National Report of Kenya (2010)

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INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

ANNUAL FISHERIES INFORMATION

In accordance with IOTC Resolution 10/02, scientific data was provided to the IOTC by 30 June [Current Year] for all fleets other than longline. Longline data was provided on 30 Dec [Previous Year] for final data from longline fleets operating in the high seas, and 30 June [Current Year] for provisional data.	[answer YES or NO] – [add date provided to the Secretariat] [answer YES or **NO**] – [add date provided to the Secretariat]
During the year, we had a problem with one of the longliners whose status has now changed and is no longer Kenya flagged	

ABSTRACT/SUMMARY

During the year 2009, the tuna catches by artisanal fishermen reduced slightly to **295** tons from the **319** tons. The same was observed in the total catch by the fishers with 2009 level at **8,851** tons compared **9,585** tons landed in 2008. The reduction was also observed from the longliner which caught 359 tons compared to 411 tons in 2008. The number of vessels in the Kenyan artisanal fleet has been on the increase as do the gear mostly targeting tuna and tunalike species. The main target gears for tuna fishery were longline hooks, handlines and trolling lines. During the year, longline sharks catches were reported for two shark species (The Mako and Blue shark) while the rest of the sharks were reported as combined. Logbook validation was carried out this year following the introduction of a Vessel Monitoring System. The number of vessels that called to the Port of Mombasa reduced mainly due to piracy and due many of them operating far away from the port. During the year, only four purse seiners delivered their catch directly to the cannery while the rest came through containers and reefers. The tuna landings reduced from 16,000 tons to 7000 tons during the year making it the worst landings in the near past, a sign of the impact of piracy in the region. The artisanal data collection system saw the introduction of trial sampling as a means of improvement in the data capture. A database was developed and data collector trained to undertake sampling in their daily routines. Recreational fishery landed 126 tons of which 22 tons were tuna. The most dominant tuna species caught was yellowfin the made up 82% of the tuna catches.

BACKGROUND/GENERAL FISHERY INFORMATION

The Kenyan coastline stretches 640Km from Vanga at the Tanzanian border to Kiunga on the Somali border. Fisheries activities are concentrated along the inshore waters by small-scale fishermen and few offshore commercial fishers, mainly shrimp trawlers. Currently the annual marine fish production landed from inshore waters fluctuates between 7,000 and 8,000 tons. Most fishermen are artisanal, and operate around the reef because they lack motorized boats necessary for venturing into deeper waters beyond the reefs. The fishery especially targets the reef fish that in all their variations are caught using a multitude of gear types. Fishing during the SE Monsoon season is low as the fishers are not able to venture out due to the rough sea conditions. Kenya fishery targeting tuna and tuna like species is exploited by artisanal, sportsfishing and Industrial longlining. The recreational fishery in Kenya is

dominated by the Big game fishing that mostly targets the Billfish. Alongside these, three species of tuna (Yellowfin, Bigeye and Skipjack) are the ones caught mostly by the sports fishermen. 70% of the professional recreational catch is in Malindi and Watamu sports fishing clubs. Apart from the two Kenyan Longliners, foreign EU purseseiners also fish in the Kenyan EEZ

CATCH BY SPECIES IN TONS

The artisanal catches in Kenya are usually aggregated together. The data collection system has not been separating the catch as per the gear. This will however change after the new data collection system through sampling starts. The catch by species is however tabulated below.

Species	**2005**	**2006**	**2007**	**2008**	**2009**
Sailfish	111	148	84	105	160
Kingfish	110	82	117	77	75
Tuna	336	233	204	319	295
Sharks & Rays	253	189	174	183	232
Others NEI	6,009	6,303	7,309	8,051	7,164

Table 1: Annual catch by gear and effort estimates by gear and primary species, for the IOTC area of competence from 2005 to 2009.

The catch by the Kenyan longliner in 2009 was **359** tons compared to **411** tons landed during the previous year. The main target species by the longliner is swordfish although yellowfin tuna and bigeye form part of the catch. The catches of bigeye and yellowfin were **9** and **17** tons respectively after **269** fishing days. All the fishing was carried out between the Kenyan and Tanzanian EEZs. The catches for the previous three years are tabulated below.

Catches in tons	**2007**	**2008**	**2009**
Swordfish	210	277	288
Bigeye tuna	17	23	9
Yellowfin tuna	11	22	17
Sharks	205	71	44
Others	2	18	1
Total	**445**	**411**	**359**

Table 2: Comparison between the 2007, 2008 and 2009 longline catches

The artisanal catches reduced slightly from the 2008 level and the figure below showsw the historical catches from 2002

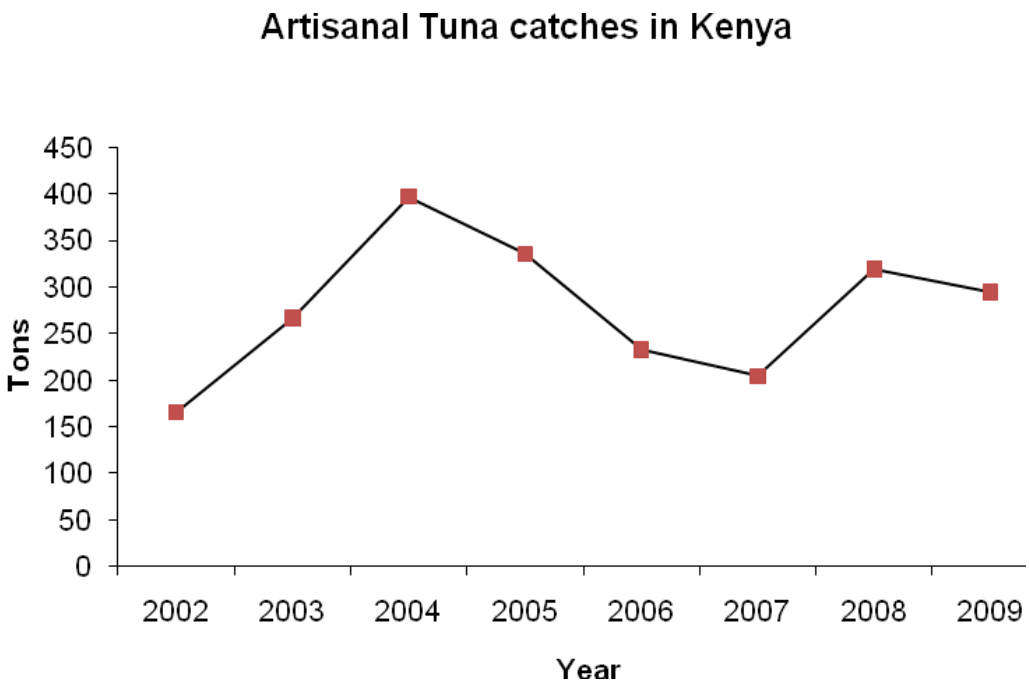

Figure 1: Historical annual catch for the [National fleet], by gear and primary species, for the IOTC Convention Area

FLEET STRUCTURE

During the year 2009, Kenya had 2 longliners operating in the IOTC area of competence. The artisanal fleet was composed of different vessel types with two being the main target for tuna. These are the outrigger vessels and Dhows. The main gears targeting tuna were Handlines, Longlines, Trolling lines, Monofilament nets and Gillnets. The composition of these vessels and gears is as tabulated below

Vessels & Gears	**2004**	**2006**	**2008**
Dhows	383	470	629
Outrigger boats	136	154	195
Gillnets	3,917	3,336	2,150
Longline hooks	10,908	8,224	9,009
Handlines	5,682	6,540	4,132
Trolling line	608	500	625
Monofilament nets	902	1,050	1,472

Table 3: of vessels operating in the IOTC area of competence, by gear type and size, for the history of the fleet.

ECOSYSTEM AND BYCATCH ISSUES

The shark catches from the Kenyan longliner are only separated for two species, the Mako and Blue sharks. The rest are reported as other sharks. The catches for the past three years are tabulated below.

YEAR	**MAKO SHARKS**	**BLUE SHARKS**	**OTHER SHARKS**
2007	2,035	2,427	200,538
2008	3,354	4,408	63,238
2009	6,093	3,514	34,393

Table 4: Total number of sharks, by species, retained by the longliner in the IOTC area of competence from 2007 to 2009.

NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

a. Logbook data collection

Logbook data collection in the country has been going on for the past three years since 2007. Logbook verification was started this year after the Vessel monitoring System was installed. However, the vessel that was being tracked was hijacked by the pirates thereby impacting on the operation. The monitoring of the other longliner was really difficult and culminated with the vessel changing its flag status.

b. Vessel Monitoring System

Vessel Monitoring System commenced this year and is currently operational.

c. Scientific Observer programme

Scientific Observer programme has only been carried out only in the shrimp trawling vessels since 2002. Before the stoppage of the fishery three years ago, each of the seven trawling vessels had an observer on board whenever trawling in the Kenyan waters. The coverage of the longliners has not yet been undertaken so far, mainly due to the piracy threat.

d. Port sampling programme

Port sampling programme has been going on since 2008. The number of vessels calling to port has drastically reduced with only four purse seiners coming to port in the year 2009. The catch from the four purse seiners was mainly composed of the small Yellowfin, Bigeye and Skipjack as shown in the figure below.

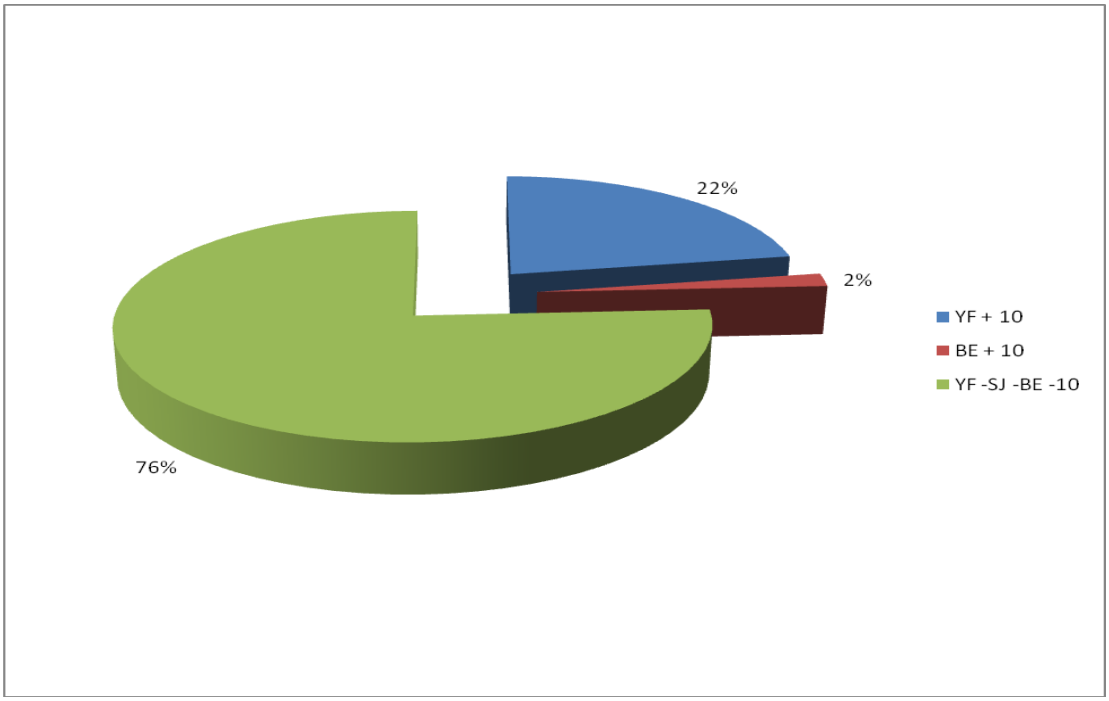

Figure 2: Catch composition of the purse seine landings in 2009

e. Tuna landings at the cannery

For the third year in row, the deliveries at the at the cannery were by by purse seiners. The rest was either by reefer vessels or by containers as tabulated below.

Type of Delivery	**Amount in tons**
Purse Seiner	3,327
Reefer (Indian Ocean)	1,269
Container	1,301
Reefer Atlantic Ocean	1,319
Total	**7,216**

Table 5: Mode of delivery at the Cannery

As per the previous years, the tuna deliveries at the cannery continued decreasing. For the year 2009. Since most of the purse seiners have relocated from the Somali area, the unloading at Mombasa have really decreased in the past three years. This has led to sourcing of fish from the Atlantic ocean at least to keep the factory operational. For the year 2009, the unloading were less than half that of the year 2008. The deliveries for the past four years are shown below.

YEAR	**'000 TONS**
2006	23.5
2007	17.4
2008	16.0
2009	7.2

Table 6: Tuna deliveries at the cannery for the past four years

Fish landing composition

The landings at the cannery were mainly composed of yellowfin larger than 10 Kgs making up nearly 2/3 of the total deliveries. The overall species/size composition is shown in the figure below.

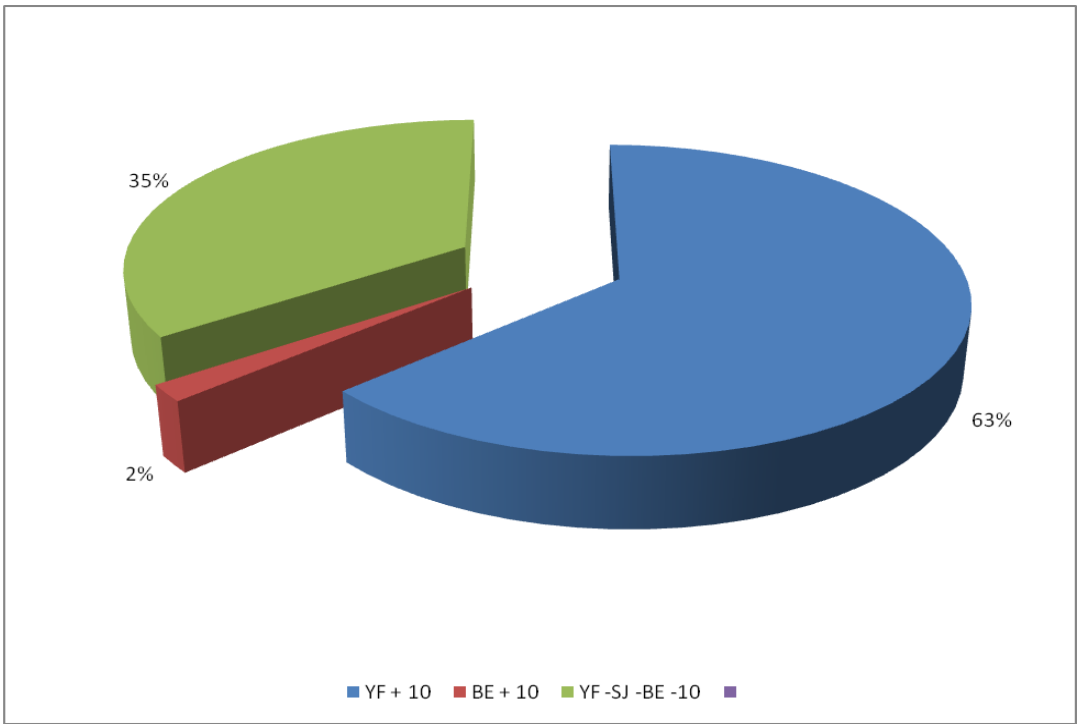

Figure 3: Size and species composition of the all tuna landings

f. Overhaul of the artisanal data collection system

In order to ensure the data collection attains the required 5% sampling, Kenya is in the process of overhauling the data collection system. A database for this system has been developed and data collectors trained in sampling and are already carrying out trial data collection from July 2010. The two new system will continue alongside the previous data collection for the year 2011 after which the new system will be adopted for data collection.

RECREATIONAL FISHERY

Most of the recreational fishery in Kenya is by the Big game fishery mostly targeting Sailfish, Marlins and Swordfishes. During the year 2009, 126 tons was landed and composed of considerable amounts of tuna, mainly the yellowfin tuna. The catches of tuna for the year 2009 are shown in the table below.

Species	Kgs
Yellowfin Tuna	18,144
Bigeye Tuna	29
Skipjack Tuna	769
Longtail Tuna	3,329

Table 7: Sports fishing Tuna Catches

The catches for the year 2009 were mostly composed of the sailfish and Yellowfin tuna which combined made up 50% of the total catch. The catch composition was as shown in figure 2.