Local Guide to BETTER RESOURCE

BETTER





This booklet was produced by Vanuatu Fisheries Department in collaboration with cChange, the Locally-Managed Marine Area Network International (LMMA Network) and the Pacific Community (SPC) through the Pacific-European Union Marine Partnership (PEUMP) programme with financial support from the European Union and the Government of Sweden. Its contents are the sole responsibility of cChange. The views in this booklet do not necessarily reflect those of the European Union and the Government of Sweden.

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ABOUT THIS BOOKLET & ACKNOWLEDGEMENTS

The Local Guide to Better Resource Management is a conversation starter for communities to host their own discussions to get better catches for food and income by managing their fishing grounds. It is about communities coming together to decide for themselves what they can do about declining catches, and this booklet is a tool to guide these discussions.

There is a coalition of people, community networks and partners working together to scale-up community-based fisheries management in Vanuatu. This booklet contributes to Vanuatu's Scaling Up CBFM Strategy that aims to reach all communities with information to make better resource management decisions.





When we start talking about fisheries management, here are the kinds of responses we hear most often.



But if you ask people how their catches have changed over the years, here is what you will find.





So why has fishing changed?

As our population increases in Vanuatu, we are fishing more as we have more mouths to feed.





Vanuatu national population (source: Pacific Community and the Vanuatu Bureau of Statistics 2022.

We are also fishing more to sell and make money so we can pay for our needs and the increasing cost of things.



Fishing gear has also improved over the years, making it easier to catch more and more fish. Now too few fish are left behind to breed and restock our fishing grounds.

This needs to change if we want good catches to eat and sell, year after year.



There are also threats to the places that fish and other marine species need to thrive – their habitats.







Mangroves are critical habitat, particularly for mud crabs and young fish. Clearing mangroves for firewood and building materials impacts habitats needed for species to grow. Using mangroves as a toilet is also harmful.

Crown-of-thorns starfish (COTs) can eat hard coral, and outbreaks of them can kill large areas of coral reefs. Warming seas and polluted water can kill coral. You can tell when coral turn bleach white.

Climate change is also increasing the number of cyclones, which can destory and damage habitats.



Walking on coral when gleaning reefs during low tide can damage coral reefs.

Turning over and moving rocks is also damaging.



Oil, detergent, human and animal waste, fertiliser and other chemicals can enter creeks and rivers, polluting the water that flows to the sea.

Littering of plastic drink bottles, bags, containers, drums, cigarette butts, foam packaging and insulation and broken and burnt pieces of plastic are also harmful.



Some fishing methods such as using an iron bar to dislodge clams is destructive. Doing this can damage surrounding coral. And the truth is, as our lives have changed, some of our traditions are being lost. When rules on who can fish and where are lost, uncontrolled fishing creates a free for all, and can lead to marine resource decline, too.





It's important for communities to talk about the changes they experience and the challenges they face.

Can you sit together in small groups and talk about the kind of changes you have seen?



Section 2 WHAT CAN WE DO ABOUT DECLINING CATCHES?



What can you do about declining catches in your community?

That's where community-based fisheries management (CBFM) comes in.

CBFM is when communities make management rules to ensure marine resources are used sustainably. The next few pages share some of the typical **management rules communities make to manage their marine resources.**



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- Typically used to protect marine species that are vulnerable during their peak spawning months, when they migrate or gather in large numbers to breed. If you allow marine species to first breed, you help maintain good catches.
- Temporary closures can also be imposed during times when some marine resources become toxic to people eating them.

Avoid Coconut Crabs during their peak spawning season. It's the law.



PERMANENT CLOSURES

- Marine areas in which the fishing and harvesting of marine resources is banned for many years.
- A permanent closure allows marine resources to reproduce without interference and provides protection of their habitats.
- The ultimate aim of creating a permanent closure is to increase marine resource stocks, which will spill over into fished areas nearby, leading to increased catches.
- Fish that swim over large areas and outside the closure area are still vulnerable.



Stret Size = 1km² for shells Stret Size = 2km² for fish



Consider banning fishing practices that leave too few marine species behind or damage habitats.

Nighttime spearfishing takes too many fish, cleaning out reefs. Communities can create local bans.





Small nets catch undersize fish especially in nursery grounds:

Mesh size <20 mm or 2m wide. Drag net or a beach seine net <50mm banned nationally.

Do not use fish fences to catch fish.

Ban the use of iron bars when collecting clams or other species. It can damage coral.





- Limit the number of people allowed to fish in your fishing ground. Some communities just limit the number fishers from outside.
- Limit catches, by weight or number.
- Limit the number of allowable fishing days, particularly when tabu areas are opened so breeding stock is not lost..





! Must not take, harm, have in your possession, sell or purchase any BDM when the <u>Season is Closed.</u>

RESTRICTIONS ON VULNERABLE SPECIES

• Ban the overharvesting of fish and other marine species that are overharvested and at risk of disappearing.

FOLLOW THE LAW

+ Restrictions on sea cucumbers, trochus, lobster, trumpet shell, turtles, green snail, coconut crab and giant clams





- Establish minimum size limits to ensure that what is caught is of a mature size and has had a chance to breed and reproduce.
- Use bigger hooks or bigger net sizes to ensure immature or unwanted fish are not caught.
- Follow national minimum size limits when collecting sea cucumbers, coconut crabs and shells.



SELECTIVE HARVESTING

- Limit the taking of certain sexes of species. This includes female mud crabs, coconut crabs or crayfish, or taking any species that are carrying eggs.
- Ban taking certain species where they change sexes of their lifetime. Some parrotfish change from female to male later in life and if you take only the larger males, you will only have females left and no males to breed with.



PROTECTION FOR KEY HABITATS

• Protect key habitats from harm, so fish can grow through life stages. For instance, fish might hide in mangroves when they are small, then move into seagrass areas and coral as they grow.



PROTECT MANGROVES







PROTECT REEFS



- Creeks and rivers that flow to the sea can transport soil, chemicals, fertilisers and effluent which can reduce water quality and smother reefs. What happens on land can impact the health of reefs.
- Reduce soil, chemicals, fertilisers and effluent from entering creeks and rivers that flow to the sea.
- Keep lifestock away from creeks and mangroves.





- Fish Aggregating Devices (FADs) are humanmade objects used to attract fish to one location making them easier to catch.
- FADs are typically placed offshore to attract fish such as tuna or wahoo. FADs can also be placed closer to shore to reduce fishing pressure in overfished areas.



IT'S THE LAW TO SEEK PERMISSION FROM VFD BEFORE DEPLOYING A FAD AS THERE ARE MINIMUM REQUIREMENTS TO PROTECT THE SAFETY OF OTHERS ON THE WATER.



It's important for communities to talk about the changes they experience and the challenges they face.

Can you sit together in small groups and talk about the kind of changes you have seen? DO YOU AGREE THAT FISHERIES MANAGEMENT MAKES SENSE IF IT CAN HELP INCREASE CATCHES?

WHAT ARE YOUR CONCERNS ABOUT FISHERIES MANAGEMENT? ARE THERE CURRENT FISHING RULES IN THE COMMUNITY? ARE THEY HELPING?

> ARE YOU INTERESTED IN KNOWING MORE ABOUT THE HEALTH OF YOUR FISHING GROUNDS AND THE RULES THAT CAN HELP IMPROVE CATCHES?

Section 3 WHERE TO FROM HERE?

Let's discuss where to from here: What actions you can take to start or improve fisheries management and get better catches for food and income in your community. While there is a CBFM network that can help you, their message to you is to <u>not wait</u> for someone to turn up and help you and your community. To help you get started, read on for more information and who to contact for support.



ACTIONS YOU CAN TAKE

1. MEET WITH COMMUNITY LEADERS & REACH OUT TO FISHERIES TO GET ORGANISED



2. HOST LOTS OF SMALL GROUP DISCUSSIONS TO GET EVERYONE INVOLVED!

MANAGEMENT PLAN OPTIONS!

PROBLEMS

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SOLUTIONS

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3. CALL A VILLAGE MEETING FOR THE COMMUNITY TO DISCUSS IF THEY WANT TO TAKE STEPS TO GET BETTER CATCHES

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 4. START MANAGEMENT PLANNING\* TO PUT DISCUSSIONS INTO ACTION

\*When you get to this stage, speak with a fisheries officer for more information

## **COMMUNITIES IN ACTION**

**Communities can create their own fisheries management rules that make sense locally and that are enforceable.** Encourage lots of discussion with everyone in your community as rules can impact people differently.

#### **EXAMPLE MANAGEMENT RULES BILLBOARD**

| What's the<br>Problem?                          | Community Fishing<br>Rule              | Fine                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|-------------------------------------------------|----------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Destructive and<br>harmful fishing<br>practices | Prohibit mesh size<br><20mm or 2m wide | Warning<br>Cash penalty | MANEJMEN RULS PESKARUS KOMUNITI-BES<br>TABU ERIA<br>TABU ERIA TABU ERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                                                 | Ban night spearfishing with torches    |                         | Krin Snel<br>Wud Krab<br>Si kakumba<br>Si kakumba<br>No YUSUM NET WE SAES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                                                 | Ban breaking coral                     |                         | Pigeon Pis<br>Pigeon Pis NO YUSUM SMOL HUK BLONG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
|                                                 | No taking undersize                    |                         | Netia Trota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Community<br>overfishing/<br>declining catches  | Ban night spearfishing with torches    |                         | Pipu shel         Pipu shel <t< td=""></t<> |  |
|                                                 | Ban using small hooks                  |                         | Peskarus Community Fishing Rule Billboard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                                                 | No taking undersize                    |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                                                 | No taking in tabu area                 |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |

## **GOVERNMENT WORKING WITH COMMUNITIES**

Vanuatu Fisheries Department (VFD) and their partners work with coastal communities across Vanuatu to protect food security and livelihoods. This support is provided in many ways.

#### **COMMUNITY-BASED FISHERIES MANAGEMENT**

VFD has a dedicated team who supports communities to establish resource management plans. Communities can contact VFD to request support for management planning.

#### COMMUNITY-BASED AUTHORISED OFFICERS

- Conduct awareness on the Fisheries Act & Regulations
- Assist with compliance & enforcement
- Support monitoring, control & surveillance
- Submit reports with evidence of offences

**Contact VFD** 

Assist any VFD-related activities in their area

## TAILS MONITORS

DATE ENTRY APPLICATION

- Community members are trained in collecting data on coastal fisheries using the TAILS App developed by SPC
- Data is uploaded to an online database and verified
- This data is important to help inform management decisions in communities and wider

contactfisheries@fisheries.gov.vu



#### The Government of

Vanuatu has regulations to prevent fisheries from being overharvested. For example, seasonal closures and minimum sizes for beche-de-mer to help sea cucumber populations recover.

There are also laws that state what size shells and crabs need to be before they are caught, bans on destructive and harmful fishing practices.

Here are some of the laws that communities should follow to help revive species that are an important source of cash in rural communities.

For more information, please contact the Vanuatu Fisheries Department 23119.

## **COASTAL FISHERIES REGULATIONS**

#### BANNED FISHING PRACTICES









Fisher **must not use** scuba for the purpose of fishing

Any cast net that has a mesh size <20mm when fully stretched or a radius that exceeds 2 metres in diameter

No use a fish fence for fishing

A drag net or a beach seine net that has a mesh size <50mm when fully stretched

- Take, kill, or have possession, export, sell or purchase
- Interfere with or disturb in any way a turtle nest or any turtle that is in the process of preparing to nest or laying eggs

### TURTLES

- Take, have possession, consume, export, sell or purchase any turtle egg
- Have possession any marine turtles that is held in captivity in any way
- Harm, capture, kill, consume, sell, purchase, export or destroy any turtle species (hatchlings, juveniles or adults) including by use of any weapon



Leatherback turtle Dermochelys coriacea



**Hawksbill turtle** *Eretmochelys imbricata* 



**Green turtle** *Chelonia mydas* 

#### CRABS, CRAYFISH & SHELLS

**Coconut crab** *Birgus latro* 



**Trochus** *Rochia nilotica* 



*Triton's Trumpet Charonia tritonis* 







Not carrying eggs, or removed eggs

**Rock crayfish** *Panulirus sp.* 



Not carrying eggs, or removed eggs







TF Taikafis | Tigerfish Bohadschia argus Dry: 15 cm / 32 g | Wet: 30 cm / 800 g



#### SEA CUCUMBER

- No harvesting allowed when the season is closed
- Harvest only legal size & weight for each species when the season is open
- Check the species dry quota weight allocated for each area when the season is open
- Must have a processing licence to process or purchase to process



WTF Waet titfis | White teatfish Holothuria fuscogilva Dry: 16 cm / 126 g | Wet: 35 cm / 1400 g

SEA CUCUMBER LAWS CONTINUE ON NEXT PAGE ...

Report offence to your Community-Based Authorised Officer in your Province or the Compliance Officers at Vanuatu Fisheries Department.

### SEA CUCUMBER



Ambafis | Amberfish AF Thelenota anax Dry: 15 cm / 80 g | Wet: 40 cm / 1600 g



Braon sanfis | Brown BSF sandfish Bohadschia vitiensis Dry: 12 cm / 28 g | Wet: 25 cm / 700 g



Elefenfis | Elephant trunkfish ETF Holothuria fuscopunctata



Lolifis | Lollyfish LF Holothuria atra









Blakfis | Hairy blackfish HBF Actinopyga miliaris Dry: 10 cm / 34 g Wet: 20 cm / 340 g



Jokfis | Chalkfish CHF Bohadschia marmorata Dry: 7 cm / 8 g | Wet: 15 cm / 130 g



Flaoafis | Flowerfish FF Pearsonothuria graeffei Dry: 15 cm / 19 g | Wet: 30 cm / 470 g



Pinatfis | Peanutfish PNF Stichopus horrens Dry: 10 cm / 8 g | Wet: 20 cm / 190 g







Holothuria whitmaei Dry: 15 cm / 100 g | Wet: 30 cm / 1000 g



Braon karifis | Brown BCF curryfish Stichopus vastus Dry: 10 cm / 10 g | Wet: 20 cm / 260 g

![](_page_27_Picture_27.jpeg)

Karifis | Curryfish CF Stichopus herrmanni Dry: 15 cm / 40 g | Wet: 35 cm / 1000 g

![](_page_27_Picture_29.jpeg)

Dipwota blakfis | DWBF Deepwater blackfish Actinopyga palauensis Dry: 15 cm / 79 g | Wet: 30 cm / 660 g

![](_page_27_Picture_31.jpeg)

Kolten sanfis | Golden GSF sandfish Holothuria lessoni Dry: 12 cm / 53 g | Wet: 25 cm / 660 g

![](_page_27_Picture_33.jpeg)

Krinfis | Greenfish GF Stichopus chloronotus Dry: 10 cm / 4 g | Wet: 20 cm / 150 g

![](_page_27_Picture_35.jpeg)

Pinkfis | Pinkfish PF Holothuria edulis Dry: 10 cm / 6 g | Wet: 20 cm / 150 g

![](_page_27_Picture_37.jpeg)

Paenapolfis | Prickly redfish STF Stonfis | Stonefish PRF Thelenota ananas

![](_page_27_Picture_39.jpeg)

SNF Snekfis | Snakefish Holothuria coluber Dry: 20 cm / 14 g | Wet: 40 cm / 340 g

![](_page_27_Picture_41.jpeg)

Actinopyga lecanora

Dry: 17 cm / 91 g | Wet: 35 cm / 1300 g Dry: 10 cm / 32 g | Wet: 20 cm / 650 g

#### Licensing fishing activities helps with the management, monitoring and control of coastal fisheries that communities depend on for income. The information below outlines how to apply for a license, if needed.

| STEP 1: Fill the License<br>Application Form* | STEP 2: Submit Documents<br>via email or through Fisheries<br>Development Officer | STEP 3: Compliance<br>Checks | STEP 4: Fisheries<br>License Issued or<br>Declined |  |
|-----------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|----------------------------------------------------|--|
|-----------------------------------------------|-----------------------------------------------------------------------------------|------------------------------|----------------------------------------------------|--|

\*For fisheries investors, a business proposal might be required. Contact VFD before filling application.

| License type                                            | Activity                                                                                      | Fee Unit                                                 |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Local Fishing License                                   | Local fishing vessel based in Vanuatu to<br>fish in Vanuatu waters                            | VUV50,000 at 8m & VUV5,000 for<br>every additional metre |
| Artisanal Fishing License                               | Small vessels fishing in coastal waters                                                       | VUV10,000-20,000                                         |
| Sea cucumber<br>Processing License                      | Purchase and processing of dried beche-<br>de-mer for commercial & pharmaceutical<br>purposes | VUV3,000,000                                             |
| Sea Cucumber Export License                             | Export of dried beche-de-mer                                                                  | VUV 3,000,000                                            |
| Processing and<br>Establishment License                 | Processing facility                                                                           | VUV100,000                                               |
| Marine Resource Scientific<br>Research Permit           | Satellite turtle tagging & tracking of post nesting turtles                                   | VUV 5,000                                                |
| Exploratory & Test Fishing                              | Test Fishing in VU EEZ                                                                        | VUV500,000                                               |
| Underwater Breathing Apparatus<br>(UBA) Fishing License | Taking of Sea cucumbers for research activities                                               | VUV10,000                                                |
| Coconut Crab Harvest<br>License                         | Harvesting coconut crabs                                                                      | VUV130,000                                               |

23119

contactfisheries@fisheries.gov.vu

## **IMPORTANT CIGUATERA INFORMATION!**

Do not eat fish harvested from areas known to have ciguatera fish poisoning.

Space out the consumption of risky species.

As soon as you catch a fish, cut off its head and remove the guts and other internal organs. They are the most tocixc parts.

## Fish

Some fish that have been reported to be the most ciguatoxic in Vanuatu include:

![](_page_29_Picture_6.jpeg)

**Bluelined surgeon** Acanthurus nigroris

Some species of parrotfish Scarus sp.

**Blacksaddled coral grouper** Plectropomus laevis

**Red snapper** Lutjanus bohar

**Black-banded snapper** Lutianus semicinctus

**Blackspot emperor** Lethrinus harak

Longface emperor Lethrinus olivaceus

Camouflage grouper Epinephelus polyphekadion

![](_page_29_Picture_15.jpeg)

![](_page_29_Picture_16.jpeg)

![](_page_29_Picture_17.jpeg)

**Giant trevally** Caranx ignobilis

Variola louti

**Giant sweetlips** 

Plectorhinchus albovittatus

Squaretail coral grouper

Plectropomus areolatus

Yellow-edge lyretail

Great barracuda

Sphyraena barracuda

**Giant moray** Gymnothorax javanicus

Yellow-edged moray Gymnothorax flavimarginatus

## Invertebrates

In Vanuatu, trochus, turban shells and giant clams have been reported to be toxic.

![](_page_29_Picture_23.jpeg)

Trochus

Rochia nilotica

![](_page_29_Picture_26.jpeg)

**Turban shells** 

Turbinidae

![](_page_29_Picture_29.jpeg)

**Giant clams** Tridacnidae

![](_page_29_Picture_31.jpeg)

TOXIC FISH DO NOT LOOK, SMELL OR TASTE DIFFERENT FROM SAFE FISH. COOKING, FREEZING, SMOKING OR SALTING DOES NOT MAKE FISH SAFE TO EAT.

## YUMI TALEM. YUMI MEKEM. YUMI LUK.

## **COMMUNITIES HELPING COMMUNITIES**

Vanua-Tai Resource Monitoring Network was established in 1995 to empower local communities to look after their resources. Join a subnetwork near you to get the support you need for better resource management in your community.

![](_page_30_Picture_3.jpeg)

## 210 RESOURCE MONITORS

## **128 COMMUNITIES**

## **26 SUBNETWORKS**

![](_page_30_Picture_8.jpeg)

## GET CONNECTED & STAY INFORMED

What you can do to start or revive fisheries management in your community

Visit your area council & fisheries

Tune into VBTC every Tuesday 6pm-7pm the Fisheries Radio Show

Follow Vanuatu Fisheries Department on Facebook

Call VFD 23119

cbfm.spc.int 、

Learn more about CBFM