



# **ABAMWAKORO ISLET FISHERIES MANAGEMENT PLAN**

## **ABAMWAKORO'S VISION**

*In 5 years' time, Abamwakoro Islet will be rich in marine resources such as strawberry conch, lobsters, bonefish, mullets and te Nimariri (Juvenile stage of a black barred surgeonfish). The village will also be known for its clean coast and lagoon in 5 years' time.*

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## Acknowledgement

Abamwakoro Islet Fisheries Management Plan was finalized by the villagers of Abamwakoro themselves on November 2020. The initiative was assisted and supervised by Nei Tengarengare or the Community Based Fisheries Management (CBFM) from the Ministry of Fisheries and Marine Resources Development. Funding for the development of this plan was supported through UNDP's Least Developed Countries Fund (LDCF) Project from the Ministry of Environment, Lands and Agricultural Development.

### **Officers who have supported the Islet in the creation and finalization of the Fisheries Management Plan**

*Tarateiti Uriam*

*Rooti Tioti*

*Toaiti Vanguna*

*Beia Nikiari*

*Matereti Buren*

*Iutita Karekennatu*

## 1. Background of the management Plan

This management plan was initially developed and endorsed in November 2019 by members of Abamwakoro Islet for the entire people of Abamwakoro. The development of this management plan is a consolidation of ideas and concerns through a series of consultations held prior the finalization and endorsement of the plan. A large number of communities were involved in the preparation of the plan and some of the members are listed in Annex 1.

Abamwakoro became an established incorporated coastal community in \*\*\*\* pursuant to the Incorporated Societies Act 2000 and includes among its purposes, the purpose of participation in the conservation, management and protection of marine resources in adjacent coastal areas.

A review and finalization of the management plan was conducted in March 2021, for the people of Abamwakoro Islet to make necessary amendments and align with the requirements as per the Fisheries (Conservation and Management of Coastal Marine Resources) Regulations 2019.

This management has the full support of the entire people of Abamwakoro Islet. (see Section 2 statement of Endorsement)

Nonouti Island Council has given support and endorsement for this management plan (see Section 2, statement of endorsement by the Island Council).

A statement of endorsement by the Minister of Fisheries and Marine is provided in Section 2.

This is a duly endorsed plan by the village of Abamwakoro, the Island Council of Nonouti Island and the Ministry of Fisheries and Marine Resources Development.

## 2. Statements of Endorsement



## 3. Fisheries Management Plan

### 3.1. Application of the Plan

Fisheries management measures as written in this fisheries management plan are enforceable Only within Abamwakoro Islet Sanctuary as Mapped on Annex 3 with coordinates on Annex 4.

### 3.2. Objective of the Plan

The general objective for this plan is to guarantee the revitalization, sustainability and security of Abamwakoro's major marine resources in Five years' time through a well-managed fishing and non-fishing practices for the wellbeing of the current and future generations of Abamwakoro villagers.

The specific objectives of the plan are as follows:

- a) Restore the health and abundance of important finfishes and marine invertebrates
- b) Maintain a healthy and intact marine ecosystem
- c) Ensure clean coastal and marine environment
- d) Increase awareness and support towards the Fisheries (Conservation and Management of Coastal Marine Resources) Regulations 2019.

### 3.3. Fisheries Management Measure

#### 3.3.1. 1st Target: Destructive Fishing Method.

- a) The use of fishing nets with mesh sizes of under 2.5 inches is banned
- b) Te ororo fishing method is to be banned in all of Temotu waters
- c) Connecting different fishing methods while fishing is banned
- d) Destruction of Octopus habitats while fishing is banned
- e) Diving for Lobsters is banned

#### 3.3.2. 2<sup>nd</sup> Target: Recovering the health of species that spawn or produce berries

- a) No one shall fish for Bonefish during spawning times as outlined below;
  - (i) three (3) days before full moon
  - (ii) during full moon
  - (iii) three (3) days after full moon
  - (iv) three (3) days before new moon
  - (v) during new moon

- (vi) three (3) days after new moon
- b) No one shall fish for Mullet during spawning times as outlined below;
  - (i) three (3) days before new moon
  - (ii) during new moon
  - (iii) three (3) days after new moon
- c) No one shall fish for Crabs during spawning times as outlined below;
  - (i) three (3) days before full moon
  - (ii) during full moon
  - (iii) three (3) days after full moon
- d) Maximum Catch quota for harvesting Crabs is 50 crabs per household in one day
- e) Harvesting lobsters with carapace sizes of less than 8.5 is banned. (see measurement instruction in Fig. 1 in Annex 2 as per the Fisheries Regulations 2019)
- f) Harvesting berried lobsters is banned

### 3.3.3. 3<sup>rd</sup> Target: Protected Resources

- a) Harvesting or fishing of te Nimariri (Juvenile stage of a black barred surgeonfish) is banned
- b) Harvesting for Strawberry Conch in a channel between Abamwakoro Islet and Tabukaokao islet is banned. Refer to a map on Annex 3 and coordinates on Annex 4 for more information
- c) An area marked over a mudflat opposite to the Abamwakoro clinic is designated as a restocking area for seagrass. The area is designated as a restocking site for seagrasses. Refer to a map on Annex 3 and coordinates on Annex 4 for more information
- d) Peanut Butter Worms
- e) To be harvested only by the People of Temotu Village
- f) Crabs – Edible ones
- g) Harvesting crabs in all of Temotu is banned for 3 years
- h) Neitoro - Hippopus hippopus
- i) Harvesting of te Neitoro is to be banned in all of Temotu waters for 4 years
- j) To be harvested only by the People of Temotu Village

- k) Te Were – Tridacna maxima
- l) Harvesting of te Were is to be banned in all of Temotu waters for 4 years
- m) To be harvested only by the People of Temotu Village
- n) Turtle – All species
- o) Fishing for turtles is banned in all of Temotu waters
- p)

#### 3.3.4. 4<sup>th</sup> Target: Maintaining coastal and marine cleanliness

- a) Mangrove deforestation is banned
- b) Littering any sort of biodegradable and non-biodegradable rubbish or waste on the beach, shoreline and mangrove areas is banned

## 4. Management Plan Guidelines

### 4.1. Entry into force and Implementation:

- a) This management plan will come into force once signed off by the Minister for Fisheries and Marine Resources Development.
- b) The Abamwakoro Maungatabu and Nei Tengarengare committee are responsible in driving the implementation and monitoring of this management plan
- c) Members of the CBFM committee consist of:
  - (i) Those nominated by Abamwakoro Maungatabu
  - (ii) A representative for females on Abamwakoro Islet
  - (iii) Abamwakoro Village wardens
  - (iv) Special Constable
  - (v) Fisheries Assistant
- d) Role of the CBFM committee:
  - (i) Conduct monitoring and inspection during the spawning seasons of the mullet, bonefish, crabs and any observed illegal fishing
  - (ii) Monitor coastline for littering
  - (iii) Receive reports of breaching cases from the villagers



- (iv) Report breaches to the Abamwakoro Maungatabu for judgements
- (v) Keeping a record of fines imposed, the number of breaching cases and the amount of fines issued.

#### 4.2. Monitoring and Enforcement Strategies:

- a) Monitoring of the management plan will be carried out by every member of the islet but will be led by Nei Tengarengare Committee
- b) It is a responsibility of every villager in Abamwakoro to report any noticeable breaches to Nei Tengarengare Committee.
- c) Nei Tengarengare Committee will record and collect more information on these breaches before reporting to the Abamwakoro Maungatabu for further actions on imposing penalties.
- d) Reports will be made on the progress of enforcement and monitoring by Nei Tengarengare committee during the monthly meetings of Abamwakoro Maungatabu
- e) Abamwakoro Maungatabu will decide penalties for offenders whether to take it to court or decide the penalty under the mwaneaba.
- f) LDCF Boat will be used to monitor and conduct surveillance in managed areas and during the spawning aggregations of bonefish and goatfish and any observed illegal fishing.

#### 4.3. Management plan review

- a) The plan shall be revised every five (5) years or when the Minister considers necessary, upon the advice of the Director and of the community involved. Any amendments to the plan shall be endorsed by the community involved and approved by the Minister in writing.

## Annex 1: Villagers who contributed to finalization of Abamwakoro Fisheries Management plan

*Temweaka Boraia*

*Teairo Bwauro*

*Timon Kateia*

*Rorii Tebwaou*

*Birikee Baroo*

*Keiakiina Birikee*

*Tinna Thomas*

*Bikentaake Tioti*

*Naomi Tiaoti*

*Bitiaieta Birikee*

*Ruruobu Tabare*

*Meere Arawatau*

*Buaua Mateti*

*Aboro Tekautu*

*Kitoua Birikee*

*Tereirooti Atauea*

*Teniko Tinoka*

*Maria Kaburawete*

*Konono Tebau*

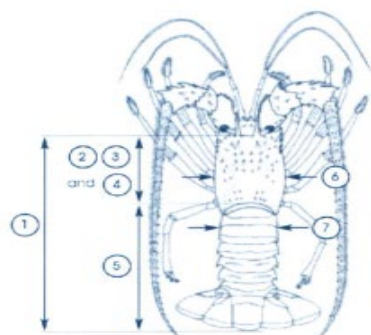
*Nawaia Mateti*

*Moata Arawatau*

*Kannaoia Teawaki*

*Bwati Tongaia*

## Annex 2: Schedule 1(as per the Fisheries Regulations 2019)



1. from the front edge of the carapace to the rear edge of the telson
2. carapace length
3. from the midline behind the rostral horns to the rear edge of the carapace
4. from the base of the supra orbital spines to the end of the cephalothorax
5. tail length
6. carapace width
7. tail width between the lateral notches of the first tail segment

Fig. 1 Rock Lobster carapace length

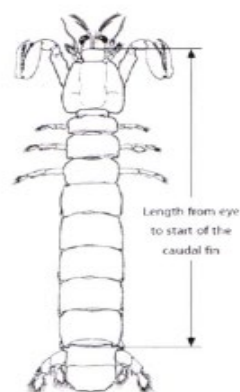
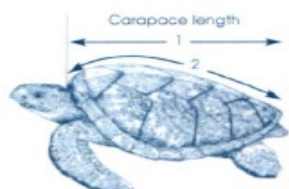


Fig. 2 Mantis shrimp



- 1: measured in a straight line
- 2: measured along the curve of the carapace

Fig. 3 Turtle carapace length

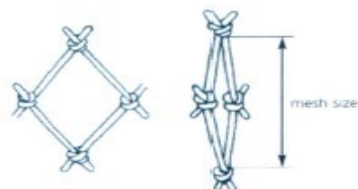
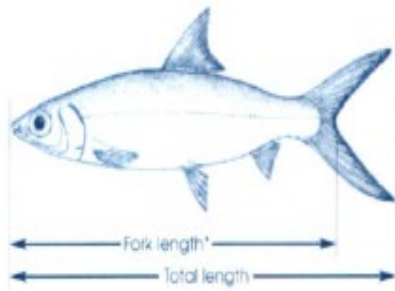


Fig. 4 Stretched mesh size



\* or measure taken at the middle of the tail

Fig. 5 Finfish fork and total length

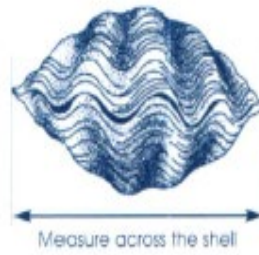
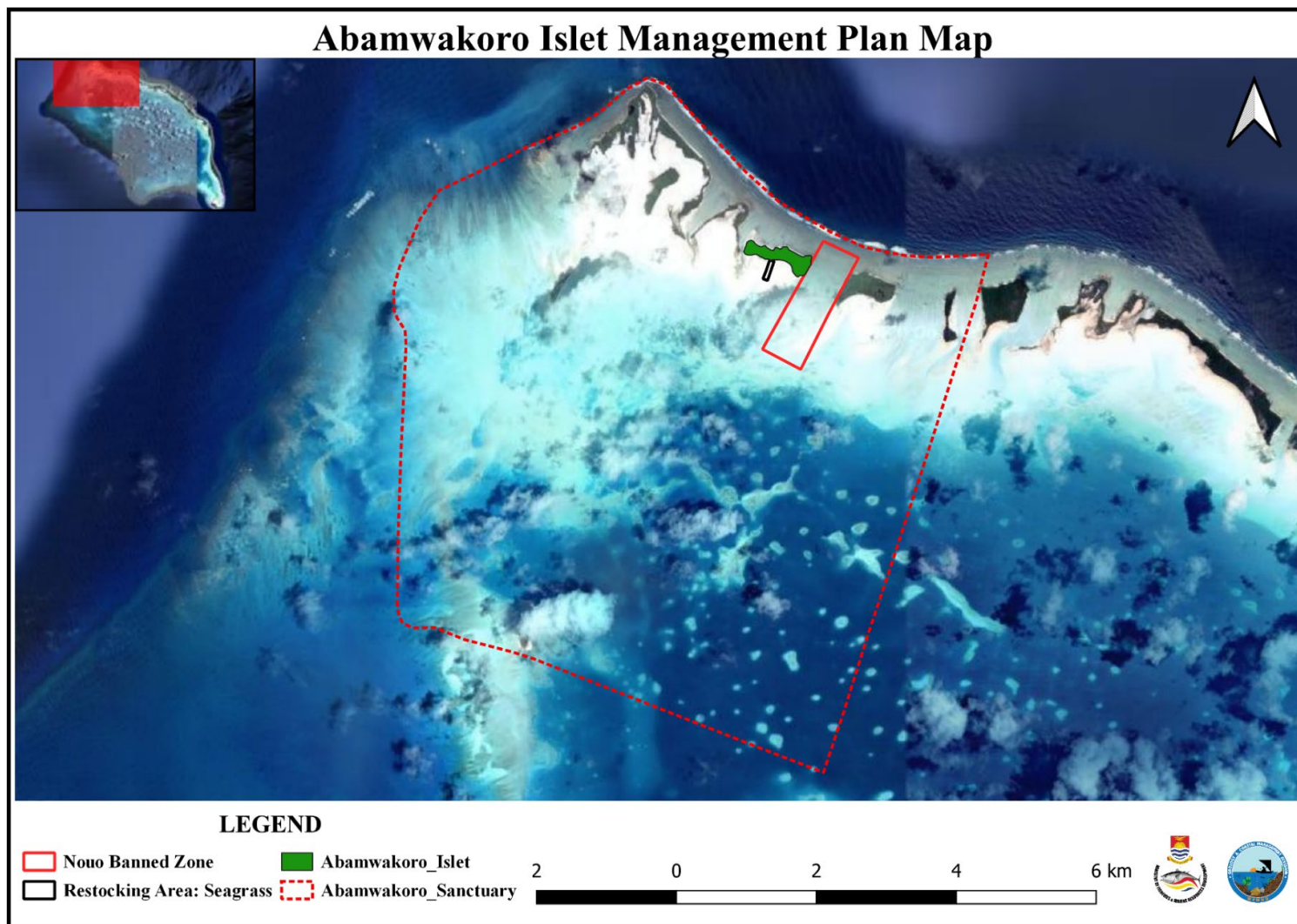


Fig. 6 Bivalve total length

### Annex 3: Schedule 2 (as per the Fisheries Regulations 2019)

Goatfish ( <i>Upeneus taeniopterus</i> )	Maebo	Minimum fork length 20 cm	Three (3) days before and three (3) days after new moon
Exocoetidae (flying fish)			
Flying fish ( <i>Cypselurus suttoni</i> )	Onauti	Minimum fork length 20 cm	Three (3) days before and three (3) days after new moon
<b>2. INVERTEBRATES</b>			
Bivalves (ark, clams)			
Ark shell <i>Anadara sp.</i>	Te bun	Minimum size 4 cm	Director to declare closed season and areas.
Clam ( <i>Tridacna maxima</i> )	Were	Minimum size 15 cm	Director to declare closed season and areas.
Clam ( <i>Tridacna squamosa</i> )	Were	Minimum size 20 cm	Director to declare closed season and areas.
Giant clam ( <i>Tridacna gigas</i> )	Kima	Total ban	Special protection warranted
Crustaceans			
Rock lobster ( <i>Panulirus sp.</i> )	Nnewe	Minimum carapace length 8.5cm from front edge of carapace to rear edge of carapace	Director to declare closed season
Mantis shrimp <i>Lysiosquilla maculate</i>	Waro	Minimum size 18cm measured from eye to start of caudal fin	Director to declare closed season
<b>3. SEA TURTLES</b>			
Green Turtle ( <i>Chelonia mydas</i> )	Te On	Minimum carapace length 86cm	Director to declare closed season
Hawksbill Turtle ( <i>Eretmochelys imbricate</i> ) (not fit for consumption)	On-tabwakea	Minimum carapace length 68cm	Director to declare closed season

### Annex 3: Abamwakoro Islet Fisheries Management Plan Map





## Annex 4: Coordinates of Marine Managed Areas

Abamwakoro Islet Coordinates			
Feature ID/Name	Elevation/Distance	Longitude (X)	Latitude (Y)
<b>(i) Nouo Banned Zone</b>			
MPA	7.007215	174.245683	-0.557122
MPA	7.007215	174.245683	-0.557122
MPA	7.007215	174.245683	-0.557122
MPA	7.007215	174.245683	-0.557122
MPA	7.007215	174.245683	-0.557122
MPA	7.007215	174.245683	-0.557122
<b>(ii) Restocking Area: Seagrass</b>			
Seagrass MPA	1.98851	174.246959	-0.546828
Seagrass MPA	1.98851	174.246959	-0.546828
Seagrass MPA	1.98851	174.246959	-0.546828
Seagrass MPA	1.98851	174.246959	-0.546828
Seagrass MPA	1.98851	174.246959	-0.546828
Seagrass MPA	1.98851	174.246959	-0.546828
<b>(iii) Abamwakoro Sanctuary</b>			
Abamwakoro	0	174.1985638	-0.59089067
Abamwakoro	1033.784472	174.198682	-0.581605265
Abamwakoro	2173.513173	174.1990369	-0.571373577
Abamwakoro	3709.306514	174.1996875	-0.557593327
Abamwakoro	3920.407062	174.1995692	-0.555700761
Abamwakoro	4124.933904	174.1985638	-0.554163051
Abamwakoro	4245.979244	174.1981498	-0.553157625
Abamwakoro	4555.499198	174.1980906	-0.550377918
Abamwakoro	4882.917548	174.1988595	-0.547539068
Abamwakoro	5620.353494	174.2014617	-0.541447369
Abamwakoro	6119.781576	174.2039605	-0.537721379
Abamwakoro	6694.120355	174.2086328	-0.535533099

Abamwakoro	7496.511989	174.2150424	-0.532235893
Abamwakoro	7965.995715	174.2189458	-0.53063904
Abamwakoro	8290.626689	174.2216368	-0.529515329
Abamwakoro	8701.680298	174.2247714	-0.52756362
Abamwakoro	9182.301764	174.2280242	-0.52472477
Abamwakoro	9512.280814	174.2306265	-0.523305345
Abamwakoro	9793.0923	174.2330144	-0.524118557
Abamwakoro	10590.28686	174.2378049	-0.5294414
Abamwakoro	11503.34893	174.2433939	-0.535444385
Abamwakoro	12123.38686	174.2475339	-0.539170375
Abamwakoro	12984.9609	174.254217	-0.543073794
Abamwakoro	13512.40393	174.2585345	-0.545025503
Abamwakoro	13843.48393	174.2614398	-0.545661287
Abamwakoro	14127.09767	174.263946	-0.546119643
Abamwakoro	14484.08426	174.2671471	-0.546311857
Abamwakoro	14958.52457	174.2714054	-0.546134429
Abamwakoro	15301.8903	174.2744808	-0.545897858
Abamwakoro	16020.68998	174.2728766	-0.552152199
Abamwakoro	18171.57018	174.2669623	-0.57054558
Abamwakoro	20005.91941	174.261876	-0.586218396
Abamwakoro	20978.24336	174.2590963	-0.594498375
Abamwakoro	22151.15997	174.255947	-0.604552634
Abamwakoro	23081.8456	174.2532855	-0.612477757
Abamwakoro	24396.51147	174.2422702	-0.608219482
Abamwakoro	27535.51514	174.2160404	-0.597869509
Abamwakoro	27854.34078	174.2133125	-0.596997154
Abamwakoro	28551.36457	174.2072503	-0.595429872
Abamwakoro	29021.14021	174.2033321	-0.593862591
Abamwakoro	29324.06361	174.2006116	-0.593921733
Abamwakoro	29489.18427	174.1992513	-0.593330306
Abamwakoro	29612.88686	174.1987781	-0.59232488
Abamwakoro	29774.32481	174.1985638	-0.59089067

