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Commentary

The Impact of Trawling on Marine Ecosystem

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DESCRIPTION

The effects of beam or ground-trawl bottom trawling on organisms found in the ocean floor. Although the study's scope is limited to the North Sea, its findings have much broader implications. Since the thirteenth century, when trawls were first used in northwest Europe, there have been demonstrations against their use. These objections continue today. Benthic life is harmed by trawling, which, depending on the substrate, can penetrate as deep as 30 mm into the soil. All varieties of trawls are generally similar in their action on the bed. More benthos are caught by beam trawls with tickler chains than by ground trawls without tickler chains. Some animal species, like echinoderms, are far more negatively impacted than others. Due to the trawl net's perceived lack of selectivity and the resulting catch of a large number and variety of non-target species, including protected species like sea turtles, as well as its impact on the marine ecology, trawling is still a contentious form of fishing. The impacts of trawling on the physical, chemical and biological environment of the marine ecosystem and the diversity and amount of by catch and discards remain little researched for the tropical waters. The bycatch that is landed at fishing ports in India is primarily used to make compost and animal feed. Furthermore, field-tested by-catch reduction tools have not been developed [1].

Fisheries are defined by the interaction of fishing gear with the marine environment, and the impact of gear on fish stocks and marine ecosystems has been a topic of much discussion. We connected all captures to a kind of fishing gear using the Sea around worldwide catch database, which takes into account both reported and unreported fisheries catches. By fishing nation, taxon, year, and fishing area, we categories all industrial fisheries captures into industrial gear categories. Additionally, for the most significant small-scale fishing nations in each of the nine global regions, we calculated catches by specific small-scale gear types [2].

Some benthic species die directly from the passage of a beam trawl across the seafloor or indirectly from subsequent predation. Additionally, animals that are caught in the cod end or those that pass through it may perish as a result of the fishing process [3]. To determine the total mortality of non-target species related to this form of fishery, the amount of this additional mortality must be quantified. As a result, we looked into the animal survivability after being caught by a 4 m beam trawl to determine which species were most susceptible to capture. Mollusks, hermit crabs, and starfish were all extremely resilient to the effects of capture .Fishes, sea urchins and swimming crabs incurred increased mortality following capture. In Southeast Asia and trawl fishing is a significant component of the marine fisheries industry. Millions of people living in coastal communities depend on it for their food and livelihoods, as well as for feed for the expanding aquaculture industry in the area. Trawl fisheries suffer from a multitude of problems, including overcapacity, excessive fishing effort, poor profitability and inadequate governance. The historically low catch per unit of effort, rising percentage of low-value fish in trawl catches, extensive illegal fishing, and user conflicts are all signs of poor management of these fisheries. Numerous initiatives put in place in the area haven't been sufficient to produce lasting results. There has been little incentive for fishers to satisfactorily comply with the regulations [4, 5].

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