experts from DA-BFAR, science and research, the fishing industry, and civil society organizations. This online survey, complemented by the limited available information on IUU fishing in the Philippines, provided the starting values for the Delphi exercise. From the fairly wide range values generated by the survey, the 50 Delphi expert participants individually and independently did their own estimation, and through the iterative feedback process, worked to narrow down the range of estimates as much as they could confidently do so.

WHAT WE NOW KNOW TOGETHER Consensus estimates of IUU fishing

The Delphi exercise produced our first-cut, broad-based consensus estimates of illegal and unreported fishing in the Philippines, presented below with one caveat: These are low-precision values. They are not meant as definitive estimates, but rather as a guide for fisheries managers and stakeholders about what they need to consider as they plan their responses to the immediate challenges of fisheries management, while we continue to find more robust ways to track, measure and respond to the threat and impact of IUU fishing.

Illegal Fishing

Catches from illegal fishing in the Philippines likely fall within the range of 516,000-766,000 metric tons (MT)/ year or 27-40% of the country's 2019 marine capture fisheries production. At 2019 prices, this translates in monetary terms to Php41.8-62.6 billion/year.

Unreported Fishing

About 274,000-422,000 MT/year of catches from commercial fishing are underreported or not reported officially to DA-BFAR. Compared to those for illegal fishing, these estimates appear to have very high uncertainty, and thus it is suggested to look into the method used by the Philippine government to generate its catch statistics, and assess the uncertainty attached to these estimates.

Unregulated Fishing

The definition of 'unregulated fishing' in Philippine law follows the international definition, which can be made

more operational and useful in the Philippine context. The panelists agreed that measuring unregulated fishing could be done by evaluating areas and/or fish stocks based on their inclusion in management plans, provided that there is (a) substantial effort to implement the plan; (b) substantial compliance with regulations; and (c) measurable effectiveness of regulations.

Unregistered Fishing Vessels

Additional data for inferring the prevalence of IUU fishing were also generated through consensus quantification of unregistered fishing vessels, which resulted in the following findings: At least 80,000-125,000 municipal fishing vessels (MFVs) remain unregistered, or about 30-47% of the current number of MFVs registered in DA-BFAR's BoatR system. There are also likely to be around 1,600-2,700 unregistered or incorrectly registered commercial fishing vessels (i.e., they are commercial scale but registered as MFVs), or about 20-33% of the current number or registered CFVs. These are significant numbers indicating a compliance problem, with implications for estimating IUU catch and IUU fishing impact.

DOING MORE TOGETHER A collective path forward

The estimates that came out of this study add to other evidence that IUU fishing remains to be prevalent and is likely growing in Philippine waters, at great economic loss to the country. In addition, the rich discussions and exchange of ideas among the panelists have also helped to untangle the complexity of IUU fishing and put emphasis on the reasons for its continued occurrence. The following key messages derived from the study can guide further thinking on IUU fishing and, more crucially, on developing solutions that drive meaningful, measurable, and lasting results for the sustainability of Philippine fisheries.

Investing in law enforcement is essential. Available evidence strongly suggests that illegal fishing is still a continuing and potentially growing threat to sustainable fisheries in the Philippines, and yet investments in fisheries law enforcement remain small relative to its impact.

A strong, responsive governance structure is key to compliance. Improving efficiencies and streamlining processes are needed to break down barriers to, and bridge gaps in, fisher compliance. This includes ensuring clear rules and procedures for reporting catches, especially for municipal fishers

We're all in this together. Reducing IUU fishing requires a multi-pronged whole-of-society approach guided by science, both natural and social. 'Single issue' management strategies that depend solely on state intervention and regulation are inadequate to prevent or suppress IUU fishing in the country's multi species, multi-gear fisheries, where there are also numerous modifications to fishing gears and practices.