

Marshall Islands

Employment

Employment information from the 1999 Census is presented in Table A2.26:

Table A2.26: Employment in Republic of the Marshall Islands, 1999

Category	Total	Male	Female
Total Marshall Islands Population	50,840	26,026	24,814
Working Age Population (15 years and older)	26,698	14,595	14,103
Economically Active Population (Labor Force)	14,677	9,679	4,998
Employed Population	10,141	7,008	3,133
Employed in Fishing			
Fishermen, deepsea	72	71	1
Fishermen, other deepsea	12	12	0
Fishermen, inland and coastal	170	165	5
Fishermen, n.e.c.	27	27	0
Total Employed in Fishing	281	275	6

Source: Office of Planning and Statistics (2000a; 1999).

The census showed that the 281 people employed in fishing were in the following employment categories: public sector employee (28 people); private sector employee (62); self-employed (179); employer in own business (2); paid worker in family business (3); and unpaid worker in family business (7).

In comparison to the census data, MIMRA staff, when asked to roughly estimate employment in the small-scale commercial coastal fishing only, indicated that about 300 people in the Marshall Islands would have such employment.

Partitioning the above census employment between the monetized sector and the subsistence sector is more difficult. The 10,141 total employed population are broken down in the Statistical Abstract (Office of Planning and Statistics, 2000a; Table 6.27) as follows: 7,221 in the monetized sector; and 2,920 in the subsistence sector (i.e., individuals involved in subsistence activities were considered employed). The 281 individuals employed in fishing would therefore be the total of all commercial and subsistence fishers. Discussions with individuals peripherally associated with the census

and a cautionary note in the Statistical Abstract led to the conclusion that the format of the 1999 census was not especially good for defining the subsistence sector of the Marshall Islands economy.⁷

FAO (1998) estimated that 4,700 individuals are employed in the subsistence fisheries in the Marshall Islands. World Bank (1995) cites the 1988 census and indicates that 12% of subsistence workers considered themselves fishers.

The “employed in fishing” category in Table A2.26 does not include processing or servicing fishing vessels. There are about 280–350 people employed at the new loining plant, with an average wage of US\$2.00 per hour. Gillett et al. (2001) estimate that 20 people serve as laborers for tuna transshipment operations.

Volumes and Values of Fish Harvests

For the small-scale catches in the Marshall Islands, many estimates have been made, several of which have quoted Smith (1992b) as a source of information. Smith stated that “With the exception of the Arno project, the available information on inshore fisheries production is virtually non-existent or old.”

The available information on fisheries production and values for this study includes:

For subsistence fisheries:

- Elsy (undated) states that there is no visible means of assessing the level of subsistence fisheries as no records have been kept.
- World Bank (1995) states that there are no reliable estimates of the degree of exploitation of inshore resources.
- Dalzell et al. (1996) estimates 2,000 mt valued at US\$3,103,213 for the early 1990s.
- Office of Planning and Statistics (1996), for early 1990s, reports 3,185,928 pounds of food weight⁸; approximately 2,800 mt of whole fish weight valued at US\$3,655,848.

⁷ The 1999 Census asked a question about the “business/industry” that respondents were involved in during the previous 7 days, and provided many choices of occupations for which the respondents were to choose one. As most subsistence fishers also have many other occupations, the responses may not have been able to portray the real situation.

⁸ This appears to be the food weight (rather than the whole weight) of fish because the value given in the worksheet (US\$1.45 per pound in Majuro in 1996) considerably exceeds the 2001 MIMRA fish buying price on Majuro of US\$1.25 per pound.

- The Agriculture and Statistics database, “RMI Online,” shows that 1,445 short tons of fish worth US\$2,852,174 production by households for own consumption.

For commercial coastal fisheries:

- King, G. (1997) estimates the annual catches for Majuro as follows:
 - (i) Tuna at 7,000 lb/week, valued at US\$847,000/year;
 - (ii) Reef fish at 850 lb/week, valued at US\$93,500/year;
 - (iii) Marlin at 200 lb/week, valued at US\$11,000/year.
- Dalzell et al. (1996), for early 1990s, reports 369 mt valued at US\$714,504.
- Office of Planning and Statistics (1996), for early 1990s, estimates 75 mt valued at US\$139,357.
- Observations and enquiries during the July 2001 trip to Majuro for this study suggest 444 mt valued at US\$500,000.
- Office of Planning and Statistics (2000a) states that for “pet fish” for 1999 the value was US\$473,000.

For the large-scale commercial fishery catches in the Marshall Islands, the following recent estimates have been made:

Estimate	Period covered	Total Tuna Catch (mt)
MIMRA (2000)	October 1997–September 1998	47,497
MIMRA (2001)	October 1998–September 1999	65,322 (from Table 11) 87,026 (from Table 17)
Gillett et al. (2001)	Calendar year 1999	33,217
Oceanic Fisheries Programme (OFP 1998)	Calendar years 1990–1996	An average of about 13,000 caught each year.
Office of Planning and Statistics (2000a)	Calendar year 1998	2,188
Office of Planning and Statistics (2000a)	Calendar year 1999	2,457

Although considerable annual variation in tuna catches is to be expected as the purse seine fishery moves east and west, into and out of the Marshall Island zone, the catches cited by Office of Planning and Statistics (2000) appear to be somewhat erroneous.

In summary, selectively using the above information and the knowledge of current developments, a crude approximation of the Marshall Islands annual fisheries production in recent years is given below:

Table A2.27: Estimated Annual Fisheries Production of Republic of the Marshall Islands, late 1990s

Fishing Sector	Volume (mt)	Value (US\$)
Coastal Subsistence	2,800	3,836,000
Coastal Commercial ^a	444	973,000
Offshore Locally-based	0	0
Offshore Foreign-based	33,217	50,000,000
Total	36,461	54,809,000

mt = metric ton; US\$ = United States dollar.

^a Includes the "pet fish" fishery valued at US\$473,000, but negligible weight.

Fishery Exports and Imports

The Statistical Abstract of the Office of Planning and Statistics (2000a) gives details on exports from the Marshall Islands:

Table A2. 28: Estimated Annual Value of Fisheries Exports of Republic of the Marshall Islands, 1995–1999 (US\$)

Exports	1995	1996	1997	1998	1999
Total Exports	23,071,000	18,919,000	12,665,000	8,774,000	7,662,000
Pet Fish	349,000	196,000	41,000	306,000	473,000
Trochus	0	0	0	564,000	0
Chilled Fish	12,671,000	13,172,000	11,855,000	0	0
Frozen Fish	0	746,000	564,000	0	0
Shark Fins	0	104	5	89	0
Total Fisheries Exports	13,020,000	14,114,104	12,460,005	870,089	473,000
Fisheries Exports as % of Total Exports	56.4	74.6	98.4	9.9	6.2

Note: Values are in US dollars (US\$) free on board (FOB).

Source: Office of Planning and Statistics (2000a).

For Table A2.28, the following should be noted:

- A tuna loining plant began operation in Majuro in October 1999, but the loins are not listed under tuna exports nor under re-exports in the Statistical Abstract.
- The treatment of transshipped fish is unclear; the frozen fish exports of 1996 and 1997 may have actually been re-exported transshipped fish.
- Handicraft exports often have shell components but are not listed in the above categories of exports.
- There have been reports of harvest of cultured black pearls, but no mention in the table.
- The CITES 1987–1998 database show considerable coral exports in some years, but these are not given in the Statistical Abstract.

The Statistical Abstract gives information on the import of “fish and crustaceans, mollusks, and other aquatic invertebrates:”

Table A2.29: Estimated Annual Value of Fisheries Imports of Republic of the Marshall Islands, 1995–1999 (US\$)

Import	1995	1996	1997	1998	1999
Total Imports	75,055,000	72,553,000	60,995,000	67,329,000	68,935,000
Imports of Fishery Products ^a	543,340	434,709	169,906	445,371	500,190
Fisheries Imports as % of Total Imports	0.7	0.6	0.3	0.7	0.7

Note: Values are in US dollars (US\$) cost insurance freight (CIF).

^a Does not include any fishery products which may be in the category “meat, fish, or crustaceans, or other aquatic invertebrates, or preparations thereof.”

Source: Office of Planning and Statistics (2000a).

Access Fees

MIMRA (2001) gives the following access fee information:

Table A2.30: Estimated Annual Fisheries Access Fees in Republic of the Marshall Islands, 1996–2000 (US\$)

Paying Country	1996	1997	1998	1999	2000
Japan	1,094,000	900,000	1,926,000	3,407,000	3,369,400
USA	1,281,000	168,000	251,600	287,000	176,600
Ting Hong	478,000	565,000	121,000	0	15,000
Taipei, China	0	0	651,600	499,900	506,200
Korea, Rep. of	0	0	874,400	596,700	253,800
Koos	0	0	0	0	86,200
Others	0	0	97,800	192,000	33,600
Total	2,853,000	1,633,000	3,922,400	4,982,699	4,440,800

USA = United States of America; US\$ = United States dollar.

Note: The above figures are for the fiscal years (October to September).

Source: Marshall Islands Marine Resources Authority (MIMRA 2001).

On the other hand, the Office of Planning and Statistics (1999) reports the following fishing rights revenues which are very different from those presented in Table A2. 30:

1996	–	US\$1,610,260
1997	–	US\$1,916,726
1998	–	US\$1,322,996

In the Marshall Islands, access fees amounted to about 25% of government non tax revenue in fiscal year 1992/1993 (World Bank 1995). The recovery in the late 1990s from three years of economic recession was attributed in part to fisheries access fees (ADB 2000a).

Levels of Marine Resource Consumption

Preston (2000), using 1995 FAO production, import, and export information, indicated the apparent per capita supply of fish in the Marshall Island to be 38.9 kg per year.

Japan International Cooperation Agency (JICA 1983) states that the annual consumption of fish per capita on Majuro in the early 1980s was as follows:

- Local fish – 22.8 kg
- Canned fish – 8.6 kg

- Imported frozen fish – 0.3 kg
- Total – 31.7 kg

The Office of Planning and Statistics' worksheet for calculating the fishing component of GDP contains information from an early 1990s household expenditure survey. From that survey, the subsistence fishery contribution to fish consumption in the Marshall Islands can be estimated to be about 59.0 kg per year.

There have been numerous nutrition studies in the Marshall Islands. At least two studies in the 1990s have contained information on fish consumption:

- Johns Hopkins (1992) gave the frequency of eating eight categories of fishery foods in 75 households.
- Burton et al. (1997) gave the average number of meals per week containing local fish and imported fish at Mili, Namu, and Laura.

In examining the fish consumption information in the Marshall Islands, it should be noted that:

- There is considerable difference in consumption between the population centers of Majuro and Kwajalein, where 68% of the population resided in 1999, and the outer islands, where fish is relatively plentiful.
- Leakage of fish from the transshipment operations and longline bases in Majuro is probably having a substantial effect on the supply of fish on that island.

Exchange Rates

The Marshall Islands uses the US dollar (US\$) as currency.

