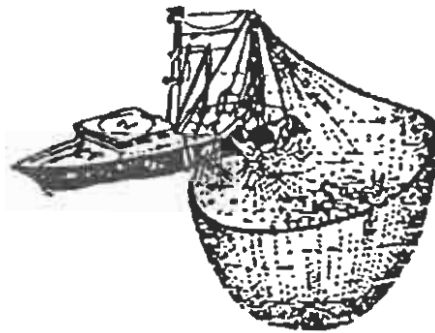


# SEYCHELLES FISHING AUTHORITY

P.O. Box 449  
Fishing Port  
Mahé  
Seychelles  
Tel: 224597/224521  
Tlx: 22284 SFA SZ  
Fax: 224508

## SEYCHELLES TUNA BULLETIN YEAR 1993



Prepared by: SEYCHELLES FISHING AUTHORITY

## SEYCHELLES FISHING AUTHORITY

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 organisation with autonomous legal and financial status, supervised by a board of directors appointed by the President.

The Ministry of Agriculture and Marine Resources is responsible for policy directives in fisheries related matters, and SFA is the executive arm of the government in all fisheries activities.

Responsibilities include:

- assessment and management of the fisheries resources;
- assistance in conducting negotiations with foreign fishing fleet operators;
- coordination and support of fishing ventures and owner/operators;
- management of the fishing port;
- development of gear technology;
- coordination of manpower training in the fishing sector.

SFA is organised essentially into:

- the Resource Management Division;
- the Research Division
- the Fishing Port Division.

This volume on catch statistics of purse seiners and longliners fishing tuna in the Western Indian Ocean is the second compiled by the Research Division using the Newtuna program made in FoxPro by the Indo Pacific Tuna Programme based in Sri Lanka. We are grateful to IPTP their assistance in replacing the old tuna statistics program which had become unserviceable and to Association Thonière for financing this.



Philippe Michaud  
Managing Director

## SUMMARY 1993

This volume of tuna statistics for the West Indian Ocean (WIO) is the second to be based on the "Newtuna" program. It includes the figures for 1992 as well as 1993. Due to the necessity of rapidly publishing 1993 statistics only one volume has been produced for the whole year and not one for each quarter. In future the system of publishing a Tuna Bulletin each quarter will be reverted to. Due to the inclusion of trips which started at the end of 1992 but which finished in early 1993 the 1992 total catch has been revised upwards from 273,852 Mt, published in the last Tuna Bulletin, to 278,218 Mt. The initial estimate for the total WIO purse seine tuna catch for 1993 is 263,918 Mt. However, this figure may also be revised upwards when trips starting in late 1993 and finishing in early 1994 are included in the first quarterly Tuna Bulletin of 1994.

The number of purse seiners fishing in the WIO reached a maximum of 55 in February 1993. Fishing activity was only very slightly greater in the first six months of the year when some 7,310 days were fished compared to 6,919 days in the second six months. The mean catch rate was 19.13 Mt/fishing day in 1993 compared with 19.55 Mt/fishing day in 1992. The most active month was January when 54 vessels accumulated 1,420 fishing days or 26.29 fishing days/vessel. The least active month was December when 30 vessels reported fishing 474 days or only 15.8 fishing days/vessel (this figure is likely to change in the next Tuna Bulletin when more data are included). Compared to 1992 the proportion of yellowfin increased slightly from 35% of the catch to 38% in 1993. Skipjack has declined slightly from 55% to 53%. Readers should be aware that this catch composition is NOT scientific. It is based on the assessment of the fishermen who write the fishing log and maybe biased.

A total of 188,957 Mt of tuna was transhipped by purse seiners in Port Victoria in 1993. This represents about 72% of the estimated WIO purse seine tuna catch for 1993. This is a considerable change from 1992 when only 58% (with revised figures) of the WIO purse seine tuna catch was transhipped in Victoria. It should be noted that the figures in table 3 represent the transhipment of vessels whose trips ended in the month indicated NOT the actual month of physical

transshipment of the catch. The most busy month for transshipment was October when 31 vessels landed 24,224 Mt. This was an average of 781 Mt / vessel. The least busy month was May when 13 vessels landed 6,111 Mt or 470 Mt/vessel.

## Résumé: 1993

Ce numéro du bulletin statistique de la pêche thonière dans l'Océan Indien Occidental (OIO) pour l'année 1993 est la seconde édition réalisée à partir du programme "NEWTUNA". Les données de 1992 ainsi que 1993 y sont incluses. Vu la nécessité de publier rapidement les statistiques pour l'année 1993, seul un numéro sera édité pour l'année complète et non un par trimestre. A l'avenir, la publication de ce bulletin se fera de nouveau, trimestriellement. Du fait des marées ayant débutées fin 1992 et fini début 1993, la prise totale de thon pour L'OIO pour 1993 a été revue à la hausse: de 273.852 MT comme indiqué dans le dernier bulletin, le chiffre définitif est de 278.218 MT pour l'année 1992. La première estimation de la prise totale de thon dans l'OIO pour l'année 1993 est de 263.918 MT. Cependant, et pour les mêmes raisons qu'indiquées plus haut, ce chiffre sera revue à la hausse et publié dans le premier tuna bulletin trimestriel pour 1994.

Le nombre maximum de senneurs en activité dans l'OIO était de 55 en février 1993. L'activité de pêche fut légèrement supérieure durant le premier semestre (7.310 jours de pêche) que durant le second semestre (6.919 jours de pêche). La CPUE moyenne pour 1993 (capture par unité d'effort) fut de 19,13 MT/ jour de pêche contre 19,55 MT/ jour de pêche en 1993. Le mois le plus actif fut janvier ou 54 senneurs accumulèrent 1420 jours de pêche soit 26,29 jours de pêche/navire. Le moins actif fut décembre avec 30 senneurs totalisant 474 jours de pêche soit 15,8 jours de pêche par senneur (ces derniers chiffres seront rectifiés dans le prochain bulletin). Comparée à 1992, le pourcentage d'albacore a légèrement augmenté, de 35% des prises en 1992 à 38% en 1993. Les prises de listao ont diminué de 55% à 53% en 1993. Les lecteurs sont avisés que la composition des captures n'est pas scientifique. Celle-ci est basée sur l'estimation faite dans les fiches de pêche par les pêcheurs et n'est donc d'approximative.

Un total de 188.957 MT de thon a été transbordé en 1993 par les senneurs à Port Victoria. Ceci représente environs 72% des captures estimées des senneurs dans l'OIO et constitue un accroissement important vis à vis de 1992 ou seulement 58% des capturés (corrigés) avait été transbordés. Il doit être noté que les données de la table 3 représentent

les transbordements de senneurs dont les marées finis dans le mois et n'indiquent pas le mois actuel du transbordement réel des captures. Le mois le plus actif pour le transbordement a été Octobre avec 24.224 MT débarqué par 31 senneurs. Ceci représentent une moyenne de 781 MT par navire. Le mois le moins actif a été le mois de mai avec 6.111 MT débarquées par 13 navires ou 470 MT par navire.

## Sumario del 1993

Esta volúmen de boletín estadístico atúnero para el Océano Indico Occidental es el segundo basado en el programa del "NEWTUNA". Esto Incluye las figuras del 1992 así como las del 1993. Debido a la necesidad de publicar de forma rápida las estadísticas del 1993, entonces un sólo volúmen ha sido producido por el año entero y ninguna por cada cuarta como era el caso anteriormente. Sin embargo el sistema de publicación en el futuro sera revertido como antes ó sea uno por cada cuarta.

Debido a la inclusión de los viajes que empezaron a finales del 1992 pero que terminaron a inicios de 1993, la captura total en 1992 revisado, ascendentemente desde 273,852 mt, publicado en el último boletín atúnero hasta 278,218 mt. La estimación inicial por la captura total de los cerqueros del WIO por el año 1993 es de 263,918 mt. Sin embargo ésta figura también puede ser revisada acendentemente en los viajes empezando tarde en 1993 y terminando temprano en 1994 son incluido en la primera cuarta del boletín atúnero de 1994.

El número de cerqueros activos en el Océano Indico Occidental llegó a un máximo de 55 barcos. La actividad pesquera fue un poco mayor en los primeros seis meses del año con unos 7,310 días de pesca comparado con 6,919 días en los segundo seis meses. La captura era de 19.13 mt por días de pesa en 1993 comparado con 19,55 mt por días pe pesca en 1992. Enero fué el mes de mayor actividad con 54 barcos acumulado 1,420 días de pesca ó 26,29 días de pesca por barco. El mes de menos actividad fué diciembre con 30 barcos relatado y pescaron 474 días con solamente 15,8 días de pesca por barco. Esta figura probablemente cambiará cuando más datos haya incluido. Haciendo una comparación del 1992 la proporción de albacora (*Thunnus albacares*) incrementó un poco en la captura de 35% a 38% en 1993. El bonito (*Katsuwonus pelamis*) descendió de 55% a 53%. Leyentes debería tener en cuenta de que esta resúmen de captura no proviene de datos científicos sino que está a base de amillaramiento de los pescadores y entonces puede ser predispuesto.

Un índice total de 188,957 mt de atún fue tranbordado por cerqueros en el puerto de Victoria en 1993. Esto

representa una estimación de un 72% de las capturas de los cerqueros en el Océano Indico Occidental en 1993. Esto representa también un considerable cambio desde 1992 con solo un 58% (con figuras revisada) de las capturas de los cerqueros (WIO) que fueron trasbordados en Victoria. Se debe notar que las figuras en Tabla 3 representan el transbordo de los cerqueros que terminaron sus viajes en el mes indicado, no en el actual mes del transbordo de las capturas. Octubre fue el mes de mayor actividad para el tranbordo con un total de 31 barcos que tranbordaron 24,224 mt que representa una media de 781 mt por barco. El mes de menos actividad fue mayo cuando 13 barcos tranbordaron 6,111 mt o 470 mt por barco.



## PURSE SEINERS

Table 1 shows monthly catch and effort statistics from January to December 1993 for all purse seiners combined; table 2.1 shows statistics for the Spanish fleet; table 2.2 statistics for the French fleet; table 2.3 statistics for the Japanese fleet and table 2.4 statistics for other nationalities (Mauritius, Panama and Russia). The "vessels licensed" may exceed the "vessels fished" column if vessels licensed to fish in a particular month have not yet fished or reported their catch.

Total catch for each trip has been taken from records of transhipments whenever complete unloading occurred in the Seychelles or the record was otherwise available from a foreign port; otherwise total catch has been estimated from logbooks containing daily catch statistics. The species composition has been estimated from logbooks. Since transhipment records and vessel logbooks both give unreliable estimates for the lesser-caught species, bigeye are included in estimates of the total catch. Catches have been estimated in wet weight rather than dry weight.

In the statistical tables "vessels fished" refers to those vessels for which a logbook has been received containing at least one fishing day during the month; "days fished" refers to days spent at sea, minus days drifting due to mechanical breakdown or other work stoppages; days spent drifting by flotsam or set Fish Aggregation Devices (FADs) while awaiting a set are included in "days fished". Historical data are periodically revised; statistics in the present volume supersede those previously published.

Some 13,799 fishing days were fished by purse seiners in the WIO area during 1993. This represents a 3% decrease from the 14,229 (revised figures) fished in 1992. The mean CPUE declined from 19.55 Mt/fishing days in 1992 to 19.13 in 1993. The greatest catch was made by the Spanish fleet with 99,247 Mt (21.05 Mt/fishing day), followed by the French with 88,912 Mt (19.41 Mt/fishing day) and the Japanese with 38,624 Mt (19.22 Mt/fishing day). Other countries - Russia, Mauritius and Panama - accounted for 37,137 Mt (14.9 Mt/fishing day). The Japanese had the highest proportion of skipjack tuna in their catch (71%) reflecting their custom of fishing on floating

objects under which smaller species and small stages of large species tend to gather.

**TABLE 1. Catch Statistics for Purse Seiners in the Western Indian Ocean on the basis of logbook returns by 20/04/94**  
(Units: catch Mt, percentages in brackets, catch rates Mt/day)

**Year: 1992**

MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	52	52	1304	15.70	10683 ( 52)	7881 ( 38)	20472	20472	
Feb	56	53	1214	18.49	9842 ( 44)	10425 ( 46)	22446	42918	
Mar	56	53	1275	18.17	6943 ( 30)	14379 ( 62)	23168	66086	
Apr	56	53	1224	22.58	4556 ( 16)	21241 ( 77)	27638	93724	
May	56	50	1169	20.07	5538 ( 24)	14574 ( 62)	23458	117182	
Jun	54	50	1124	10.09	4896 ( 43)	5537 ( 49)	11342	128524	
Jul	54	49	1167	23.32	17507 ( 64)	5955 ( 22)	27217	155741	
Aug	54	52	1123	18.19	10161 ( 50)	8836 ( 43)	20422	176163	
Sep	54	47	1017	29.20	5161 ( 17)	21236 ( 72)	29700	205863	
Oct	56	48	1075	36.04	7249 ( 19)	26958 ( 70)	38738	244601	
Nov	55	51	1126	18.71	7778 ( 37)	10991 ( 52)	21066	265667	
Dec	57	55	1411	8.90	7519 ( 60)	3951 ( 31)	12551	278218	
					14229 19.55	97833 ( 35)	151964 ( 55)	278218	

**Year: 1993**

MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	56	54	1420	15.53	15074 ( 68)	5128 ( 23)	22052	22052	
Feb	55	55	1177	18.46	12881 ( 59)	7780 ( 36)	21733	43785	
Mar	55	52	1333	20.52	11179 ( 41)	14117 ( 52)	27356	71141	
Apr	55	52	1279	19.57	4109 ( 16)	17851 ( 71)	25026	96167	
May	56	51	1111	18.47	3290 ( 16)	15654 ( 76)	20517	116684	
Jun	55	50	1171	13.19	7578 ( 49)	6526 ( 42)	15441	132125	
Jul	57	51	1247	15.55	9327 ( 48)	8447 ( 44)	19395	151520	
Aug	56	51	1288	18.87	8159 ( 34)	13832 ( 57)	24301	175821	
Sep	56	49	1177	23.77	5040 ( 18)	19331 ( 69)	27975	203796	
Oct	58	47	1151	25.46	6597 ( 23)	19280 ( 66)	29305	233101	
Nov	52	45	971	17.32	5377 ( 32)	9905 ( 59)	16815	249916	
Dec	51	30	474	29.54	10700 ( 76)	2235 ( 16)	14002	263918	
					13799 19.13	99311 ( 38)	140086 ( 53)	263918	

**LONGLINERS**

Longline data for 1993 is incomplete. It will be included in the first Tuna Bulletin for 1994.

**TABLE 2.1. Statistics for Purse Seiners in the Western Indian Ocean  
by Country on the basis of logbook returns by 20/04/94**  
(Units: catch Mt, percentages in brackets, catch rates Mt/day)

Country: SPAIN*		Year: 1992							
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	17	15	366	14.10	3237 ( 63)	1874 ( 36)	5161	5161	
Feb	17	14	346	17.45	3552 ( 59)	2352 ( 39)	6036	11197	
Mar	17	14	374	22.48	2025 ( 24)	6126 ( 73)	8409	19606	
Apr	17	14	320	31.83	1050 ( 10)	9101 ( 89)	10185	29791	
May	17	14	363	13.12	710 ( 15)	3795 ( 80)	4763	34554	
Jun	17	16	404	9.05	2637 ( 72)	842 ( 23)	3656	38210	
Jul	17	16	388	29.63	8546 ( 74)	1511 ( 13)	11498	49708	
Aug	17	17	394	22.02	4622 ( 53)	3774 ( 44)	8675	58383	
Sep	17	17	412	32.07	2629 ( 20)	10319 ( 78)	13212	71595	
Oct	18	18	413	44.51	3781 ( 21)	13835 ( 75)	18382	89977	
Nov	18	17	385	20.88	2699 ( 34)	4638 ( 58)	8039	98016	
Dec	18	18	494	9.85	3526 ( 72)	1217 ( 25)	4867	102883	
					4659	22.08	39014 ( 38)	59384 ( 58)	102883

Country: SPAIN*		Year: 1993							
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	19	17	455	15.53	5389 ( 76)	1165 ( 16)	7065	7065	
Feb	18	18	386	15.78	3813 ( 63)	1965 ( 32)	6090	13155	
Mar	19	16	414	26.55	4439 ( 40)	6296 ( 57)	10993	24148	
Apr	19	16	382	22.99	1347 ( 15)	7373 ( 84)	8781	32929	
May	20	16	376	19.15	1371 ( 19)	5694 ( 79)	7202	40131	
Jun	21	17	427	16.70	4226 ( 59)	2437 ( 34)	7133	47264	
Jul	20	17	444	16.21	3597 ( 50)	3173 ( 44)	7199	54463	
Aug	21	17	441	19.19	3468 ( 41)	4676 ( 55)	8464	62927	
Sep	20	17	440	25.45	2445 ( 22)	8467 ( 76)	11196	74123	
Oct	24	17	428	30.26	3718 ( 29)	8855 ( 68)	12952	87075	
Nov	21	18	352	17.19	2185 ( 36)	3817 ( 63)	6052	93127	
Dec	22	10	170	36.00	5194 ( 85)	858 ( 14)	6120	99247	
					4715	21.05	41192 ( 42)	54776 ( 55)	99247

\*Includes Spanish managed vessels

**TABLE 2.2. Statistics for Purse Seiners in the Western Indian Ocean  
by Country on the basis of logbook returns by 20/04/94**  
(Units: catch Mt, percentages in brackets, catch rates Mt/day)

Country: FRANCE		Year: 1992							
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	17	17	466	17.85	5552 ( 67)	1737 ( 21)	8320	8320	
Feb	17	17	387	19.47	3682 ( 49)	2529 ( 34)	7536	15856	
Mar	17	17	431	13.52	2816 ( 48)	1849 ( 32)	5829	21685	
Apr	17	17	401	19.96	1814 ( 23)	4991 ( 62)	8004	29689	
May	17	17	395	23.24	3105 ( 34)	3666 ( 40)	9180	38869	
Jun	17	16	353	13.94	1422 ( 29)	2930 ( 60)	4922	43791	
Jul	17	16	361	21.58	5703 ( 73)	540 ( 7)	7789	51580	
Aug	17	17	369	15.39	3588 ( 63)	1188 ( 21)	5679	57259	
Sep	17	17	353	33.83	1452 ( 12)	7750 ( 65)	11941	69200	
Oct	17	16	371	34.94	1707 ( 13)	8061 ( 62)	12961	82161	
Nov	17	17	380	25.95	3874 ( 39)	4500 ( 46)	9861	92022	
Dec	17	17	402	9.60	2476 ( 64)	709 ( 18)	3858	95880	
					4669	20.54	37191 ( 39)	40450 ( 42)	95880

Country: FRANCE		Year: 1993							
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	17	17	430	17.40	5864 ( 78)	922 ( 12)	7481	7481	
Feb	17	17	388	17.39	5643 ( 84)	811 ( 12)	6748	14229	
Mar	17	17	449	16.56	2781 ( 37)	3144 ( 42)	7434	21663	
Apr	17	17	420	19.02	1006 ( 13)	4297 ( 54)	7990	29653	
May	17	16	350	17.78	860 ( 14)	4305 ( 69)	6223	35876	
Jun	17	17	336	13.92	2302 ( 49)	1791 ( 38)	4676	40552	
Jul	17	16	386	15.10	4037 ( 69)	860 ( 15)	5828	46380	
Aug	17	17	426	20.96	3027 ( 34)	4127 ( 46)	8928	55308	
Sep	17	17	393	29.39	1343 ( 12)	7015 ( 61)	11550	66858	
Oct	17	17	421	24.54	1222 ( 12)	6166 ( 60)	10331	77189	
Nov	17	17	383	17.98	2032 ( 30)	3403 ( 49)	6885	84074	
Dec	17	12	198	24.43	2773 ( 57)	1105 ( 23)	4838	88912	
					4580	19.41	32890 ( 37)	37946 ( 43)	88912

**TABLE 2.3. Statistics for Purse Seiners in the Western Indian Ocean  
by Country on the basis of logbook returns by 20/04/94**  
(Units: catch Mt, percentages in brackets, catch rates Mt/day)

Country: JAPAN		Year: 1992						
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL
Jan	10	10	233	20.40	1162 ( 24)	2976 ( 63)	4753	4753
Feb	10	10	221	26.78	984 ( 17)	4345 ( 73)	5919	10672
Mar	10	10	221	22.66	869 ( 17)	3864 ( 77)	5008	15680
Apr	10	10	209	26.00	1102 ( 20)	4057 ( 75)	5433	21113
May	9	9	196	26.75	1012 ( 19)	3785 ( 72)	5243	26356
Jun	9	9	224	7.41	328 ( 20)	1242 ( 75)	1659	28015
Jul	9	9	240	15.13	737 ( 20)	2618 ( 72)	3630	31645
Aug	10	10	217	18.77	985 ( 24)	2875 ( 71)	4073	35718
Sep	9	6	113	16.58	538 ( 29)	1204 ( 64)	1873	37591
Oct	10	6	105	19.18	509 ( 25)	1390 ( 69)	2014	39605
Nov	8	8	199	5.32	374 ( 35)	650 ( 61)	1058	40663
Dec	11	11	271	7.48	670 ( 33)	1116 ( 55)	2028	42691
			2449	17.43	9270 ( 22)	30122 ( 71)	42691	

Country: JAPAN		Year: 1993						
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL
Jan	11	11	281	14.21	1178 ( 30)	2382 ( 60)	3992	3992
Feb	11	11	227	26.63	1659 ( 27)	3989 ( 66)	6044	10036
Mar	9	9	226	21.13	1632 ( 34)	2933 ( 61)	4775	14811
Apr	9	9	219	20.34	858 ( 19)	3349 ( 75)	4455	19266
May	10	10	195	26.16	721 ( 14)	4047 ( 79)	5101	24367
Jun	9	8	207	9.68	252 ( 13)	1511 ( 75)	2003	26370
Jul	10	8	218	16.49	622 ( 17)	2773 ( 77)	3594	29964
Aug	9	8	179	20.32	697 ( 19)	2764 ( 76)	3638	33602
Sep	9	5	116	16.10	358 ( 19)	1439 ( 77)	1868	35470
Oct	9	5	84	26.14	644 ( 29)	1513 ( 69)	2196	37666
Nov	6	2	53	18.08	308 ( 32)	649 ( 68)	958	38624
Dec	5	1	5	0.00	0 ( 0)	0 ( 0)	0	38624
			2010	19.22	8929 ( 23)	27349 ( 71)	38624	

**TABLE 2.4. Statistics for Purse Seiners in the Western Indian Ocean  
by Country On the basis of logbook returns by 20/04/94**  
(Units: catch Mt, percentages in brackets, catch rates Mt/day)

Country: Other countries Year: 1992									
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	10	10	239	9.37	731 ( 33)	1293 ( 58)	2239	2239	
Feb	12	12	260	11.36	1623 ( 55)	1198 ( 41)	2953	5192	
Mar	12	12	250	15.69	1234 ( 31)	2539 ( 65)	3923	9115	
Apr	12	12	294	13.66	592 ( 15)	3092 ( 77)	4016	13131	
May	11	10	215	19.87	710 ( 17)	3328 ( 78)	4272	17403	
Jun	11	9	143	7.73	509 ( 46)	524 ( 47)	1106	18509	
Jul	11	8	178	24.15	2522 ( 59)	1288 ( 30)	4299	22808	
Aug	10	8	143	13.94	967 ( 48)	1000 ( 50)	1994	24802	
Sep	10	7	139	19.24	542 ( 20)	1963 ( 73)	2675	27477	
Oct	10	8	185	29.09	1252 ( 23)	3671 ( 68)	5381	32858	
Nov	11	9	162	13.01	832 ( 39)	1203 ( 57)	2108	34966	
Dec	10	9	244	7.37	847 ( 47)	909 ( 51)	1798	36764	
					2452	14.99	12361 ( 34)	22008 ( 60)	36764

Country: Other countries Year: 1993									
MONTH	VESSELS LICENSED	VESSELS FISHED	DAYS FISHED	CATCH RATE	YELLOWFIN	SKIPJACK	TOTAL	CUMUL TOTAL	
Jan	9	9	254	13.83	2643 ( 75)	659 ( 19)	3514	3514	
Feb	9	9	175	16.30	1766 ( 62)	1014 ( 36)	2852	6366	
Mar	10	10	244	17.02	2327 ( 56)	1744 ( 42)	4154	10520	
Apr	10	10	258	14.73	900 ( 24)	2831 ( 74)	3801	14321	
May	9	9	190	10.47	337 ( 17)	1608 ( 81)	1990	16311	
Jun	8	8	201	8.10	798 ( 49)	787 ( 48)	1629	17940	
Jul	10	10	199	13.94	1072 ( 39)	1640 ( 59)	2774	20714	
Aug	9	9	242	13.51	967 ( 30)	2266 ( 69)	3270	23984	
Sep	10	10	228	14.74	895 ( 27)	2409 ( 72)	3360	27344	
Oct	8	8	218	17.56	1013 ( 26)	2747 ( 72)	3827	31171	
Nov	8	8	183	15.96	851 ( 29)	2037 ( 70)	2921	34092	
Dec	7	7	100	30.45	2733 ( 90)	273 ( 9)	3045	37137	
					2492	14.90	16302 ( 44)	20015 ( 54)	37137



**TABLE 3. Purse Seiner Transshipment Statistics for Victoria, Antsiranana and Mombasa on the basis of transshipment information by 20/04/94**  
(Units: catch MT)

Port: VICTORIA		Year: 1992							CUMUL.
MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NEI	TOTAL	TOTAL	
Jan	31	5270	6640	13	4	4377	16304	16304	
Feb	27	8198	3634	25	9	4878	16744	33048	
Mar	29	5956	3689	139	72	5008	14864	47912	
Apr	16	1310	2688	63	10	5323	9394	57306	
May	14	168	1381	0	0	4371	5920	63226	
Jun	12	360	2198	0	8	1939	4505	67731	
Jul	18	4980	1785	55	588	2033	9441	77172	
Aug	24	5654	1369	42	521	2423	10909	87181	
Sep	20	4462	7078	0	141	1579	13260	100441	
Oct	29	5709	18364	265	6	1466	25810	126251	
Nov	29	7770	16920	673	0	0	25363	151614	
Dec	31	5576	3517	216	0	1104	10413	162027	
Total		55413	69263	1491	1359	34501	162027		

Port: VICTORIA		Year: 1993							CUMUL.
MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NEI	TOTAL	TOTAL	
Jan	36	11459	3063	187	70	3514	18293	18293	
Feb	31	9102	2440	214	41	5954	17751	36044	
Mar	25	7781	3628	24	52	2637	14122	50166	
Apr	20	4311	3961	9	12	3536	11829	61995	
May	13	264	888	0	0	4959	6111	68106	
Jun	17	2679	4432	67	2	2374	9554	77660	
Jul	29	3428	4074	272	152	4856	12782	90442	
Aug	32	5499	3687	513	143	7859	17701	108143	
Sep	32	7228	11165	451	221	2355	21420	129563	
Oct	31	4439	16026	573	0	3186	24224	153787	
Nov	27	5418	9318	262	40	898	15936	169723	
Dec	27	11704	6293	149	9	1079	19234	188957	
Total		73312	68975	2721	742	43207	188957		

Port: ANTSIRANANA

Year: 1992

MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NEI	TOTAL	CUMUL. TOTAL
Jan	1	542	411	1	0	1	955	955
Feb	1	578	261	33	0	0	872	1827
Mar	6	2253	1765	157	0	10	4185	6012
Apr	15	2880	6616	7	100	0	9603	15615
May	22	4947	10562	0	239	868	16616	32231
Jun	10	2588	2365	1	265	0	5219	37450
Sep	2	501	1335	101	0	0	1937	39387
Oct	1	133	461	81	0	0	675	40062
Total		14422	23776	381	604	879	40062	

Port: ANTSIRANANA

Year: 1993

MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NEI	TOTAL	CUMUL. TOTAL
Jan	4	1636	567	101	54	0	2358	2358
Feb	7	2482	850	79	26	0	3437	5795
Mar	5	1696	2477	0	0	0	4173	9968
Apr	22	4824	8451	160	1	3204	16640	26608
May	21	2714	8577	44	97	1091	12523	39131
Jun	6	541	2523	49	5	0	3118	42249
Jul	4	1082	802	120	184	706	2894	45143
Nov	3	447	675	24	0	0	1146	46289
Dec	1	674	155	1	0	0	830	47119
Total		16096	25077	578	367	5001	47119	

Port: MOMBASA

Year: 1992

MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NET	TOTAL	CUMUL. TOTAL
Feb	2	1632	343	27	0	0	2002	2002
Apr	2	412	1225	0	0	7	1644	3646
May	1	211	720	0	0	0	931	4577
Jun	1	156	812	0	0	8	976	5553
Jul	6	5656	503	515	64	445	7183	12736
Aug	11	5631	2032	206	0	454	8323	21059
Sep	7	2311	3653	440	0	0	6404	27463
Oct	6	623	3712	35	0	3214	7594	35057
Nov	2	0	0	0	0	1369	1369	36426
<b>Total</b>		<b>16632</b>	<b>13000</b>	<b>1223</b>	<b>64</b>	<b>5507</b>	<b>36426</b>	

Port: MOMBASA

Year: 1993

MONTH	No. of SEINERS	YELLOWFIN	SKIPJACK	BIGEYE	ALBACORE	TUNA NET	TOTAL	CUMUL. TOTAL
Jan	1	0	0	0	0	0	0	0
Apr	1	682	426	62	0	0	1170	1170
May	2	231	947	20	0	0	1198	2368
Jun	1	236	359	6	3	0	604	2972
Aug	3	490	134	0	0	1160	1784	4756
Sep	2	0	0	0	0	1135	1135	5891
Oct	3	442	929	0	0	961	2332	8223
Nov	2	250	350	0	0	668	1268	9491
Dec	2	1598	448	0	0	0	2046	11537
<b>Total</b>		<b>3929</b>	<b>3593</b>	<b>88</b>	<b>3</b>	<b>3924</b>	<b>11537</b>	

**TABLE 4. Purse Seiners Fishing in the Western Indian Ocean by  
Country of registration**  
(Licensed to fish in the Seychelles EEZ )

Country	1992	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEYCHELLES		1	1	1	1	1	1	1	0	0	0	0	0
FRANCE		17	17	17	17	17	16	16	17	17	16	17	17
JAPAN		10	10	10	10	9	9	9	10	6	6	8	11
MAURITIUS		3	3	3	3	2	2	2	2	2	2	3	3
PANAMA		3	3	3	3	3	3	3	3	3	3	3	3
RUSSIA		3	5	5	5	4	3	2	3	2	3	3	3
SPAIN		15	14	14	14	14	16	16	17	17	18	17	18
Total		52	53	53	53	50	50	49	52	47	48	51	55

Country	1993	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEYCHELLES		0	0	0	0	0	0	1	1	1	1	1	1
FRANCE		17	17	17	17	16	17	16	17	17	17	17	12
JAPAN		11	11	9	9	10	8	8	8	5	5	2	1
MAURITIUS		3	3	3	3	3	3	3	3	3	2	2	1
PANAMA		3	3	3	3	3	3	3	3	3	3	3	3
RUSSIA		3	3	4	4	3	2	3	2	3	2	2	2
SPAIN		17	18	16	16	16	17	17	17	17	17	18	10
Total		54	55	52	52	51	50	51	51	49	47	45	30

TABLE 5. Purse Seiners Fishing in the Western Indian Ocean on the basis of logbook returns by 20/04/94)

Code	Sainer	Country	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Year: 1992			<-> = Vessel active                      .                      Vessel not active											
214	ALBACORA CUATRO	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
264	TXORI URDIN	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
292	EUSKADI ALAI	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
318	ALSACORA DOCE	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
330	ALBACORA CATORCE	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
332	ALMADRABA TRES	ESP	<->	.	.	.	.	.	<-	-	-	-	-	-
346	ALBACORA QUINCE	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
347	ALBACORA DIECISEIS	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
348	ALACRAN 2	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
349	TXORI ZURI	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
355	JUAN RAMON EGADA	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
356	MAR DE SERGIO	ESP	.	.	.	.	.	.	.	.	<-	-	-	-
454	FELIPE RUANO	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
459	CAMPOLIBRE ALAI	ESP	.	.	.	.	.	.	<-	-	-	-	-	-
459	MONTELARZ	ESP	<-	-	-	-	-	-	.	.	.	<-	-	-
460	MONTEALEGRE	ESP	<-	-	-	-	-	-	-	-	-	-	-	-
465	NARANCO/KAI ALAI	ESP	<-	-	-	-	-	-	-	-	-	-	<-	-
488	TXORI BERRI	ESP	.	.	.	.	.	.	.	.	<-	-	-	-
527	FLAYA DE BAEIO	ESP	.	.	.	.	.	.	<-	-	-	-	-	-
274	ROSPICO	FRA	<-	-	-	-	-	-	.	.	.	<-	-	-
275	KERGUELEN	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
296	TREVIGNON II	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
305	HUON DE HERMADET	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
306	TRESCAO	FRA	<-	-	-	-	-	-	.	.	.	<-	-	-
325	DRENNEC	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
326	CAP ST PAUL	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
327	HERSAINT	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
328	ARMEN	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
334	PENDRUC	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
345	AVEL VIZ	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
430	RAYOTA	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
463	GOMBESSA	FRA	<-	-	-	-	-	-	-	-	-	.	<-	-
483	CAP BOJADOR	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
490	CAEOTEC	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
491	AVEL VOR	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
492	GUERIDEN	FRA	<-	-	-	-	-	-	-	-	-	-	-	-
436	NIPPON MARU	JPN	<-	-	-	-	.	.	.	.	<-	-	-	-
469	HAYABUSA MARU 6	JPN	<-	-	-	-	-	-	-	-	-	-	-	-
470	TOMI MARU 61	JPN	<->	.	.	.	.	.	<-	-	-	-	-	-
495	EIYUKU MARU I	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
495	TOKIWA MARU I	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
497	TAIKEI MARU 51	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
498	SHOYU MARU 38	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
499	KOYO MARU 75	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
500	KOYO MARU 88	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
501	GENKUPU MARU 86	JPN	<-	-	-	-	-	-	-	-	-	.	<-	-
510	FURUICHI MARU 83	JPN	.	<-	-	-	-	-	-	-	-	-	-	-
523	NAKNO MARU 27	JPN	.	.	.	.	.	.	.	.	.	<-	-	-
360	LADY SUSHL I	MUS	<-	-	-	-	.	.	.	.	<-	-	-	-
426	LADY SUSHL II	MUS	<-	-	-	-	-	-	-	-	-	.	<-	-
489	CIRNE	MUS	<-	-	-	-	-	-	-	.	.	<-	-	-
353	TXORI MUNDI	PAN	<-	-	-	-	-	-	-	-	-	-	-	-
473	INTER TUNA DOS	PAN	<-	-	-	-	-	-	-	-	-	-	-	-
476	INTER TUNA UNO	PAN	<-	-	-	-	-	-	-	-	-	-	-	-
333	TRIDAKVA	RUS	.	<-	-	-	-	-	.	.	.	.	.	.
452	TIORA	RUS	<-	-	-	-	.	.	.	.	.	.	.	.
494	PINNA	RUS	<-	-	-	-	-	-	-	-	-	.	<-	-
506	KACUI	RUS	.	<-	-	-	-	-	.	.	.	<-	-	-
517	TIVELLA	RUS	<-	-	-	-	-	-	-	-	-	-	-	-
485	DJC DE PRASLIN	SEZ	<-	-	-	-	-	-	.	.	.	.	.	.



**TABLE 6.1. Catch Statistics for Longliners in the Western Indian Ocean by Country on the basis of logbook returns by 25/04/94**

(Units: catch Mt, percentages in brackets, catch rates Mt/1000 hooks)

Country: JAPAN		Year: 1992						
MONTH	VESSELS LICENSED	VESSELS FISHED	HOOKS FISHED	CATCH RATE	YELLOWFIN	BIGEYE	ALBACORE	TOTAL
Jan	0	1	36640	0.901	23 ( 70)	6 ( 18)	0 ( 0)	33
Feb	0	1	68551	0.715	36 ( 73)	7 ( 14)	0 ( 0)	49
Mar	0	1	75640	0.687	27 ( 52)	20 ( 38)	0 ( 0)	52
Apr	0	1	67198	0.774	21 ( 40)	26 ( 50)	0 ( 0)	52
May	0	1	45594	1.119	28 ( 55)	19 ( 37)	0 ( 0)	51
Jun	0	1	19200	0.365	1 ( 14)	5 ( 71)	0 ( 0)	7
Jul	0	1	36058	0.250	2 ( 22)	4 ( 44)	0 ( 0)	9
Nov	0	3	188460	0.727	78 ( 57)	40 ( 29)	0 ( 0)	137
Dec	0	3	212702	0.503	60 ( 56)	37 ( 35)	0 ( 0)	107
			750043	0.663	276 ( 56)	164 ( 33)	0 ( 0)	497

**TABLE 6.2. Catch Statistics for Longliners in the Western Indian Ocean by Country On the basis of logbook returns by 25/04/94**

(Units: catch Mt, percentages in brackets, catch rates Mt/1000 hooks)

Country: SOUTH KOREA		Year: 1992						
MONTH	VESSELS LICENSED	VESSELS COVERED	HOOKS FISHED	CATCH RATE	YELLOWFIN	BIGEYE	ALBACORE	TOTAL
Jan	0	2	48635	0.411	7 ( 35)	10 ( 50)	0 ( 0)	20
Jun	0	7	145374	0.440	13 ( 20)	40 ( 63)	0 ( 0)	64
Jul	0	6	225911	0.230	9 ( 17)	30 ( 58)	0 ( 0)	52
Aug	0	6	188862	0.477	13 ( 14)	65 ( 72)	0 ( 0)	90
Sep	0	6	272172	0.364	18 ( 18)	64 ( 65)	0 ( 0)	99
Oct	0	8	178950	0.374	25 ( 37)	31 ( 46)	0 ( 0)	67
Nov	0	11	634992	0.474	117 ( 39)	148 ( 49)	0 ( 0)	301
Dec	0	12	682146	0.488	134 ( 40)	165 ( 50)	0 ( 0)	333
			2377042	0.432	336 ( 33)	553 ( 54)	0 ( 0)	1026



TABLE 6.3. Catch Statistics for Longliners in the Western Indian Ocean by Country on the basis of logbook returns by 25/04/94

(Units: catch Mt, percentages in brackets, catch rates Mt/1000 hooks)

Country: TAIWAN		Year: 1992						
MONTH	VESSELS LICENSED	VESSELS COVERED	HOOKS FISHED	CATCH RATE	YELLOWFIN	BIGEYE	ALBACORE	TOTAL
Jan	0	1	61200	0.180	5 ( 45)	4 ( 36)	0 ( 0)	11
Mar	0	1	28000	0.464	5 ( 38)	5 ( 38)	0 ( 0)	13
Apr	0	1	26000	1.269	24 ( 73)	2 ( 6)	0 ( 0)	33
Jun	0	2	38700	0.362	3 ( 21)	9 ( 64)	0 ( 0)	14
Jul	0	2	36080	0.333	3 ( 25)	5 ( 42)	0 ( 0)	12
			189980	0.437	40 ( 48)	25 ( 30)	0 ( 0)	83

