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EIGHTEENTH REGULAR SESSION**

ELECTRONIC MEETING
10-18 August 2022

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

WCPFC-SC18-AR/CCM-13

REPUBLIC OF MARSHALL ISLANDS

Annual Report to the Western and Central Pacific Fisheries Commission
Part 1: Information of fisheries, statistics and research

Republic of the Marshall Islands



Oceanic and Industrial Affairs Division
Marshall Islands Marine Resources Authority

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2022	Yes
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SUMMARY

In 2021, there were eleven Marshall Islands-flagged purse seine vessels operating throughout the Western and Central Pacific Ocean (WCPO). The total catch estimates by the national purse seine fleet in 2021 was 89,434 metric tons. Additionally, retained catch estimates, from twenty-eight chartered longline vessels associated with the domestically-based Marshall Islands Fishing Venture (MIFV), totaled 1,733 metric tons.

The commercial catches within the RMI EEZ are taken predominantly by the purse seine fishery but longline and pole-and-line operations also occur. In 2021, estimated total catch for all gears combined was 58,682 metric tons with purse seine accounting for 93% followed by longline 6% and pole-and-line 1%. Purse seine catch in the RMI EEZ increased from 36,841 metric tons in 2020 to 54,640 metric tons in 2021.

The RMI Observer program's 41 active observers carried out 23 longline trips during 2021. Observers were also utilized to monitor shore-based unloading activities in Majuro port while adhering to strict standard operating procedures. There were no purse seine trips and transshipments monitored by observers during the year due to the COVID19 pandemic.

FLAG STATE REPORTING

Annual catch and effort estimates for the national purse seine fleet, fishing throughout the Western and Central Pacific Fisheries Commission Convention Area (WCPFC-CA) during the last five years are presented in Table 1 and Figure 1. In 2021, total catch estimates were 89,434 metric tons for the purse seine fleet. Skipjack is the prominent species caught comprising 91% of the total followed by yellowfin, 8% and bigeye tuna, 1%.

There were 28 foreign long-liners chartered in 2021 whose catch estimates are provided in Table 2. All chartered vessels are based locally and fish almost exclusively in the RMI EEZ. Vessel numbers for both purse seine and longline vessels are presented in Table 3 below.

Figures 2 and 3 illustrate catch distributions for the RMI flagged purse seine and chartered longline fleets from 2020 to 2021. Purse seine catch and effort is primarily concentrated in the southern part of the RMI EEZ and the adjacent EEZs. As previously stated, longline vessels predominantly operate in the EEZ and effort is more widely distributed within the RMI zone.

Table 1. Annual catch and effort estimates for the Marshall Islands purse seine vessels, by species and year, in the WCPFC Convention Area (Source: Raised logsheet data collected by MIMRA)

Species	2017		2018		2019		2020		2021	
	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard
ALBACORE	0	0	0	0	0	0	0	0	0	0
BIGEYE TUNA	4,971	31	3,039	30	616	21	771	20	683	23
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	0	0
SKIPJACK TUNA	50,936	195	60,212	625	84,253	719	74,575	1,191	81,741	1,362
YELLOWFIN TUNA	8,612	40	9,429	72	10,654	98	6,594	186	7,005	213
BLACK MARLIN	1	10	1	1	2	4	2	5	2	6
BLUE MARLIN	7	14	6	6	7	14	1	9	1	10
STRIPED MARLIN	0	2	0	3	1	2	2	2	3	2
SWORDFISH	0	0	1	0	0	0	0	0	0	0
BLUE SHARK	0	0	0	0	0	0	0	0	0	0
SILKY SHARK	0	190	0	85	0	69	0	15	0	47
HAMMERHEAD SHARKS	0	0	0	0	0	0	0	1	0	1
MAKO SHARKS	0	0	0	0	0	0	0	0	0	0
OCEANIC WHITETIP SHARK	0	1	0	1	0	2	0	0	0	0
PORBEAGLE/ SALMON SHARK	0	0	0	0	0	0	0	0	0	0
WHALE SHARK	0	22	0	0	0	9	0	0	0	0
THRESHER SHARKS	0	0	0	0	0	0	0	0	0	0
Total	64,527	505	72,688	823	95,533	939	81,945	1,430	89,434	1,664

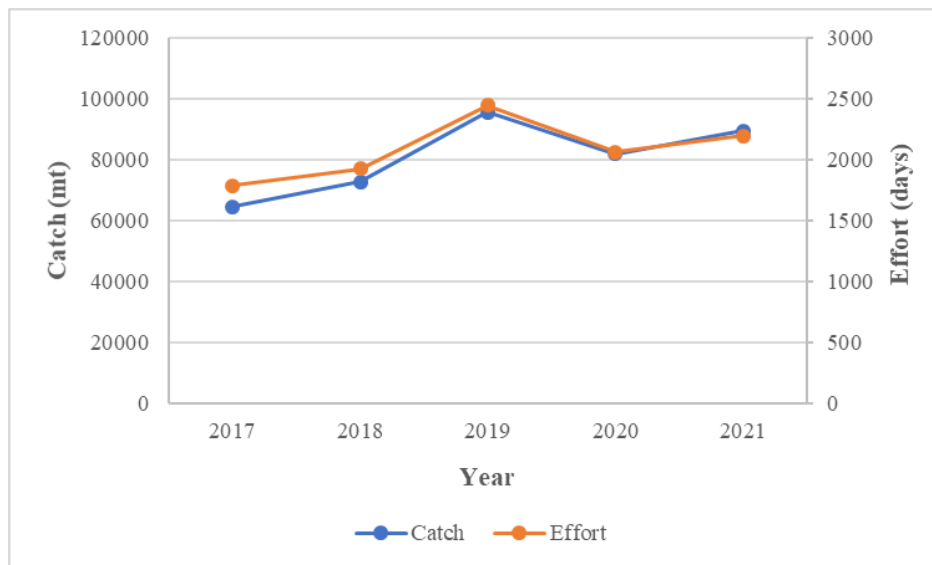


Figure 1. Annual catch and effort for the Marshall Islands purse seine vessels for the WCPFC Convention Area

Table 2. Annual catch estimates for the Marshall Islands-chartered longline vessels, by species and year, for the WCPFC Convention Area (Source: Raised logsheet data collected by MIMRA)

Species	2017		2018		2019		2020		2021	
	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard	Retain	Discard
ALBACORE	45	2	30	3	97	2	9	0	53	1
BIGEYE TUNA	1,208	21	1,122	24	1,428	30	751	13	915	13
PACIFIC BLUEFIN TUNA	0	0	0	0	0	0	0	0	0	0
SKIPJACK TUNA	1	0	0	14	0	10	1	0	0	1
YELLOWFIN TUNA	933	15	639	68	1,152	23	730	13	620	14
BLACK MARLIN	75	3	0	1	0	0	0	0	0	0
BLUE MARLIN	208	2	115	2	189	3	98	0	130	0
STRIPED MARLIN	125	1	2	1	0	0	0	1	0	0
SWORDFISH	80	3	14	11	24	16	10	7	15	8
BLUE SHARK	0	16	0	11	0	94	0	13	0	114
SILKY SHARK	0	16	0	46	0	20	0	10	0	68
HAMMERHEAD SHARKS	0	0	0	0	0	0	0	0	0	0
MAKO SHARKS	1	10	0	7	0	2	0	1	0	4
OCEANIC WHITETIP SHARK	0	5	0	8	0	44	0	1	0	13
PORBEABLE / SALMON SHARK	0	0	0	0	0	0	0	0	0	0
WHALE SHARK	0	0	0	0	0	0	0	0	0	0
THRESHER SHARKS	0	8	0	9	0	0	0	0	0	0
Total	2,676	102	1,922	205	2,890	244	1,599	59	1,733	236

Table 3. Number of Marshall Islands-chartered and flagged vessels, by size category, active in the WCPFC Convention Area, 2017-2021

Year	GRT	Longline				Purse Seine			
		0-50	51-200	201-500	500+	0-500	501-1000	1001-1500	1500+
2017		0	31	0	0	0	0	7	3
2018		0	26	0	0	0	0	7	3
2019		0	22	0	0	0	0	7	4
2020		0	25	0	0	0	0	7	4
2021		0	28	0	0	0	0	7	4

2021

2020



Figure 2. Annual distribution of catch by the Marshall Islands-chartered longline vessels in the WCPFC Convention Area in 2021 and 2020 (Red - BET, Yellow - YFT, Green - ALB)

2021

2020

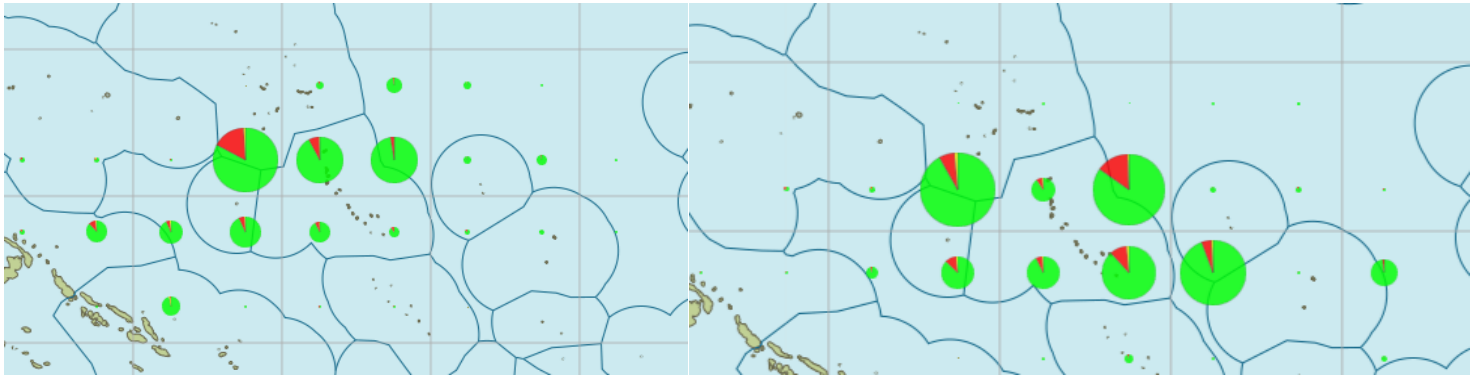


Figure 3. Annual distribution of catch by the Marshall Islands purse seine vessels in the WCPFC Convention Area in 2021 and 2020 (Green – SKJ, Red – YFT, Yellow – BET)

COASTAL STATE REPORTING

Table 5 provides a description of foreign-flagged vessels licensed to fish in the Marshall Islands waters over the past five years. A total of 240 foreign vessels were licensed however, not all were actively fishing in the RMI EEZ during the period. Domestically-based foreign longline vessels affiliated with the Marshall Islands Fishing Venture (MIFV) have been operating under charter with the RMI since 2016, hence the inclusion of the charter component of the catches in the flag state reporting above.

Table 5. Number of foreign longline, pole-and-line and purse seine vessels licensed to fish in the RMI EEZ, by year and flag.

FLAG	GEAR	2017	2018	2019	2020	2021
CHINA	LL	30	0	22	20	18
	PS	6	8	9	9	9
FSM	LL	13	9	9	10	12
FSMA	PS	76	49	54	70	83
JAPAN	LL	6	6	9	2	2
	PL	16	11	20	21	25
	PS	25	25	26	28	29
KIRIBATI	PS	0	5	7	3	4
KOREA	PS	26	24	25	25	21
PHILIPPINES	PS	0	13	10	15	15
CH-TAIPEI	LL	0	0	1	0	0
	PS	27	23	24	18	21
TUVALU	PS	1	1	1	0	1
USA	PS	31	31	6	25	0
TOTAL	LL	49	15	41	32	32
	PL	16	11	20	21	25
	PS	192	179	162	190	183

Available logsheet data indicate that total catch by purse seine fleets operating in the RMI EEZ increased from 36,841 metric tons in 2020 to 54,640 mt in 2021 with 26% taken by the RMI fleet (Table 6). The catch rates in the RMI EEZ are usually influenced by the prevailing environmental conditions, with higher catches recorded during or immediately following strong El Nino periods. Skipjack tuna continues to be the dominant catch, accounting for 66% of the total catch in 2021.

The domestically-based foreign longline fleet comprises vessels from China, FSM and previously Chinese Taipei are managed and operated under Marshall Islands Fishing Venture, Ltd., which is a subsidiary of Luen Thai. Japanese longline vessels offload their catch in ports in Japan. In-zone longline catch estimates are provided in Table 7. Bigeye and yellowfin catches continue to account for the major part of the target catch composition. As with the purse seine

fishery, most of the longline fishing effort occurs in the southern areas of the RMI EEZ however in the longline fishery, effort is more widely distributed throughout the zone.

In 2021, provisional catches from the pole-and-line fleet decreased to 777 metric tons from 2,610 mt in the previous year (Table 8). Skipjack is the main species making up the catch composition for this fleet and nearly accounts for the entire catch total each year. The RMI has yet to place observers on board these vessels and as a result observer coverage for validation purposes has not been achieved.

Table 6. Annual catches of purse seine fleets operating in the RMI EEZ, by flag and species, 2017-2021 (Source: Unraised logsheet data collected by MIMRA)

		Catches (metric tonnes)				
Flag	Year	SKJ	YFT	BET	OTH	TOTAL
China	2017	0	0	0	0	0
	2018	274	128	13	1	416
	2019	280	30	20	1	331
	2020	0	0	0	0	0
	2021	0	0	0	0	0
FSM	2017	1,458	175	60	8	1,701
	2018	2,602	230	57	7	2,896
	2019	220	49	13	6	289
	2020	5,197	1,064	108	12	6,380
	2021	6,959	2,947	89	4	9,999
Japan	2017	112	60	2	1	175
	2018	472	12	0	1	485
	2019	0	0	0	0	0
	2020	40	30	0	0	70
	2021	1,384	2,096	10	3	3,493
Kiribati	2017	709	158	14	4	885
	2018	754	125	31	1	911
	2019	186	28	1	0	215
	2020	2,899	1,343	40	3	4,284
	2021	2,345	665	5	1	3,016
Korea	2017	779	180	27	1	987
	2018	3,955	430	20	0	4,405
	2019	460	15	0	0	475
	2020	3,963	1,860	118	7	5,949
	2021	2,077	2,898	23	0	4,998
Nauru	2017	0	0	0	0	0
	2018	0	0	0	0	0
	2019	171	25	0	0	196
	2020	3,400	1,059	95	15	4,569
	2021	3,047	1,914	80	2	5,043
PNG	2017	3,415	544	231	15	4,205
	2018	3,604	313	24	13	3,954
	2019	379	16	0	0	395
	2020	0	0	0	0	0
	2021	0	0	0	0	0
Philippines	2017	0	0	0	0	0
	2018	36	13	0	0	49
	2019	0	0	0	0	0
	2020	0	0	0	0	0
	2021	0	0	0	0	0

		Catches (metric tonnes)				
Flag	Year	SKJ	YFT	BET	OTH	TOTAL
RMI	2017	6,995	708	221	11	7,935
	2018	5,769	419	36	25	6,249
	2019	1,587	19	51	5	1,662
	2020	9,027	482	154	7	9,670
	2021	12,083	2,220	123	1	14,427
Solomon Is	2017	0	0	0	0	0
	2018	415	0	0	0	415
	2019	0	0	0	0	0
	2020	251	129	25	1	406
	2021	20	495	35		550
Chinese Taipei	2017	6,045	779	143	21	6,988
	2018	5,729	436	50	7	6,222
	2019	1,237	133	7	3	1,380
	2020	2,798	711	256	7	3,772
	2021	7,167	4,463	143	2	11,775
Tuvahu	2017	0	0	0	0	0
	2018	0	0	0	0	0
	2019	0	0	0	0	0
	2020	0	0	0	0	0
	2021	680	497	6	1	1,184
Vanuatu	2017	0	0	0	0	0
	2018	0	0	0	0	0
	2019	0	0	0	0	0
	2020	0	0	0	0	0
	2021	80	75	0	0	155
USA	2017	3,252	297	90	4	3,643
	2018	2,814	62	22	3	2,901
	2019	353	80	17	1	451
	2020	1,340	323	75	3	1,741
	2021	0	0	0	0	0
TOTAL EEZ	2017	22,765	2,901	788	65	26,519
	2018	26,424	2,168	253	58	28,903
	2019	4,874	395	109	16	5,394
	2020	28,915	7,000	871	55	36,841
	2021	35,842	18,270	514	14	54,640

Table 7. Annual catches of longline fleets operating in the RMI EEZ, by flag and species, 2017-2021 (Source: Unraised logsheet data collected by MIMRA)

Flag	Year	Catch (metric tonnes)				Total
		ALB	BET	YFT	OTH	
China	2017	0	4	3	0	6
	2018	1	169	129	28	327
	2019	0	16	17	5	38
	2020	1	66	45	9	121
	2021	1	32	25	6	63
FSM	2017	16	440	350	116	921
	2018	17	705	373	104	1,199
	2019	41	695	594	140	1,470
	2020	10	686	533	111	1,340
	2021	36	637	392	125	1,189
Japan	2017	12	108	148	29	297
	2018	3	49	47	10	109
	2019	2	66	46	12	126
	2020	1	180	25	17	223
	2021	32	109	108	21	270
RMI-Chartered	2017	43	1,147	888	299	2,379
	2018	31	1,287	713	174	2,205
	2019	91	1,219	1,045	241	2,596
	2020	9	708	679	119	1,515
	2021	53	899	610	179	1,741
CH-Taipei	2017	0	0	0	0	0
	2018	0	0	0	0	0
	2019	0	4	17	18	40
	2020	0	0	0	0	0
	2021	0	0	0	0	0
TOTAL EEZ	2017	71	1,698	1,389	445	3,603
	2018	52	2,210	1,262	316	3,840
	2019	134	2,000	1,719	417	4,269
	2020	21	1,640	1,282	256	3,199
	2021	122	1,677	1,136	331	3,265

Table 8. Annual catches of pole-and-line fleet operating in the RMI EEZ, by flag and species, 2017-2021 (Source: Unraised logsheet data collected by MIMRA)

Flag	Year	Catch (metric tonnes)			
		BET	SKJ	YFT	TOTAL
Japan	2017	0	72	0	72
	2018	0	1,017	1	1,018
	2019	0	1,022	2	1,024
	2020	0	2,609	10	2,619
	2021	2	761	14	777

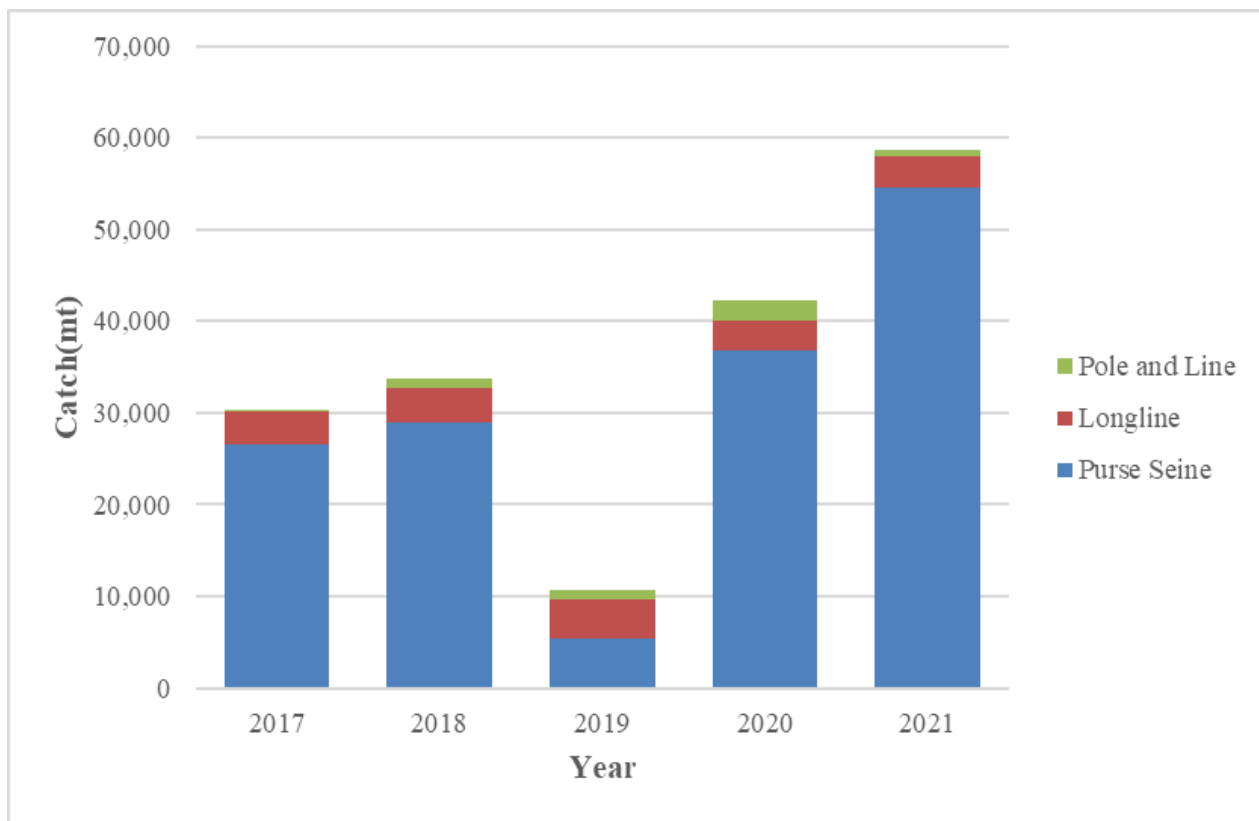


Figure 4. Total catch by the different gears operating in the RMI EEZ

DISPOSAL OF CATCH

As mentioned earlier, the Marshall Islands Fishing Venture, Ltd. (MIFV) operates the Longline Fish base with domestically-based foreign longline vessels. In 2021, there was a provisional total of 3,033 metric tons of fish unloaded by the longline fleet and most of it was bound for export markets (Table 9). The MIFV exports mainly fresh chilled tuna species to markets in the US, China and Canada. Frozen fish (rejects and bycatch), designated as Local, are shipped to Asia via transport containers and/or sold locally.

Majuro port is the only designated port for transshipment in the RMI. There were an estimated 289 purse seine transshipments undertaken in Majuro in 2021 with a provisional total of 221,609 metric tons transshipped (Table 10). Port restrictions due to COVID19 resulted in a significant decrease in the number of vessel entries. Additionally, most transshipments by the national purse seine fleet are usually carried out in Majuro, however, foreign ports in the region are occasionally utilized (Table 11).

Table 9. Total unloaded catch (mt) for domestically-based longline vessels in 2021

Species	Unloaded Catch (mt)
Albacore Tuna	89
Big Eye Tuna	1,560
Blue Marlin	219
Mahi Mahi	8
Moon Fish	4
Sailfish	12
Skipjack Tuna	17
Striped Marlin	6
Swordfish	25
Wahoo	64
Yellowfin Tuna	1,030
TOTAL	3,033

Table 10. Provisional purse seine transshipments in Majuro port in 2021

Flag	Number of PS Transshipments	SKJ	YFT	BET
China	2	1,553	32	0
Federated States of Micronesia	68	41,340	8,236	712
Kiribati	3	1,141	628	46
Korea	1	1,074	19	24
Marshall Islands	60	44,556	4,645	322
Nauru	41	21,510	7,426	695
Papua New Guinea	19	8,473	3,840	433
Philippines	3	2,303	249	7
Solomon Islands	6	2,896	364	515
Spain	3	4,538	378	1,750
Taiwan	74	42,947	12,013	1,039
Tuvalu	8	5,045	750	110
TOTAL	288	177,376	38,580	5,653

Table 11. Purse seine transshipments by RMI-flagged vessels in 2021

Annex II(1)					
Species	Quantity Transhipped (mt)	Transhipped in port	Transhipped in WCP-CA	Caught in WCP-CA	Product Form
SKJ	75,738	Yes	Yes	Yes	Frozen Whole
YFT	5,293	Yes	Yes	Yes	Frozen Whole
BET	422	Yes	Yes	Yes	Frozen Whole
MIXED (YFT_BET)	7,050	Yes	Yes	Yes	Frozen Whole
Annex II(2)					
Port	Number of Transshipments	Transhipped in port	Transhipped in WCP-CA	Caught in WCP-CA	Product Form
Majuro	60	Yes	Yes	Yes	Frozen Whole
Pohnpei	5	Yes	Yes	Yes	Frozen Whole
Rabaul	8	Yes	Yes	Yes	Frozen Whole
Tarawa	22	Yes	Yes	Yes	Frozen Whole

ONSHORE DEVELOPMENTS AND SOCIO-ECONOMIC FACTORS

MIMRA, on behalf of the Government, still maintains a joint venture partnership with Koo's Fishing Company, Ltd. (KFC). This venture continues to provide an additional revenue stream as well as a catalyst for further on-shore developments.

The Pan Pacific Foods (PPF) loining plant continued operations in 2021 however was limited to cold storage and containerization of fish. As has been reported before, the company also operates six RMI-flagged purse seine vessels which supply the plant with raw materials. The plant did not produce any processed fish during 2021 due in part to COVID19 restrictions and staff shortages.

Total volume of exports was 11,523 metric tons with whole containerized tuna exports making up the majority (Table 12). MIFV and Pacific International Inc. (PII) have steadily increased their numbers of containerized whole tuna exports in recent years. PPF exported the highest volume of whole tuna at 6,447 metric tons in 2021.

Table 12. Total Purse Seine whole tuna exports (mt) in 2021, by destination and species

Destination	SKJ	YFT	BET
Fiji	178	6	24
Indonesia	2,097	47	121
Japan	53	111	3
Taiwan	0	208	0
Thailand	3,705	458	630
Vietnam	792	3,049	41
TOTAL	6,824	3,880	819

FUTURE PROSPECTS OF THE FISHERY

The RMI continues to support domestic fisheries development aspirations in the region so long as it goes hand in hand with sustainable management measures that do not put a disproportionate burden on SIDS, in accordance with Article 30 of the Convention.

Other notable future prospects for the RMI tuna fishery involve further observer and debriefer capacity development as MIMRA continues to progressively train and recruit additional fisheries observers. Since the latter half of 2015, MIMRA has also utilized observers (when in port) to carry out port monitoring duties on transshipments taking place in Majuro port. Due to COVID19 restrictions, port monitoring was suspended in 2021 but coverage for portside unloadings continued with adherence to strict standard operating procedures.

DATA COLLECTION SYSTEM AND RESEARCH ACTIVITIES

Data management and handling capacity continues to be a vital tool for MIMRA. The SPC-OFP has been very instrumental in the RMI's data efforts. MIMRA continues to employ a dedicated port sampler covering almost 100% of longline unloadings at the MIFV fish base. The port sampler along with other staff collate the data and enter into the TUFMAN II database. In 2019 SPC introduced Onshore, an electronic port sampling app that would improve data flow and eliminate the use of paper sampling forms. The trialing of Onshore showed great potential but further improvements are being taken into consideration.

MIMRA intends to shift its focus towards the PNAO FIMS as the standard by which it will manage and handle its data complemented by existing databases such as the TUFMAN II currently in use. Further development of e-Reporting (ER) and EM initiatives continue to be a priority for MIMRA.

In 2021, there were 41 active RMI observers employed under the MIMRA Observer Program. A total of 23 longline trips were observed (Table 13). Deploying of observers on purse seine vessels halted in February of 2020 due to COVID19 travel restrictions. In collaboration with SPC, MIMRA initiated a beached FAD program in 2021 and has employed two observers to conduct the field work. A total of two outer islands were visited and data on 23 beached FADs were collected. This work also includes public awareness and reporting on beached FADs, which several were reported during the year by the community.

Table 13. Observer trips by flag and gear in 2021

Longline Trips	
Flag	No. of trips
FM	6
CN	17

APPENDIX 1 – CMM REPORTING



ADDENDUM TO ANNUAL REPORT PART 1

Specific information to be provided in Part 1 as required by CMMs¹

CMM 2019-03 [North Pacific Albacore], Para 3	This is not a target catch for RMI vessels however, 53mt of NP ALB were caught as bycatch by the chartered longline fleet operating in the RMI EEZ.
CMM 2006-04 [South West striped Marlin], Para 4	Not applicable. No RMI vessels fishing south of 15°S.
CMM 2009-03 [Swordfish], Para 8	Not applicable. No RMI vessels fish south 20°S.
CMM 2009-06 [Transshipment], Para 11 (ANNEX II)	95 in-port transshipments (Majuro 60; Tarawa 22; Pohnpei 5; Rabaul 8) = 88,503 mt (<i>prov.</i>). See table 11.
CMM 2011-03 [Impact of PS fishing on cetaceans], Para 5	There were no reports of instances in which cetaceans were encircled by purse seine nets in 2021.
Observer coverage (WCPFC 11 decision – para 484(b))	This does not apply to RMI. There were no RMI flagged longline fishing vessels in 2021.
CMM 2015-02 [South Pacific Albacore] Para 4	Not applicable. No RMI vessels fish south 20°S
CMM 2018-03 [Seabirds] Para 13	There were no RMI flagged longline fishing vessels in 2021.

¹ Reporting requirements requested by CMMs and decisions by the Commission, as of WCPFC16 (Dec 2019).
First issued on 13 March 2020