



Overfishing and sustainable fishing

Fish are more popular than ever, partly due to the increasing awareness of their health benefits. But the world's insatiable appetite has almost drained the once apparently limitless resources of the ocean – often with catastrophic results to ecosystems. Fish farming and sustainable fishing may provide solutions to these problems.

Global hunger for fish

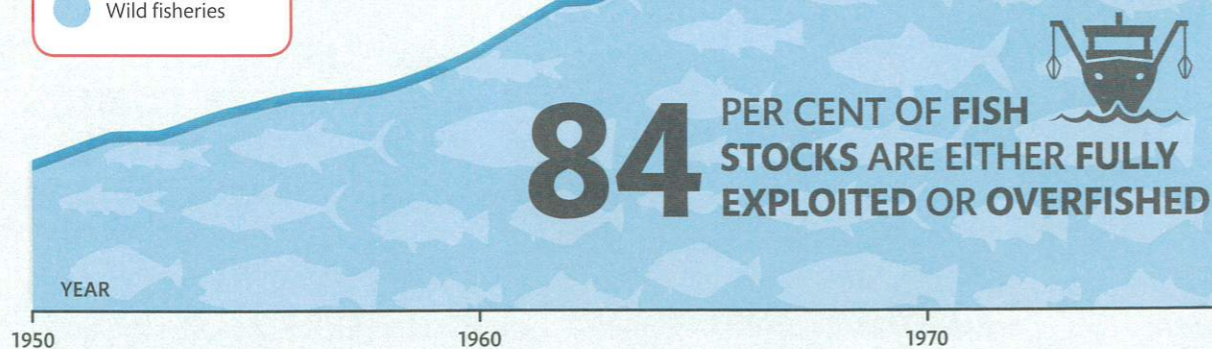
Around three billion people in the world, in order to obtain enough protein, rely on either wild-caught or farmed seafood, including fish. On average, each person eats four times as much seafood now than they did in 1950. To satisfy this great demand, global fisheries have already been pushed past their limits. When fish stocks (populations) fall steadily, they are being overfished – and this is unsustainable because these fish will, sooner or later, become too scarce to support a fishery – or worse, go extinct entirely. The United Nations Food and Agriculture Organization (UNFAO) say we will need another 36.3 million tonnes (40 million tons) of seafood worldwide per year by 2030 just to meet current consumption rates, based on current population projections.

A rise in fishing

Since the 1950s, global fishing of wild populations (wild fisheries) have been rapidly increasing, along with aquaculture (fish farming). By the 1990s, fishing plateaued as fish stocks became depleted. In response, fish farming grew even more rapidly – and continues to grow.

KEY

-  Fish farming
-  Wild fisheries



IS IT OK TO EAT TUNA?

The once-abundant bluefin tuna is now critically endangered, and many other tuna species are decimated. They are large predators, and so like big cats or birds of prey, they are naturally scarce – so we can't eat them too much or too fast.

How to fish sustainably

Sustainable fishing preserves fish populations and allows them to replenish themselves. It involves a mixture of good practice, such as: no-catch areas, where fishing is illegal; no bottom-trawling, to avoid damaging fragile ecosystems such as reefs; preventing fraud, in which fishers misreport catches; reducing bycatch by using nets that allow fry and other accidentally caught species to escape; buying other species of fish that are not overfished; and fishing using a line and pole, which targets individual fish rather than entire shoals.



NO-CATCH AREAS



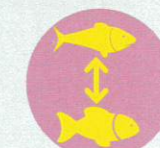
NO BOTTOM TRAWLING



PREVENTING FRAUD



REDUCE BYCATCH



SUBSTITUTION OF STOCKS



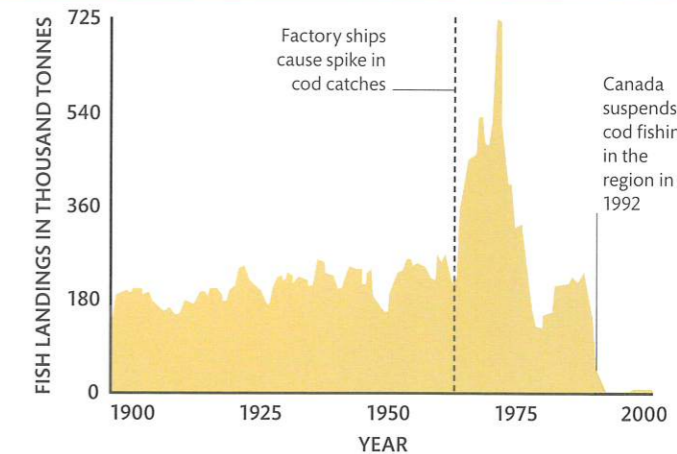
LINE-AND-POLE

Are fish farms the solution?

Fish farming involves raising fish and other seafood in captivity, usually in giant ponds or netted enclosures. Whether fish farming is sustainable or not depends on whether the fishmeal they are fed was sustainably fished itself.

COLLAPSE OF ATLANTIC COD STOCK

One of the most dramatic instances of a fishery collapse was the Grand Banks cod fishery off Newfoundland. Cod were once so plentiful in the area that it was possible to scoop them out of the sea with a basket. The implementation of factory ships in the 1960s caused a massive spike in catches, but they quickly declined and fell completely in the 1990s. Recovery is slow because cod fry are quickly eaten by predators. Adult cod would normally eat the predators of the fry, but since they are absent very few cod ever grow up.



Diets around the world.

Supply

Feeding the world.