

Fisheries and global changes impacts on marine ecosystems and global food security

Daniel Pauly

Individual fisheries are generally perceived as one fleet exploiting one or several target species, in a specific area. The vision of fisheries that will be presented here, however, is that of a global, integrated system spanning the global oceans. Consumers in the European Union, the United States, Japan and increasingly China, have been to date largely unaffected by the local depletions these fleets induce, as they are buffered by seafood imports from the developing world. Global fisheries, fed by onerous subsidies, have an enormous impact on marine ecosystems, which they degrade, and on their target species, whose abundance is generally reduced by a factor of ten or more a few decades after a fishery opens.

This form of interaction with marine organisms, intensified by the effects of global warming, will lead in the next decades to a succession of local extirpation, followed by global extinctions, which will affect people in both developed and developing countries. Confronting this will require a new mode of thinking on how humans and marine wildlife can co-exist on Earth.