
Albacore Tuna Unloaded at Phuket Fishing Port, Thailand

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Abstract

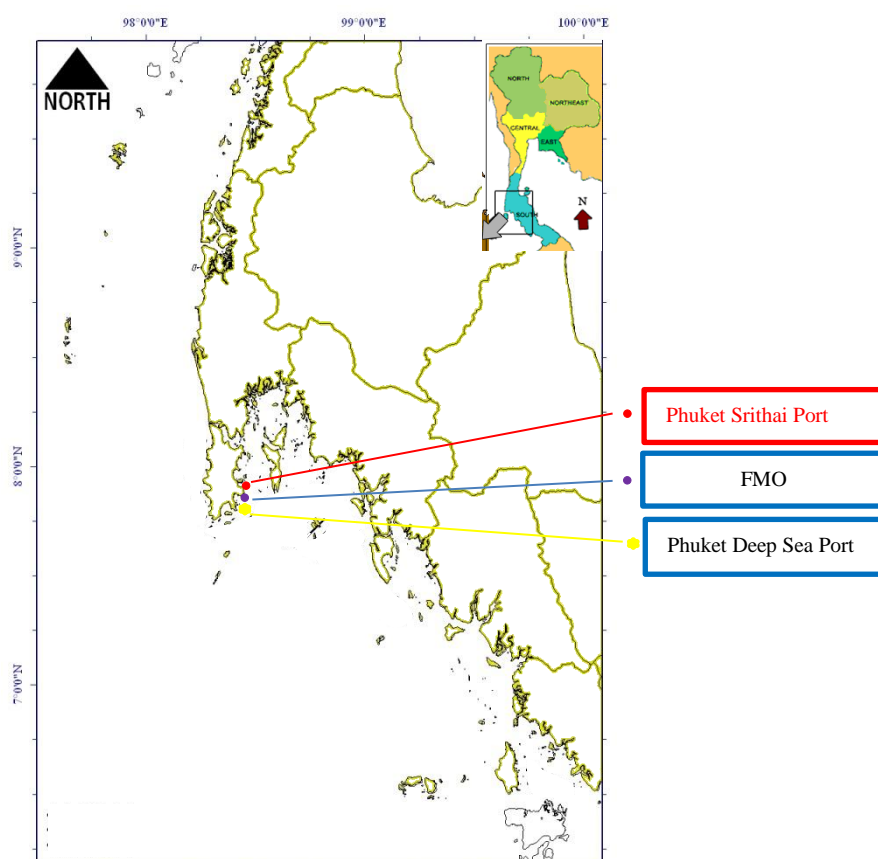
This report reviews the historical data of the albacore tuna landing in Phuket ports of Thailand as well as elaborates the data on the year of 2011 when the port sampling had been carried out. In 2011, all landing fishing vessels were longliners from Taiwan, Belize, Malaysia, India and Indonesia which the lengths of vessels were 19-40 m and their storage capacity were 20-60 tons. Their fishing ground was in the latitude of 2°S to 12°N and longitude of 77° to 95° 40'E. The total catch were 5,543,244 kg that included 4,318,743 kg of tuna, 92,351 kg of billfishes and 1,132,150 kg of other fishes. The tuna catch mainly comprised yellowfin (*Thunnus albacares*) and bigeye (*T. obesus*) for 68.77 and 9.14% while the composition of the albacore was less than 0.01%. The body weights of albacore were in the range of 8-39 kg with the average of 14.25± 3.09 kg, and the modal weights of 12 and 13 kg. Although the landing of tuna vessels in Phuket of Thailand has started since 1994, the report mostly addressed the major tuna species of yellowfin and bigeye tuna rather than albacore. Without the systematic port sampling may lead the missing catch report of this albacore species. So, the increasing capacity of officers for identification of fish at the landing port and the port sampling program is recommend to monitoring the catch of Albacore species for assessment in the long run basis.

Key words: albacore tuna, Indian Ocean, port sampling, species identification,

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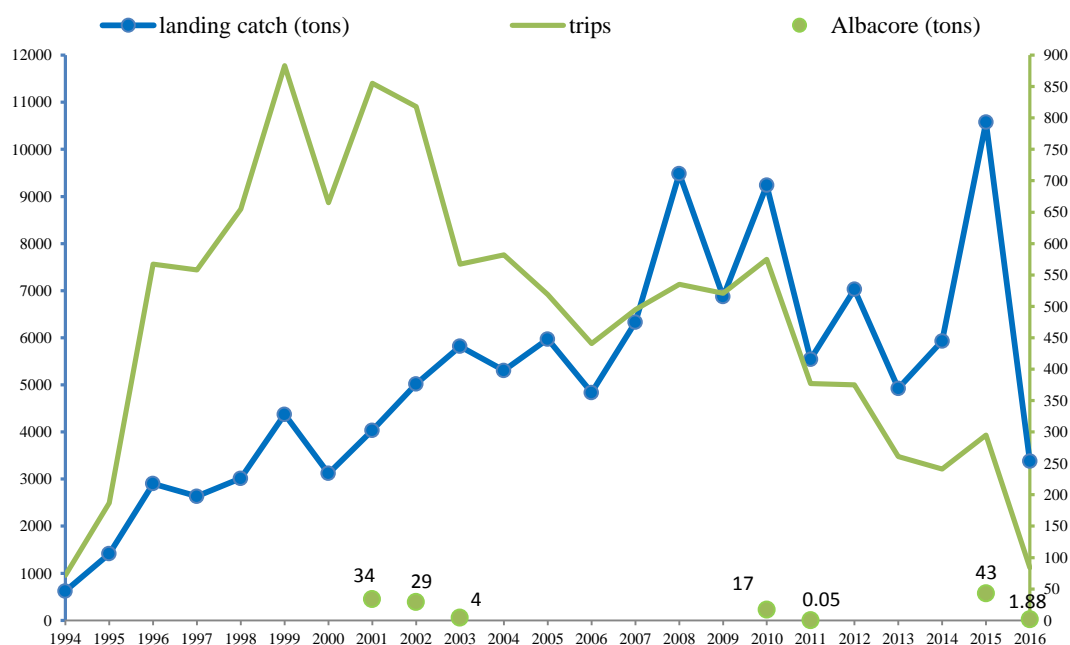
1. Introduction

Phuket fishing ports is the important ports for unloading tuna and tuna likes species from fishing in the Indian Ocean. All of fishing ports are under the port state measure authority. The Phuket Deep Sea Port is for the landing of the large scale purse seiners while there are two major ports for the landing of tuna longliners including the Phuket Srithai Port and the Phuket Fish Market Organization Port (FMO port). The Phuket Srithai Port is the private port and the FMO Port is the semi-government port.



2. Historical data of longline tuna catch and effort

The landing trips showed the trend of increasing from 1994 until 2002 with the peak of 883 trips per year. After then, the landing trips have been dramatic decreasing. However, the landing catches slightly increased since the 1994 and reached the peak of 800 tons per trips in 2015. Although the record of landing of foreign longliners in Phuket of Thailand started since 1994, the albacore is a small proportion with the amount of 34 29 4 17 and 43 tons only in 2001, 2002, 2003, 2010, 2011 and 2015. As of May 2016, there were 2 tons of unloaded albacore.

Figure 1 Historical record of foreign longliners landing and the contribution of albacore (As of May 2016)**Table 1** Historical record of catch composition from foreign longliners landing in Phuket, Thailand (As of May 2016)

Year	Effort	Total	YFT	BET	ALB	BILL	SWO	SHA	Oil fish	misc.	Ton/trip
1994	72	622	254	127	-	56	66	20	-	-	8.64
1995	187	1,415	958	200	-	133	113	13	-	-	7.57
1996	567	2,903	1,038	965	-	426	425	49	-	-	5.12
1997	558	2,632	1,138	676	-	425	383	10	-	-	4.72
1998	655	3,015	2,435	432	-	84	63	1	-	-	4.60
1999	883	4,373	2,124	1,909	-	200	140	1	-	-	4.95
2000	665	3,118	1,310	1,244	-	247	209	108	-	-	5.00
2001	876	4,372	1,895	1,378	34	531	500	-	-	68	4.99
2002	816	4,971	1,960	2,475	29	281	145	-	-	110	6.09
2003	563	4,995	3,360	1,194	4	240	175	-	-	27	8.87
2004	582	5,317	3,708	1,197	-	235	153	-	-	24	9.14
2005	517	5,953	4,354	1,077	-	171	113	-	-	238	11.51
2006	442	4,830	3,584	615	-	133	87	-	-	411	10.93
2007	494	6,315	4,410	748	-	346	105	-	-	706	12.78
2008	533	7,710	4,587	1,772	-	387	268	-	-	696	14.47
2009	521	6,821	4,926	1,025	-	27	129	-	-	714	13.09
2010	575	9,230	7,425	371	17	76	4	-	-	1,354	16.05
2011*	375	5,543	3,812	506	1.3	68	25	**	4	1,127	14.78
2012	315	7,024	3,976	943	-	88	47	-	-	1,970	22.30
2013	261	4,923	2,487	431	-	555	694	-	-	756	18.70
2014	241	5,847	3,526	154	-	659	798	-	-	710	24.20

2015	295	10,576	5,867	1,334	43	1,277	1,189	-	-	792	36.00
2016**	84	3,380	2,388	990	2	-	-	-	-	-	40.20

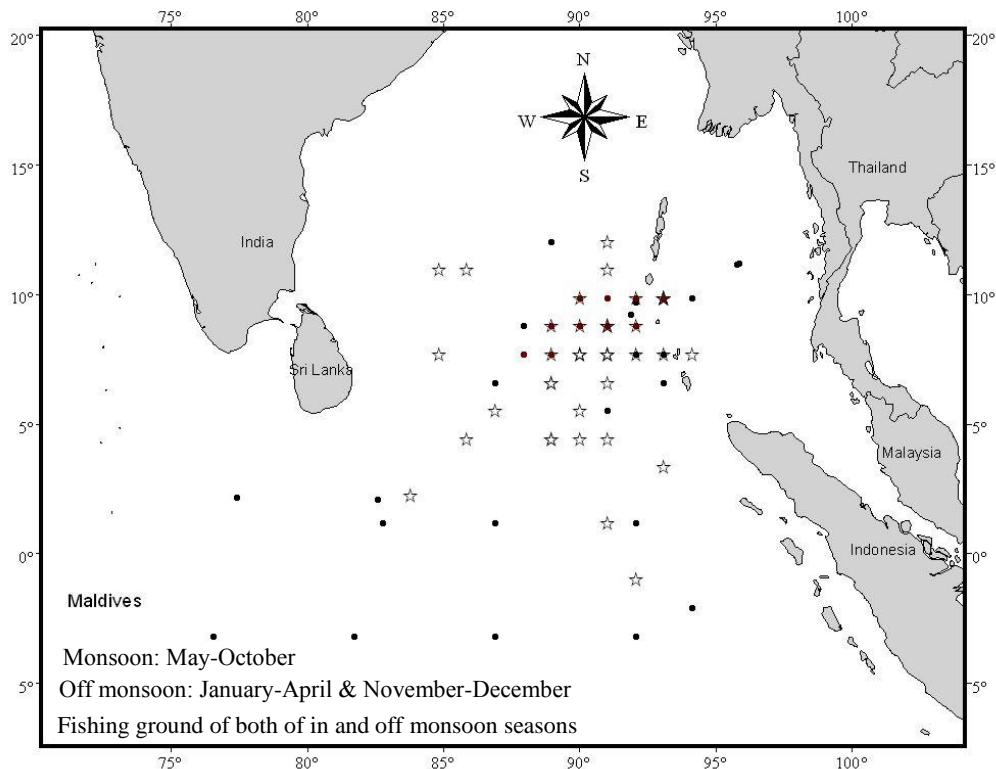
Remarks: * port sampling was carried out
 ** As of May, 2016

3. Ports sampling

3.1 Longliners and their fishing ground

In 2011, there were totally 375 trips of 156 longliners and the total samplings were 45 trips of 26 vessels. The vessels were from Taiwan, Belize, Malaysia, India and Indonesia and the length of the vessels are between 19-40 m. Their Fishing ground was in the latitude of 2°S to 12°N and longitude of 77° to 95° 40'E. The high fishing period for tuna longliners was the monsoon season which was during November to March and the low fishing period was during the off monsoon season which was June to October. During the low season, most fishing vessels were back to their States while some of them have been docked at the Phuket Province as to preparing for the next fishing season.

Figure 2 Fishing ground of foreign tuna longliners unloading at Phuket Province, 2011

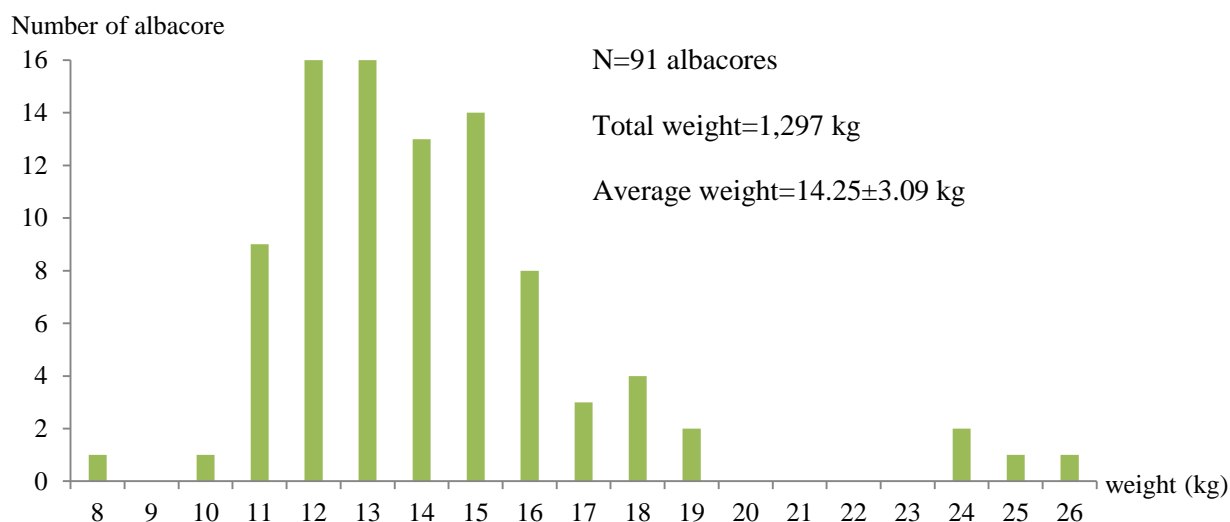


3.2 Number of albacores and their sizes

There were totally only 91 albacore tunas unloaded at Phuket in 2011 with the total weight of 1,297 kg. All of them were recorded their body weights which were in the range of 8-26

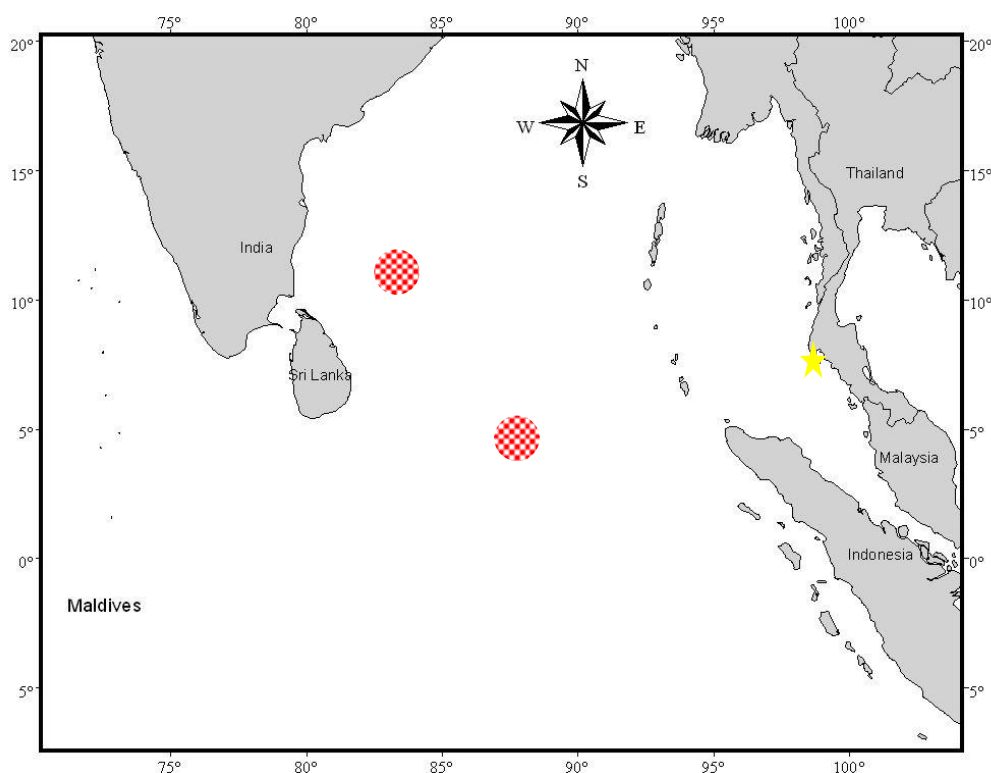
kg. Their average body weight was 14.25 ± 3.09 kg and the 12 and 13 kg were the modal weights of albacore (Figure 19). However, from the total unloaded albacore, only 53 kg of them reported by fishing vessels in the landing declaration. The remaining albacores were included in the miscellaneous fish which mixed with other minor species e.g. king mackerel, dolphin fish and oil fish.

Figure 3 Body weight frequency distribution of albacore tuna caught by foreign tuna longliners landing in Phuket, Thailand, 2011



Among 91 albacores, there were only 4 albacores that their ground was derived by the interview of the fishing master. The fishing grounds of the four albacore tuna, one of the 14 weight albacore and two of the 11 weight albacores were in the latitude 11° N longitude of 86° E and latitude 8° N longitude 89° E (Figure 14).

Figure 4 Fishing ground of foreign tuna longliners landing albacore in Phuket, Thailand, 2011



4. Conclusion and Recommendations

Albacore are mostly the small proportion in catch. They always were mixed with other lower value species such as king mackerel, oilfish and sailfishes and reported as miscellaneous catch. This report address the information derived from the sampling in 2011 that without the port sampling, the accurate amount of the unloaded albacore cannot be told. The Port State Measure in Thailand has been firstly introduced and exercised in 2013 and 2014 as a pilot project. The PSM Agreement has just been ratify by Thailand on 10th May, 2016. This will allow the port authority to closely inspect the unloading fish against the fishing logbooks of the landing vessel that includes the declaration of the unidentified miscellaneous fish. Without the systematic port sampling may lead the missing catch report of this albacore species. So, the increasing capacity of officers of the PSM in the identification of fish at the landing port is recommended to monitoring the catch of albacore species so that the accurate information of the unloading albacore and their fishing ground will be discovered. This will benefit the assessment of the albacore in a long term basis.