

**Excerpt from FAO (2010): The State of the World Fisheries and Aquaculture. FAO, Rome. (p.185-188).**

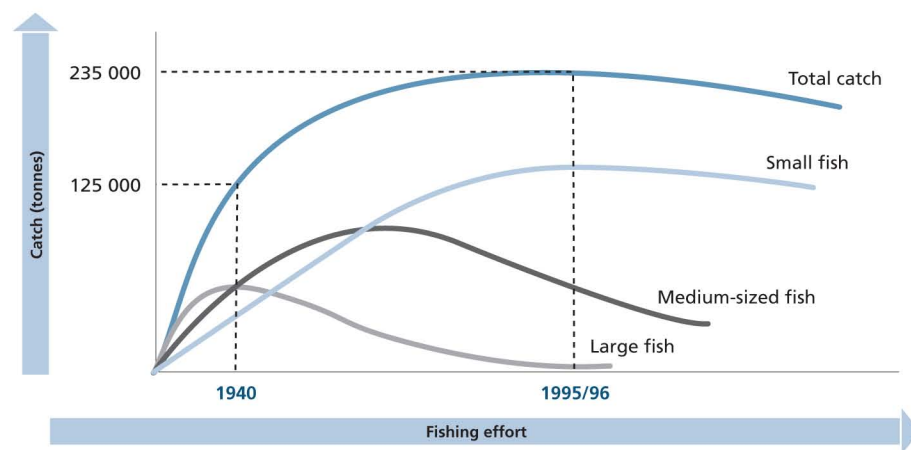
“The estimated global trend of increasing [freshwater fisheries catches] may encourage an immediate conclusion that inland fisheries have not yet been fished to their fullest extent. However, overfishing may be taking place in inland fisheries but is often masked by the fact that the total catches remain stable over a range of fishing pressures. This is referred to as ‘assemblage overfishing’ and is related to the resilience of inland fish communities and the opportunistic behavior of the fishers. In healthy inland multispecies fisheries, a small part of the fish community consists of large fish, with a high value.

These species grow slowly and start to reproduce when they are three to four years or even older. The majority of the fish consist of small rapid-growing fish reproducing early in their life. With increasing fishing pressure, the large fish will be reduced by fishing and may ultimately suffer recruitment failures. In response, the fishers will gradually shift their effort to other species of the assemblage by using different gear. As the mean size of individuals and species in the assemblage becomes smaller, the fishers will reduce the mesh size of gear they use. This will result in a fishery mainly consisting of the smaller species, with a more rapid life cycle, and often based on the young of the year, but it will remain very productive, at least for a while.

The fishing-down process is illustrated in Figure 46, which shows the trend in catch composition in the Tonlé Sap (Cambodia). In 1940, the total catch from the Tonlé Sap of 125 000 tonnes consisted mainly of large and medium-sized fish; while the 1995-96 catch of 235 000 tonnes contained hardly any large fish and was dominated by small fish.

Assemblage overfishing is most common in tropical areas with high species diversity and where local communities depend on a diverse inland fish harvest. It is an indication of the resilience of inland fisheries, but it also creates the misleading impression that inland fishery resources are limitless. This is especially the case if catches are not reported by species or species groups and internal processes in the fisheries are masked.”

Catch composition in the Tonle Sap, Cambodia



**Figure 46:** Source: FAO. 2003. New Approaches for the improvement of inland capture fishery statistics in the Mekong Basin. Ad-hoc expert consultation. RAP Publication 2003/01. Bangkok, Erawan Press, 145 p.