



ARNO SOCIOECONOMIC DATA: 2020

TOTAL NUMBER OF HOUSEHOLD SURVEYED: 84

TOTAL NUMBER OF PEOPLE IN SURVEYED HOUSEHOLD: 523

Name of Island:

	Frequency	Percentage
Arno	42	50
Bikareej	12	14
Ulien	6	7
Langor	8	10
Ine	14	17
Japo	2	2

Gender of respondents:

Gender	Frequency	Percentage
Female	67	80
Male	17	20

Age of respondents:

Age	Frequency	Percentage
21	2	2
22	1	1
23	1	1
24	4	5
25	4	5
26	3	4
27	2	2
28	3	4
30	1	1
31	3	4
32	2	2
34	6	7
35	2	2
36	4	5
37	5	6
39	2	2
40	1	1
41	2	2
42	1	1
43	2	2
44	1	1
45	1	1
46	2	2
47	2	2
48	1	1
51	2	2
52	3	4
53	1	1

54	1	1
55	2	2
56	2	2
57	1	1
58	4	5
59	1	1
60	2	2
61	2	2
62	1	1
67	1	1
68	1	1
70	1	1
72	1	1

How long the respondents live on atoll by year:

Number of years	Frequency	Percentage
1	6	7
2	3	4
3	3	4
4	2	2
5	1	1
6	4	5
7	1	1
10	3	4
11	1	1
12	2	2
13	1	1
15	2	2
19	1	1
20	5	6
21	2	2

22	1	1
23	1	1
24	2	2
25	4	5
26	1	1
27	1	1
28	3	4
30	2	2
34	2	2
35	2	2
36	4	5
37	2	2
38	1	1
39	1	1
46	1	1
47	2	2
48	1	1
50	4	5
52	2	2
53	1	1
54	1	1
55	1	1
58	1	1
60	2	2
61	1	1
67	1	1
68	1	1
70	1	1

Total number of people living in households:

Number of people	Frequency	Percentage
1	1	1
2	2	2
3	3	4
4	12	15
5	15	18
6	14	17
7	8	10
8	6	7
9	4	5
10	4	5
11	1	1
12	2	2
13	5	6
14	1	1
16	2	2
20	1	1
21	1	1
25	1	1

Total number of fishermen, farmers and artisans in households

Livelihood	Frequency
Fishermen	131
Farmers	161
Artisans	100

AGE GROUP:

Age group	Frequency	Percentage
Elder	39	7
Middle age	93	18
Adult	152	29
Adolescent	87	17
Child	152	29

SEX RATIO:

Gender	Frequency
Elder Male	20
Elder Female	19
Middle age Male	53
Middle age Female	40
Adult Male	80
Adult Female	72
Adolescent Male	57
Adolescent Female	30
Child Male	85
Child Female	67

Religion:

Denomination	Frequency	Percentage
Assembly of God	35	42
Ba'hai	3	4
Bukot nan Jesus	1	1
Full Gospel	17	20
Protestant	18	21
Salvation Army	10	12
Morning Star	2	2

Employment rate:

	Frequency	Percentage
Employed	15	18
Not employed	68	82

Occupation:

	Frequency	Percentage
School teacher	8	53
Health assistant	2	13
Council member	1	7
Manager	1	7
Police officer	2	13
Janitor	1	7

Sources of income:

Primary source of income:

	Frequency	Percentage
Fishing	29	35
Farming	16	19
Handicraft	15	18
Salaried employment	10	12
Copra	9	11
Gleaning	2	2
Social security	2	2
Livestock	1	1

Secondary source of income:

	Frequency	Percentage
Handicraft	25	30
Fishing	24	29
Livestock	13	16
Farming	11	13
Copra	7	8
Social security	2	2
Land lease or House rent	1	1
Salaried employment	1	1

Which member of the household earns the primary source of income:

	Frequency	Percentage
Male	56	67
Female	15	18
Both	13	14

Which member of the household earns the secondary source of income:

	Frequency	Percentage
Male	43	52
Female	29	35
Both	11	13

Level of Education:

	Frequency	Percentage
Elementary	7	8
Middle school	21	25
High school incomplete	29	35
High school diploma	15	18
College incomplete	10	12

Associates degree	1	1
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Type of transportation:

	Frequency	Percentage
Canoe	2	3
Fiberglass boat with engine	29	37
Fiberglass boat without engine	3	4
Aluminum boat with engine	3	4
Auto diesel	9	12
Auto gasoline	3	4
Bike	50	64
Wheel cart	23	30

MARINE:

Where do you fish:

	Frequency	Percentage
Lagoon side	37	50
Ocean side	28	38
Channel	9	12

Top Fishing Methods:

	Frequency	Percentage
Bottom fishing	36	49
Spear fishing	50	68
Trolling	20	27
Throw netting	24	32
Long netting	44	60

Top Fishing Gears:

	Frequency	Percentage
Flash light	50	68
Spear gun	45	61
Snorkeling gear	43	58
Scuba diving gear	6	8
Fish trap	3	4
Fishing line	40	54
Pole and line	10	14
Throw net	27	37
Long net	41	55

Do you participate in sea cucumber harvesting:

	Frequency	Percentage
Yes	19	23
No	63	77

TOP REEF FISH

1. Mole
2. Bejrok
3. Jato
4. Bwilak
5. Ekmouj

TOP PELAGIC FISH:

1. Bwebwe
2. Lojabwil
3. Jilo

Do you catch seasonal fish?

	Frequency	Percentage
Yes	30	41
No	43	59

Fish species	Month	Frequency	Percentage
Pati	May	18	62
Molmol	May	7	37
Jo	January	3	10

Do you hunt turtles:

	Frequency	Percentage
Yes	26	32
No	56	68

If yes, how often do you go hunt for turtles in a year?

	Frequency	Percentage
1 time	8	32
2 times	10	40
3 times	2	8
4 times	2	8
5 times	1	4
10 times	1	4
12 times	1	4

How many turtles do you catch per trip?

	Frequency	Percentage
1	9	36
2	11	44
3	2	8
5	1	4
13	1	4

Compare fish quantity- 5 years:

	Frequency	Percentage
There are many more fish now	2	3
About the same amount	16	22
There is somewhat fewer fish now	32	43
There are far fewer fish now	17	23

Fish quantity (explain)

	Frequency	Percentage
Overfishing	26	63
Increasing number of fisher and boats	9	22
Overharvesting	1	2
No limit on fishing	2	5
Harmful fishing methods	1	2
Fish migrate to deeper water	2	5

Compare fish size- 5years:

	Frequency	Percentage
They are much bigger now	3	4
They are somewhat much bigger now	5	7
About the same	29	40
They are somewhat smaller now	20	27
They are much smaller now	10	14

Fish size (explain):

	Frequency	Percentage
Overfishing	16	50
Increase number of fishermen	8	25
Harmful fishing methods	4	13
Size of fish has increased	4	13

How often do you go out fishing:

	Frequency	Percentage
A few times a month		
1-2 times per week		
3-6 time per week		
Everyday		

When do you fish:

	Frequency	Percentage
Day time		
Night time		
Both		

How much do you catch:

Pounds (lbs)	Frequency	Percentage
3	1	1
5	1	1
7	2	3
10	1	1
15	3	4
20	21	30

25	3	4
30	7	10
32	1	1
34	1	1
50	9	13
55	1	1
60	2	3
80	2	3
100	6	9
120	1	1
130	1	1
150	1	1
200	1	1
220	1	1
250	1	1
400	1	1
415	1	1
450	1	1
3000	1	1

Catch Breakdown:

% Sale	% Consumption	Frequency	Percentage
0	100	24	36
10	90	3	5
15	85	1	2
20	80	8	12
25	75	1	2
30	70	2	3
50	50	12	18
60	40	3	5
70	30	1	2

80	20	8	12
100	0	1	2

EARN AND SELL PER MONTH:

How much do you earn per month?

Amount	Frequency	Percentage
\$20	1	2
\$25	1	2
\$26	1	2
\$30	4	6
\$50	3	5
\$60	2	3
\$70	3	5
\$78	1	2
\$80	1	2
\$100	1	2
\$112	1	2
\$115	1	2
\$120	2	3
\$150	1	2
\$200	2	3
\$300	2	3

\$400	1	2
\$500	3	5
\$600	1	2
\$700	2	3
\$825	1	2
\$900	1	2
\$1000	4	6
\$1500	1	2
\$2000	1	2

How often do you sell your catch per month?

	Frequency	Percentage
1	4	6
2	4	6
3	5	7
4	2	4
5	2	4
6	2	4
8	1	2
12	8	12
24	6	9

25	1	2
36	1	2
48	1	2
60	1	2
80	1	2
85	1	2
136	1	2
144	1	2
600	1	2

Are you aware of ciguatera fish poisoning:

	Frequency	Percentage
Yes	24	29
No	58	71

TOP Ciguatera Fish Poisoning Species:

- 1.Paan
- 2.Iool
- 3.Mole
- 4.Mera
- 5.Jeplo

Fish Market:

	Frequency	Percentage
Majuro	39	54
Ebeye	1	1
Within community	12	17

TERRESTRIAL:

What type of livestock do you keep:

Livestock	Frequency	Percentage
Pigs	73	91
Chicken	70	88

How many pigs/swine and chicken/poultry: *Total number of pigs and chicken on surveyed households*

	Total
Pigs	638
Chicken	1152

Where do you keep livestock:

	Frequency	Percentage
Lagoon side	14	18
Ocean side	8	10
Middle of the island	18	23
Free range	41	51

What type of trees/crops have you planted:

Tree	Frequency	Percentage
Breadfruit	26	31
Pandanus	27	32
Coconut	25	30
Lime	23	27
Papaya	13	16
Pumpkin	13	16
Taro	8	10

Where do you sell your crops:

Market:	Frequency	Percentage
Majuro	27	38
Within community	1	1

How often do you sell you crops per month:

	Frequency	Percentage
1 time	5	8
2 times	5	8
3 times	6	9

4 times	4	6
5 times	1	2
10 times	1	2
12 times	6	9

How much do you earn per month:

	Frequency	Percentage
\$35	1	2
\$40	1	2
\$45	1	2
\$60	1	2
\$80	1	2
\$100	8	13
\$120	1	2
\$125	1	2
\$140	1	2
\$145	1	2
\$150	1	2
\$200	1	2
\$225	1	2

\$300	3	5
\$500	1	2
\$700	1	2
\$800	1	2
\$1000	2	3
\$2000	1	2

Compare quantity of food tree-5 years

	Frequency	Percentage
There is much more now	6	8
There is somewhat more now	7	9
About the same	31	41
There is somewhat less now	16	21
There is far less now	7	9

Explain quantity of food tree- 5 years

	Frequency	Percentage
It's been raining a lot	4	13
Climate change	4	13
Drought	13	43
Local crops are decreasing	1	3
NRC is distributing seedlings for replanting	6	20
Pigs are ruining/eating from our gardens	2	7

Do you plant trees to reduce salt spray:

	Frequency	Percentage
Yes	23	31
No	51	69

Where do you plant trees to reduce salt spray:

	Frequency	Percentage
Lagoonside	22	69

Which month is usually wet: **(Percentage of respondents)**

Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
9	13	20	17	77	21	17	7	5	8	13	19

Wet season: How do you call wet season in Marshallese

	Frequency	Percentage
Anin rak	27	42
Pata in allon	9	11

Dry season:

	Frequency	Percentage
Anin ean	31	44
Drin drin in mejlep	7	7

How do you say it in Marshallese if it is extremely dry:

	Frequency	Percentage
Drin drin in mejlep	16	38

HANDICRAFT:

	Frequency	Percentage
Shell	32	56
Coconut fiber	55	97
Pandanus leaves	54	95
Wood	14	25

Where do you sell your handicraft:

	Frequency	Percentage
Majuro	54	95
Within community	6	11

How often do you sell you handicraft per month:

	Frequency	Percentage
1	8	10
2	4	5
3	5	6
4	8	10
5	5	6
6	3	4

8	2	2
12	11	13
24	4	5
50	1	1
80	1	1
98	1	1

How do you earn from selling your handicraft:

Amount (\$)	Frequency	Percentage
\$30	1	2
\$40	1	2
\$50	3	6
\$90	1	2
\$98	1	2
\$100	14	26
\$120	1	2
\$125	1	2
\$130	1	2
\$150	1	2
\$175	1	2
\$200	7	13
\$250	1	2
\$300	1	2
\$400	2	4
\$450	1	2
\$480	1	2

\$500	4	7
\$550	1	2
\$700	1	2
\$1000	6	11
\$1200	1	2
\$1500	1	2
\$5000	1	2

What do you buy with your handicraft income:

	Frequency	Percentage
Food	56	67
Water	5	6
Transportation	19	23
Health care	37	44
Energy	5	6
Education	27	47

STATUS:

Environmental threats	Percentage	Human threats	Percentage
Harmful fishing practices	68	No electricity	46
Too much fishing	45	Remote location	4
Too much harvesting turtles	8	Out migration	31
Too much harvesting coconut crabs	11	Too many visitors	4
Invasive species	6	Poor Governance/ Communication	16
Climate change	55	Poor education services	2
Extreme weather events	29	Poor health services	39

Poor education	31		Poor transportation services	43
Not enough fresh water	25		Illegal dumping	33
Pigs ruining gardens	13			
Coastal erosion	30			

What do you think of the health or current status of the following: (%)

Resources	Very healthy	Somewhat healthy	Somewhat unhealthy	Very unhealthy	I don't know
Coral reefs	25	29	23	12	12
Underground water	27	26	23	17	7
Native trees	29	39	23	6	4
Number of sea cucumber and urchin	11	18	18	17	37
Number of fish	11	23	33	10	24
Livestock	38	37	11	7	7

Are you aware of any marine or terrestrial resource management measures that are in place? (%)

Measures	Yes	No	Not sure
Traditional protected area	39	45	12
Protected area	33	58	7
Limits on catch	11	83	6
Seasonal fishing	13	77	6
Collection sea invertebrates	10	79	7
Replanting native trees	29	63	5
Shoreline replanting	16	79	5
Waste disposal	41	51	6
Free range roaming pigs	26	66	7
Zones	18	73	10

Does this household take part in conserving natural resources? (%)

Never	2
In past, but not now	1
Seldom	7
Frequently	17
Always	73

To your understanding, do we practice any other sustainable measures in our culture? (%)

Yes	32
No	33
Not sure	35

Please explain answers on previous table: (%)

Limit catch	5
Traditional protected area (<i>Mo</i>)	2
Do not litter	5
Work together and take care of our resources	12

Where do you get information about the environment? (%)

Newspaper	5
Radio	73
Brochure	1
Community members	26
Community meetings	13
Work	2
Mobile phones	12

Traditional knowledge	6
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What do you do with the old batteries? (%)

Throw away with the rest of the trash	50
Put aside for separate disposal	43
I don't know	8

Have you heard of the Micronesia Challenge? (%)

Yes	0
No	100

WATER:

What kind of access to freshwater do you have? (%)

Water catchment tank	92
Water well	57
Makeshift water bins	1
Gov't water supply system	2
Village water supply	6
Reverse osmosis	1
Purchase water	1

Which one is your main drinking water:

-77% of the respondents said that they use the water catchment to store drinking water.

What are the individual volumes of your home's rainwater storage tanks?

Volume	Percentage
500	5
1000	27
1500	42

How does your household treat your main drinking water? (%)

No treatment	18
Boiling	24
Bleach	17
Sand clay filter	41
Cloth	4
Reverse osmosis	7

How do you dispose your trash? Where? (%)

Trashpit	51
Burn	41

CLIMATE CHANGE:

Is your household exposed to any of the following climate impacts? (%)

Tropical storm/cyclone	20
Coastal erosion	38
Flooding/wave inundation	32
Drought	56
Tornadoes	6
King tides	10
Salt spray damage	36
Salt water intrusion	23
High temperature heat	19
Disease outbreak (e.g diarrhea)	8

How often do you and your household use traditional knowledge for forecasting weather events? (%)

Never	36
In past, but not now	5
Rarely	27
Often	5
Always	27

If you use traditional knowledge, how reliable is it for weather and climate forecasts? (%)

Not reliable	
Sometimes	
Very reliable	

Have you heard of climate change, global warming and greenhouse effect? (%)

Yes	52
No	48

IF yes, from where? (%)

Radio/news	2
Awareness group from Majuro (MIMRA, PSS, Disaster, IOM etc)	11
School	7
Newspaper	29

Do you know the difference between weather and climate:

	Percentage
Yes	90
No	10

AQUACULTURE:

Are there any ongoing aquaculture activities going on right now? (%)

Yes	17
No	83

Has there been any aquaculture projects or activities in the past within the atoll? (%)

Yes	39
No	61

What kind of animal/plant were cultured?

1. Giant clam
2. Fish
3. Sea cucumber
4. Turtle

Who managed or organized the aquaculture activities/projects: (%)

MIMRA	25
RALGOV	1
LOCAL GOV'T	2
Private company	5
CMI Land Grant	1

Do you have any skills or have been trained in aquaculture? (%)

Yes	23
No	76

If you were to farm marine animals/plants in the lagoon, will you need to get permission to do so? (%)

Yes	56
No	42

From who? (%)

Traditional leaders	43
Local Government	13

How often does a field trip or AMI come to this Atoll?

AMI does not come this this atoll. Small boats come frequently. Up to 3 times a week or every day.

What are the significant resources (terrestrial & marine) for this atoll? (%)

Jaibo	8
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What are some of the existing projects that are currently happening? (%)

Installation on new NTA towers	17
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