

INCHIE 5Y - 07116-PS

## JAMAICA FISHERIES: Quarterly Statistics Report

Volume 1: Issue 2

OCTOBER - DECEMBER 2022

NATIONAL FISHERIES AUTHORITY © National Fisheries Authority, Jamaica 2023

Short extracts from this publication may be copied or reproduced, for individual use, with permission, provided the source is fully acknowledged. More extensive reproduction or storage in a retrieval system, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, requires prior permission of the National Fisheries Authority.

Designed by	Fisheries Statistics and Data Management
Contact officer:	Zahra H. Oliphant, PhD., JP.
Postal address:	PO Box 470 Kingston 13, Jamaica
Office address:	2C Newport East, Kingston 11, Jamaica
Phone enquiries:	(876) 948-9014, (876) 948-6933, (876) 967-2081
Email:	fisheries@nfa.gov.jm / fisheries_jamaica@live.com
Website:	www.moa.gov.jm

View this report online -

https://www.moa.gov.jm/document/categories/reports

Front cover photo:

National Fisheries Authority



#### Acknowledgements NATIONAL FISHERIES AUTHORITY, JAMAICA

The National Fisheries Authority (NFA) takes this opportunity to acknowledge the contribution of all fisheries and aquaculture stakeholders, in particular fishers, fish farmers, vendors, and processors that provided information on all data captured herein which made it possible for the timely compilation of the report.

The contribution made by all staff members is appreciated. In particular, the Extension Officers and Data Collection Officers conducted the data collection, compilation, processing, and analysis accordingly.

The report was produced by the Fisheries Statistics and Data Management Branch of the Fisheries Compliance, Licensing, and Statistics (FCLS) Division in collaboration with the Capture Fisheries and Aquaculture Divisions of the NFA.

FCLS Division – Dr. Zahra H. Oliphant, JP (Principal Director), Mr. Garth Brown (Senior Director, Fisheries Statistics and Data Management), Mrs. Anginette Murray (Statistician/Data Manager), Mr. Ian Jones (Senior Director, Compliance), Mr. Lance McDonald (Licensing & Registration Manager), Mr. Robert Kenward and Mrs. Sashay Liking-Tennant (Data Collection Officers).

Capture Fisheries Division: Mr. Stephen Smikle (Principal Director) and Ms. Rachel Feddis (Research Officer).

Aquaculture Division: Mrs. Avery Smikle (Principal Director) and Mr. Dehaan Brown



#### Contents

#### LIST OF TABLES

Table 1 Number of vessel licences issued since 1996	. 20
Table 2 Number and percentage composition of fisher licence issued April-December 2022	22
Table 3 Marine fish production (MT) trend by fishery type, April-December 2022	. 24
Table 4 Estimated value (USD for Marine fish production (MT) by fishery type, April-December 2022	24
Table 5 Estimated Marine fish production (MT) and value, April-December 2022	24
Table 6 Farm gate and retail price of tilapia	. 27
Table 7 Fines by Parish Courts for Close Season offences from 2019-2022	. 28
Table 8 Number of Individual Fisher Licences issued and Renewal percentage (ex.temporary permits).	29

#### LIST OF FIGURES

Figure 1 National Fisheries Authority Organizational Chart	12
Figure 2 Overview of the sampling plan for the artisanal fishery of Jamaica	16
Figure 3 The fishery areas of Jamaica	17
Figure 4 Major marine fish landing sites on mainland, Jamaica	17
Figure 5 Regional position of Jamaica including delimited territorial waters and	
the Jamaica-Colombia Joint Regime Area	17
Figure 6 Number of boat licenses issued by category during October-December 2022	20
Figure 7 Number of boat licences issued by category and parish, October-December 2022	21
Figure 8 Number of Fisher Licences issued by month October-December 2022	21
Figure 9 Age distribution of licensed fishers	22
Figure 10 Sex distribution (%) of licensed fishers October-December 2022	22
Figure 11 North vs South coast percentage composition	25
Figure 12 Artisanal fish production trend by Coastal communities, April-December 2022	25
Figure 13 Artisanal finfish production by month, April-December 2022	25



#### **User Guide**

This report provides details of the performance of the fisheries sector for the quarter of October to December 2022, in support of the GOJ's Programme and Sub-Programme objectives for Agriculture and Fisheries, i.e. *To increase agricultural production by at least 15% to meet domestic, export and manufacturing input demand* and *to improve the economic, social and ecological value of capture fisheries and aquaculture while increasing fisheries contribution to GDP to 0.6%.* 

The Quarterly Statistics Report was developed by the National Fisheries Authority, Jamaica (NFA) and serves as a tool of accountability for the Jamaican Government. It also provides a valuable resource for NFA's clients, government at all levels, industry, and the general community.

#### Part 1 - Overview

Provides an overview of the National Fisheries Authority by highlighting its functions, organizational chart, services, and stakeholders.

#### Part 2 – Statistics Report Framework

Details NFA's Quarterly Statistics Report explaining its purpose, scope, and methodology used in capturing our performance results.

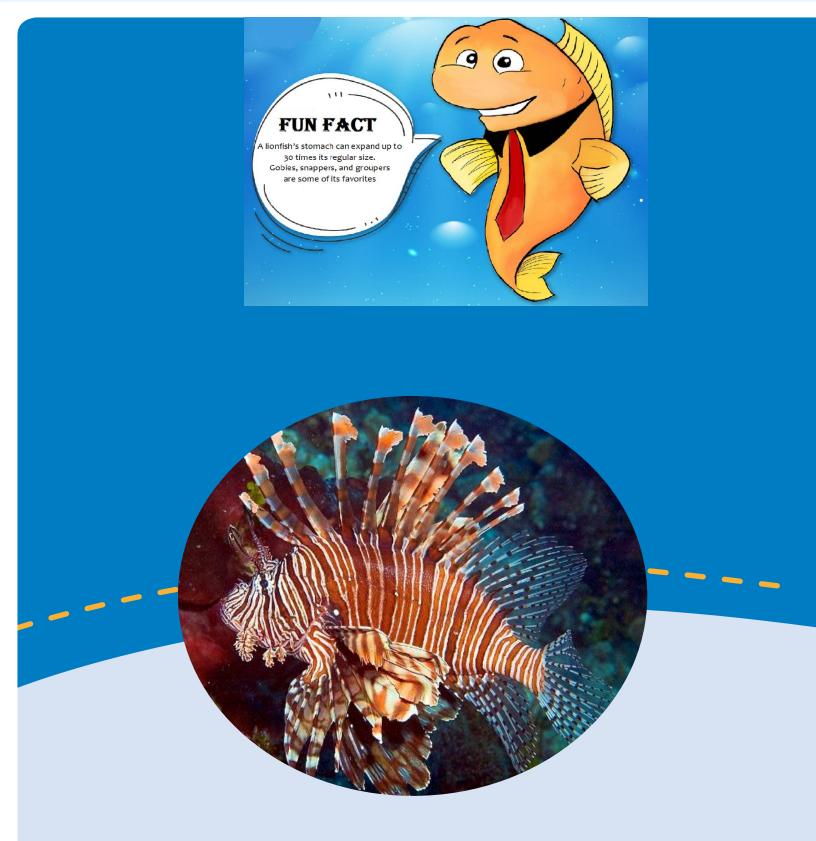
#### Part 3 – 3rd Quarter Statistics Performance

Describes the performance of the two technical arms of the NFA – Capture Fisheries and Aquaculture, for the quarter, any significant operational success, opportunities, and challenges faced in meeting the Authority's objectives.

#### Part 4 - Conclusion

This section summarises the performance results for the quarter, any significant operational changes, and highlight the opportunities and challenges faced by the sector.

#### Part 5 – Appendices



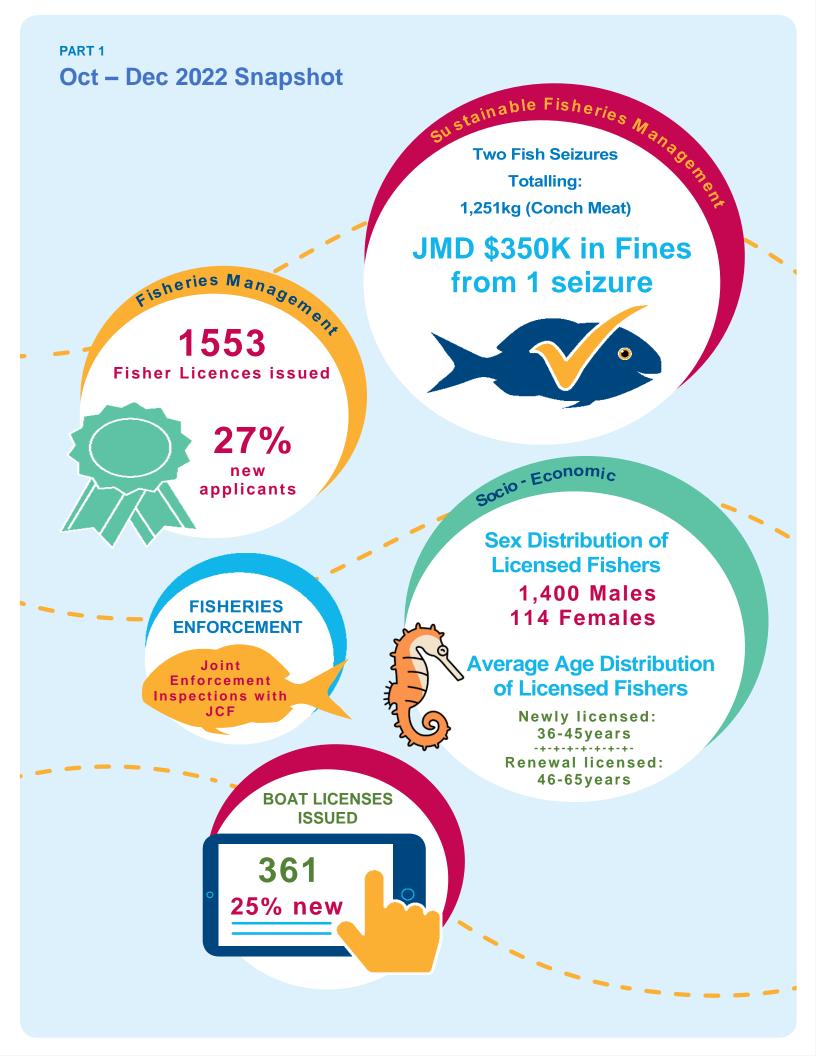
Caribbean lionfish photographed on the reefs. Photo courtesy: NFA and The Manhattan Fish Market Brunei

# Part 1

Overview

PART 1

Our Agency



#### **The National Fisheries Authority**

#### Overview of Our Agency

The National Fisheries Authority (NFA) was established as a body corporate, under Section 5(1) of the Fisheries Act, 2018, with the mandate being that the Authority will be responsible for the management and development of fisheries and aquaculture. The Authority is, therefore, the sole body with the responsibility of ensuring that there is conservation of Jamaica's fisheries, collection, compilation, and analysis of statistics for the sector, monitoring, control, and enforcement of activities related to fisheries and aquaculture; as well as, granting of licenses, authorizations and permits and allocation of fishing rights and quotas for all who intend to fish in Jamaica's waters. Before its establishment, the fisheries and aquaculture sectors were regulated by the Fisheries Division which was established in 1949 and as a government division, fell within the portfolio with responsibility for Fisheries. Transitioning to a statutory body allows the NFA to regulate the fisheries and aquaculture sectors more independently within the structure of a strengthened legislative framework, enabled by the new Act.



Kenyon Hemans/Photographer

From left: Agriculture and Fisheries State Minister Frank Witter; Agriculture and Fisheries Minister Pearnel Charles Jr; Gavin Bellamy, CEO of National Fisheries, and Stephen McLish, owner of McLish Farm, look at a small catch during a tour.

The structure of the fisheries sector of Jamaica is comprised of Capture Fisheries and Aquaculture. Capture Fisheries primarily consist of artisanal fishers (~20,000) operating from open-type canoe boats over inshore and offshore areas; the inshore fishery takes place in the coastal waters of the Island Shelf with its nine proximal banks (CFRAMP, 2000). The fishers operate from the fishing beaches primarily on the wide South Shelf of the island, as well as, along the banks of the Pedro and Morant Cays. A smaller but economically significant sub-sector is comprised of industrial fishers who fish for lobster and conch, the latter being a highly significant part of the industry from the 1960s. Commercial sports fishery (e.g., fishing tournaments) and small recreational fishery are other sub-sectors that, although smaller in scope, are likewise important. The production from capture fisheries in 2020 was 11,226 tonnes (t) which represented a decline of 9.3% from the previous year (PIOJ, 2021).

1

#### **Role and Functions**

NFA is the Jamaican Government agency responsible for the provision of regulatory and other services to ensure efficient and sustainable management of Jamaica fisheries on behalf of the Jamaican community. The challenge in delivering these services is to find the right balance between competitive and profitable aquaculture production and keeping the impacts of fishing on Jamaica's marine ecosystems within sustainable and acceptable risk levels.

Our fisheries management practices aim to maintain the environmental sustainability of commercial fisheries for Jamaicans both now and into the future. These practices have regard to the impact of fishing on non-target species and the long-term health of the broader marine environment.

The National Fisheries Authority is also responsible for international fisheries matters, including preventing illegal foreign fishing in the Jamaican Fishing Zone. NFA participates in the management, monitoring, control, and surveillance activities as well as developing capacity-building activities, and providing advice and training to the Jamaican Fishers.



Rachel Feddis/Photographer From left: Fisheries Management Specialist Junior Squire; Senior Research Officer Kimberlee Cooke-Panton; Sabrina Cain, Projects Officer, and Sheldon Marriott, Small Boat Operator.

#### Stakeholders

NFA's stakeholders include the commercial fishing industry, researchers, environment and conservation organizations, recreational fishers, artisanal fishers, and other government agencies. We continue to encourage and promote a partnership approach with stakeholders, involving them in developing policies and actions and sharing responsibility for fisheries management (and the associated risks) where appropriate.

### 1 Overview

#### **Organizational Structure**

The NFA, with a staff complement of 290 persons, is governed by a Board which advises the Minister with responsibility for fisheries, while the Chief Executive Officer is responsible for carrying out the functions and managing the operations of the Authority.

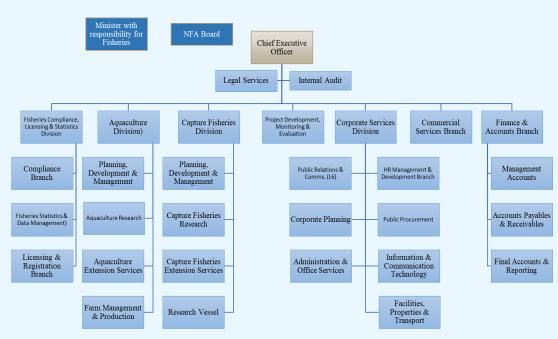
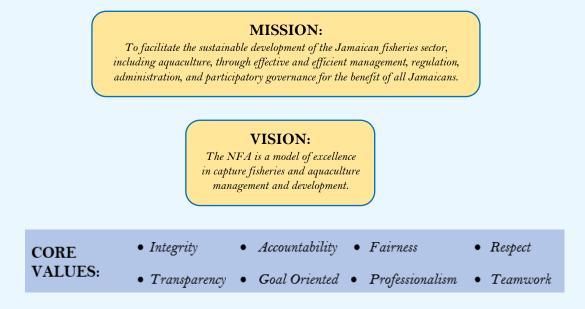


Figure 1 National Fisheries Authority of Jamaica Organizational Chart

#### Vision, Mission, Values



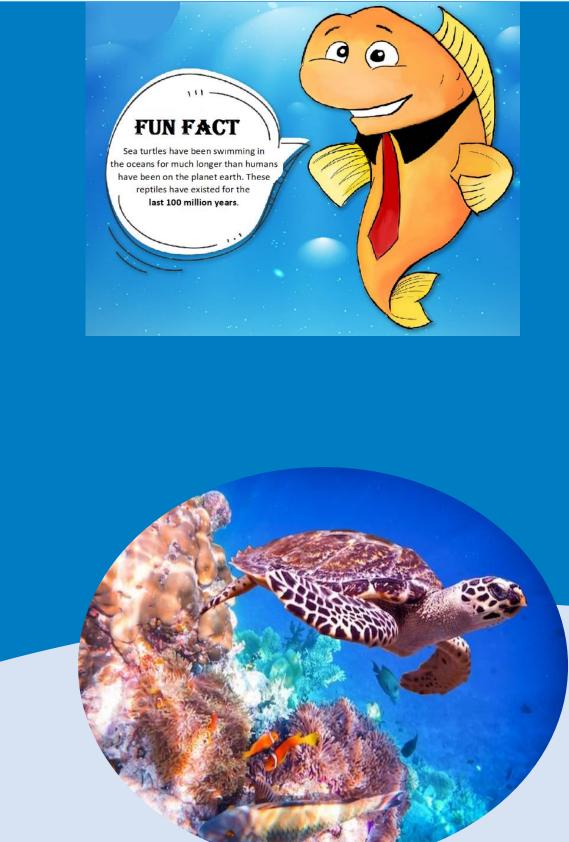


Photo courtesy: Adult hawksbill Turtle © Andrey Armyagov.

PART 2 Statistical Report Framework

**PART 2** Statistical Report Framework

#### **About NFA's Statistical Report Framework**

Solid policy design and decision-making, which are predicated on hard evidence, are achievable through the provision and availability of timely, accurate, and high-quality data and statistics. This is recognized by Governments worldwide and as such, there is a high level of commitment at the policy level, as is stated in several sectoral and national development plans, as well as regional and global development agendas.

This publication is the second issue in a series of publications of Quarterly Reports by the National Fisheries Authority (NFA), as part of its ongoing programme to provide data and statistical information (production, social and economic) on the performance of the fisheries and aquaculture sector.

The data and statistical information in this report highlights the sector performance for the third quarter (October – December, 2022) of the financial year (2022-2023). The publication of this Report is intended to support sound decision-making and policy development for the sustainable growth and development of the fisheries and aquaculture sector locally and internationally.

#### Methodology

The report's objective is:

'The objective of the present data acquisition system is to collect basic fisheries data by sampling representative landing sites in Jamaica. The monitoring system provides accurate data on catches, effort, catch by fishing ground, the value of the catch, length of fish landed and data on fishing gear.'

The strategy for sampling from artisanal fishers is as follows:

- 1. Jamaica is divided into three statistical areas, the North Coast, South Coast, and Offshore Cays (Morant and Pedro), based on the nature of the fishery.
- 2. Landing sites are stratified by fishing ground, beach size (according to the number of boats), gears, and fish type. The categories are used as sampling strata and it is assumed that within a stratum, the gears, vessels, and fishing grounds are homogeneous throughout the area. This means that fishermen at all beaches within a category have access to fisheries of similar productivity. Once all the beaches were classified into strata, one or more beaches were selected to be sampled in each stratum (Figure 1).
- 3. The data are collected from fishers by the Data Collection and Extension Officers of the NFA.
- 4. Each sample beach is visited two days per month and the data collected from vessels landing that day. The data include vessel identification, fishing effort (amount of gear, number of crew, hours fished), fishing ground, species landed by weight, and the price. Other data collected include the total number of vessels that went to sea that day, the number of fishing days for the month, and descriptive comments on the weather and beach conditions.
- 5. Biological data such as weight, length, sex, and maturity of select species are also collected monthly. These species include Caribbean spiny lobster, dolphinfish, skipjack tuna, and conch. In conjunction with the catch and effort data, the biological data are used for stock assessment and for detecting trends, etc., which are necessary for proper decision-making.

- 6. Estimation of the total landings is based on the following:
  - ✓ Percentage of active vessels/gears for the sampled site(s)
  - ✓ Total fish landings at the known site for the sampled site(s)
  - ✓ Estimate of the Catch per unit of effort (CPUE) for the sampled site(s)
  - Calculate the estimate of active vessels/gears that went to sea multiplied by CPUE for un-sampled sites
  - ✓ The summation of sampled and un-sampled sites will give total landings.
  - ✓ Calculations are done by stratification e.g. coastal pelagics.

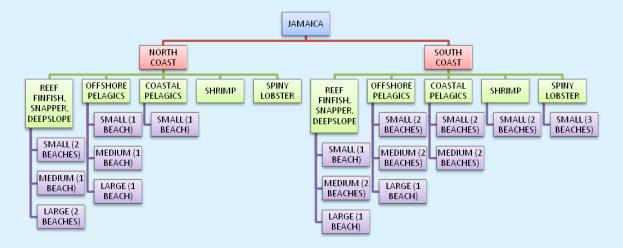


Figure 2 Overview of the sampling plan for the artisanal fishery of Jamaica

As it relates to the industrial (large-scale) fisheries, completed vessel log sheets are collected from the operators of industrial fishing vessels on the day of landing. The data captured on the log sheet include but are not limited to, catch, effort, location, gear type, level of processing on factory vessels and fishing ground. Landings are verified through inspections of catch at the landing sites.



Figure 3 The Fishery areas of Jamaica



Figure 4 Major marine fish landing sites on the mainland, Jamaica

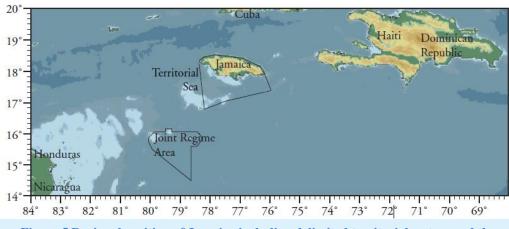
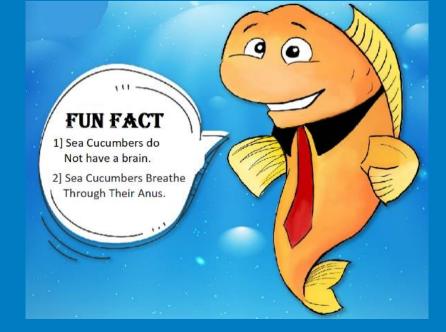


Figure 5 Regional position of Jamaica including delimited territorial waters and the Jamaica-Colombia Joint Regime Area

2





PART 3 3<sup>rd</sup> Quarter Statistics

#### PART 3 3<sup>rd</sup> Quarter Statistics Performance

#### 1) CAPTURE FISHERIES

- a) Fishing Fleet
- b) Licensing Categories
- c) Estimated Production and Value
- d) Factors affecting the industry
- 2) AQUACULTURE
  - a) Production
  - b) Fish Farmers
  - c) Price
  - d) Factors affecting the industry
- 3) COMPLIANCE

#### **Capture Fisheries**

#### Fishing Fleet

A variety of mechanized and non-mechanized fishing boats operate in Jamaican waters. The nonmechanized boats are generally propelled by oars and are made of wood or a mixture of wood and fiberglass. The mechanized boats are of the fibre-reinforced plastic (FRP) open hull canoe type, propelled by outboard engines (25 - 75 HP) with dimensions of 8.4 x 1.5 x 0.9 m on average. The decked vessels are generally made of steel with lengths averaging 15 - 30 m.

Table 1 provides information on the number of vessels registered up to the end of the third quarter of the financial year 2022/2023 and from 1996 to 2022.

	Oct. – Dec. 2022
Registered Vessels	361
New	92
Renewals	269

This brings the total number of vessels that have been registered from 1996 to 2022, to 9281.

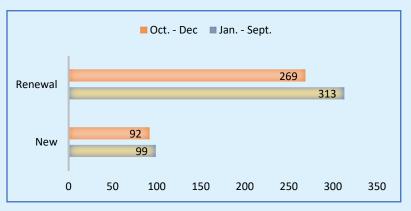


Figure 6 Number of boat licenses issued by category from January to December 2022



3<sup>rd</sup> Quarter Statistics Performance

3

During the third quarter (October-December 2022), showed an average of 120 boat licenses being issued over the quarter per month, however January to September recorded an average of 45 boat licenses being issued per month, October to December quarter contributed 46% to the total number of licences renewed for 2022. Of the 582 vessel licences issued in 2022, 32% or 191 represented new applications as highlighted in (Figure 6). Of the total number of boat licences issued, the majority were from Kingston and St. Catherine areas (Figure 7).

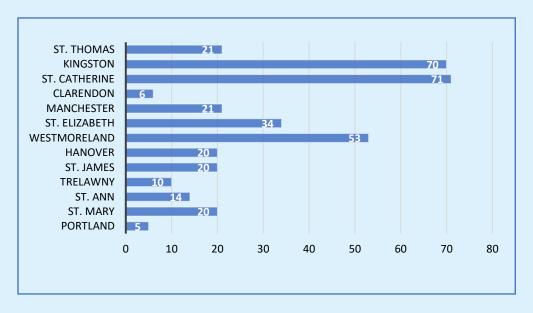


Figure 7 Number of boat licenses issued by parish, October-December 2022

#### **Licensing Categories**

During the period October to December 2022, a total of 1553 licences were issued, with the highest numbers recorded in November and December (Figure 8). From this total, 89.81% represent the artisanal fishery, 8.3% represents the recreational fishery, and 0.43% the industrial (Table 2). October to December recorded a 34.94% reduction in comparison to the combined first and second quarters (April to September). 23% of fishers who were licensed fell within the 46-55 age group (Figure 9) and approximately 92% were males (Figure 10).



Figure 8 Number of fisher licences issued, October-December 2022

CATEGORY	NUMBER	%
COMMERCIAL FISHING (ARTISANAL FINFISH)	1,393	89.81
COMMERCIAL FISHING (IRISH MOSS)	1	0.06
INDUSTRIAL FISHING	13	0.83
RECREATIONAL FISHING	129	8.3
<b>RIVERINE FISHING</b>	1	0.06
CAY PERMIT	2	0.12
VENDOR PERMIT	12	0.77

Table 2 Number and percentage composition of fisher licences issued.October-December 2022

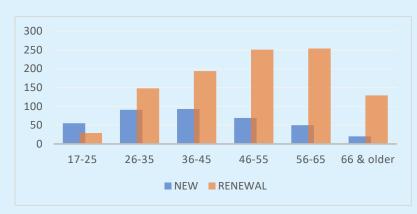


Figure 9 Age distribution of licensed fishers, October-December 2022

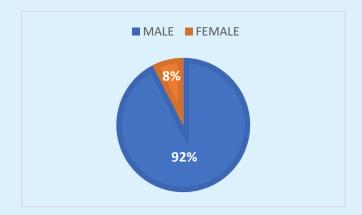


Figure 10 Sex distribution (%) of licensed fishers, October-December 2022



Photo courtesy: Lance McDonald Fishermen returning from sea.

3

#### **Estimated Production and Value**

The data collection system for the artisanal fisheries is based on landings at individual beaches. The average number of days fished per month is twenty days. The artisanal fish production is diverse and includes finfish species (such as snappers, parrotfish, jacks, and grunts), lobster, and conch.

Fifty-two (52) broad categories of fish were caught within the third quarter and this number represented over 90 species of fish. Sardines (*Sardinella* spp.), Black Jacks (*Caranx lugubris*) and Herring (*Opisthonema oglinum*) represented the largest catch as it relates to weights. The popular food fish Snapper, showed high species diversity with nine different species being recorded for the quarter (Dog, Glasseye, Grey, Lane, Mutton, Red, Silk, Vermillion, Yellowtail).

The overall marine finfish production for the period October - December 2022 was 2,125.88 MT (Table 3, 10) valuing approximately US\$35 Mil or over JMD\$5 billion (Table 4). The artisanal fishery accounted for 93% of total marine fish production by quantity. The industrial spiny lobster fishery is based on reported landings and includes weights of whole, tails and head meat combined.

Further examination of the artisanal fishery shows that landings from the southern shelf and the proximal banks contributed to over 59.4 percent of the total production for the period October – December 2022 (Figure 11). Peak productivity was observed in October for the south coast (Figure 12). The reef, offshore and deep slope fisheries yielded the greatest productivity during this period.

#### Factors affecting the Industry

The capture fisheries sub-sector has been affected negatively by several factors. During the reporting period, the factors reported were similar to those highlighted in Issue 1 - poor weather conditions, poor water visibility in some areas, influx of *Sargassum* particularly on the south coast and pollution in general.

					Production (MT)	)				
April	May	June	July	August	September	October	November	December	Total	% Composition
473.6	516.03	801.62	953.9	1,375.11	504.58	922.65	473.86	729.37	6,750.72	93.09
						2.17	0.81	2.4	5.38	0.07
50.32	110.60	65.53	34.26						260.70	3.59
			0	7.17	45.98	97.94	46.69	37.19	234.97	3.24
523.92	626.63	867.15	988.16	1382.28	550.56	1022.76	521.36	768.96	7,251.77	100
	473.6 50.32	473.6     516.03       50.32     110.60	473.6         516.03         801.62           50.32         110.60         65.53	473.6         516.03         801.62         953.9           50.32         110.60         65.53         34.26           0         0         0	April         May         June         July         August           473.6         516.03         801.62         953.9         1,375.11           50.32         110.60         65.53         34.26         0           0         7.17         0         7.17	April         May         June         July         August         September           473.6         516.03         801.62         953.9         1,375.11         504.58           50.32         110.60         65.53         34.26         90         7.17         45.98	473.6       516.03       801.62       953.9       1,375.11       504.58       922.65         50.32       110.60       65.53       34.26       2.17         0       7.17       45.98       97.94	April         May         June         July         August         September         October         November           473.6         516.03         801.62         953.9         1,375.11         504.58         922.65         473.86           50.32         110.60         65.53         34.26         -	April         May         June         July         August         September         October         November         December           473.6         516.03         801.62         953.9         1,375.11         504.58         922.65         473.86         729.37           50.32         110.60         65.53         34.26         -         <	April         May         June         July         August         September         October         November         December         Total           473.6         516.03         801.62         953.9         1,375.11         504.58         922.65         473.86         729.37         6,750.72           50.32         110.60         65.53         34.26

#### Table 3 Marine fish production (MT) trend by fishery type, April - December 2022

\* Reported weight for whole, tail and head meat

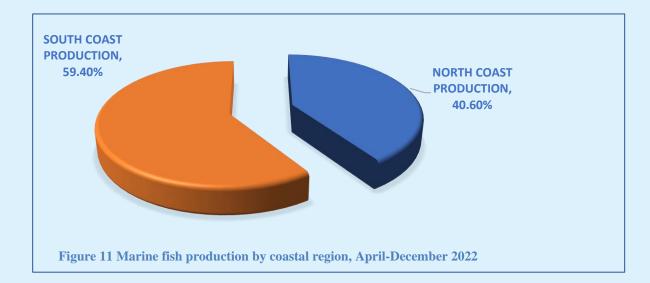
\*\*Reported that not all allocated Conch quota was utilized Close Season

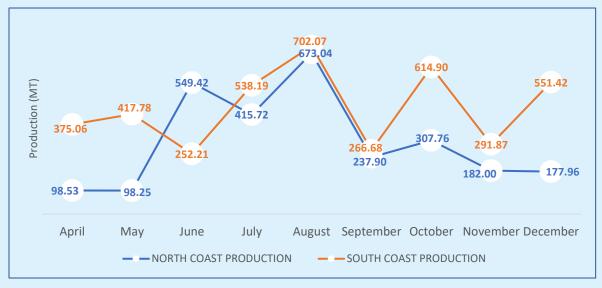
#### Table 4 Estimated value (USD for Marine fish production (MT) by fishery type, April-December 2022

	Estimated Value (USD)																
Fishery	April	May	June		July		August	Sept	ember		October	N	lovember	D	ecember	Total	Contribution
Atrisanal finfish	\$ 5,172,454	\$ 7,055,237	\$ 10,095,239	\$	11,643,546	\$	14,960,602	\$6,	183,416	\$	16,764,642	\$	8,742,001	\$	9,565,791	\$ 90,182,928	91.97
Industrial Conch	\$ 721,045	\$ 1,584,869	\$ 938,984	\$	490,919											\$ 3,735,817	3.81
Industrial Spiny Lobster*	:			\$	-	\$	126,350	\$	810,672	\$	1,726,682	\$	823,145	\$	655,660	\$ 4,142,509	4.22
<b>Total Marine Production</b>	\$ 5,893,499	\$ 8,640,106	\$ 11,034,223	\$	12,134,465	\$	15,086,952	\$6,	994,088	\$	18,491,324	\$	9,565,145	\$	10,221,451	\$ 98,061,253	100.00

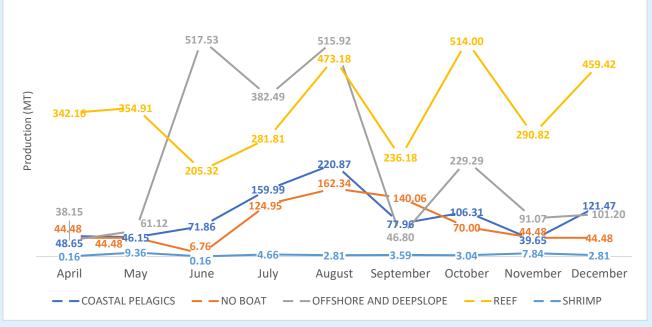
#### Table 5 Estimated Marine fish production (MT) and Value (USD), April-December 2022

2022	Fisł	n Production Estim	nate		Value Summary	Value Summary USD					
Month	Weight (MT)	Qtrly Fig (MT)	Quarter	Estimated Value J\$	Qtrly Estimate J\$	Qtrly Estimate J\$ Quarter		Qtrly Estimate USD	Quarter		
January	846.87			1,386,790,161.69			\$ 8,889,110.71				
February	734.79		1ST Quarter	1,038,336,389.74		1ST Quarter	\$ 6,608,135.87		1ST Quarter		
March	991.32	2,572.98		1,613,675,120.19	\$ 4,038,801,671.62		\$ 10,468,213.56	\$ 25,965,460.14			
April	473.6			803,178,694.42			\$ 5,172,454.24				
May	516.03		2nd Quarter	1,096,948,210.46		2nd Quarter	\$ 7,055,236.75		2nd Quarter		
June	801.62	1,791.25		1,545,480,175.93	\$ 3,445,607,080.81		\$ 10,095,239.24	\$ 22,322,930.23			
July	953.9			1,780,181,818.41			\$ 11,643,546.46				
August	1,375.11		3rd Quarter	2,280,444,604.24		3rd Quarter	\$ 14,960,602.27		3rd Quarter		
September	504.58	2,833.59		944,083,912.08	\$ 5,004,710,334.73		\$ 6,321,708.26	\$ 32,925,856.99			
October	922.65			2,572,534,262.46			\$ 16,764,641.66				
November	473.86		4th Quarter	1,346,442,950.61		4th Quarter	\$ 8,742,000.72		4th Quarter		
December	729.37	2,125.88		1,451,226,172.31	\$ 5,370,203,385.38		\$ 9,565,791.13	\$ 35,072,433.51			











# 3<sup>rd</sup> Quarter Statistics Performance

#### **Aquaculture Sector**

#### Production

Aquaculture occurs primarily on the south-central plains of St. Catherine and Clarendon, as well as in the parishes of St. Elizabeth and Westmoreland where the topography and soil type are suitable for aquaculture production. There is minor production in the parishes of St. Thomas, Portland, St. Mary, St. Ann and Hanover. In the main production areas, production systems are primarily semiintensive utilizing earthen ponds averaging 0.405 hectares (1 acre). In the minor production areas, production is mainly subsistence and small scale with ponds being less than 0.405 hectares. Presently there are a total of 860 earthen ponds and concrete tanks across Jamaica.

239.7MT of tilapia was produced during the third quarter October – December 2022; this is in comparison to the first two quarters where 455.96 MT was produced. The production is an improvement over the preceding second quarter (212.1MT of tilapia).

Through the Aquaculture Division of the NFA, seedstock are also produced and supplied to fish farmers to stock their ponds. The amount of seedstock (fry) produced in the third quarter was 256,590, which represented a marked increase over the amount produced in Quarter 2 - 180,434.

#### **Fish Farmers**

At the end of the third quarter, October – December 2022, the total number of registered fish farmers was 117.



#### Price

All tilapia produced is absorbed by the local market. Most fish farmers rely on vendors to buy and distribute their product from farm-gate to the markets. The farmer may also sell tilapia to restaurants, hotels, supermarkets, and other distributors. The size preferred by local consumers is 227–340 kg. Sale price for tilapia per quarter is shown in the table below.

Quarter	Farm gate price	Retail price				
April – June	\$440- 450 per pound	\$600 per pound				
July – Sept	\$440 per pound	\$600- 650 per pound				
Oct - Dec	\$400-\$430 per pound	\$600- 650 per pound				

Table 6	Farm	gate	and	retail	price	of	tilapia.	2022
20020 0		8			PLICE	~~		

The price of fry for the stocking of fishponds was J\$4.00 each.

#### Factors affecting the Industry

During the period October – December 2022, challenges that fish farmers faced included the following:

- ✓ Sales at the farm-gate. In October to November, fish farmers were challenged by a reduction in the price at which vendors wanted to purchase fish. This led to fish farmers maintaining fish in ponds until the purchase price was reasonable. There was however an improvement in the price and an uptick in sales, in December.
- $\checkmark$  Disruption in supply chain of fish feed.
- ✓ Water supply is limited in some areas (drought). Water supply is sourced through various means surface water, wells, and irrigation systems.



National Fisheries Authority, Eat Tilapia public campaign poster. Photo courtesy: NFA

3

#### Compliance

The Compliance Branch is within the FCLS Division, and it is responsible for planning and implementing fisheries and aquaculture compliance, and enforcement programmes for the Authority.

During the third quarter of the financial year (October to December 2022), the compliance officers conducted approximately 960 site visits to fishing beaches, marinas, restaurants, tournaments, seafood stores, rivers, fish farms, supermarkets and wholesales. There were also 8 specialised joint inspections with law enforcement partners. Additionally, during the quarter, two persons were charged for illegal possession of conch during the Conch Close Season. The total quantity of conch meat seized amounted to 2,757.82lbs with an estimated value of USD \$39,519 or JMD \$6M. One of two persons arrested during this period, was fined JMD \$350,000 by the Parish Court. At the end of the quarter, there were two court cases outstanding.

2019	2020	2021	2022	TOTAL
\$742,000	\$180,000	\$1,145,000	\$1,004,000	\$3,071,000
\$1.9M				
(Foreign poaching by 2 Dominican				
Republic Vessels and their fishers)				

 Table 7 Fines for Offences under The Fisheries Act, 2018 from 2019-2022



#### **Compliance with Licensing Requirements**

Another area of compliance being tracked by the FCLS Division concerns the high incidence of individuals fishing without a license, which is part of Illegal Unreported and Unregulated (IUU) fishing. Issue 1 of this publication highlighted that on average, only 24% of persons being licensed each year, are renewing their license from the previous year, although there is evidence to suggest that they continued to engage in fishing activity.

	Year	Number of Individual	% Renewing from previous
	Tear	Fisher Licences Issued	year
2017		2530	
2018		3467	19
2019		3654	26
2020		4979	24
2021		3995	25
2022		5687	20
		Total: 23300	Average: 22.8

Table 8 shows the rate of renewal for individual licenses to fish from 2017 to 2021.

 Table 8 Number of Individual Fisher Licences issued and Renewal percentage (excluding temporary permits)

The data show that on average, fishers do not renew their licence consistently every year and this lack of consistency shows non-compliance with the requirement by law for an individual to be in possession of a valid licence when fishing.

For the third quarter under review, of the 1553 persons registered, 1128 were renewals; however, only 256 were renewals from the same period of October – December, in 2021. This represents a quarterly renewal rate of 23% over the third quarter in the previous year. This rate is within the average that has been computed for year-on-year renewals in the sector.

The FCLS Division is responding to the trends highlighted by hosting monthly in-field licensing sessions and increasing enforcement by training and deploying more compliance officers.





Photo: Red Tilapia Fish swimming in a pond. © https://www.istockphoto.com

Part 4Conclusion

PART 4 Conclusion Appendices

#### Conclusion

This second issue of the Jamaica Fisheries: Quarterly Statistics Report for the NFA, highlighted the performance of the Jamaican fisheries sector over the third quarter of the Financial Year 2022 - 2023.

From the data presented, the artisanal fishery continued to play a critical role in food security accounting for 93% of total fish production. Fish production overall accounted for 2,125.88MT which, at a value of US\$35M, can be considered economically significant. In examining the data based on calendar year, a 15% increase in estimated production in 2022 over 2021, is considered to be a significant achievement. The South Coast contributed to 59% of the overall fish production recorded for this period and the month of October recorded the highest fish production figure totalling 922.66 MT.

The persistent drought conditions continue to negatively impact both aquaculture and capture fisheries sub-sectors. Fish production from Aquaculture is showing an improved performance, key to note is that this sub-sector plays a critical role in Jamaica food and its performance is of national importance. 239.7MT of tilapia was produced during the third quarter October – December 2022; this is in comparison to the first two quarters where 455.96 MT were produced and a direct improvement over the preceding second quarter where 212.1MT of tilapia were produced. With 117 registered fish farmers producing freshwater tilapia for the local market, representing a 2% increase in comparison to the period of April to September 2022.

Compliance with The Fisheries Act, 2018 and the regulations for the sector, continues to be critical in ensuring that the resources are not overexploited. During the 3<sup>rd</sup> quarter (October – December) two persons were charged for illegal possession of conch during the Conch Close Season; while the seizure of 2,757.82 lbs of conch meat represents an estimated value of USD \$39,519 or JMD \$6M. However, the report highlighted the ongoing issue of lack of consistency with renewing year on year, as only 23% of individuals renewed over the quarter in the previous year.

#### **Appendices**

	OCTOBER	NOVEMBER	DECEMBER	TOTAL
MALE	412	495	493	1400
FEMALE	38	36	40	114

Sex distribution of licensed fishers October-December 2022.

	NEW	RENEWAL	TOTAL
17-25	55	29	84
26-35	91	148	239
36-45	93	194	287
46-55	69	251	320
56-65	50	254	304
66 & older	20	129	129

Age distribution of licensed fishers, new and renewed license, October-December 2022.

Production	April	May	June	July	August	September	October	November	December	Grand Total
NORTH COAST PRODUCTION	98.53	98.25	549.42	415.72	673.04	237.90	307.76	182.00	177.96	2,740.57
SOUTH COAST PRODUCTION	375.06	417.78	252.21	538.19	702.07	266.68	1,311.11	291.87	551.42	4,706.39
Grand Total	473.60	516.03	801.63	953.90	1,375.11	504.58	1,618.87	473.87	729.38	7,446.96

Artisanal fish production (MT) trend by coastal communities April-December 2022.

Estimated Production (MT)										
Fishery	April	May	June	July	August	September	October	November	December	Grand Total
COASTAL PELAGICS	48.65	46.15	71.86	159.99	220.87	77.96	106.31	39.65	5 121.47	892.90
NO BOAT	44.48	44.48	6.76	124.95	162.34	140.06	766.22	44.48	44.48	1,378.27
OFFSHORE AND DEEPSLOPE	38.15	61.12	517.53	382.49	515.92	46.80	229.29	91.07	101.20	1,983.57
REEF	342.16	354.91	205.32	281.81	473.18	236.18	514.00	290.82	459.42	3,157.80
SHRIMP	0.16	9.36	0.16	4.66	2.81	3.59	3.04	7.84	2.81	34.42
Grand Total	473.60	516.03	801.63	953.90	1,375.11	504.58	1,618.87	473.87	729.38	7,446.96

Artisanal fish production (MT) trend by fishery groups April-December 2022.

Estimated value (J\$)										
Fishery	April	May	June	July	August	September	October	November	December	Grand Total
REEF	603,471,184.23	782,441,252.66	294,226,644.21	559,147,969.98	834,537,766.88	520,682,480.07	1,133,183,121.12	641,147,510.04	810,277,892.83	6,179,115,822.02
COASTAL PELAGICS	53,625,249.65	61,045,624.47	95,053,372.71	176,363,253.97	243,462,602.21	85,932,082.82	140,621,455.63	69,936,699.40	107,116,592.77	1,033,156,933.63
OFFSHORE AND DEEPSLOPE	67,282,260.54	134,751,333.33	1,140,946,159.00	758,928,180.17	909,929,296.97	82,539,482.52	505,505,691.90	160,617,026.57	156,169,286.64	3,916,668,717.65
NO BOAT	78,456,000.00	98,070,000.00	14,910,000.00	275,473,400.00	286,322,938.18	247,017,866.67	1,182,459,055.56	98,070,000.00	58,842,000.00	2,339,621,260.41
SHRIMP	344,000.00	20,640,000.00	344,000.00	10,269,014.29	6,192,000.00	7,912,000.00	6,708,000.00	15,557,400.00	4,953,600.00	72,920,014.29
Grand Total	803,178,694.42	1,096,948,210.46	1,545,480,175.92	1,780,181,818.41	2,280,444,604.24	944,083,912.08	2,968,477,324.20	985,328,636.01	1,137,359,372.24	13,541,482,747.99

Estimated value (J\$) for the artisanal fish production.

Average ex-vessel price									
Fishery	April	May	June	July	August	September	October	November	December
REEF	800	1000	650	900	800	1000	1000	1000	800
COASTAL PELAGICS	500	600	600	500	500	500	600	800	400
OFFSHORE AND DEEPSLOPE	800	1000	1000	900	800	800	1000	800	700
NO BOAT	800	1000	1000	1000	800	800	700	1000	600
SHRIMP	1000	1000	1000	1000	1000	1000	1000	900	800

Average Ex-vessel price (J\$) per pound.

