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**ANNUAL REPORT TO THE COMMISSION  
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

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**WCPFC-SC12-AR/CNM-31  
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**EL SALVADOR**



## ANNUAL REPORT TO THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

### PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

01 JANUARY – 31 DECEMBER 2015  
June 23, 2016

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by April 30, 2016, <i>revised version Sep 23, 2016.</i>	YES
If no, please indicate the reason(s) and intended actions:	



## 1. SUMMARY

El Salvador is located in Central America, and is not a coastal country of the WCPFC Convention area. During the 5th Regular Session of the Commission held in Busan, Republic of Korea the members granted the status of Cooperating Non Member status to El Salvador, since then we have complied with all the measures issued by the Commission to aim sustainable fisheries, under the technical principles established by the WCPFC.

El Salvador tuna fisheries in the WCPFC Convention Area started in 2001, two purse seiners flagged to El Salvador operated at that time (Montelucia and Monterocio, this last was formerly known as Alexandros). Tuna fisheries in this geographical area ceased in 2003; then in 2007 started again using a fishing license issued by a coastal country of the Convention. Currently there are four Salvadoran flagged purse seiners registered on the record of Fishing Vessels of the WCPFC: Montelucia, Monterocio, Montelape, and Montealegre. However, during 2015 only two of them fished at the WCPFC area. At one point during the last years all of the four vessels fished in the WCPFC Convention Area. Nonetheless, it included fishing at the overlap area shared by the IATTC and WCPFC. However, as El Salvador is a member of the Inter American Tropical Tuna Commission (IATTC) the vessels may move back and forth on both Areas.

Salvadoran flagged vessels aim for tropical tunas while fishing in the WCPFC Area, particularly Yellowfin tuna (*Thunnus albacares*), Skipjack tuna (*Katsuwonus pelamis*) and Bigeye tuna (*Thunnus obesus*).



The information gathered for preparing this document comes basically from different sources, such as the logbooks on board, VMS tracking, catch certificates issued for the European Market, observer reports, invoice sales, transshipments declaration reports, landing reports, and inspection reports. Some of the data is collected in collaboration with the IATTC.

Nonetheless El Salvador is only Cooperating Non Member of the Commission, it is fully aware and complies with all of the Conservation and Management Measures passed by the Commission in order to keep a sustainable use of fisheries in the Convention Area and beyond.

## 2. TABULAR ANNUAL FISHERIES INFORMATION

Table 1 shows effort estimation of the annual catches, data comes primarily from logbooks filled by the captain of the vessels in 2015.

*Table 1. Annual catches and effort*

YEAR	ANNUAL CATCHES BY PRIMARY SPECIES, (Metric Tons)				FISHING DAYS	
	YFT	SKJ	BET	TOTAL	HIGH SEAS	EEZ <sup>1</sup>
2007	396	1691	355	2250	N/A	N/A
2008	376	6903	1083	8362	0	61
2009	512	4914	1584	7010	28	87
2010	647	4736	1441	6824	23	87
2011	836	9089	1948	11873	17	202
2012	2954	8630	684	12268	24	257
2013	1235	8960	2009	12204	28	223
2014	2898	13933	649	17480	29	334
2015	597	6337	295	7229	29	62

<sup>1</sup> For 2015, fishing days in EEZ are from Kiribati.



For annual catches estimates data comes primarily from logbooks filled by the captain of the vessels in 2015 (Figure 1).

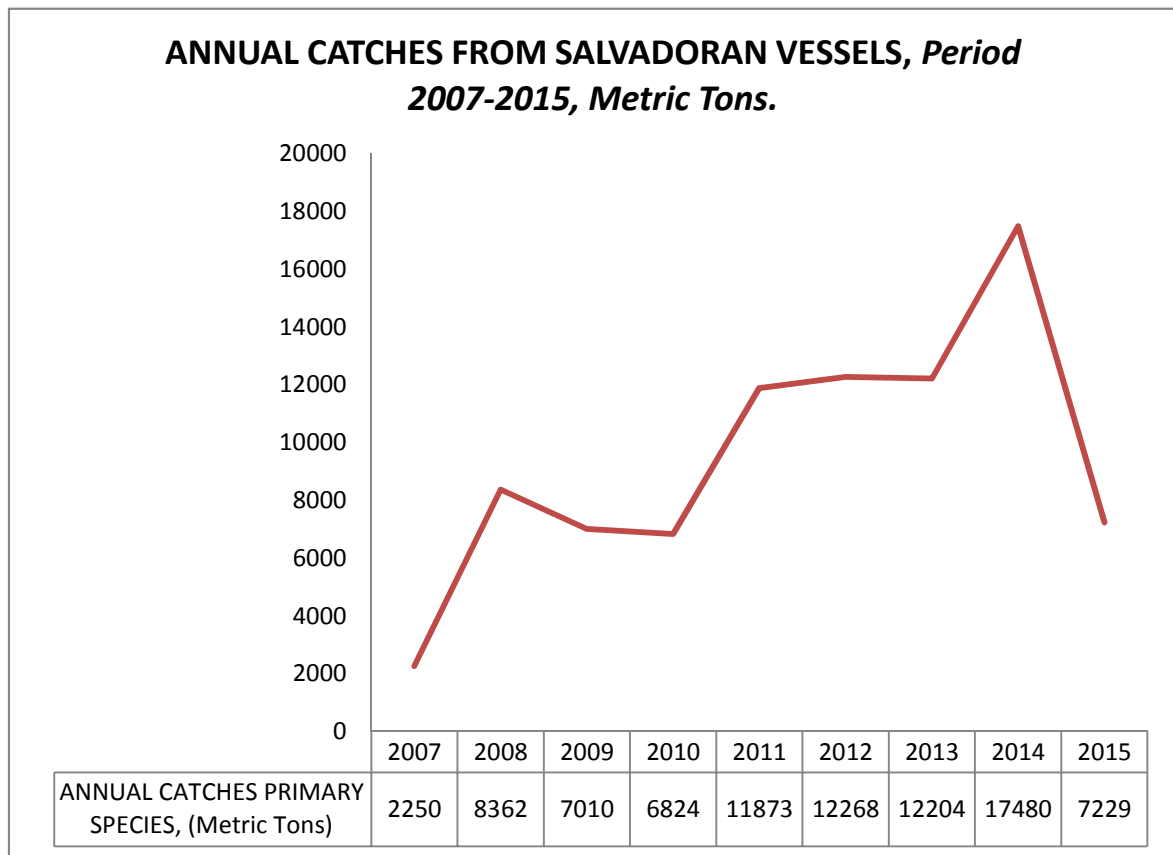


Figure 1. Historical Catch in the WCPFC area by El Salvador’s fleet, the data before 2011 was estimated by the observer program.

### 3. BACKGROUND

El Salvador is located in Central America, with approximately 320 Km of coastline bordering the North Pacific Ocean, between Guatemala and Honduras, among 13° 10' and 13° 40' N Latitude.



Fishing and Aquaculture are ruled by the General Law to Manage and Promote Fisheries and Aquaculture, published in the Official Gazette number 240, volume number 353 of December 19th, 2001. The Law is executed by the General Director of the Center for Fisheries and Aquaculture Development of the Republic of El Salvador (CENDEPESCA), a branch office of the Ministry of Agriculture and Livestock.

The fisheries sector in El Salvador is divided in four sub sectors:

1. Marine industrial fishery;
2. Marine artisanal fishery;
3. Inland water fishery and
4. Aquaculture.

The marine industrial fishery includes the tuna purse seine fishery, shrimp trawler fishery, and pelagic longline fishery.

El Salvador tuna fisheries in the WCPFC Convention Area started in 2001, two purse seiners flagged to El Salvador operated then (Montelucia and Monterocio, this last was formerly known as Alexandros). Tuna fisheries in this geographical area ceased in 2003; then in 2007 started again using a fishing license issued by a coastal country of the Convention.

Currently, El Salvador has the status of *Cooperating Non Member* within the WCPFC and is complying with all the measures issued by the Commission to aim sustainable fisheries, under the technical principles issues by the WCPFC as:

*“Complies with all Resolutions and requirements including effort, capacity and catch controls and limits; carries on all purse seine vessels an observer accredited with either the IATTC or WCPFC observer programs and operates a vessel monitoring system (VMS)”.*



#### 4. FLAG STATE REPORTING

The present information has been gathered from the logbooks reported to CENDEPESCA by the tuna industry. The number of vessels fishing in the WCPFC Convention Area may vary from one year to another, as stated above El Salvador is a member of the ATTC and Cooperating Non-member of the WCPFC, by maintaining this status Salvadoran flagged vessels may move back and forth on both RFMO, complying with the different CMM and Resolutions of course. Figure 2 shows the number of vessels that have operated in the WCPFC area throughout the years.

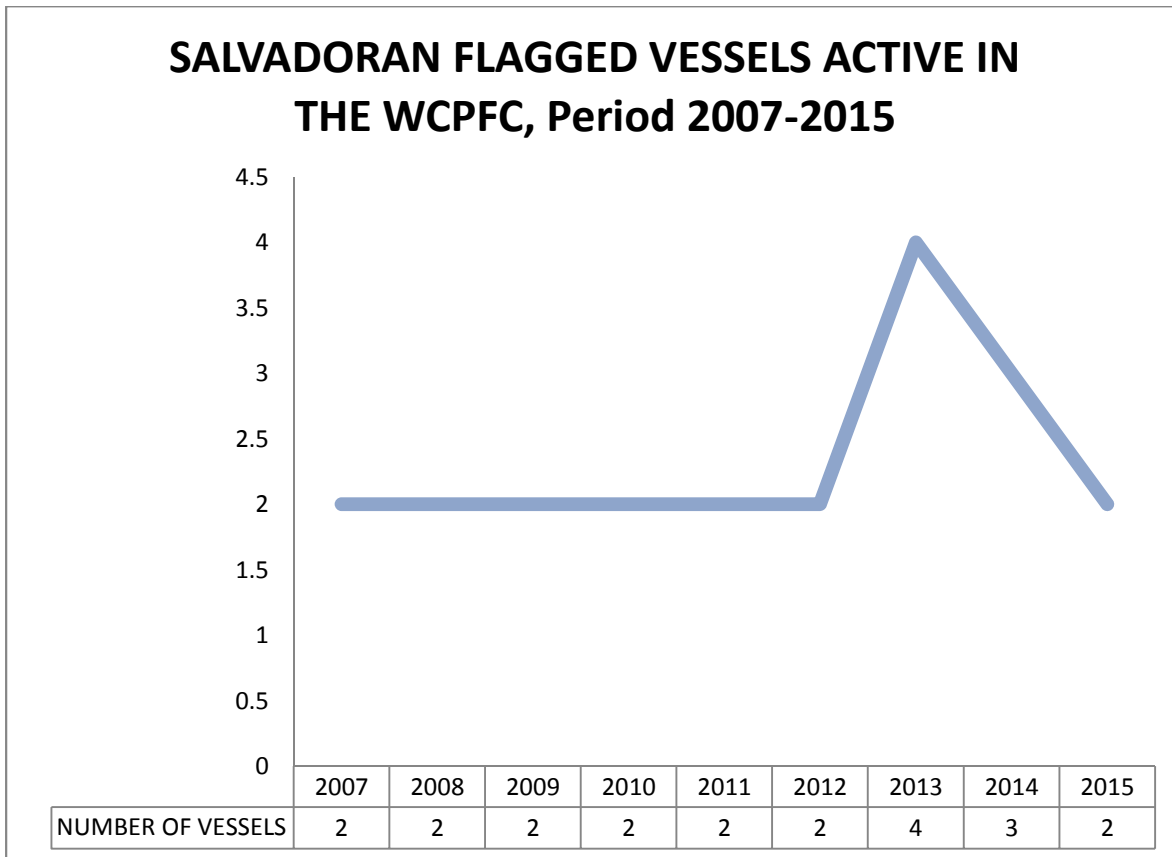


Figure 2. Salvadoran flagged purse seiners fishing in the WCPFC Convention Area.



El Salvador started the tuna fishing into WCPO in 2007; the number of vessels has kept constant with the exception in 2013 that 4 vessels worked on that year. However, all Salvadoran vessels have been on RFV when fishing and before. Table 2 shows the number of vessels by gear and size category.

*Table 2. Salvadoran flagged vessels, by gear and size category active in the WCPFC Convention Area, period 2007-2015*

YEAR	NUMBER OF VESSELS	TYPE OF GEAR	SIZE CATEGORY
2007	2	Purse seine	1500+
2008	2	Purse seine	1500+
2009	2	Purse seine	1500+
2010	2	Purse seine	1500+
2011	2	Purse seine	1500+
2012	2	Purse seine	1500+
2013	4	Purse seine	1500+
2014	3	Purse seine	1500+
2015	2	Purse seine	1500+

The distribution of effort for 2015 is shown in Figures 3 and 3a, the first was provided by the Secretariat of the Pacific Community based on the Scientific Data that El Salvador submitted to the Commission in early April 2016, and the second one was elaborated by CENDEPESCA with data from the logbooks.

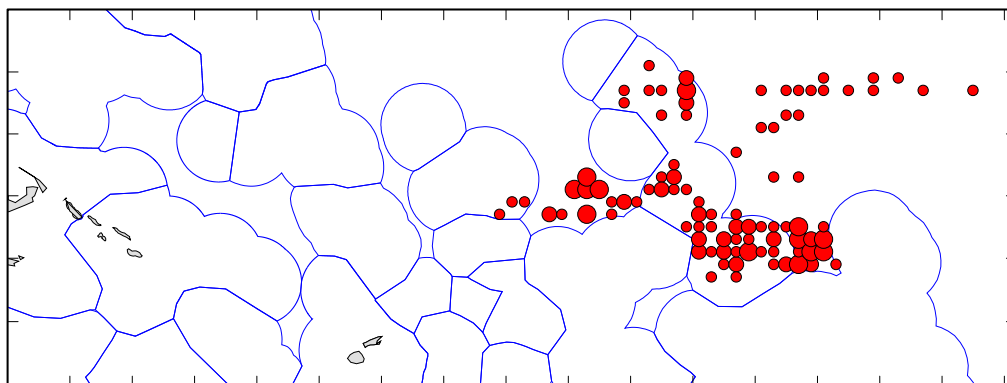


Figure 3. Salvadoran flagged purse seiner effort for 2015 in the WCPFC Convention Area.



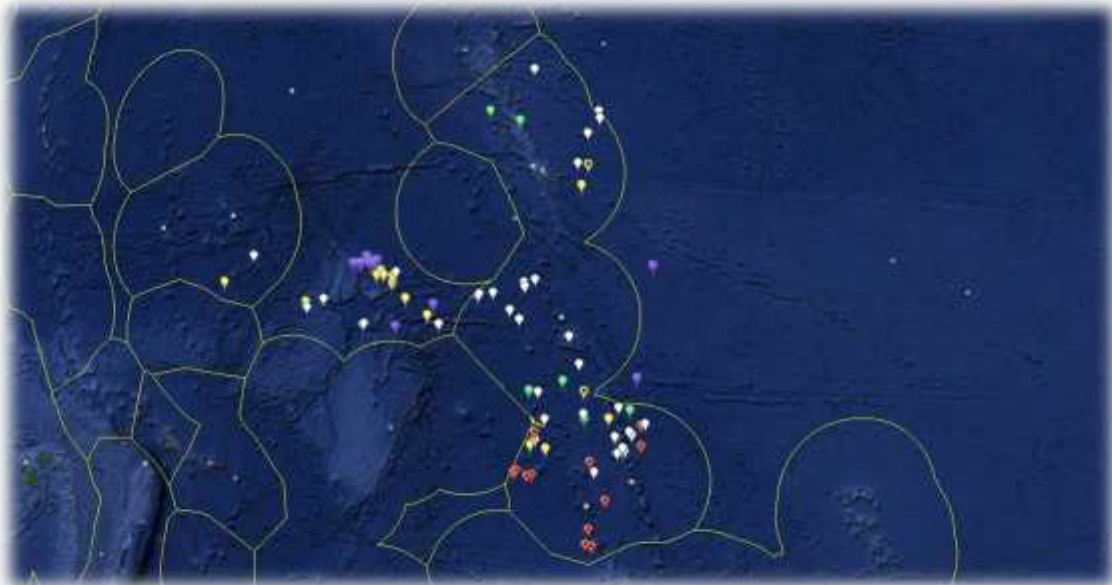


Figure 3a. Salvadoran flagged purse seiner effort for 2015 in the WCPFC Convention Area.

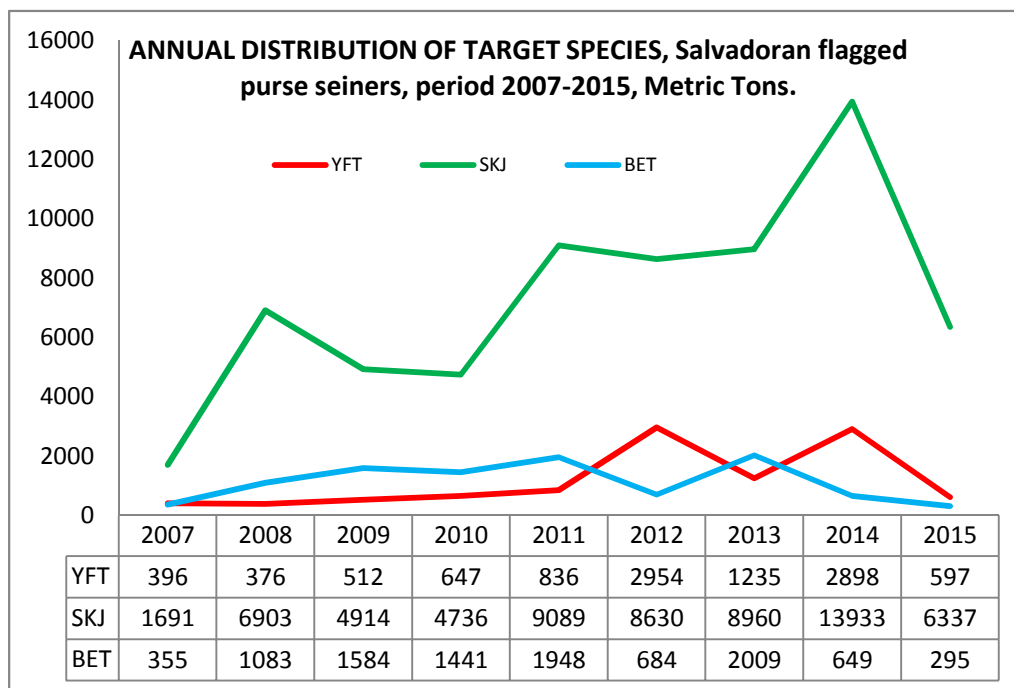


Figure 4. Historical distribution of target species at the WCPFC Convention Area.<sup>2</sup>

<sup>2</sup> Data between 2007 and 2011 comes from the Observers report, 2012-2015 has been estimated based on logbooks, sales invoices and landings.



Regarding CMM 2011-03, during 2015 there was no interaction with cetaceans reported on the logbooks onboard Salvadoran flagged vessels. However, there may be some data regarding this issue that we don't know about as we don't have access to the data recorded by Observers when fishing at the WCPFC Convention area.

Table 3 shows the annual estimated catches of non-target species covered by the WCPFC Convention, the data includes years 2014 and 2015.

Table 3. Bycatch reported by Salvadoran flagged vessels, 2014-2015.

COMMON NAME	SCIENTIFIC NAME	2014	2015	TOTAL
Billfish, nei	( <i>Istiophoridae, Xiphiidae</i> )		0.297	0.297
Black marlin	( <i>Istiompax indica</i> )	0.068	1.400	1.468
Blue marlin	( <i>Makaira nigricans</i> )	2.351	1.794	4.145
Blue shark	( <i>Prionace glauca</i> )		0.006	0.006
Bluestriped chub	( <i>Sectator ocyurus</i> )	0.005		0.005
Common dolphinfish	( <i>Coryphaena hippurus</i> )	2.302	0.225	2.528
Cortez sea chub	( <i>Kyphosus elegans</i> )	0.018		0.018
Drummer	( <i>Kyphosus spp.</i> )	0.001		0.001
Great barracuda	( <i>Sphyraena spp.</i> )	0.017	0.016	0.033
Indo-Pacific sailfish	( <i>Istiophorus platypterus</i> )	0.043		0.043
Large fish, nei	( <i>Osteichthyes</i> )		0.010	0.010
Longfin yellowtail	( <i>Seriola rivoliana</i> )	0.001		0.001
Mackerel scad	( <i>Decapterus macarellus</i> )	0.003		0.003
Marlin, nei	( <i>Makaira, Tetrapturus</i> )	0.183	0.110	0.293
Ocean sunfish, Mola	( <i>Mola mola</i> )	0.012		0.012
Ocean triggerfish	( <i>Canthidermis maculata</i> )	0.828	0.129	0.957
Oceanic whitetip shark	( <i>Carcharhinus longimanus</i> )		0.052	0.052
Pelagic stingray	( <i>Pteroplatytrygon violacea</i> )	0.003		0.003
Rainbow runner	( <i>Elagatis bipinnulata</i> )	0.534	0.277	0.811
Requiem sharks, nei	( <i>Carcharhinidae</i> )	0.130	0.244	0.374
Scalloped hammerhead shark	<i>Sphyrna lewini</i>		0.093	0.093
Scrawled filefish	( <i>Aluterus scriptus</i> )	0.004	0.008	0.013
Silky shark	( <i>Carcharhinus falciformis</i> )	7.703	5.106	12.809
Striped marlin	( <i>Kajikia audax</i> )	0.110	0.531	0.641



Triggerfishes, durgons, nei	( <i>Balistidae</i> )		0.008	0.008
Unicorn filefish	( <i>Aluterus monoceros</i> )		0.032	0.032
Wahoo	( <i>Acanthocybium solandri</i> )	0.895	0.215	1.110
Whitetongue jack	( <i>Uraspis helvola</i> )	0.000		0.000
Yellowtail amberjack	( <i>Seriola lalandi</i> )	0.032	0.005	0.037
<b>TOTAL</b>		15.243	10.558	25.801

Table 4 shows the estimated annual coverage for different purposes of collecting data.

Table 4. estimated annual coverage for collecting data

VESSEL	OPERATIONAL CATCH EFFORT	OBSERVER ON BOARD	TRANSHIPMENT DATA COVERING	LANDING INSPECTION
Montelucia	100%	100%	100%	Inspected only in Salvadoran ports.
Monterocio	100%	100%	100%	

El Salvador is not a coastal country of the WCPFC area therefore does not have any survey program in order to control its fleet operating in the Western, nevertheless, all of the fishing trips have been monitored by the IATTC Observer Program and Kiribati Observer program. During disembarkation in El Salvador CENDEPESCA performs inspection and all controls according with national law and international regulations.

Legislation provides controls regarding:

1. Discharged fish
2. RFMO management measures resolutions/recommendations/conservation and management measures.

### Transshipment activity during 2015

Complying with CMM 2009-06, we show Tables 5 and 6 with data regarding the transshipments for 2015.



REPUBLIC OF EL SALVADOR  
MINISTRY OF AGRICULTURE AND LIVESTOCK  
CENTER FOR FISHERIES AND AQUACULTURE DEVELOPMENT



Table 5. Data from annex II of CMM 2009-06, section 1

VESSEL	WIN	PLACE OF TRANSHIPMENT				CATCHES COMING FROM		SPECIES TRANSSHIPPED (KG)			SPECIES RECEIVED (KG)			PRODUCT FORM	FISHING GEAR		
		IN PORT	AT SEA (NATIONAL JURISDICTION)	AT SEA (OUTSIDE NATIONAL JURISDICTION)	INSIDE THE WCPFC CONVENTION AREA	OUTSIDE THE WCPFC CONVENTION AREA	THE WCPFC CONVENTION AREA	NON WCPFC CONVENTION AREA	YFT	SKJ	BET	YFT	SKJ			BET	
MONT ELUCIA	YS C20 01	X			X		X			750 00	168 000 0	600 00	48 47 1	171 718 4	78 38 5	ROUND AND FROZEN	PURSE SEINE
MONT ELUCIA	YS C20 01	X			X		X	X		131 000	153 800 0	310 00	13 80 48	157 347 8	40 84 3	ROUND AND FROZEN	PURSE SEINE
MONT ELUCIA	YS C20 01	X			X		X	X		372 000	121 000 0	135 000	11 79 49	137 581 4	18 27 21	ROUND AND FROZEN	PURSE SEINE
MONT EROCIO	YS C20 02	X			X		X			330 00	672 000	700 00	30 43 3	717 750	27 29 9	ROUND AND FROZEN	PURSE SEINE
MONT EROCIO	YS C20 02	X			X		X	X		192 000	117 300 0	131 000	15 76 34	114 087 4	56 23 6	ROUND AND FROZEN	PURSE SEINE
MONT EROCIO	YS C20 02	X			X		X	X		510 00	137 200 0	200 0	42 33 2	129 849 0	85 1	ROUND AND FROZEN	PURSE SEINE

Table 6. Data from annex II of CMM 2009-06, section 2.

NUMBER OF TRANSHIPMENTS	PLACE OF TRANSHIPMENT				CATCHES COMING FROM		SPECIES TRANSSHIPPED (KG)			SPECIES RECEIVED (KG)			PRODUCT FORM	FISHING GEAR	
	IN PORT	AT SEA (NATIONAL JURISDICTION)	AT SEA (OUTSIDE NATIONAL JURISDICTION)	INSIDE THE WCPFC CONVENTION AREA	OUTSIDE THE WCPFC CONVENTION AREA	THE WCPFC CONVENTION AREA	NON WCPFC CONVENTION AREA	YFT	SKJ	BET	YFT	SKJ			BET
4	X			X		X	X	746 000	529 300 0	299 000	45 59 63	538 865 6	28 06 51	ROUND AND FROZEN	PURSE SEINE
2	X			X		X		108 000	235 200 0	130 000	78 90 4	243 493 4	10 56 84	ROUND AND FROZEN	PURSE SEINE



### **Interactions with Oceanic whitetip sharks 2015**

The logbooks don't show any data regarding interactions with Oceanic whitetip sharks; however, as we don't have access to data from Observer reports it may be possible that in near future the Commission let us know about this issue.

Based on Observer Reports we have estimated 0.052 metric tons of by catch of Oceanic whitetip sharks (table 3), which belongs to two sharks, one shark was dead and the other one alive when released. This cover the 100% of our fishing activities for 2015 as our purse seiners have a 100% coverage with observers.

### **Interactions with Silky sharks 2015**

The logbooks don't show any data regarding interactions with Silky sharks; however, as we don't have access to data from Observer reports it may be possible that in near future the Commission let us know about this issue.

We estimated in 5.106 metric tons of bycatch of silky sharks, all of them were released and based on SPC data it has been estimated that 56 of the sharks were alive. The weight belongs to 404 sharks. Again it covers the 100% of our fishing activities for 2015 as all of our purse seiners have observer onboard when fishing.

## **5. SOCIO-ECONOMICS FACTORS**

Tuna industry in El Salvador directly employs around 1500 people in processing activities, 500 in unloading fish from vessels, 110 as crew on the vessels and indirectly employs nearly 5000 people in different activities related with the operations.



## 6. DISPOSAL OF CATCH AND ONSHORE DEVELOPMENT

Tuna is processed and canned in a processing plant located in eastern El Salvador. Discarded tuna due to contaminants and waste (bones, heads, etc. are processed for fish meal. Tuna loins are mostly exported to European Union markets and canned tuna is distributed all over the world, it includes domestic market.

## 7. FUTURE PROSPECT OF THE FISHERY

El Salvador tuna fleet is currently composed by four purse seiners, and there is no plan for increasing the number of vessels operating in the WCPFC Convention area.

### ADDENDUM TO THE TEMPLATE TO BE USE BY CCMS FOR ANNUAL REPORT PART 1-NATIONAL FISHERY REPORT

#### SPECIFIC INFORMATION TO BE PROVIDED IN PART 1 AS REQUIRED BY CMMS

1. CMM 05-03, North Pacific Albacore para 4

El Salvador does not catch North Pacific Albacore, the objective fisheries are tropical tunas, specifically Yellowfin tuna (*Thunnus albacares*), Skipjack tuna (*Katsuwonus pelamis*) and Bigeye tuna (*Thunnus obesus*).

2. CMM 06-04 South West striped Marlin paragraph 4

Salvadoran vessels don't fish striped marlin in the area south of 15°S, the main area where our vessels operate is shown in Figures 3 and 3a.

3. CMM 07-04, Seabirds paragraph 9



El Salvador does not have longline vessels in the WCPO area.

4. CMM 09-03, Swordfish paragraph 8

No swordfish was reported to be caught during 2015 by Salvadoran flagged vessels.

5. CMM 10-05, south Pacific albacore paragraph 4

El Salvador does not catch North Pacific Albacore either as target specie or as bycatch, the objective fisheries are described in the figure 4.

**DATA GAP**

It must be mentioned that whenever our vessels hire an Observer from WCPFC Programs we as State flag do not have access to the collected data. This creates a data gap for us as we miss events that could affect our status within the Commission.