



**Status and future plans for information on discard mortality
rates of Korean fisheries for Pacific bluefin tuna, *Thunnus
orientalis***

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Pacific bluefin tuna (PBF), *Thunnus orientalis*, has been caught along the coast of the South and the East sea, and mainly being caught around Jeju island. Even though most of PBF has been caught by Korean offshore large purse seine fishery (hereafter ‘purse seine’), this species had been treated as bycatch since those purse seiners always target specific pelagic species such as mackerels. For that reason, PBF had not been managed systematically.

Meanwhile, Korea established for the Ministerial Directive on conservation and management for PBF stock in 2011 for strengthening monitoring and management of fisheries associated with PBF. Based on this measure, Korea has been conducting various actions to improve the quality of PBF catch and sales information and to try to gain more reliable data on biological information and discard activities by fishery. Since 2018, National Institute of Fisheries Science (NIFS) has started to work with some provincial governments which have other PBF related fisheries such as set net and trawl etc. and some fisheries cooperatives to make sure of collecting PBF related information from those fisheries.

Through those efforts, it has increased the quality of the information on catch and biological matter, however, discard related information are still inadequate. Therefore, it is impossible to produce a specific value for the discard mortality rate of Korean fisheries at this stage as there is a lack of relevant information on not only actual discard amounts but also the survival rate after releasing by fishery.

As the management measures of PBF is strengthened, the issue of increasing discard is becoming one of major issues, especially for member countries with a variety of fisheries, and it is no doubt that this issue should be considered to be an essential factor to assess PBF stock status more accurately. Although Korea has no information on discard activities that can be presented in the upcoming PBF working group meeting, it is judged that the issue of applying discard mortality rate to the PBF benchmark stock assessment model should be one of the key discussions during this meeting. For that reason, if there is any data or information related to this issue available to be suggested by other member countries in this meeting, using those information might be one of good alternatives to find out how various discard activities affect PBF stock status.

Korea will continually endeavor to ensure more reliable data by encouraging fishers and relevant organizations to enhance data collection for estimating discard mortality rates of Korean PBF fisheries.