Fishery biomass trends of exploited fish populations in marine ecoregions, climatic zones and ocean basins

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Description

Aquaculture helps revive populations of some fish species such as cod, sea bass and red snapper. Due to the high demand for such fish species, they must be bred in fish farms to prevent extinction. Farmed fish are often treated with antibiotics, disinfectants and insecticides. These chemicals can combine with fish waste and leach into the surrounding freshwater, causing water pollution. In addition, fish accumulation in an area can cause some fish deaths. Dead fish can encourage the growth of bacteria and other infectious diseases, threatening entire fish populations in water sources. The initial set-up costs of fish farming can be high due to the need to provide fish cages, hatcheries and processed fish food. Furthermore, unlike fish farming in large bodies of water, pond fish farming requires costly excavation and the inflow and outflow of river water into the fish pond. Since 70% of the earth's surface is covered with water, people have recognized its importance as a resource. For this reason, aquaculture is one of the highly developed sectors in terms of exploitation of water resources, especially in food production, as opposed to exploitation of land. Aquaculture is the process of raising, breeding and harvesting aquatic species, both animals and plants, in controlled aquatic environments such as seas, lakes, rivers, ponds and streams. It serves a variety of purposes, including food production, restoring endangered species populations, increasing wildlife populations, building aquariums and fish farms, and restoring habitats. Here we discuss different types of aquaculture and their importance. The best-studied example is the transmission of sea lice from farmed salmon to wild salmon. There are many factors that affect the survival of wild salmon populations in fish farms. Escaping salmon from fish farms and hatcheries can adversely affect and threaten native Atlantic salmon populations in coastal waters. Problems that arise when salmon escape fish farms are that they interfere with them, compete with wild salmon for food and habitat, and reproduce with them as infections and parasites. Aquaculture has created jobs in areas such as animal research and fish hatcheries. In addition, the harvested fish contributes to job creation in the food industry, transport sector and restaurants. On the other hand, aquaculture is an important source of income for aquaculture investors. Fish farming is an important source of protein and nutrients essential for a healthy life. As the world's population grows, fish can help supplement other protein sources such as animal meat, milk, and beans. Furthermore, fish contains omega-3 fatty acids, which are important for brain function and normal development Compared to livestock and poultry farming, fish farming is easier to maintain and has lower running costs. Fish farms can be built almost anywhere with clean water and a large body of water. In this respect, if managed properly, aquaculture is economically viable due to its low operating costs. Fish farming methods protect food fish from marine predators such as large fish, bears, and fish-eating birds. This results in stable fish populations and high fish yields. Additionally, farmed fish are constantly monitored for parasites, diseases, and other factors that can impede their growth. Also, fish raised in fish farms are aged for a period of time before being harvested. This ensures maximum yields by eliminating juvenile catches that are common with traditional fishing methods.

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Conflict of Interest

The author declares there is no conflict of interest in publishing this article.

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