

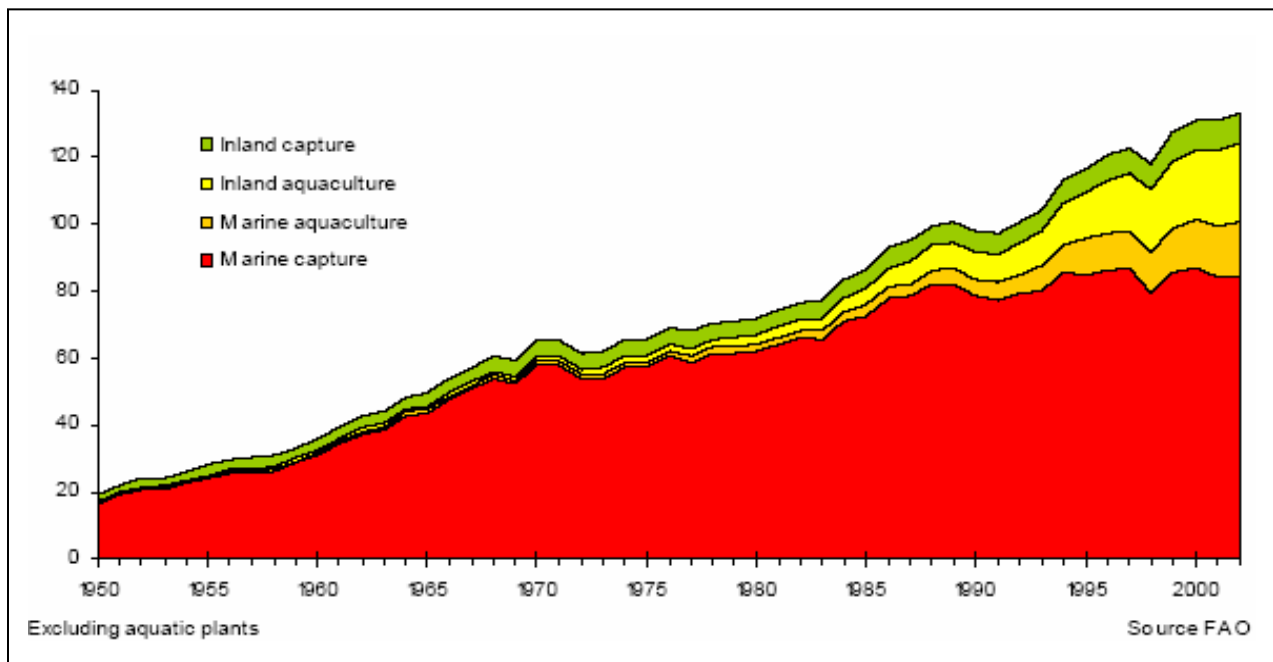
## The State of the World Fish Stocks

**Total world fisheries production** has increased steadily from 19 million tons in 1950, to 100 million tons in 1989, to 140 million tons in 2004 (excluding aquatic plants). **Marine capture fisheries** (excluding aquaculture and fresh water capture fisheries) increased production to about 80 million tons by the end of the 1980s, and have sustained production at that level since. This shows that we now have reached the maximum long-term potential of the world's marine capture fisheries.

This does not mean that the total amount of fish in the sea has remained the same since the end of the 1980s. In many areas, greater fishing effort and better-equipped vessels with increasingly efficient gear are needed to catch the same amount of fish.

Analysis of global fisheries data has shown decreases in the mean size of individual fish and in the value of the catches. As it becomes harder to catch large, valuable fish, fishers switch their targets and gear to take smaller and often less valuable species. As a result, larger fish are sequentially removed at the top of the food chain and the catch consists of smaller sized fish.

**World production (million tons) from capture fisheries and aquaculture**



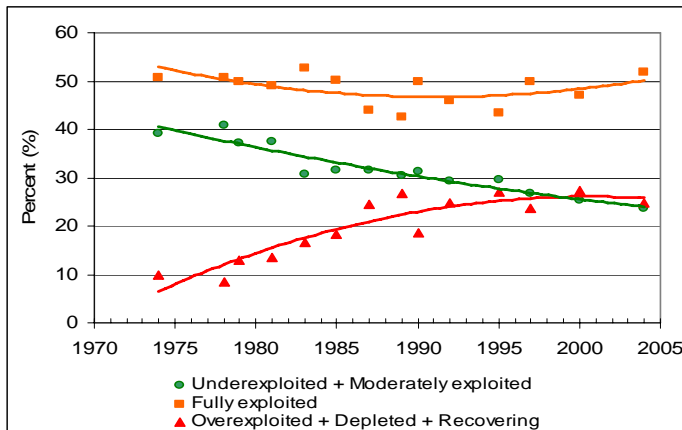
**Aquaculture production** has grown at almost 9% per year since 1970 and aquaculture now provides 44% (in 2003) of the world's fish supply for direct human consumption. This development brings new challenges to sustainable use of aquatic resources and environments.

## State of exploitation of world marine fish stocks

Approximately 25% of the world's marine fish stocks are considered overexploited and an additional 50% are fully exploited. The depleted state of wild fish stocks is due to overfishing and increasing degradation of coastal, marine and freshwater ecosystems and habitats, as growing coastal populations exert increasing pressures on natural resources.

Seven of the 10 top marine fish species—which together account for about 30 percent of all capture fisheries production—are fully exploited or overexploited. The ability of the overexploited stocks to recover from human pressure or from natural disturbances (such as adverse climate conditions, pollution, and disease outbreaks) is severely compromised.

**Global trend in the state of exploitation of global marine fish stocks: 1974-2004** (Source: [FAO](#) . Review of the State of World Marine Fishery Resources)

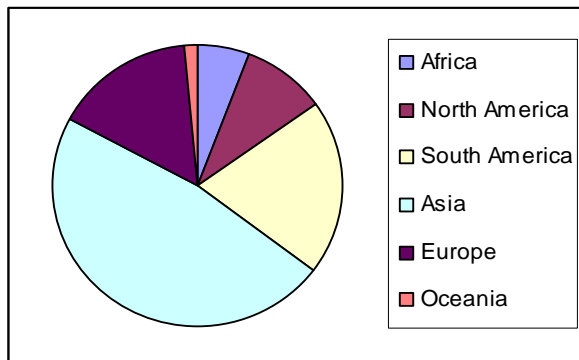


The available data indicate that stocks exploited at the level of the MSY (Maximum Sustainable Yield - top line in the figure) decreased steadily from 1974 to 1995, with a clear reversal of this trend after 1995. The trend of the stocks offering potential for expansion (green, middle line in the figure) is clearly downwards, decreasing from 40 percent in 1970, to 24 percent in 2004. The proportion of overexploited stocks (red, bottom line in the figure) have increased, from about 10 percent in the mid-1970s to close to 25 percent in the early 2000s, but as it can be seen from the figure, the proportion of overexploited stocks remains more or less stable since the late 1980s.

The most productive fishing area of the world is the northwest Pacific Ocean. In this area all the major groups of fish species are represented in more or less equal share. The second most productive area is the southeast Pacific, where catches are dominated by small pelagic fish species (mostly Peruvian anchoveta). In the northeast Atlantic Ocean, the third most productive area, demersal (bottom) fishes are the most abundant, followed by larger pelagic and small pelagic species. In the fourth most productive area of the world, the western Central Pacific, the catches are dominated by larger pelagic species. The larger pelagic species are also the most abundant group in the western Indian Ocean.

### Marine capture fisheries in 2004

As can be seen from the figure, the marine capture is dominated by Asia, South America and Europe. In 2004 these areas represented 83 % of the World total. (Source: FAO)



In two areas, the **Northwest Atlantic** and the **Southeast Atlantic**, catches reached a maximum in the 1970s or early 1980s and have since declined.

In the **Northwest Atlantic**, the fishery for cod has been important for five centuries. Most of the demersal resources in this area were severely depleted in the late 1980s and early 1990s by a combination of heavy fishing, cold conditions linked to stronger Labrador Current flows and other factors, such as poor feeding conditions, lack of capelin (*Mallotus villosus*), seal predation and low oxygen concentration.

After more than 10 years with these demersal fisheries closed or under very strict regulations – they have still not recovered. However, the declines in these demersal stocks have been replaced by other species, some of them crustaceans. The fishery for northern prawn (*Pandalus borealis*) expanded so strongly in the late 1990s off the coast of Newfoundland that the total landed values reached record highs, despite the loss of the traditional demersal fisheries.

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