

# PROPOSAL

**Proposed use of Weight Ratio between Whole (WHO) and Gilled  
and Gutted (GGT) *Thunnus maccoyii***



**Research Institute for Tuna Fisheries  
Research Center for Fisheries Management and Conservation**

**INDONESIA**

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## 1. PROPOSAL

Currently Indonesia is using conversion factor 1.15 from net weight to whole weight for its southern bluefin tuna and reported to CCSBT. However, while adopting this conversion factor, Indonesia do not yet conduct a study to check whether the 1,15 suitable for its SBT. Indonesia tuna longliners mainly operated in region 1, the known area as spawning ground and mostly the catch were dominated by adult SBT. Notice the possibility that adult SBT might have different conversion factor to the juvenile SBT, it is important to conduct a study to verify the current conversion factor use by Indonesia. RITF scientific Observer have been collected various operational and catch data from tuna longliners since 2005, Recognizing a difficult task for the observer while collecting those operational data it is proposed to also record and weigh discard part from SBT body immediately after caught and processed on board. The study will coincide with observer activities onboard since then the value of 1,15 will still use by Indonesia as a conversion factor unless the result of this study showed a significant different value.

## 2. OBJECTIVE

The objective of this study is to investigate the weight ratio of WHO and GGT SBT and use as conversion factor particularly from the catch of Indonesia tuna longliners.

## 3. MATERIAL AND METHODS

***Study area and data sampling.*** Data will collected from the specimens caught under Indonesia longliners operating in Indian Ocean from September 2013 to April 2014. These data will be taken on a daily 5x5-degree square basis by vessel, fishing date, location of deployment, number of hooks, daily deployed hooks and catch in number and length (FL) of southern bluefin tuna, weight of whole fish, weight of gonad and also weight of stomach content including fins weight and blood loss.

**Weight-weight relations.** In total catch of southern bluefin tuna of different size (Fork Length in cm) will also analyzed in this research. Once on board, the lateral veins are cut immediately (behind the pectoral fins) for bleeding purposes. After that, the spinal cord will be destroyed, and fish will gilled and gutted. Fish will weighted individually using platform digital scale for quick weight check, with accuracy of  $\pm 0.1$  kg. Corresponding gills and guts of each fish will weighted separately on a smaller scale with accuracy of  $\pm 0.05$  kg. These weight measurements will conduct immediately, within a period of approximately 1-2 minutes, after the fish is killed. Furthermore, based on direct observations, it will assessed the percentage of weight loss due to partial bleeding. Thus, live round weight (RWT) of each fish will determined as a sum of GG product weight, weight of gills and gut, and estimated blood weight loss. Consequently, the following equation can be proposed:

$$\text{RWT (kg)} = a \times \text{GG product weight (kg)}$$

Where **RWT** is live weight of the fish (in kg), **a** for conversion factor and **GG product weight** is processed southern bluefin tuna in gill and gutted (in kg) (Tičina, et al., 2006).

#### 4. EXPECTED OUTPUT

Alternative conversion factor of WHO and GGT SBT

#### 5. PERSONNEL

RITF Observer and scientists from RCFMC

#### 6. BUDGET

The research budget will be allocated from RITF routine research budget from Indonesia government

## 7. REPORT OF THE RESULTS

The progress and results of the project will be reported to the secretariat in the next SC meeting

## 8. REFERENCES

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<http://www.ccsbt/docs/about.html>