



## **SEYCHELLES FISHING AUTHORITY**

### **SEYCHELLES TUNA BULLETIN**

**THIRD QUARTER 1990**

Prepared By Seychelles Fishing Authority

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The Seychelles Fishing Authority (SFA) was incorporated in August 1984 by the Seychelles Fishing Authority (Establishment) Act. This body was formed in view of the need to develop the fishing industry to its fullest potential. It is a parastatal organization with autonomous legal and financial status, supervised by a board of directors appointed by the President.

The Ministry of Agriculture and Fisheries is responsible for policy directives in fisheries related matters, and SFA is its executive arm in all fisheries activities. Responsibilities include: assessment and management of the fishery resources, assist in conducting negotiations with foreign fishing fleets, coordination and support of local fishing fleet, management of the fishing port, development of gear technology, support services and coordination of manpower training in the fishery sector. SFA is organised essentially into the Resource Management Division, the Research Division and the Fishing Port Division.

This bulletin catch statistics of purse seiners and longliners fishing tuna in the Western Indian Ocean was compiled by the Research and Resource Management Divisions.



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**SUMMARY: JULY - SEPTEMBER 1990**

The number of purse seiners active in the Western Indian Ocean increased from a low of 41 at the end of the last quarter to 45 vessels in September.

Fishing results improved slightly with daily catch rates for the third quarter averaging 22 MT, increasing from 17.7 MT/day in August to 31.5 MT/day in September. These results are considerably better than those for the same period last year when it averaged 16 MT/day.

The fishing pattern for the third quarter showed that fishing effort was concentrated between 5 degrees North and 5 degrees South of the Equator in the vicinity of the Northern sector of the Seychelles EEZ.

Fifty five percent of the third quarter catch was made up by skipjack tuna compared to 58% for the second quarter. This is partly due to the high catch of yellowfin during July (76% of total catch). However the proportion of yellowfin tuna declined sharply to 22% in August and 15% in September.

The cumulative catch by purse seiners operating in the Western Indian Ocean as determined from seiner logbooks received by the 30th of September 1990, now stands at 121,390 MT.

**RESUME : JUILLET - SEPTEMBRE 1990**

Le nombre de senneurs actifs dans l'océan Indien occidental est passé de 41 navires seulement à la fin du dernier trimestre, à 45 en Septembre.

Les résultats de pêches se sont sensiblement améliorés avec un taux moyen de prises par jour pour le troisième trimestre de 22 tonnes, passant de 17.7 tonnes par jour en Août à 31.5 tonnes par jour en Septembre. Ces résultats sont nettement supérieurs à ceux enregistrés l'année passée pour la même période, puisque l'on obtenait une moyenne de 16 tonnes par jour.

La zone de pêche pour le troisième trimestre montre que l'effort de pêche s'est concentré entre 5 degrés au nord de l'équateur, et 5 degrés au sud, à proximité du secteur nord de la ZEE seychelloise.

Le Listao représente 55% des prises du troisième trimestre, à comparer avec 58% pour le second trimestre. Ceci est en partie dû aux importantes prises d'Albacore de Juillet (76% des prises totales). Cependant, la proportion d'Albacore a décrue rapidement à 22% en Août, puis 15% en Septembre.

Les prises cumulées des senneurs opérant dans l'océan Indien occidental, d'après les livres de bord reçus au 30 Septembre 1990, atteignent à ce jour 121 390 tonnes.

RESUMEN : JULIO - SEPTIEMBRE 1990

El número de cerqueros activos en el Oceano Indico Occidental se ha incrementado desde cuarenta y uno, al final del pasado trimestre, hasta cuarenta y cinco en Septiembre.

Los resultados de la pesquería han mejorado sensiblemente, con unas cuotas de captura diarias, para el tercer trimestre, que median las 22 TM, incrementándose desde 17.7 TM/dia en Agosto a 31.5 TM/dia en Septiembre. Este balance resulta considerablemente mejor que el que se obtubo para el mismo periodo del año pasado; en el que la media fue de 16 TM/dia.

La distribución zonal de la pesquería para el tercer trimestre, muestra que el esfuerzo pesquero se ha concentrado entre los 5 grados Norte y los 5 grados Sur, respecto del Ecuador, en las proximidades del sector norte de la ZEE de Seychelles.

El cincuenta y cinco por ciento de la captura del tercer trimestre se realizó sobre Listado, contrastandose con el cincuenta y ocho por ciento del segundo trimestre. Esto puede deberse a la elevada captura de Rabil durante el mes de Julio (75% del total de la captura). Sin embargo la proporción de Rabil declinó linealmente del 22% en Agosto al 15% en Septiembre.

El total de la captura acumulada por los cerqueros que operan en el Oceano Indico Occidental, obtenida a partir de los cuadernos de bitacora recibidos hasta el treinta de Septiembre, es actualmente de 121,390 TM.

## PURSE SKINERS

Table 1 shows monthly catch and effort statistics from January to September 1990 for all purse seiners combined. Tables 2 and 3 represent catch statistics for French and Spanish purse seiners respectively.

Total catch for each trip has been taken from records of transhipment whenever complete unloading occurred in the Seychelles, otherwise total catch has been estimated from logbooks containing daily catch statistics. The species composition has been estimated from logbooks. Since transhipment records and vessels logbooks both give unreliable estimates for lesser-caught species, e.g bigeye and albacore, these species are not reported separately but are included in estimates of the total catch. Catches have been estimated in net weight rather than dry weight.

In the statistical tables "Vessels Covered" refer to those vessels for which a logbook has been received containing at least one day's fishing during the month. "Days fished" refers to days spent at sea less days drifting due to mechanical breakdowns or other work stoppages. Days spent drifting by flotsam while awaiting a set are included in "days fished". Historical data is periodically revised; statistics in the present volume supersede those published previously.

Daily catch rates (of 22,6 MT/day) obtained for the third quarter of 1990 indicated a substantial increase from the daily catch rate of 17 MT/day for the same period in 1989. Good catches of yellowfin in July accounted to some extent for the improved overall catch rates. Yellowfin tuna represented 83% of the catch for July, however catch rates for yellowfin dropped considerably in August and September (22% and 11% respectively) as is expected during this period of the year. The total percentage of tuna catch for the third quarter 1990, is 39% yellowfin and 58% skipjack tuna, with other species representing only 3 percent.

Transhipment statistics are presented in Table 4. The data is taken from receipts of the stevedoring company (which are countersigned by representatives of the purse seiners and carrier vessels). Since the date of unloading is used rather than the date fish were caught, the monthly totals in Table 4 will differ from those of Table 1.

The number of purse seiners transhipping in Port Victoria during the third quarter increased to between 27 and 29 vessels. This is marginally lower than the statistics for the same period last year, however the number of tuna transhipped is 6 percent higher for the third quarter 1990.

The cumulative total catch transhipped in Port Victoria up to September 1990 amounted to 108,322 MT. This represents a 30% decrease compared to the same period in 1989.

The number of purse seiners active in the Western Indian Ocean from January 1989 to September 1990 is listed by country of registration in Table 5. The vessels active from October 1989 to September 1990 are listed in Table 6. The figures indicate a slight rise in active purse seiner from 41 in June to 45 in September. This brings the number of purse seiners operating in September to 21 Spanish, 14 French, 4 Soviet, 3 Japanese, 2 Mauritian and one Panamanian vessel.

## **LONGLINERS**

Table 7 gives the number of longliners licensed to fish in the Seychelles EEZ and the transhipment activity from January 1989 to September 1990. In this volume transhipment statistics for longliners have been revised with statistics gathered by the Port Authorities covering each longliner calling in the Seychelles. In this Table the row labelled "TOTAL" refers to the number of vessel-months licensed and the number of calls for the year, whereas the row labelled "vessels" refers to the number of vessels licensed or calling.

The number of licensed longliners operating during the third quarter was 37, representing 35 Korean vessels, one Japanese and one Taiwanese vessel. This indicates a drop of just under 60% in the number of longliners operational in Seychelles Water as compared to the same period in 1989. Up to the end of September 1990, 107 vessels were licensed which totals 171 vessel months, these figures also indicate a drop when compared to the same period last year.

The cumulative transhipment for all longliners (30 Korean, 6 Japanese and 1 Taiwanese) up to September amounts to 4,699 MT. This figure represents a decrease of 35% over transhipment figure up to the third quarter of 1989. From the last three years data there is a trend towards decreased activity of longliners in Seychelles EEZ.

**Table 1. Catch Statistics For Purse Seiners in the Western Indian Ocean.**

(Units: catch MT, percentage in brackets, catch rate MT/day)

MONTH	VESSELS ACTIVE	VESSELS COVERED	DAYS FISHED	CATCH RATE	YELLOWFIN	Skipjack	TOTAL	CUMUL TOTAL
Jan/89	49	47	873	20.47	9767 (55)	7599 (43)	17874	17874
Feb	49	47	1076	21.71	10955 (47)	12006 (51)	23358	41231
Mar	47	45	923	36.76	11864 (35)	21755 (64)	33930	75162
Apr	46	45	915	25.35	6674 (29)	15948 (69)	23194	98356
May	45	42	936	13.05	2923 (24)	9200 (75)	12216	110572
Jun	44	41	1017	13.66	6312 (45)	7467 (54)	13896	124468
Jul	46	45	1010	10.74	1332 (12)	9379 (86)	10850	135318
Aug	46	46	1077	12.61	3007 (22)	10270 (76)	13584	148902
Sep	49	49	1121	24.70	5035 (18)	22407 (81)	27694	176596
Oct	49	49	1088	25.92	6472 (23)	21187 (75)	28198	204794
Nov	50	50	1188	10.01	2860 (24)	8879 (75)	11891	216685
Dec	47	47	1218	8.26	3938 (39)	5909 (59)	10060	226745
Total			12442	18.22	71141 (31)	152006 (67)	226745	
Jan/90	49	49	1280	10.98	7188 (51)	6634 (47)	14053	14053
Feb	54	51	1129	16.41	12475 (67)	5929 (32)	18525	32578
Mar	54	50	1229	16.11	8394 (42)	11126 (56)	19797	52375
Apr	54	47	983	14.68	3349 (23)	10963 (76)	14429	66804
May	52	43	942	7.86	1235 (17)	6117 (83)	7403	74207
Jun	41	38	874	13.31	9637 (83)	1797 (15)	11632	85839
Jul	44	39	867	17.73	11735 (76)	3043 (20)	15370	101209
Aug	44	33	682	17.03	2500 (22)	8932 (77)	11614	112823
Sep	45	20	272	31.49	1259 (15)	7022 (82)	8566	121390
Total			8258	14.70	57773 (48)	61563 (51)	121390	

**Table 2. Catch Statistics For French Purse Seiners.**  
 (Units: catch MT, percentage in brackets, catch rate MT/day)

MONTH	VESSELS ACTIVE	VESSELS COVERED	DAYS FISHED	CATCH RATE	YELLOWFIN	Skipjack	TOTAL	CUMUL TOTAL
Jan/89	20	20	358	21.26	4755 (62)	2690 (35)	7611	7611
Feb	20	20	451	17.44	5381 (68)	2366 (30)	7865	15476
Mar	20	20	411	35.14	5590 (39)	8586 (59)	14444	29919
Apr	20	20	436	21.39	3079 (33)	6161 (66)	9325	39244
May	19	19	411	13.75	1571 (28)	4048 (72)	5650	44894
Jun	18	18	399	10.19	1808 (44)	2257 (56)	4064	48959
Jul	18	18	393	8.14	221 (7)	2941 (92)	3199	52158
Aug	16	16	410	10.28	917 (22)	3252 (77)	4213	56371
Sep	19	19	412	27.42	2166 (19)	9129 (81)	11296	67667
Oct	19	19	420	24.72	2525 (24)	7769 (75)	10384	78051
Nov	19	19	441	6.10	552 (21)	2117 (79)	2692	80743
Dec	19	19	492	6.82	724 (22)	2604 (78)	3356	84099
<b>Total</b>			<b>5834</b>	<b>16.71</b>	<b>29290 (35)</b>	<b>53917 (64)</b>	<b>84099</b>	
Jan/90	20	20	537	9.48	3024 (59)	1990 (39)	5089	5089
Feb	20	19	447	16.53	5214 (71)	2105 (28)	7389	12478
Mar	19	19	426	17.93	6201 (82)	1267 (17)	7638	20116
Apr	19	17	361	13.41	2353 (49)	2444 (50)	4842	24958
May	18	15	279	9.45	159 (6)	2464 (93)	2637	27594
Jun	14	14	324	11.74	3227 (85)	547 (14)	3802	31397
Jul	15	14	282	15.58	3930 (89)	211 (5)	4394	35791
Aug	14	12	245	14.40	793 (22)	2701 (77)	3529	39320
Sep	14	7	83	28.46	197 (8)	2037 (86)	2362	41682
<b>Total</b>			<b>2984</b>	<b>13.97</b>	<b>25176 (60)</b>	<b>15766 (38)</b>	<b>41682</b>	

**Table 3. Catch Statistics For Spanish Purse Seiners, Including Txori Aundi.**  
 (Units: catch MT, percentage in brackets, catch rate MT/day)

MONTH	VESSELS ACTIVE	VESSELS COVERED	DAYS FISHED	CATCH RATE	YELLOWFIN	Skipjack	TOTAL	CUMUL TOTAL
Jan/89	21	21	375	22.15	4498 (54)	3576 (43)	8305	8305
Feb	21	21	478	25.71	3802 (31)	8270 (67)	12290	20595
Mar	21	21	435	41.02	5863 (33)	11939 (67)	17846	38440
Apr	20	20	398	32.91	3445 (26)	9163 (70)	13096	51537
May	20	19	434	12.97	1159 (21)	4407 (78)	5628	57165
Jun	19	19	512	18.80	4429 (46)	5079 (53)	9626	66790
Jul	20	20	480	14.59	946 (14)	5978 (85)	7004	73795
Aug	23	23	491	15.75	1703 (22)	5817 (75)	7733	81528
Sep	24	24	575	24.73	2463 (17)	11659 (82)	14217	95745
Oct	24	24	528	29.98	3585 (23)	11919 (75)	15830	111575
Nov	24	24	584	13.92	1846 (23)	6212 (76)	8130	119705
Dec	22	22	576	9.75	2862 (51)	2681 (46)	5617	125322
Total			5866	21.36	36601 (29)	86619 (69)	125322	
Jan/90	21	21	555	11.28	3748 (68)	2480 (48)	6262	6262
Feb	21	20	458	19.96	6623 (72)	2525 (28)	9150	15412
Mar	21	19	500	19.57	1277 (13)	8364 (85)	9785	25197
Apr	22	20	405	18.84	526 (7)	7079 (93)	7631	32828
May	20	19	477	8.75	932 (22)	3228 (77)	4172	37000
Jun	21	19	444	15.68	6191 (89)	605 (9)	6926	43926
Jul	20	19	463	21.10	7495 (77)	1964 (20)	9768	53693
Aug	21	16	351	20.30	1483 (21)	5507 (77)	7126	60819
Sep	22	11	141	35.66	771 (15)	4222 (84)	5029	65848
Total			3794	17.36	29046 (44)	35975 (55)	65848	

**Table 4. Transhipment Statistics. (Units: MT)**

MONTH	PURSE SEINERS	YELLOWFIN	Skipjack	BIGEYE	ALBACORE	TOTAL	CUMUL TOTAL
Jan/89	37	12566	12247	97	0	24910	24910
Feb	34	11157	6481	204	13	17855	42765
Mar	41	11078	18494	139	1	29712	72477
Apr	36	7625	16348	378	0	24351	96828
May	15	2025	5276	171	0	7472	104300
Jun	19	2937	6090	2	0	9029	113329
Jul	30	3150	7921	4	0	11075	124404
Aug	24	1689	11199	0	0	12888	137292
Sep	32	2895	16858	46	0	19801	157093
Oct	39	4850	23882	86	0	26818	185911
Nov	31	3447	13422	3	0	16872	202783
Dec	34	2500	6836	62	0	9398	212181
Total		65919	145054	1194	14	212181	
Jan/90	29	4838	6732	41	0	11611	11611
Feb	35	8596	6571	66	0	15235	26846
Mar	30	10914	6832	81	0	17827	44673
Apr	19	4372	4796	172	0	9340	54013
May	6	267	1247	1	4	1519	55532
Jun	18	3347	2795	106	0	6246	61780
Jul	29	12105	3364	337	104	15910	77690
Aug	27	7109	5336	354	44	12843	90533
Sep	28	4246	13487	56	0	17789	108322
Total		55796	51160	1214	152	108322	

**Table 5. Purse Seiners Active in the Western Indian Ocean,  
By Country of Registration.**

MONTH	FRANCE	SPAIN	MAURITIUS	PANAMA	USSR	JAPAN	TOTAL
Jan/89	20	20	3	1	4	1	49
Feb	20	20	3	1	4	1	49
Mar	20	20	3	1	3	-	47
Apr	20	19	3	1	3	-	46
May	19	19	3	1	3	-	45
Jun	18	18	3	1	4	-	44
Jul	18	19	3	1	4	1	46
Aug	16	22	2	1	3	2	46
Sep	19	23	2	1	2	2	49
Oct	19	23	2	1	1	3	49
Nov	19	23	2	1	2	3	50
Dec	19	22	2	-	1	3	47
Jan/90	20	21	2	-	2	4	49
Feb	20	21	1	-	8	4	54
Mar	19	21	2	-	8	4	54
Apr	19	22	2	-	8	3	54
May	18	20	2	-	9	3	52
Jun	14	20	2	1	1	3	41
Jul	15	19	2	1	4	3	44
Aug	14	20	2	1	4	3	44
Sep	14	21	2	1	4	3	45

Table 6. Purse Seiners Active In the Western Indian Ocean.

Longline Activity in the Seychelles Islands: HT

TOKELAU VESSELS		JAPANESE VESSELS		TAIWANESE VESSELS		MAURITIUS VESSELS	
LICENSING CALL UNLOADING TRANSHIPMENT		LICENSING CALL UNLOADING TRANSHIPMENT		LICENSING CALL UNLOADING TRANSHIPMENT		LICENSING CALL UNLOADING TRANSHIPMENT	
26	12	9	10/0	8	7	6	398
11	7	14	1594	7	12	9	902
3	8	5	816	11	7	2	425
2	8	5	650	4	2	1	152
3	10	5	320	1	1	1	0
25	6	2	295	3	1	1	158
19	10	4	310				0
34	1						0
27	6						0
11	7	2	200				0
36	6	5	660				0
20							0
228	91	49	5815	48	45	25	2461
109	68	41		19	29	18	8
107	75	30	3864	40	21	6	715
117	75	30					120
12	1	1					0
31	29	15	33	6			0
78	31	29	4699				2