

Overexploitation rates cause decline in yellowfin tuna in Indian Ocean

"Multiple lines of evidence highlight the dire straits of yellowfin tuna in the Indian Ocean."

By **Ashley Curtin** - January 9, 2024



Image Credit: NatureRules1 Wiki

According to a new research study conducted by Sea Around Us, yellowfin tuna is in decline particularly in the Indian Ocean because of overexploitation rates. An international team of researchers determined that the weight of the four yellowfin tuna populations managed by Regional Fisheries Management Organizations (RFMO) decreased by an average of 54 percent.

As global yellowfin tuna populations continue to struggle, "the biomass (the weight of a given population in the water) of yellowfin tuna in the Indian Ocean has declined by 70 percent in the last 70 years," EcoWatch reported.

“Biomass continues to decline everywhere except for stabilizing trends in the Western Pacific Ocean, prompted by management interventions,” Kristina Heidrich, the study’s lead author and a Ph.D. candidate with the University of Western Australia (UWA)’s the Sea Around Us—Indian Ocean, said.

The study, which was published in the journal *Ocean & Coastal Management*, used RFMO’s biomass calculation to then estimate the yearly changes in yellowfin populations from 1950—since the industrial exploitation began—to 2020

“Beyond yellowfin tuna fisheries contributing more than US\$16 billion to the global economy yearly, the species is an apex predator that plays a critical role in the functioning, productivity and overall health of marine ecosystems,” Daniel Pauly, study co-author and the principal investigator of the University of British Columbia’s the Sea Around Us initiative, said. “The risk of population collapse is high if current management does not adapt. Stringent management constraints must be implemented to reduce overall fishing capacity, rebuild overfished populations, and reduce the collateral damage these fisheries cause to other species such as sharks.”

The study called on management organizations to use “stricter management measures like implementing effective catch limits, reducing fishing capacity and enforcing the MSY limit” to “improve the confidence, transparency and accuracy of the information that guides their decisions.” With overfishing said to be ongoing in the Indian Ocean, data has shown yellowfin tuna are not currently being overfished in the Atlantic and western and eastern Pacific Ocean based on the CMSY++ approach, which “relies mainly on time series of fisheries catches to assess the status of fish stocks.”

“In the Indian Ocean in particular, a catch reduction of 30 per cent from 2020 levels is urgent to halt and reverse the decline in yellowfin tuna population,” Heidrich said in the press release.

Ashley Curtin

Ashley is an editor, social media content manager and writer at NationofChange. Before joining NoC, she was a features reporter at The Daily Breeze – a local newspaper in Southern California – writing a variety of stories on current topics including politics, the economy, human rights, the environment and the arts. Ashley is a transplant from the East Coast calling Los Angeles home.