



Government of the Republic of Vanuatu



Vanuatu Fisheries Department

# Vanuatu National Sea Cucumber Fishery Management Plan 2019–2024



A national policy for the management and development  
of Vanuatu's sea cucumber fishery



Pacific  
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# Vanuatu National Sea Cucumber Fishery Management Plan 2019–2024

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Vanuatu Fisheries Department

PMB 9045  
Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity  
Port Vila, Vanuatu



Noumea, New Caledonia,  
July 2019

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## Abbreviations and acronyms

<b>BDM</b>	beche-de-mer
<b>FMAC</b>	Fisheries Management Advisory Council
<b>TAC</b>	total allowable catch
<b>VFD</b>	Vanuatu Fisheries Department

# Foreword

It is my pleasure to proudly present the revised Vanuatu National Sea Cucumber Management Plan 2019–2024.

This policy document is made in accordance with the Fisheries Act No. 10 of 2014, and will help to promote a new concept in the management and development of the sea cucumbers fishery for the next five years in the Republic of Vanuatu.

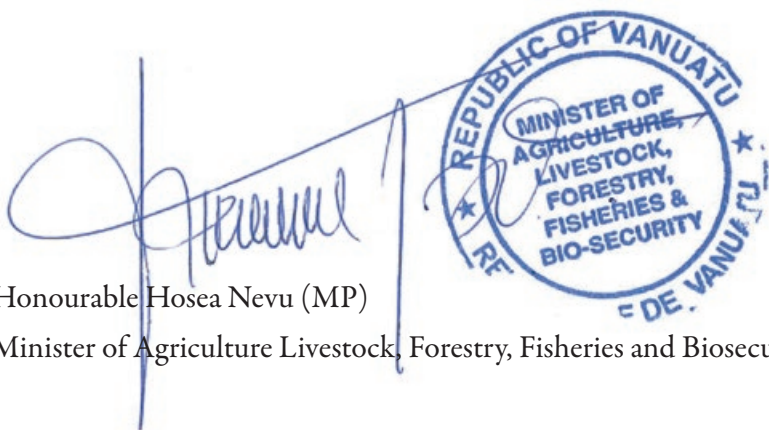
Vanuatu faces many challenges at the political and community level – by relevant authorities and the sea cucumber industry – in the management and development of this important resource. Sea cucumbers have been vastly overexploited in Vanuatu, resulting in a ban on their harvesting in 2008. In 2014, however, a new management system was introduced whereby sea cucumber species found in sufficient quantities could be fished, based on a quota system by species and by area.

This system was used in certain areas throughout the country, and successfully achieved its purpose. After Tropical Cyclone Pam, the fishery was re-opened in order to provide a source of income and livelihood for people during the period that followed. This, however, resulted in the fishery being overharvest three-fold. Despite the challenges, Vanuatu benefits considerably from foreign trading of sea cucumbers or beche-de-mer through license access fees, royalties and other resource rental fees.

A study conducted by the Vanuatu Fisheries Department, with the assistance of the French Institute of Research for Development (IRD), estimates that in order to sustainably manage and develop a lucrative sea cucumber fishery every year, 15 tonnes of dried product could be harvested.

I strongly encourage fisheries officers, fishers, communities and exporters to make good use of this policy to sustainably manage and develop the sea cucumber fishery in Vanuatu so that future generations can continue to enjoy the economic benefits we do today.

Yours truly,

The image shows a handwritten signature in blue ink, which appears to be 'Hosea Nevu'. To the right of the signature is a circular official stamp. The stamp contains the text 'REPUBLIC OF VANUATU' at the top, 'MINISTER OF AGRICULTURE, LIVESTOCK, FORESTRY, FISHERIES & BIO-SECURITY' in the center, and 'RÉPUBLIQUE DE VANUATU' at the bottom. There are two small stars on either side of the bottom text.

Honourable Hosea Nevu (MP)

Minister of Agriculture Livestock, Forestry, Fisheries and Biosecurity



# Approval

The Vanuatu National Sea Cucumber Fishery Management Plan 2019–2024 is made in accordance with Part 4, of the Fisheries Act No. 10 of 2014 (hereafter referred to as the Fisheries Act).

By virtue of powers conferred upon the Minister for Fisheries, under Section 11(5) of the Fisheries Act, I hereby approve the Vanuatu National Sea Cucumber Fishery Management Plan 2019–2024.

## Commencement date

This Plan commences on the date on which it is approved by the Minister, according to Section 11(5) of the Fisheries Act.

Made at Port Vila this.....<sup>20<sup>th</sup></sup>.....day of.....<sup>MARCH</sup>.....2019

  
Honourable Hosea NEVU  
Minister Responsible for Fisheries





# Executive summary

Vanuatu's sea cucumber fishery faces many management and development challenges, including the boom and bust nature of the fishery, lack of knowledge on beche-de-mer prices, retention of a fair proportion of the value chain within Vanuatu, weak enforcement of sea cucumber regulations, insufficient monitoring and data collection, and an insufficient level of skills and technology transfer.

The Vanuatu National Sea Cucumber Fishery Management Plan 2015<sup>1</sup> was designed to address the above challenges. The main management regime applied under the plan was the application of a total allowable catch (TAC) but, there were key lessons to be learned and these included:

- too many companies were licensed to process and export sea cucumber, making it difficult to monitor the TAC efficiently and resulting in a total catch of twice the allocated TAC; and
- less than 50% of the product's overall value was retained in Vanuatu, as shown by a 2016 evaluation report.<sup>2</sup>

Therefore, the principle purpose for the review of the Vanuatu National Sea Cucumber Plan 2015 is twofold:

1. It is anticipated that limiting the number of companies that export beche-de-mer will strive to improve the effective monitoring of allocated TAC to ensure the sustainability of the fishery. It is, therefore, in the best interest of companies exporting beche-de-mer to ensure the fishery is sustainable in order to guarantee the long-term existence, success and credibility of their businesses.
2. Vanuatu is not maximising the returns from its sea cucumber resources. The figure below illustrates the proportion of the value retained along the value chain within Vanuatu – from the fisher who collects sea cucumbers to the final import destination broker in Hong Kong for the 2015 harvest season. This current Sea Cucumber Management Plan aims to increase the percentage retained in Vanuatu to 60% (green dotted line in figure) or greater through establishing joint venture companies for the processing and export of beche-de-mer.

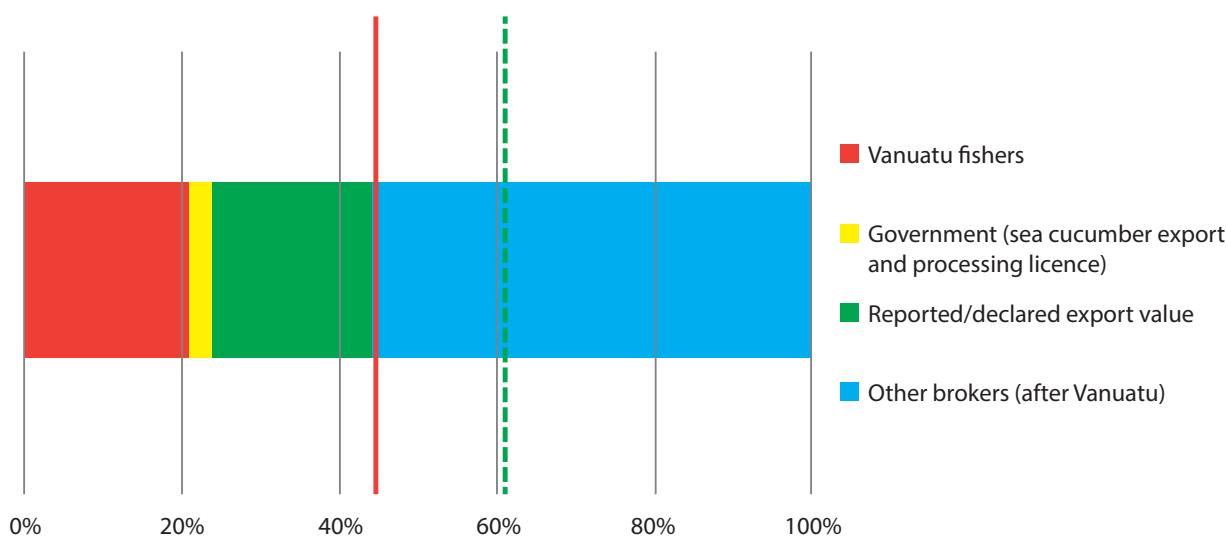


Figure 1. The proportion of the value chain retained within Vanuatu – from the fisher who collects sea cucumbers to the final import destination broker in Hong Kong for the 2015 harvest season. Red line shows the total value (42%) that is retained in Vanuatu.

To achieve the above, Vanuatu needs to adapt its management approach, thus the review of the Vanuatu National Sea Cucumber Fishery Management Plan 2015. To ensure that the challenges faced by the fishery are appropriately addressed, this management plan proposes four objectives:

1. Ensure that the sea cucumber fishery is ecologically sustainable and economically viable
2. Improve commercial operations of the sea cucumber fishery in order to maximise economic returns to Vanuatu
3. Strengthen the ongoing monitoring programme and collection of market and scientific information

<sup>1</sup> [http://www.spc.int/DigitalLibrary/Doc/FAME/Reports/Anon\\_15\\_Vanuatu\\_BDM\\_Management\\_Plan.pdf](http://www.spc.int/DigitalLibrary/Doc/FAME/Reports/Anon_15_Vanuatu_BDM_Management_Plan.pdf)

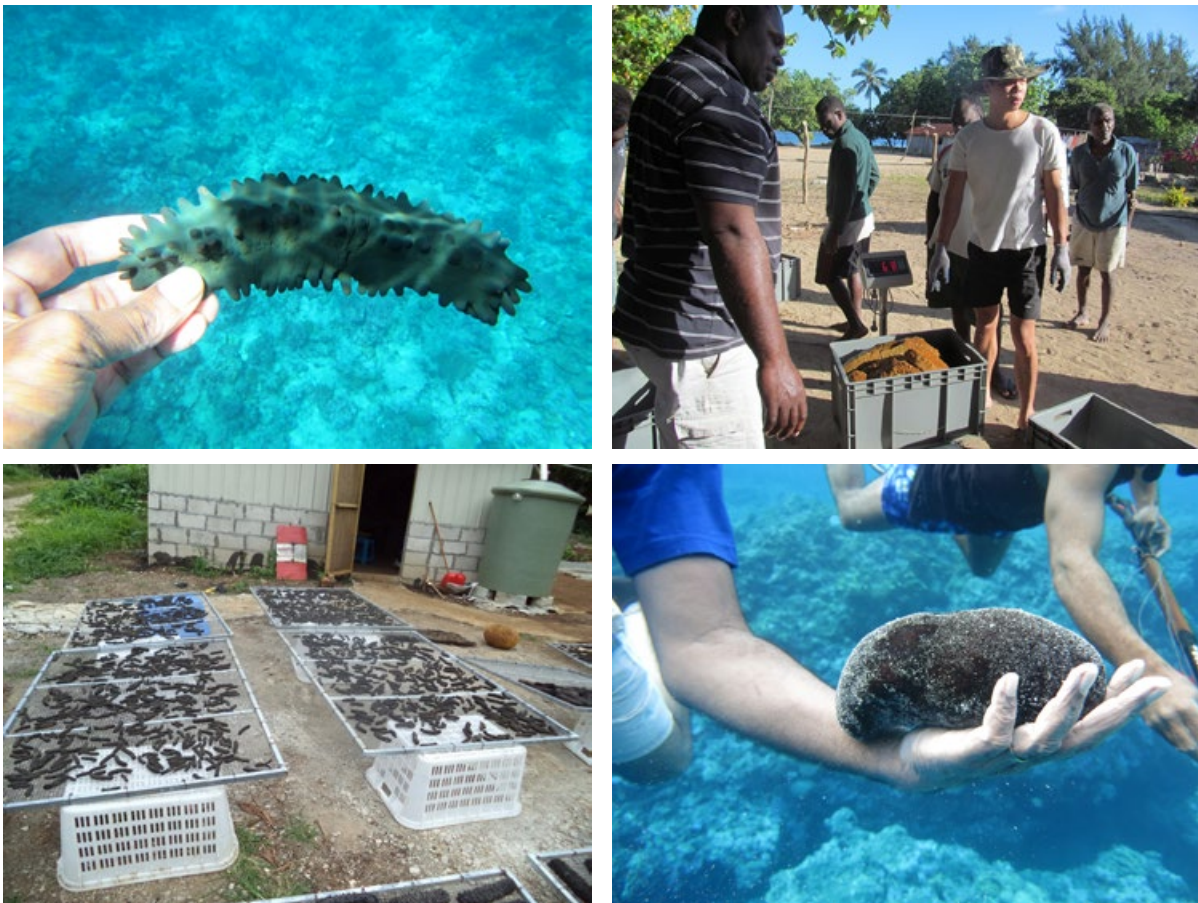
<sup>2</sup> Léopold, M. 2016. Evaluating the harvest and management strategies for the sea cucumber fisheries in Vanuatu. Projects No 4860A1 (BICH2MER) and No CS14-3007-101 (BICHLAMAR). IRD, Nouméa, 64 p.

#### 4. Sea cucumber awareness information dissemination.

The four objectives are supported by 18 strategies, and if implemented effectively, they will address the above-mentioned challenges. The flow chart below depicts a proposed operational structure, and expected outcomes and results.



Figure 2: The operational structure of the Sea Cucumber Management Plan.



Images by Rocky Kaku (top left and bottom right) and Peter Neihapi (top right and bottom left), VFD.

# Part 1 Preliminary information

## 1.1 Title

This plan is called the Vanuatu National Sea Cucumber Fishery Management Plan 2019–2024, hereinafter referred to as ‘Sea Cucumber Management Plan’, and sets out the policy of the Government of the Republic of Vanuatu in relation to the management, development and conservation of sea cucumber resources in the country.

## 1.2 Area of application

The Sea Cucumber Management Plan supplements, but does not override, the provisions of the Fisheries Act No. 10 of 2014, and the regulations promulgated under the act. As such, all activities under this Sea Cucumber Management Plan shall be subject to the applicable provisions of all laws and regulations of the Republic of Vanuatu:

- a. The Sea Cucumber Management Plan applies to all animals belonging to the class Holothuroidea, commonly known as sea cucumbers, and their fisheries as regards to the collection, processing, buying, storage, selling and exporting of sea cucumber products, or the aquaculture, restocking or ranching of sea cucumbers.
- b. The schedules to the Sea Cucumber Management Plan are part of the plan, and shall be read together with the plan.
- c. The Sea Cucumber Management Plan is to be interpreted in accordance with Part 1 of the Fisheries Act No. 10 of 2014, and Section 1.6 of this plan.

## 1.3 Purpose

The purpose of the Sea Cucumber Management Plan is to ensure the ecologically sustainable utilisation of the sea cucumber fishery in order to optimise economic benefits to Vanuatu.

## 1.4 Vision

A responsible and sustainable sea cucumber fishery that supports long-term livelihoods and income generation.

## 1.5 Goal

The overall goal of the Sea Cucumber Management Plan is to ensure long-term sustainable benefits to the people and Government of Vanuatu through the responsible utilisation and management of the sea cucumber fishery.

## 1.6 Interpretation

Unless otherwise expressed, words and expressions used in the Sea Cucumber Management Plan shall have the same meaning as defined in the Fisheries Act No. 10 of 2014. Where there is inconsistency between the plan and the Fisheries Act, the Fisheries Act shall prevail.

<b>Act</b>	The Fisheries Act No. 10 of 2014 as amended from time to time
<b>Area</b>	An area declared by the national government or provincial government as a place where certain fishing activities shall be undertaken
<b>Beche-de-mer</b>	The raw, boiled and dried (or other processed forms) of sea cucumber
<b>Biomass</b>	An estimate of species abundance (in weight of sea cucumbers) in a given area
<b>Department</b>	Department of Fisheries
<b>Fisheries Management Advisory Council</b>	A council established pursuant to Section 9 of the Fisheries Act No. 10 of 2014
<b>Fishery Management Plan</b>	A plan for the management, development and conservation of any designated fisheries pursuant to Section 10 and 11 of the Fisheries Act No. 10 of 2014
<b>Final product</b>	The final processed product of sea cucumber that is ready for consumption
<b>Indefinite closure</b>	The fishery shall be closed permanently with short open seasons
<b>Licensing period</b>	A period from 1 January to 31 December of any year
<b>Marine protected area</b>	A marine area protected and enforced by the community for the purposes of conserving marine species
<b>Open season</b>	A period of time declared by the Government of Vanuatu as a period when certain fishing activity can be undertaken
<b>Open area</b>	A given area declared by the national government or a provincial government as an area where certain fishing activity can be undertaken
<b>Quota</b>	The total allowable catch defined for each species in open areas within the fishery during open seasons
<b>Resource owner</b>	A person or groups of people having traditional ownership rights over certain marine areas and the resources within
<b>Sea cucumber</b>	The live form of any species of sea cucumber present in Vanuatu's waters
<b>Sea cucumber export license</b>	A license issued under the Fisheries Act to undertake the purchasing, processing and selling of dried sea cucumbers, or beche-de-mer, for the purposes of exporting to overseas markets
<b>Sea cucumber processing license</b>	A license issued under the Fisheries Act to purchase 'green' <sup>3</sup> and semi-processed sea cucumbers, and to process finished products for sale to exporters
<b>Target species</b>	Sea cucumber species specified in the processing and export license to be fished, purchased, processed or exported in a province and in an open season.

## 1.7 Key guiding principles

The following key guiding principles form the basis of development and implementation of this Sea Cucumber Management Plan:

- Ecosystem Approach to Fisheries Management
- Precautionary Approach to Fisheries Management
- Community-based Fisheries Management
- Adaptive Fisheries Management
- Inclusiveness

<sup>3</sup> 'green' refers to unprocessed sea cucumbers.

## Part 2 Development and management objectives

This part forms the core of the Sea Cucumber Management Plan, and provides the basis for guiding the Vanuatu Fisheries Department (VFD) and its partners and stakeholders in the sustainable utilisation of the sea cucumber fishery. The Sea Cucumber Management Plan comprises four objectives that are supported by 18 strategies.

These objectives and strategies are interwoven with the vision of the Vanuatu National Fisheries Sector Policy 2016-2031, which highlights the need of economic and social returns from a healthy and sustainable fishery.

Objective 1: Ensure that the sea cucumber fishery is ecologically sustainable and economically viable	
Strategy	Action
1.1 Manage the sea cucumber fishery through indefinite closures, limited open fishing season(s) and areas, and quotas when resources have recovered to healthy stock levels	1.1.1 VFD will review and Implement fisheries regulations governing closures, limited open fishing seasons and areas 1.1.2 VFD shall undertake stock assessments to determine stock status by area and by species in order to define population abundance and size structure
1.2 Support the development of other sea cucumber products	1.1.3 Strengthen and improve production of pharmaceutical products 1.1.4 Ensure all developments of other sea cucumber products are made in line with national policies and laws
1.3 Support aquaculture development	1.1.5 Collect, from all license holders, management fees that will go towards activities enhancing wild sea cucumber stocks 1.1.6 Undertake training in monitoring of sea cucumber aquaculture activities 1.1.7 Ensure that all sea cucumber aquaculture activities are in line with Vanuatu government policy(ies)
1.4 Restrict fishing methods and gear used in the collection of sea cucumbers	1.1.8 Maintain and enforce the prohibition on the use of scuba and hookah 1.1.9 Maintain harvesting of deep-water sea cucumber species to free diving 1.1.10 Develop regulations prohibiting the use of potential destructive methods such as trawl gear and any equipment used for spearing sea cucumbers
1.5 Support existing protected areas for the protection of sea cucumber and other marine resource populations to allow recovery from fishing pressure and/or for the protection of breeding stocks	1.1.11 Fishing on any protected or management area is prohibited
1.6 Sustainably harvest sea cucumbers	1.1.12 Harvesting must be done in accordance with prescribed total allowable catch per species and per area
Objective 2: Improve commercial operations of the sea cucumber fishery in order to maximise economic returns to Vanuatu	
Strategy	Action
2.1 Not more than two companies will be allowed to purchase, process and export sea cucumber products	2.1.1 Review and amend the fisheries regulation to allow for not more than two companies in one licensing period 2.1.2 Develop licensing conditions and relevant regulations that are aligned with this management plan
2.2 All license holders must produce high-grade beche-de-mer product	2.1.3 establish centralised processing facilities in declared harvest areas only 2.1.4 Develop and ensure adherence to processing standards and grades 2.1.5 Train harvesters in sea cucumber processing methods
2.3 Promote other beche-de-mer markets, products and marketing strategies and establish fair distribution of earnings from the sea cucumber fishery	2.1.6 Conduct research into new markets and value adding, such as vacuum packed BDM products and pharmaceutical products 2.1.7 Assess the potential for auctioning Vanuatu beche-de-mer products 2.1.8 Develop a species-specific conversion ratio for wet to dry product that is specific to Vanuatu. Gather and update information on wholesale and retail prices through the Vanuatu Embassy 2.1.9 Increase and maximise the value of the fishery returned to Vanuatu
2.4 Ensure ni-Vanuatu benefit through employment in the industry	2.1.10 Create employment opportunities through domestic sea cucumber processing, exporting, marketing and administration management 2.1.11 Comply with employment working conditions in accordance with national laws and policies 2.1.12 Ensure resource owners harvest sea cucumber sustainably, and receive fair returns for their product 2.1.13 Conduct research into new markets and value adding, such as vacuum-packed beche-de-mer products and pharmaceutical products 2.1.14 Assess the potential for auctioning Vanuatu beche-de-mer products 2.1.15 Develop a species-specific conversion ratio for wet to dry product that is specific to Vanuatu



Objective 3: Strengthen the ongoing monitoring programme and the collection of market and scientific information	
Strategy	Action
3.1 Ensure an effective monitoring, control and enforcement system to ensure effective compliance	3.1.1 Training in species identification of wet and processed product 3.1.2 VFD to establish monitoring and inspection teams to be stationed in provinces during open harvest seasons 3.1.3 Harvesting of sea cucumber cannot occur in the absence of Authorised Officer/s 3.1.4 Work with other government agencies (e.g. Customs, Border Control, and Biosecurity) to monitor exports of beche-de-mer 3.1.5 Use of e-reporting for monitoring, control declared total allowable catch in a timely manner
3.2 Improve catch and export documentation scheme	3.2.1 Movement or transportation of sea cucumber products from provinces are to be accompanied by certificates issued by a Authorised Officer 3.2.2 Exports of sea cucumbers must comply with Sea Food Regulations No. 149 of 2015 3.2.3 Each sea cucumber company must maintain a record of BDM quantities received (and sources) at the species level, and provide complete log forms to VFD to establish monitoring and inspection teams to be stationed in provinces during open harvest seasons 3.2.4 Harvesting of sea cucumber cannot occur in the absence of a Authorised Officer 3.2.5 Work with other government agencies (e.g. Customs, Border Control, and Biosecurity) to monitor BDM exports
3.3 Establish a programme for monitoring, purchasing, processing, exporting and collecting scientific and market information to support the management of the sea cucumber fishery and improve the catch and export documentation scheme	3.3.1 VFD to regularly monitor international wholesale and retail prices 3.3.2 Exports of sea cucumber to comply with Sea Food Regulations No. 149 of 2015 3.3.3 Sea cucumber companies must maintain a record of BDM quantities received (and sources) at the species level, and provide completed log forms to VFD
3.4 Monitoring stocks and establish a programme for monitoring, valuing, purchasing, processing, exporting and collecting scientific and market information to support management of the fishery	3.4.1 Conduct monitoring and assessment to inform on the status of stocks and total allowable catch 3.4.2 Regularly monitor international wholesale and retail prices
Objective 4: Sea cucumber awareness information dissemination	
Strategy	Action
4.1 Promote awareness and understanding of the sea cucumber fishery and its contribution to Vanuatu society	4.1.1 Compile and disseminate information through quarterly and annual reports on: <ul style="list-style-type: none"> <li>• status of stocks,</li> <li>• fishing operations,</li> <li>• harvest quotas by area,</li> <li>• prices fishers receive relative to wholesale prices and value,</li> <li>• harvest and export production, and</li> <li>• revenue to Vanuatu.</li> </ul> 4.1.2 Disseminate sea cucumber species harvest size limits, area quotas, and price list for unprocessed and processed sea cucumber to resource owners
4.2 Ensure public is informed of Vanuatu's sea cucumber fishery	4.2.1 Inform the public of previous and current management initiatives 4.2.2 Compile and disseminate information through quarterly and annual reports on: <ul style="list-style-type: none"> <li>• on status of stocks,</li> <li>• fishing operations</li> <li>• harvest quotas by area,</li> <li>• prices fishers receive relative to wholesale prices and value,</li> <li>• harvest and export production, and</li> <li>• revenue to Vanuatu</li> </ul> 4.2.3 Disseminate information on sea cucumber species harvest size limits, area quotas, and price list for unprocessed and processed sea cucumber to resource owners
4.3 Promote and maintain transparent and informed management	4.3.1 Keep records of management decisions 4.3.2 Inform the public of previous and current management initiatives
4.4 Develop and maintain transparent and informed management decisions	4.4.1 Keep records of management decisions

## Part 3 Overview of the fishery

### 3.1 Fishery and utilisation

Between the 1920s and 1930s, beche-de-mer (BDM) – dried sea cucumber – was an important export commodity for the New Hebrides Government. BDM trading, however, dates back to the late 1800s. Sea cucumbers are not consumed traditionally by indigenous Ni-Vanuatu and, therefore, their exploitation is primarily for commercial export purposes. Harvesting of the 23 species present in Vanuatu waters is by hand while snorkeling, free diving or wading on the reef at low tide. Harvested cucumbers are processed by licensed processors and exporters using a variety of cleaning, cooking and drying methods. Products are then fully dried before being sold. Each species commands a different price that is based on its market value. Until recently, the BDM industry is dominated by Asian nationals who operate mostly through joint venture arrangements with local Ni-Vanuatu with 51% foreign share. BDM is stockpiled in Port Vila and Santo for holding, packing and export. In the past, target species were high- to medium-value species, which fetch higher prices on the market. This trend has changed, however, because high-value species have been overfished, and lower-value species are now being sought after as a replacement. In 2015, following the devastation brought about by Tropical Cyclone Pam, the closed season was lifted to allow harvesting in affected areas to assist with income generation.

### 3.2 Production and price

After being dormant for many years, BDM production started picking up in the 1980s, with production reaching 70 metric tonnes in 1994. Export production steadily declined, however, to seriously low levels in the mid-2000s because of overfishing. In 2008 a five-year moratorium was imposed, with an extension in 2013 to 10 years. During the same period, BDM fisheries in other Pacific Island countries were closed following a serious worldwide decline in wild sea cucumbers. An upsurge in the demand for BDM and an increase in their value is being experienced. BDM prices vary with the quality of processing. It has been difficult to maintain consistently high-quality BDM with so many fishers harvesting sea cucumbers in rural areas and who are processing the resource with limited skills. Lower-grade products and wastage have been a feature of the sea cucumber fishery in Vanuatu. While some processors encourage the purchasing of raw or partly processed products for further processing to final finished products, many fishers still prefer to produce the final product themselves.

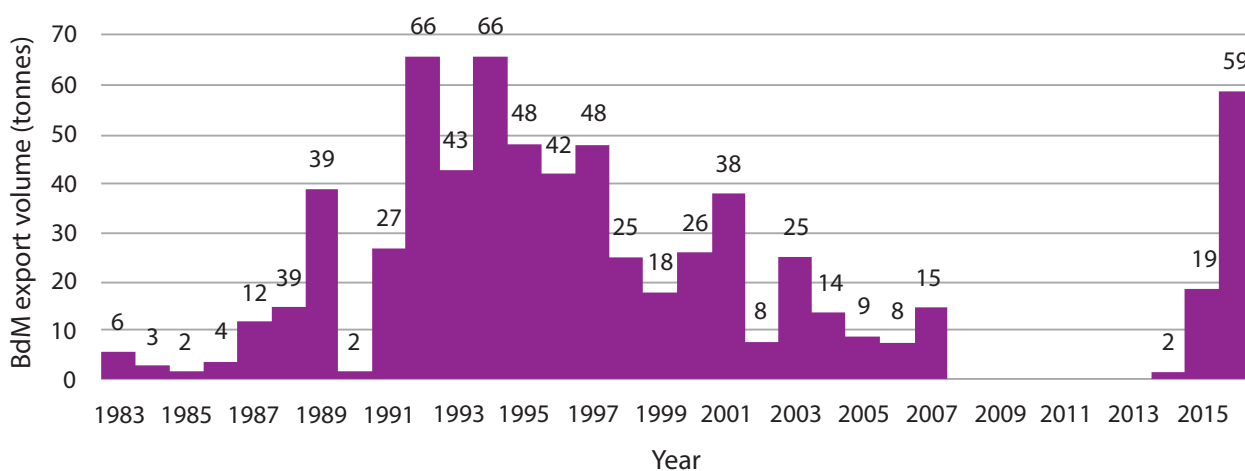


Figure 3. Vanuatu beche-de-mer export trend since 1983. Exports of 59 tonnes in 2016 were from the 2015 harvest season.





Figure 4. Purchased price per species of sea cucumber in three different regions.

### 3.3 Current management measures

A moratorium was placed on the sea cucumber fishery in 2008, initially for five years, but was later extended for another five years to 2018. In 2014, however, a limited harvest was permitted to a scientific research permit holder and a harvest and processing trial. A management plan was signed in 2015 and a new regulation order was established. Two licenses were issued for buying and processing raw material, and an export license for buying and exporting dried products. Regulatory measures included minimum size limits for live and dried products, a ban on harvesting sandfish, and the issuing of only two licenses. During the harvest in 2015, the management plan was put into action, and while communities made a good income from the fishery, there were monitoring challenges: regulated minimum prices were not enforced and resources in some areas were overfished. There are community efforts to manage sea cucumber resources but when communities are under pressure by traders, fishing easily becomes uncontrolled, leading to overharvesting.

### 3.4 Biology and species distribution

There are over a thousand sea cucumber species distributed throughout the world's oceans. Sea cucumbers live on reefs and in lagoons, and feed on dead plant and animal materials (detritus) in the sediments. Most sea cucumbers have separate sexes and some species undergo asexual reproduction. Some species, such as sandfish, are relatively fast growing and reach reproductive maturity at around two years but often take another two years to reach an acceptable market size. Other species grow more slowly, and have a lifespan of between 5 and 15 years. Successful reproduction involves fertilisation of many millions of eggs, and this requires large numbers of adult sea cucumbers to be within close proximity to one another. Fertilised eggs hatch (during planktonic larval stages) and drift with ocean currents from two to several weeks before settling on the sea floor as juvenile sea cucumbers. Adults appear not to move very far from the areas in which they settle.

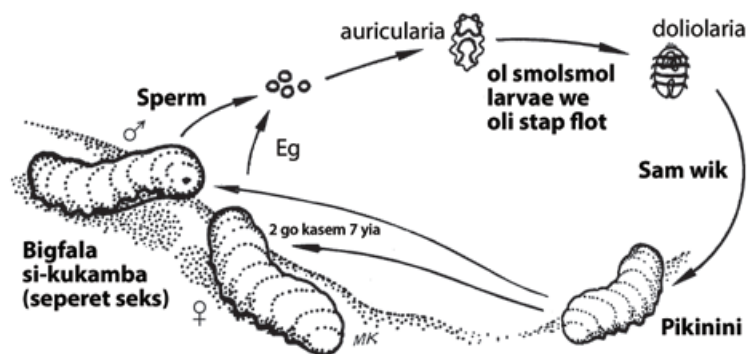


Figure 5. Life cycle of a sea cucumber. (source: Mike King in Anon. 2017<sup>4</sup>)

4 Anon. 2017. Guide and information sheets for fishing communities. Third edition. Noumea, New Caledonia: Secretariat of the Pacific Community. Available from: <https://coastfish.spc.int/en/publications/information-sheets/kit-for-communities>

## Part 4 Authorities and roles

### 4.1 Fisheries Management Advisory Council

The Fisheries Management Advisory Council (FMAC) provides recommendations to the Director of Fisheries on the management, development and conservation of the sea cucumber fishery. The composition of the council is provided for under Section 9 of the Fisheries Act.

When matters relating to the sea cucumber fishery are discussed during FMAC meetings, stakeholders are invited to the meeting. This is to ensure that the concerns of fishery participants are expressed, examined and addressed in a transparent manner.

Stakeholders of the sea cucumber fishery comprise the following:

- two representative of sea cucumber companies;
- three representatives from provincial governments are invited to participate in committee meetings for when matters related to their area of jurisdiction need to be addressed; and
- four representatives of resource owners and communities.

### 4.2 Vanuatu Fisheries Department

The role of VFD in the management, development and conservation of the sea cucumber fishery includes, but is not limited to:

- conducting sea cucumber resource assessment surveys;
- determining, allocating and declaring the total allowable catch (TAC) per species per area in collaboration with communities;
- providing advice on the lifting of an indefinite closure, the period of open seasons, and open areas and quotas;
- releasing harvestable quota information on sea cucumbers to relevant communities;
- monitoring the harvest during an open season by area and by species;
- assisting and/or facilitating the development of a management arrangement for provincial governments and communities;
- conducting an inspection of processing and exporting facilities, their products and export consignment;
- monitoring and analysing all data collected, on a weekly basis at a minimum;
- advising FMAC and stakeholders on the status of harvesting, processing and export activities;
- enforcing sea cucumber regulations and conditions of licenses;
- coordinating the implementation and review of the Sea Cucumber Management Plan;
- providing annual reports on the status of the fishery to FMAC and stakeholders;
- facilitating training for communities and other partners in order to improve monitoring activities and processing methods; and
- collaborating with local and regional partners for advice and assistance regarding the fishery.

### 4.3 Company or license holder

The sea cucumber company's role in this Sea Cucumber Management Plan includes, but is not limited to:

- taking charge of purchasing, processing, transportation and marketing of all dried sea cucumber products (i.e. beche-de-mer) from Vanuatu, excluding other products such as those taken for pharmaceutical purposes;
- exploring innovative product development marketing strategies to ensure fishers get the best value for their products;
- assisting with funding a sea cucumber assessment carried out by VFD;

- developing and championing a Vanuatu beche-der-mer ‘brand’;
- working with provincial governments, communities, and VFD to monitor TAC harvests during open seasons;
- complying fully with license conditions;
- complying with relevant national laws;
- utilising TACs and managing these in collaboration with VFD and communities; complying with the minimum purchase price set out under this Sea Cucumber Management Plan (Schedule 1);
- exploring the use of other marketing arrangements (e.g. auction);
- providing ongoing post-harvest processing training to harvesters;
- providing organisation of authorised fisheries officers placements and logistics, including daily subsistence allowance, during open seasons.

## 4.4 Provincial governments

The role of the Provincial Government Councils roles in this Sea Cucumber Management Plan include, but are not limited to:

- collaborating with VFD on the declaration of open seasons, and associated open areas;
- collaborating with VFD on the preparation of provincial, or community-based fisheries, management initiatives;
- recommending to VFD the declaration of designated marine areas for conservation and resource management;
- developing bylaws consistent with the Fisheries Act for sustainable fisheries development and management in their respective area of jurisdiction;
- certifying sea cucumber products originating from the province prior to the product leaving the province;
- issuing a provincial access permit for allowing sea cucumber operation. The access fee amount is based on catch quotas determined for the season;
- assisting with the monitoring, processing and transporting of sea cucumber products and minimising unsustainable activities;
- working with VFD to identify zonings of sites for the sea cucumber fishery;
- make available appropriate data of potential sites of zonings; and
- assist with carrying out enforcement of fisheries regulations.

## 4.5 Area Secretaries and Authorised Officers

The roles of Area Secretaries and Authorised Officers in this Sea Cucumber Management Plan include but are not limited to:

- collaborating with and assisting VFD to monitor the sea cucumber harvest during an ‘open season’;
- collaborate with VFD to collect fisheries data;
- assisting VFD with carrying out monitoring, control and surveillance activities of designated marine areas for conservation and resource management;
- promulgating and ensuring compliance with bylaws passed by relevant provincial governments for the sustainable utilisation and management of fisheries resources;
- assisting VFD with monitoring of fishing, processing and transport of products to prevent unsustainable activities;
- collaborating with VFD to enforce and report fisheries infringements; and
- collaborating with VFD to prepare statement of infringements.

## 4.6 Community and/or resource owners

Community and/or resource owners can utilise sea cucumber without a license. The role of community and resource owners in the management, development and conservation of sea cucumber fisheries include but are not limited to:

- implementing appropriate community-based management practices and ensuring their enforcement;
- assisting VFD, the Provincial Government Councils, Area Secretaries and fishermen in conducting resource assessment surveys and monitoring fishing activities;
- assisting VFD in declaring and allocating TACs;
- assisting in the dissemination of information on management measures and regulations;
- ensure that fishing is conducted responsibly by the community during periods declared as open seasons, within specific areas with declared TACs;
- making the final decision as to whether to open an area to harvesting;
- providing relevant information about resources and fishing activities to VFD; and
- working with other line agencies and civil society partners on resource monitoring and protected area management.

# Part 5 Management measures

## 5.1 Licensing and permits

This section outlines the different licenses and permits to be issued under this Sea Cucumber Management Plan for the sea cucumber fishery, sea cucumber aquaculture activities, and sea cucumber research.

### 5.1.1 License types and permits

Licenses are issued to individuals or companies wishing to harvest, process, export or carry out sea cucumber aquaculture.

The following licenses apply to each individual species or fishery:

1. Sea Cucumber Harvest License
  - The maximum number of Sea Cucumber Harvest Licenses to be issued in any licensing period shall be capped at two;
  - This license applies to any person or company wishing to harvest the TAC of sea cucumbers;
  - The license shall be issued per species and per area;
  - The license is valid for 12 calendar months (from 1 January to 31 December of any year);
  - The license application form and format are attached in Schedules 1 and 3; and
  - Schedule 5 contains some conditions that could apply under a Sea Cucumber Harvest License.
2. Sea Cucumber Export License
  - This license applies to any person or company wishing to export sea cucumber products out of Vanuatu;
  - The maximum number of licenses to be issued in a given open season period shall depend on the number of species for which the license holder wishes to purchase from holder(s) of a Sea Cucumber Harvest License;
  - The license is valid for 12 calendar months (1 January to 31 December of any year);
  - The license form and format are attached in Schedules 2 and 4; and
  - Schedule 6 contains some conditions that could apply under a Sea Cucumber Export License.

3. Sea Cucumber Aquaculture License
  - The maximum number of licenses for sea cucumber aquaculture shall be limited to two companies only for the whole country.
4. Research Permit
  - A Research Permit will only be issued for the sea cucumber fishery if the application relates to value adding. The proposed value adding must be done locally in Vanuatu.

## 5.2 Marketing

### 5.2.1 Local product price

The local buying price of sea cucumbers shall be set as a minimum buying price for wet products and for fully dried products, and shall be based on minimum recommended prices for Melanesian Spearhead Group countries in 2013. A respective price adjustment price list can be access from VFD.

### 5.2.2 Value-added product

Any license holder must fully process all sea cucumbers into final products. No semi-processed sea cucumber products will be permitted for export.

## 5.3 Management regime

### 5.3.1 License system

A sea cucumber company shall be issued with a sea cucumber license, which will allow the company to purchase, process and export beche-de-mer.

### 5.3.2 Indefinite closure

- The sea cucumber fishery shall be managed by an indefinite closure and for a limited duration of declared open seasons by area of harvest;
- An open season(s) will be declared by area of harvest on a rotational basis.
- When an open season is declared for an area, VFD will coordinate the harvesting of the area within that province;
- The sea cucumber open season will be decided for an area after an assessment has been completed by VFD and when the results of that assessment indicate that stock estimates allow for sustainable harvesting of sea cucumbers. Monitoring and decision-making procedures are illustrated in Schedule 9;
- When declaring an open season, the Director, in collaboration with the provincial governments, communities, FMAC and the new sea cucumber development company shall give public notice of not less than 28 days of the date nominated for the open season, and the restrictions placed on the harvesting and processing of sea cucumbers;
- VFD shall advise on species permitted to be harvested by area or province, associated open area(s) and quotas, for each province for each open season;
- Provincial open season shall be declared by VFD in consultation with the provincial government and shall last for two months;
- VFD shall organise a monitoring and inspection team to be stationed at each open area during an open season;
- Fishing, processing and transporting sea cucumbers shall take place within the declared open season in each province;
- Communities and resource owners can decide whether to fish or not in their rightful reef area during an open season.

### 5.3.3 Total allowable catch system

#### 5.3.3.1 TAC setting

- TACs are derived from biomass stock assessment surveys that are undertaken ONLY by VFD;
- TAC information produced by other interest groups shall not be used by VFD in decision-making;
- TACs to be released for a new licensing period cannot be based on a stock assessment undertaken in that same period;
- In setting TACs, species that demonstrate volumes (metric tonnes) of greater than or equal to 2 metric tonnes per area (using the stocks assessment methods used by VFD) may be considered for opening (if the resource assessment results show that the resource stock is less than 2 metric tonnes), the fishery (by species) will remain closed for that area;
- TACs will be determined for live sea cucumbers to allow for effective monitoring of the catch; and
- The procedure to set TACs will be developed and implemented by VFD.

#### 5.3.3.2 TAC allocation

- VFD shall establish and implement a system of TAC allocation for each species by area.
- When establishing a TAC system, VFD – in close collaboration with provincial governments, communities and the new sea cucumber development company – will administer TACs, sub-divide, allocate and monitor these TACs among communities, and deal with TAC overruns.
- TACs cannot be reviewed once they are set and allocated for each species by area in a licensing period by VFD.
- In allocating TACs, VFD shall seek community agreement to harvest the allocated TAC prior to releasing the allocated TACs for each species and area

## 5.4 Other sea cucumber products

Any person or company intending to process other sea cucumber products (e.g. for pharmaceuticals, aphrodisiacs, cosmetics, or any other non-food production) shall first obtain written permission from the Director. Potential investors shall submit to the Director a proposal outlining the following:

- Proposed operations and its objectives,
- Types of activities the operation shall undertake,
- Source and quantity of sea cucumber species,
- Site of proposed operation,
- Monthly or yearly production,
- An evaluation of environmental impacts,
- Procedures the operation shall undertake to avoid detrimental environmental impacts,
- Business plan, and
- Any other information as may be required by the Director.

The Director will review the proposal and consider whether or not to issue a license to operate, under the terms and conditions of a license (including open periods, open areas and quotas) and prescribed fees for such an operation. The conditions of the licence shall be aligned with the conditions for open periods, open areas and quotas, as described in the sections above. Quotas allocated under this section shall be part of the total TAC released for a licensing period.

## 5.5 Sea cucumber aquaculture and sea ranching

- Any person or company intending to use locally available sea cucumber stocks for breeding or for the grow-out of hatchery-produced sea cucumbers or imported stocks shall first obtain written permission from the Director. Potential sea cucumber aquaculture investors, or persons or companies interested in ranching sea cucumbers are required to submit to the Director a proposal outlining the: proposed operations and its objective;



- goals to be achieved and the types of activities the operation shall undertake;
- target sea cucumber species;
- source and quantity of broodstock species and site of proposed operation (aquaculture and reseeded sites);
- monthly or yearly production;
- an evaluation of environmental impacts;
- procedures the operation shall undertake to avoid detrimental environmental impacts;
- business plan;
- indicators to measure the operation's success;
- how the plan meets the requirements of national policies; and
- any other information the director may require from time to time.

The Director will review the proposal and, if satisfied, shall consider issuing a license to operate a sea cucumber aquaculture activity, with the terms and conditions of the specified licenses and prescribed fees for such operation, as specified in the aquaculture license.

## 5.6 Sea cucumber reseeded guidelines

The Vanuatu Fisheries Department shall develop sea cucumber reseeded guidelines as a formal set of guidelines for any sea cucumber reseeded programme.

## 5.7 Sea cucumber ranching guidelines

To ensure clear designation between hatchery-bred and wild sea cucumber stocks, VFD shall develop sea cucumber ranching guidelines. These guidelines shall be implemented and enforced upon companies or persons wishing to carry out sea cucumber ranching anywhere in the archipelago.

## 5.8 Prohibitions

- Fishing for sea cucumbers shall be restricted to hand gathering or collecting either by free diving or wading (reef walking) during daylight hours.
- Collecting and harvesting sea cucumbers shall only be carried out by indigenous ni-Vanuatu community members or resource owners in each designated area;
- Species that are rare or threatened by fishing shall be prohibited from fishing, collecting, processing and export.
- VFD shall determine and publicise the species that are permitted for collection, processing and exports by province and area.
- Collecting sea cucumbers during aquarium fish collection operations, for the purpose of sale to sea cucumber processors or exporters, is prohibited.
- Collecting, or being in possession of, or exporting under-sized or underweight sea cucumbers, as listed in the Fisheries Regulations, is prohibited.
- Exporting broken or damaged pieces of beche-de-mer is prohibited.
- Harvesting sea cucumbers in marine reserves, conservation areas, marine protected areas and world heritage sites, is prohibited.
- Leasing a marine area for the purpose of securing wild sea cucumber stocks is prohibited.
- Exporting live sea cucumbers or beche-de-mer for personal consumption is prohibited.
- Exporting live sea cucumbers or beche-de-mer for research purposes is prohibited.
- Collecting and exporting live sea cucumbers for introduction purposes is prohibited.
- Non-indigenous ni-Vanuatu divers and fishers are prohibited from harvesting sea cucumbers.
- Harvesting sea cucumbers in the absence of an Authorised Officer and Fisheries Observer is prohibited.



## **Part 6 Monitoring, control and surveillance**

### **6.1 Compliance and enforcement**

Vanuatu Fisheries Department, as the regulatory agency, is responsible for the compliance and enforcement of this Sea Cucumber Management Plan. It works closely with other key stakeholders to ensure efficiency and effectiveness.

### **6.2 Reporting**

Reporting of purchasing, processing and exporting of sea cucumber and/or beche-de-mer are required as part of licencing terms and conditions.

## **Part 7 Penalties**

All those involved in the harvesting, processing and/or exporting of sea cucumbers or beche-de-mer must comply with this Sea Cucumber Management Plan and all relevant regulations associated with and the Fisheries Act.

Penalties as per the Fisheries Act and regulations will apply to any non-compliance.

## **Part 8 Review and amendment**

This Sea Cucumber Management Plan is a five-year plan for the period 2019 to 2024. It shall be first reviewed after the mid-term and a final review will take place after the end of the five-year period. However, if there are major changes in the policy direction of VFD or the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity during this period, or in the operating environment, amendments to parts or the entire document can be made. This can only take place in consultation with all parties concerned.

## **Part 9 Implementation plan**

For effective implementation, VFD must develop an Implementation Plan that will act as a roadmap to detail how VFD will implement each activity of the Sea Cucumber Management Plan.

## **Part 10 Monitoring, evaluation and learning framework**

A monitoring, evaluation and learning framework will be developed by VFD. This framework will assist VFD with ensuring that the Sea Cucumber Management Plan is achieving its objectives.







# Schedules

## Schedule 1: Application form for a Sea Cucumber Harvest License

### Instructions

- Underline surname
- For 'address' provide as much detail as possible
- Leave no question blank
- If not applicable, write N/A
- Must attach recent photograph of applicant(s)

**Address to:** The Director  
Vanuatu Fisheries Department  
PBM 9045  
Port Vila, Vanuatu

Attach recent passport size  
photograph

I hereby apply for a Sea Cucumber Harvest License at the place and in a manner described below:

1	Name and address of company or establishment							
2	Name and address of owner(s)							
3	Contact details of owner(s)							
4	List of sea cucumber species to be harvested and islands or areas where they will be harvested (please tick)							
	<b>Species</b>	<b>Tick</b>	<b>Quantity (kg)</b>	<b>Area</b>	<b>Species</b>	<b>Tick</b>	<b>Quantity (kg)</b>	<b>Area</b>
	Amberfish				Hairy blackfish			
	Black teatfish				Lollyfish			
	Brown curryfish				Peanut fish			
	Brown sandfish				Pinkfish			
	Chalkfish				Prickly redfish			
	Curryfish				Red snakefish			
	Deepwater blackfish				Sandfish			
	Deep water redfish				Snakefish			
	Elephant trunkfish				Stone fish			
	Flowerfish				Surf redfish			
	Golden sandfish				Tigerfish			
	Greenfish				White teatfish			
5	Products to be processed		(Attach full detail description on a separate piece of paper and label it as Attachment 1)					
6	Nature of operation		(Attach full detail description on a separate piece of paper and label it as Attachment 2)					
			(Attach full detail description of the construction and maintenance standards on a separate piece of paper and label it as Attachment 3)					

I understand that I am required to report any changes in the information contained in this form to the Director of Vanuatu Fisheries Department, Port Vila within seven days of the changes.

Signature of applicant(s)

Date

.....

.....

Name of applicant(s)

.....

# Schedule 2: Application form for a Sea Cucumber Export License

**Instructions**

- Underline surname
- For 'address' provide as much detail as possible
- Leave no question blank
- If not applicable, write N/A
- Must attach recent photograph of applicant(s)

Attach recent passport size photograph

**Address to:** The Director  
Vanuatu Fisheries Department  
PBM 9045  
Port Vila, Vanuatu

**I hereby apply for a Sea Cucumber Harvest License at the place and in a manner described below:**

1	Name and address of company or establishment							
2	Name and address of owner(s)							
3	Contact details of owner(s)							
4	List of sea cucumber species to be harvested and islands or areas where they will be harvested (please tick)							
	<b>Species</b>	<b>Tick</b>	<b>Quantity (kg)</b>	<b>Name of product**</b>	<b>Species</b>	<b>Tick</b>	<b>Quantity (kg)</b>	<b>Name of product**</b>
	Amberfish				Hairy blackfish			
	Black teatfish				Lollyfish			
	Brown curryfish				Peanut fish			
	Brown sandfish				Pinkfish			
	Chalkfish				Prickly redfish			
	Curryfish				Red snakefish			
	Deepwater blackfish				Sandfish			
	Deep water redfish				Snakefish			
	Elephant trunkfish				Stone fish			
	Flowerfish				Surf redfish			
	Golden sandfish				Tigerfish			
	Greenfish				White teatfish			
5	Products to be processed and exported		(Attach full detail description on a separate piece of paper and label it as Attachment 1))					
6	Nature of operation		(Attach full detail description on a separate piece of paper and label it as Attachment 2)					
			(Attach full detail description of the construction and maintenance standards on a separate piece of paper and label it as Attachment 3)					

**I understand that I am required to report any changes in the information contained in this form to the Director of Vanuatu Fisheries Department, Port Vila within seven days of the changes.**

**Signature of applicant(s)**

**Date**


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-----

**Name of applicant(s)**

\*\* Dried, chilled, frozen, green, others

## Schedule 3: Sea Cucumber Harvest License format

	<p><b>Government of the Republic of Vanuatu</b>  <b>Gouvernement de la République de Vanuatu</b></p> <p><b>Sea cucumber Harvest License</b></p>
	<div style="border: 1px solid black; padding: 5px; display: inline-block;">             License n°.....           </div>

The person or company named as licensee below is hereby licensed in accordance with Fisheries Regulation Order No. 11 of 2014, with the terms and conditions set out in this license, and the conditions prescribed from time to time in the Fisheries Regulations and by the Director of Vanuatu Fisheries Department.

Name of licensee:			
Name of business:			
Address of premises:			
Contact details:	Tel no:		
	Email address:		
Provincial government area:			
Island:			
<b>Authorised harvest area, authorised target sea cucumber species, and authorised total allowable catch (TAC) to be harvested</b>	<b>Authorised harvest area</b>	<b>Authorised species</b>	<b>Authorised TAC wet weight (kg)</b>
<b>Total aggregated TAC:</b>			
<b>Total harvest fee payable in vatu:</b>			
<b>Authorised license period:</b>			


Director

Date

.....

.....

## Schedule 4: Sea Cucumber Export License format

	<p><b>Government of the Republic of Vanuatu</b>  <b>Gouvernement de la République de Vanuatu</b></p> <p><b>Sea cucumber Export License</b></p>
	<div style="border: 1px solid black; padding: 5px; display: inline-block;">License n°.....</div>

The person or company named as licensee below is hereby licensed, in accordance with Section 32 of the Fisheries Act No. 10 of 2014, to use the premises described below as a sea cucumber processing establishment in accordance with the terms and conditions set out in this license and the conditions prescribed from time to time in the Fisheries Regulations and by the Director of the Vanuatu Fisheries Department.

Name of licensee:			
Name of business:			
Address of premises:			
Contact details:	Tel no:		
	Email address:		
Provincial government area:			
Island:			
<b>Authorised harvest area, authorised target sea cucumber species, and authorised total allowable catch (TAC) to be harvested</b>	<b>Authorised harvest area</b>	<b>Authorised species</b>	<b>Authorised TAC wet weight (kg)</b>
<b>Total aggregated TAC:</b>			
<b>Total harvest fee payable in vatu:</b>			
<b>Authorised license period:</b>			

Director

Date

.....

.....

## Schedule 5: Conditions for a Sea Cucumber Harvest License

The following conditions apply to the Sea Cucumber Harvest License:

1. This license is valid only for the harvesting of sea cucumbers from authorised harvesting areas, islands and provinces, as specified in this license, and is not transferable.
2. The Director of Fisheries may suspend or revoke this license with immediate effect if the licensee fails to comply with the terms and conditions of this license. The period of suspension or revocation of the license shall be 12 months.
3. The applicability and validity of this license is subject to granting of a Provincial Government Access License, and the proof of community/landowner agreement for sea cucumber species authorised herein.
4. The licensee must:
  - a. not undertake any harvesting of sea cucumbers TAC/s authorised under this license at authorised harvesting areas without the presence of an Authorised Officer or a Fisheries Observer;
  - b. cover travel and per diem costs for one Authorised Officer or Fisheries Observer to monitor harvesting of sea cucumber at the authorised harvesting areas;
  - c. only harvest sea cucumber in authorised harvesting areas where authorised total allowable catches (TACs) have been set and only in areas where the Fisheries Department has conducted stock assessment;
  - d. only harvest TACs of sea cucumber species authorised under this license and shall not harvest more than the authorised TACs;
  - e. only harvest sea cucumber species of legal size and weight as stipulated under Fisheries Regulation Order No. 28 of 2009;
  - f. not conduct their own stock assessment in areas where the Fisheries Department has not conducted a stock assessment;
  - g. comply with open seasons and TACs per sea cucumber species declared for authorised areas per island and per province by the Director of Fisheries;
  - h. maintain and provide harvest catch reports in a format as may be determined by the Director of Fisheries, and any other information requested by the Director of Fisheries from time to time;
  - i. make sea cucumber harvest data available to the Director of Fisheries 14 days prior to the end of a specified open season;
  - j. not provide misleading or false information, and must declare all sea cucumbers harvested and intended for shipment out of the authorised harvesting area, island and province;
  - k. not purchase sea cucumbers collected from areas established by national or local governments or local communities as closed areas, marine protect areas, marine reserves, marine parks, marine sanctuaries, or from areas declared as important archaeological sites;
  - l. upon request, present his or her license to a Fisheries Observer or an Authorised Officer;
  - m. allow harvested sea cucumbers and purchased sea cucumber raw materials, holding facility or packaged consignments of sea cucumbers to be inspected by an Authorised Officer; and
  - n. ensure that a bond of VUV 4 million is deposited into an account at a commercially registered bank placed at the discretion of the Director of Fisheries and in accordance with the Bank Guarantee Agreement.
5. All harvested sea cucumbers must be landed only in locations within designated authorised areas as determined by the Director of Fisheries.
6. The method of harvesting or collecting sea cucumbers may only include free diving, gleaning and wading.
7. The use of underwater breathing apparatus (UBA) or scuba is prohibited.
8. The night collection of sea cucumbers in authorised areas is prohibited.
9. Employed divers must have appropriate work permits.
10. Any other conditions prescribed by the Director of Fisheries from time to time.



## Schedule 6: Conditions for a Sea Cucumber Export License

The following conditions apply to the Sea Cucumber Export License:

1. This Sea Cucumber Export License is valid only for the export of sea cucumbers harvested and processed from authorised harvesting areas, islands and provinces specified herein and is not transferable.
2. The export of processed or semi-processed sea cucumber products under this license is subject to inspections and certifications by the Seafood Verification Agency Authorised Officer, confirming that the products are derived from an approved fish processing establishment or any alternative approved facility that has met the requirements of the Fisheries Act, and is fit for export.
3. The licensee must:
  - a. not trade or purchase or process or export any sea cucumber from an area or island or province other than the area, island or province specified as authorised in the license;
  - b. not buy, store, possess, process, sell or export any sea cucumbers that are smaller than the prescribed minimum length as set out in Schedule 27 of Fisheries Regulation Order No. 28 of 2009;
  - c. not purchase, process or export any sea cucumbers deemed to be stolen or poached from other provinces, islands or areas where there has not been an authorised total allowable catch (TAC) established for sea cucumber species;
  - d. provide true, complete and accurate information in the prescribed forms as may be provided for by the Director of Fisheries;
  - e. not export sea cucumber products – raw or semi-processed – out of harvest areas, islands and provinces without the authorisation of an Authorised Officer or a Fisheries Observer, and must have the signed consent of the community chief or the community resource owner;
  - f. declare to the respective provincial government authority concerned about all sea cucumber products that have been harvested, packed and intended for shipment out of the province;
  - g. upon request, present his or her license to an Authorised Officer;
  - h. allow purchased sea cucumber raw materials, processed products, holding facility or packaged consignments of sea cucumbers intended for sale or export to be inspected by an Authorised Officer or Fisheries Observer;
  - i. allow the processing premises, equipment, packaging materials and tools to be inspected by Seafood Verification Agency Officers;
  - j. ensure that the processed sea cucumber product has been properly preserved by freezing, chilling, salting, canning, drying, dehydrating or by any other approved method, and that the sea cucumber product is properly packed, labelled and in good order and condition at the time when it is placed onboard a ship or aircraft for export; and
  - k. ensure that any condition imposed with respect to the entry of the sea cucumber product into the importing country, or with respect to its sale for human consumption in that country, must be complied with in Vanuatu.
4. The licensee must not export any sea cucumber product overseas under this license except with the written approval of the Director of Fisheries upon payment of the 80% of fee payable for the Sea Cucumber Export License, and in accordance with such additional conditions he or she may specify.
5. Should the licensee contravene paragraph (4) above, the company is guilty of an offence and is punishable by a spot fine of VUV 1,000,000.
6. The Director of Fisheries may suspend or revoke this license upon failure of the licensee to comply with any of the terms and conditions of this license, and may not renew the revoked or suspended license for a period of one year from the date of the revocation or suspension.
7. Any other conditions prescribed by the Director of Fisheries from time to time.

## Schedule 7: Certificate of Export of seafood product

Export permit number: \_\_\_\_\_

Insert company name here

Export License No.: _____	
Exporter name and address	
Name:	Tel:
Address:	Email:
Port of shipment:	Vessel or Carrier:
Country of origin: Vanuatu	
Consignee name and address	
Name:	Tel:
Address:	Email:

### Consignment details

Common/Scientific name:	Product description:
No. of fish:	Quantity (kg):
Food Business Operator value (in VUV):	Presentation or product type:
Flight no.:	Airway bill no.:
Date of export:	Country:

### Export declaration

The product(s) described above was/were caught or harvested, handled and processed at all times in accordance with Fisheries Act No. 10 of 2014 and other applicable legislation.

Signature of consignee: \_\_\_\_\_ Date: \_\_\_\_\_

### **SVA Use Only:**

The Ministry of Agriculture, Livestock, Fisheries, Forestry and Bio-Security as Competent Certifying Authority:  
*The products described in this form have been audited in accordance with the requirements of the Fisheries Act No. 10 of 2014, and at time of audit, the product(s) are: certified as fit for use and approved for export.*

Signature of Authorised Officer: \_\_\_\_\_ Date: \_\_\_\_\_

## Schedule 8: Sea cucumber export declaration form

(To be completed by the exporting company prior to export)

Send completed form to: The Director, Department of Fisheries, PMB 9045, Port Vila

Telephone: (678) 5333340

Name of exporting company: .....	Date of shipment: .....
Sea Cucumber Export License no.: .....	Export permit no: .....

Sea cucumber species	No. of 20-kg bags	Number of pieces per bag	Total weight of each bag (kg)	Export destination	Value or currency per kg
<b>Total</b>					

Black teatfish (**BTF**), White teatfish (**WTF**), Prickly redfish (**PRF**), Brown sandfish (**BSF**), Surf redfish (**SRF**), Tigerfish (**TF**), Curryfish (**CF**), Greenfish (**GF**), Elephant trunkfish (**ETF**), Lollyfish (**LF**), Amberfish (**AF**), Pinkfish (**PF**), Sandfish (**SF**), Golden Sandfish (**GSF**), Blackfish (**BF**), Chalkfish (**CHF**), Stonefish (**STF**), Peanutfish (**PNF**), Snakefish (**SNF**)

Signature:.....	Signature:.....
Sea Cucumber Export Licensee	Authorised Officer/Inspector
Date:.....	Date:.....

## **Schedule 9: Guidelines for assessing the resource and deciding to open the fishery**

### **Procedure for conducting resource assessment surveys**

1. VFD is to conduct resource assessments prior to an open season in order to assess stock status and prescribe species to be allowed for fishing. Assessment of sea cucumber stocks would be based on the standardised methodologies prescribed by the Vanuatu Fisheries Department.
2. Resource assessments shall be undertaken at the main fishing areas as deemed necessary and depending on funding availability.
3. Resource surveys shall follow the same standardised methods to enable the monitoring of stock conditions over time and for estimating fishable stocks.
4. Data collected shall be entered into a database such as the Fishery Department's invertebrate database for which a backup can be maintained elsewhere such as with the French Research Institute for Development (IRD) and the Pacific Community (SPC).
5. If resources are healthy enough to allow fishing, an estimation of stock biomass and abundance shall be performed using appropriate mapping tools and sampling protocols to provide reliable stock estimates by size class based on statistical uncertainty and harvest size regulations.
6. Resource surveys undertaken by other partners shall follow the same methodologies used by VFD. This is for compatibility purposes.
7. Rare species and species whose harvestable stocks are low should be prohibited from harvesting during an open season.
8. Total stocks, mature stocks above legal minimum size, and harvestable stocks shall be estimated in numbers and in wet and dry weight for prescribed species by fishing area.
9. Results are then communicated to the Director of Fisheries for decision-making during an open season.
10. Where necessary, best estimates shall be made for areas that have not been surveyed based on past information, local knowledge or experience from related areas.

### **Procedure for opening the sea cucumber fishery**

1. The Fisheries Department, in consultation with provincial governments, and when all agree to open the fishery, shall prepare a regulation order for the Council of Ministers to open the fishery.
2. The Fisheries Department shall announce the opening of license application and selection of licenses, based on the criteria set out in Section 5.2 of this Sea Cucumber Management Plan.
3. The Fisheries Department, in collaboration with other partners, shall conduct awareness campaigns with communities on open seasons and new management measures.
4. The Fisheries Department shall coordinate and conduct training for fisheries and provincial officers on monitoring and reporting procedures during an open season.
5. Fisheries Officers will be stationed in their respective areas before the opening season begins.
6. The start and finish of the opening season will be announced through appropriate media outlets seven days before the opening date.

## Schedule 10: Sea cucumber monthly export log

To be submitted by all exporters on the 7<sup>th</sup> day of the month, following the month of reporting (e.g. submit on the 7<sup>th</sup> of June when reporting for May).

Send completed form to:

The Director, Department of Fisheries, PMB 9045, Port Vila  
Telephone: (678) 23119/23621; Fax: (678) 23641

Name of exporting company: .....					Reporting month:.....		
Sea Cucumber Export License No: .....							
Date	Full name of processor	Species name	Number of pieces	Weight (kg)	Area, Island	Product type	Export price per kg/piece

Black teatfish (**BTF**), White teatfish (**WTF**), Prickly redfish (**PRF**), Brown sandfish (**BSF**), Surf redfish (**SRF**), Tigerfish (**TF**), Curryfish (**CF**), Greenfish (**GF**), Elephant trunkfish (**ETF**), Lollyfish (**LF**), Amberfish (**AF**), Pinkfish (**PF**), Sandfish (**SF**), Golden sandfish (**GSF**), Blackfish (**BF**), Chalkfish (**CHF**), Stonefish (**STF**), Peanutfish (**PNF**), Snakefish (**SNF**)

\*Product type: unprocessed (UP), semi-processed (SP), dried product (DP)

Signature:..... Date: .....

Export company owner

Signature:..... Date: .....

Authorised Officer/Inspector

## Schedule 11: Sea cucumber monthly processors log

To be submitted by all licensed processors on the 7<sup>th</sup> day of the month, following the month of reporting (e.g. submit on the 7<sup>th</sup> of June when reporting for May).

Send completed form to:

The Director, Department of Fisheries, PMB 9045, Port Vila  
Telephone: (678) 23119/23621; Fax: (678) 23641

Name of processor: .....					Reporting month:.....		
Sea Cucumber Processor License No: .....							
Date	Full name of fisher	Species name	Number of pieces	Weight (kg)	Area	Product type*	Comments

Black teatfish (**BTF**), White teatfish (**WTF**), Prickly redfish (**PRF**), Brown sandfish (**BSF**), Surf redfish (**SRF**), Tigerfish (**TF**), Curryfish (**CF**), Greenfish (**GF**), Elephant trunkfish (**ETF**), Lollyfish (**LF**), Amberfish (**AF**), Pinkfish (**PF**), Sandfish (**SF**), Golden Sandfish (**GSF**), Blackfish (**BF**), Chalkfish (**CHF**), Stonefish (**STF**), Peanutfish (**PNF**), Snakefish (**SNF**)

\*Product type: unprocessed (UP), semi-processed (SP), dried product (DP)

Signature:..... Date: .....

Export company owner

Signature:..... Date: .....

Authorised Officer/Inspector

## Schedule 12: Guidelines for monitoring, compliance and reporting

### Inspection of processing and exporting facilities and products

1. Authorised Officers, trained provincial officers, and community workers shall inspect minimum sizes and weights of sea cucumbers on the beach, and return undersized individuals to the sea alive.
2. All sea cucumbers leaving the provinces by sea and air to Port Vila or Luganville shall be accompanied by a Provincial Sea Cucumber Shipment Form signed by an Authorised Officer or designated provincial officer.
3. Exports of sea cucumber products out of Vanuatu shall be accompanied by an export declaration permit issued after all necessary export requirements are completed. Authorised Officers shall inspect all consignments prior to issuing an export permit.
4. Fishers, processors and exporters may be asked to provide more information on their respective activities.
5. Monitoring and inspection fees can be charged, if deemed necessary, to cover overtime of inspection officers.
6. Authorised Officers should work closely with Customs Inspection Officers to monitor exports.
7. An inspection timesheet shall be provided by fisheries for the payment of inspection fees on a monthly basis.

### Monitoring, processing and exporting

1. All licensed processors shall submit completed processor log form to Fisheries Department on a monthly basis.
2. All license exporters shall submit export log form to Fisheries Department on a monthly basis.
3. Export and processing log forms should contain prices per product type.
4. Export and processing data shall be entered into a database such as the Fisheries export database provided by SPC and information used to monitor quota allocation by exporters, prescribed species or by area to advice license holders of their quota limit.
5. A relative database can be developed for catch data from licensed processors.
6. Vanuatu Fisheries Department should also monitor live sea cucumber data being exported by aquarium trade exporters and advice on number of specimen exported.
7. Vanuatu Fisheries Department shall advice license holders and fisher's accordingly about the state of their quota allocation on a timely basis to prevent overruns.
8. Vanuatu Fisheries Department should also develop harmonise data collection protocol with Customs Department to prevent repeated or misreporting of export information.



## Schedule 13: Recommended minimum sea cucumber harvest size and weight restrictions

Common name	Local name	Minimum size		Minimum weight		Minimum pieces	
		wet	dry	wet	dry	1 kg	10 kg
Amberfish	Ambafis	40 cm	15 cm	1600 g	80 g	12	120
Black teatfish	Blak titfis	30 cm	15 cm	1000 g	100 g	10	100
Blackfish	Blakfis	20 cm	10 cm	340 g	34 g	29	290
Brown curryfish	Braon karifis	20 cm	10 cm	260 g	10 g	96	960
Brown sandfish	Braon sanfis	25 cm	12 cm	700 g	28 g	35	350
Chalkfish	Jokfis	15 cm	7 cm	130 g	8 g	128	1280
Curryfish	Karifis	35 cm	15 cm	1000 g	40 g	25	250
Deepwater blackfish	Dipwota blakfis	30 cm	15 cm	660 g	79 g	12	120
Elephant trunkfish	Elefenfis	40 cm	20 cm	1700 g	221 g	4	40
Flowerfish	Floafis	30 cm	15 cm				
Golden sandfish	Kolten sanfis	25 cm	12 cm	660 g	53 g	19	190
Greenfish	Krinfis	20 cm	10 cm	150 g	4 g	222	2220
Lollyfish	Lolifis	20 cm	10 cm	280 g	14 g	71	710
Peanutfish	Pinatfis	20 cm	10 cm	G	G	0	0
Pinkfish	Pinkfis	20 cm	10 cm	150 g	6 g	166	1660
Prickly redfish	Paenapolfis	35 cm	17 cm	1300 g	91 g	11	110
Red snakefish	Red snekfis	30 cm	15 cm			0	0
Sandfish	Sanfis	20 cm	10 cm	300 g	15 g	66	660
Snakefish	Snekfis	40 cm	20 cm				
Stonefish	Stonfis	20 cm	10 cm	650 g	32 g	30	300
Surf redfish	Sefredfis	25 cm	12 cm	500 g	30 g	33	330
Tigerfish	Taikafis	30 cm	15 cm	800 g	32 g	31	310
White teatfish	Waet titfis	35 cm	16 cm	1400 g	126 g	8	80

## Schedule 14: Minimum sea cucumber size limits of beche-de-mer in Vanuatu

Common name	Local name	Minimum size		Minimum weight		Minimum pieces	
		wet	dry	wet	dry	1 kg	10 kg
Amberfish	Ambafis	40 cm	15 cm	1600 g	80 g	12	120
Black teatfish	Blak titfis	30 cm	15 cm	1000 g	100 g	10	100
Blackfish	Blakfis	20 cm	10 cm	340 g	34 g	29	290
Brown curryfish	Braon karifis	20 cm	10 cm	260 g	10 g	96	960
Brown sandfish	Braon sanfis	25 cm	12 cm	700 g	28 g	35	350
Chalkfish	Jokfis	15 cm	7 cm	130 g	8 g	128	1280
Curryfish	Karifis	35 cm	15 cm	1000 g	40 g	25	250
Deepwater blackfish	Dipwota blakfis	30 cm	15 cm	660 g	79 g	12	120
Elephant trunkfish	Elefenfis	40 cm	20 cm	1700 g	221 g	4	40
Flowerfish	Floafis	30 cm	15 cm	470 g	19 g	53	530
Golden sandfish	Kolten sanfis	25 cm	12 cm	660 g	53 g	19	190
Greenfish	Krinfis	20 cm	10 cm	150 g	4 g	222	2220
Lollyfish	Lolifis	20 cm	10 cm	280 g	14 g	71	710
Peanutfish	Pinatfis	20 cm	10 cm	190 g	8 g	132	1320
Pinkfish	Pinkfis	20 cm	10 cm	150 g	6 g	166	1660
Prickly redfish	Paenapolfis	35 cm	17 cm	1300 g	91 g	11	110
Red snakefish	Red snekfis	30 cm	15 cm	260 g	10 g	100	1000
Sandfish	Sanfis	20 cm	10 cm	300 g	15 g	66	660
Snakefish	Snekfis	40 cm	20 cm	340 g	14 g	73	730
Stonefish	Stonfis	20 cm	10 cm	650 g	32 g	30	300
Surf redfish	Sefredfis	25 cm	12 cm	500 g	30 g	33	330
Tigerfish	Taikafis	30 cm	15 cm	800 g	32 g	31	310
White teatfish	Waet titfis	35 cm	16 cm	1400 g	126 g	8	80



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