Received: 1 December 2013

Indian Ocean Tuna Commission
Commission des Thons de l'Ocean Indien
iotc ctoi

Sultanate of Oman National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2012

Mr. Khalid Khalfan AL Mahrooqi
Ms. Maryam Bint Mohammed Al-Shidhani
Ministry Of Agriculture and Fisheries
General Directorate of Fisheries Development

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 10/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, for all fleets other than longline.	YES
In accordance with IOTC Resolution 10/02, provisional **longline data** for the previous year was provided to the Secretariat by 30 June of the current year [e.g. for a National report submitted to the Secretariat in 2013, preliminary data for the 2012 calendar year was provided to the Secretariat by 30 June 2013). **REMINDER:** Final longline data for the previous year is due to the Secretariat by 30 Dec of the current year [e.g. for a National report submitted to the Secretariat in 2013, final data for the 2012 calendar year must be provided to the Secretariat by 30 December 2013).	YES
If no, please indicate the reason(s) and intended actions:	

Table of Contents

Executive Summary

Omani fishery sector is one of several sectors that contribute to the economy of the country. The total production of this sector in 2012 was 192,000 tons with a total value of 143 million OMR. Comparing with 2011 the value of fishery production was increased by 16% in 2012. The consumption of Tuna products in Oman is high. There is a fluctuations of the total annual production of Tuna which is 8753 mt in 2003 and it increased up to 16850 mt in 2007 and decreased to 5501 mt in 2012. This fluctuation of coastal tuna activities finds probably its origin, among others, in the modification of environmental factors, predator-prey relationship, spawning problems (Dr. Al Qumi, 2011) and the actual reduction of the industrial pelagic fleet. This segment went from 52 vessels in 2008 to 8 vessels in 2012. This reduction in the industrial fishing capacity was initiated by the national Authorities for the purpose of restructuring the industrial fishing sector to improve its competitiveness and efficiency. On the other hand there is a massive increase in the number of vessels and fishermen of Artisanal and coastal fleets. Omani Government has introduced the logbook data collection scheme, the Vessel Monitoring System (VMS) and Port Sampling Program (PSP), observer programme (under/development) to monitor Tuna fishery and to enhance the quality of data gathered in order to manage and sustain efficiently the Omani fisheries. Moreover, the Government started to run and monitor several other projects for other\ marine species such as sea birds and marine turtles but are still in their starting stages.

1. BACKGROUND/GENERAL FISHERY INFORMATION

The coastline of Oman extended to about 3165 km. The rich marine biodiversity and productive ecosystems with valuable fishery stocks are the main characteristics of this coastline.. The total production of the fishery sector in 2012 was 192,000 tons with a total value of 143 million OMR. This production level showed an increase in the landing of 21% and an increase of 16% in the value compared to 2011.

Concerning Tuna and Tuna- like species, they have all shown considerable increase during the period 2009- 2012, except for Yellow fin Tuna & Indian Mackerel which have experienced sharp decrease respectively by 39% and 21% for the same period.

The Omani national fleet consists of three different segments: Artisanal, Costal and Industrial fleets:

- Artisanal fleet: There are two types of fishing units: Dhows (wooden hulls) and Fiber glass boats.
- Costal fleet: the total number of vessels in 2012 was 56 vessel, with a high concentration in the Arabian Sea, and precisely from Ras AL Had in Sharqiya to Dhofar.
- Industrial fleet: consist of vessels undertaking pelagic fishing and demersal fishing activities and representing only 10% of the total fishery production.

2. FLEET STRUCTURE

The national fishing fleet consists of three main segments:
i)- Artisanal fishery
ii)- Coastal fishery
iii)- Industrial fishery

i)- Artisanal fishery

Table 1a: Number of units in artisanal fleet operation in On- shore from 2008 – 2012.

Years		2008	2009	2010	2011	2012
Number of Units	Dhows	660	612	695	704	698
	Fiber Glass	13748	14330	18031	18031	19245
Gear Type	LL, HL. N, BSN					

ii)- Coastal fishery

Table 1b: Number of costal vessels from 2008 – 2012.

Years	**2008**	**2009**	**2010**	**2011**	**2012**
Number of Vessels	18	19	33	49	56
Gear Type	LL, HL. N, GL				

iii)- <u>Industrial fishery</u>

Table 1c: Number of vessels operating in IOTC area of competence from 2008 – 2012.

Years		2008	2009	2010	2011	2012
Number of Vessels	**Longliners**	52	17	13	10	8
	Trawlers	41	32	25	18	0
Gear Type		LL, PS				
Size of Vessels		OAL: Above 30 m				

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

3.1 Tuna catch series by segment:

Table 2a. Artisanal Annual catches (mt) by species from 2008 – 20012.

Artisanal Fleet					
Species	**2008**	**2009**	**2010**	**2011**	**2012**
Yellowfin* Tuna	5488	6102	2580	1948	5501
Longtail Tuna	7753	8052	8564	10217	14274
Kawakawa	4077	2336	2214	3113	4597
Striped Bonito	383	155	180	562	488
Frigate Tuna	1113	737	1314	1577	944
Skipjack	18	11	80	22	94
Other Tunas	418	55	369	2027	198
Sailfish	729	803	1831	2660	3338
Inadian Mackerel	8813	10125	10022	7952	8589
Sharks	4898	4503	5148	7009	5341
Total	8792	28376	27154	30078	43364

*the data concerning the landing of this species from 2008 until now, under investigation to examine their accuracy, the outcome of this investigation will be submitted later to the scientific committee.

Table 2b. Costal Fleet Catches (mt) in 2012.

Costal Fleet	
Species	**2012**
YellowfinTuna	**0**
Longtail Tuna	**1**
Kawakawa	**1**
Striped Bonito	**0**
Frigate Tuna	**0**
Skipjack	**0**
Other Tunas	**0**

Sailfish	**0**
Inadian Mackerel	**0**
Sharks	**7**
Total	**9**

Table 2c. Industrial Fleet Annual Catches (mt) By Species from 2008- 2012.

Industrial Fleet					
Species	**2008**	**2009**	**2010**	**2011**	**2012**
Yellowfin Tuna	1558	919	622	73	78
Longtail Tuna	0	0	0	0	0
Kawakawa	0	0	0	0	0
Striped Bonito	199	8	1	0	0
Frigate Tuna	0	0	0	0	0
Skipjack	0	0	0	0	0
Other Tunas	0	0	0	0	1027
Sailfish	1392	429	202	202	170
Inadian Mackerel *	203	861	70	4	0
Sharks	310	248	130	23	2
Total	3662	2465	1025	302	1277

*This type of species are targeted only by trawling vessels.

3.2 Estimated Fishing Effort:

Table 2d. Estimated Fishing Effort for Artisanal Fleet During 2012

Boat – Fishing Gear	Parameters	Total
FG (HL + TL)	**Number of Boats**	12083
	Estimated Effort	145874
	Estimated Catch (Ton)	17951
	CPUE (Kg)	1384
FG (NET)	**Number of Boats**	971
	Estimated Effort	8501
	Estimated Catch (Ton)	1624
	CPUE (Kg)	2170
BEACH SEINE NET	**Number of Boats**	61
	Estimated Effort	2219
	Estimated Catch (Ton)	1559
	CPUE (Kg)	7179
LANUCH - NET	**Number of Boats**	788
	Estimated Effort	7206
	Estimated Catch (Ton)	3592
	CPUE (Kg)	6260
LANUCH – LINE - TL	**Number of Boats**	184
	Estimated Effort	3107

	Estimated Catch (Ton)	1688
	CPUE (Kg)	4443

Table 2e. Estimated Effort of Coastal Vessels in 2012.

Landing (mt)	Number of Vessels	Season Duration	Catch/ Vessel/ Year (mt)	Catch/ Vessel/ Day (mt)	Catch/ Fishing/ Day
1450	56	12	26	0.2	139

Table 2f. Estimated Effort of Industrial Fishing Activity from 2008 – 2012.

Longliners						
Years	**Landing (mt)**	**No. of Vessels**	**Vessel – day number**	**Season Duration (month)**	**Catch/ Vessel - Year (mt)**	**Catch/ Vessel - Day (mt)**
2008	3241	52	1720	8	62	1.88
2009	1965	17	1205	7	116	1.63
2010	889	13	918	12	68	0.97
2011	1400	10	1139	12	140	1.23
2012	1292	8	896	12	162	1.44

3.3. Historical Tuna Catches (Graphic Representation):

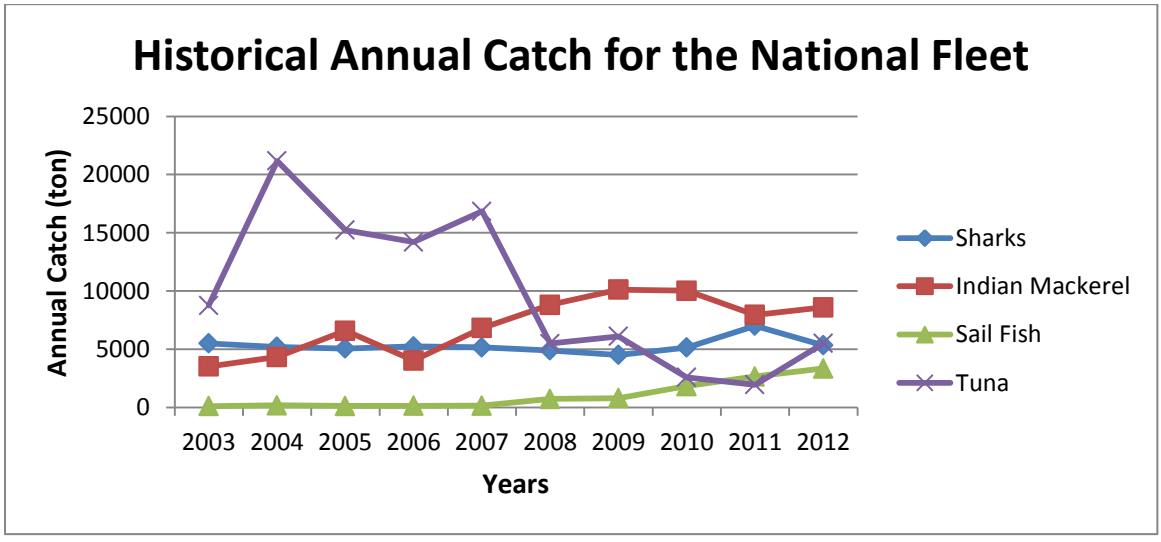

Figure 1. Historical annual catch for the national fleet, by species.

4. RECREATIONAL FISHERY

There is no recreational tuna fishery and tuna like species in Oman.

5. ECOSYSTEM AND BYCATCH ISSUES

5.1 Sharks

The fishing activities of Sharks in the Sultanate are not a specialized fishery targeting primarily this species.

Table 3: Total catch of sharks by the Industrial fleet in the IOTC area from 2008-2012.

Species	2008	2009	2010	2011	2012
SHA*	310	248	130	23	**2**
SPHY**					

***SHA, Carcharindae shark species.**

****SPHY, Sphyrnidae shark species.**

Sharks are considered as the most important and successful inhabitants of the seas for millions of years. Recent trends in global elasmobranch landings indicate that this group is in serious decline in many areas of the world, including the Indian Ocean. From this point, the Sultanate of Oman established a project in the Assessment of Shark Population Movements, Delineations and Breeding Grounds. This project aims to determine the population movements and explore the possible need for individual stock management / international cooperation.

5.2 Seabirds

The Government started to run a project in this field but there is no available data at the recent time.

5.3 Marine Turtles

Environment Society of Oman (ESO) is running a project in this field, which aims to assist the Ministry of Environment and Climate Affairs (MECA) with collection of important biological and ecological information on turtles of Oman and to assist with the development of appropriate conservation management plans for their protection.

5.4 Other ecologically related species (e.g. marine mammals, whale sharks) [Desirable]

No available data.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Logsheet data collection and verification

A primary log sheet has been made and it requires approval from the Ministry of Agriculture and Fisheries to be applied. This logbook system records daily information for each trip delivering three documents (copies): One goes for the vessel, the second goes for the port and the last for the Ministry of Agriculture and Fisheries.

6.2. Vessel Monitoring System

Vessel Monitoring System (VMS) was implemented in Oman in 2001. It was introduced at that time only for industrial fishery. The real challenge faced VMS implementation is the impossibility to get on time data. The data received by the department is 2 hours afterwards. Due to the developments in fishery sector, the Ministry of Agriculture and Fisheries is starting to implement VMS for the coastal fleet & artisanal fleets.

6.3. Observer programme

The Ministry has an observer scheme to monitor the landings by such programmes. It is, however, the objective of this ministry to make a special focus on the industrial fleet and especially onboard the vessels targeting tuna species within the IOTC convention area.

7. NATIONAL RESEARCH PROGRAMS

Table 8. Summary table of national research programs, including dates.

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
Management of exploited coastal tuna fisheries resources of the Sultanate of Oman	From 2012 till data of selected fish landing	Oman			1- Management of the coastal tuna fishery resources with planned interventions to help enhance the nutritional status & economy of Oman. 2- To understand the status of the exploited coastal tuna resources of Oman. 3- To generate baseline/ additional information on the biology & stock characteristics of some coastal tuna species. 4- To relate the possible oceanographic features for inter-annual variation in tuna catches of traditional fisheries. 5- To gather data on socio-economic aspects of	Monthly collection of fish samples for biological parameters & Physicochemical parameters of water were collecting from January 2012 till date from selected fish landing centers along the coasts of the Arabian Sea & Gulf of Oman.

					coastal tuna fisheries. 6- To help develop suitable management plan for the coastal tuna resources.	

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Table 9. Respond with progress made to recommendations of the SC and specific Resolutions relevant to the work of the Scientific Committee [to be updated annually to include most recent Conservation and Management Measures adopted by the Commission].

Res. No.	Resolution	Scientific requirement	CPC progress
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	It is prohibited the cut of fins of sharks by the fishermen , unless they get approval from the authorities. Also, there is an ongoing scientific research program on sharks, and hope to get some good result regarding the suitable fishing gears to avoid the bycatch of sharks. Overall, satisfactorily monitored and under progress for 8 & 10
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7	Implementation under progress, and the statistical department will report those information to the secretary in the coming future.
10/06	On reducing the incidental bycatch of seabirds in longline fisheries. **Reminder**: Resolution 12/06 will supersede Resolution 10/06 on 1 July 2014	Paragraphs 3–7	Oman will make these requirements, mandatory in the new proposed law for commercial fishing vessels
11/04	On a regional observer scheme	Paragraph 9	The fisheries authority is examining some prosed scenario to apply this program.
13/03	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–11	Under implementation
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Under progress, and it will be included in the new proposed law.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Under consideration for implementation

8. LITERATURE CITED [Mandatory]

1- Fishery Statistical Book (2011 &2012). Fisheries Statistic & Information Department, General, Directorate of Fisheries Research, Ministry of Agriculture and Fisheries.
2- Marine and Fisheries Science Center, Dr.Fatma Al-Qumi, Management of the Exploited Coastal Tuna Fisheries Resources of the Sultanate of Oman project.
3- Regional Commission for Fisheries (RECOFI), 2010. fourth meeting of the working group of fisheries management, Trends and Emerging Issues of the Gulf Fisheries: A regional Perspective.
4- Regional Commission for Fisheries (RECOFI), 2010. fourth meeting of the working group on fisheries management, report of the FAO/ RECOFI Workshop on Fishery Stock Indicators and Stock Status, Tehran/Iran, 26-29 July (2009).