



Introduction to Trawling in Asia & South East Asia



Photo by Tanvi Vaidyanathan/Project Seahorse

Trawl operations are central to fisheries in the Asia-Pacific region, where most of the world's fish are caught (48.7 million tonnes and over 50% of global wild fish caught). Increased fishing effort, modified gear, faster trawling, a growing geographic range, and larger retention have led to increased captures in the region. The Food and Agricultural Organization (2014) describes this "industrialized trawling in Asia... as one of unregulated, sequential expansion" with "universally weak and ineffective" management. Moreover, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) incentivizes the use of these marine resources within a nation's exclusive economic zone (EEZ) by stating that surplus must be made available to other nations—leading to rapid overexploitation.

While trawl fisheries often have target species (at least nominally), their non-selective gears obtain many other species as bycatch (Lobo et al. 2010, and references therein). Of particular cause of concern is bottom trawling for shrimp, wherein the small mesh sizes results in the catch of a large number of other non-target species. Globally, discards are decreasing, largely because of the increasing retention of previously low value fish. The increased landing of previously discarded trawl fisheries bycatch has created a market for products such as chicken feed, fish meal and fish oil. This in turn has helped sustain non-selective extraction—and this cycle continues to reinforce itself over time. While



TARGET OUR TAKE, STOP TRAWLING

such retention creates less waste in fisheries—which is often argued to be a positive outcome (Funge-Smith et al. 2005)—it also exerts more ecological pressure because of the increasingly indiscriminate nature of the fishery where everything or conversely no species is a target.

Biomass trawling is a form of trawling in which fisheries are removing any and all marine life indiscriminately - with little to no effort at targeting species—including low value fish and invertebrates, what has traditionally been known as trash fish. This catch is then turned into low value products such as fish oil, fishmeal, animal feed and surimi (paste made from fish, most commonly as imitation crabmeat in the West). There is a growing demand for low value fish “for aquaculture (through both direct feeding and through conversion into [fishmeal and fish oil])” (Funge-Smith et al. 2005). The market for surimi is also growing (FAO 2014) and making it especially important as a value-added product. As demands soar this market for surimi drives the extraction of species. The catch from biomass trawling is of such low financial value that many fisheries are only viable because of subsidies (e.g. fuel and labour). Labour subsidies, in reality, present as modern-day slavery or indentured labour.

Responding to the advent of biomass trawling is a large challenge, but progress is certainly feasible. There are ecological, social, economic, and management aspects of trawling as well as a varying distribution of the resources—all of which are connected and complicate the situation. Solutions lie in addressing the fisheries measures—and bottom-trawling in particular—in a holistic manner, using law enforcement, economic discipline, trawl exclusion zones (i.e. marine protected areas), and a myriad of other measures. The creation and implementation of such management tools depends on broad engagement by multiple stakeholders and advisors.