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Saint Lucia

SAFETY AT SEA

Baseline survey report



FISH
safety foundation



Saint Lucia

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Baseline survey report

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PREPARATION OF THIS REPORT

This report summarizes the findings of a baseline survey, developed and managed by the FISH Safety Foundation (FSF), into safety practices, attitudes and legislative understanding among a selected group of fishers in Saint Lucia.

The survey was undertaken as part of the FAO project “Follow up activities on safety at sea for small-scale fishers in Saint Lucia” which is funded by the Norwegian Government - FAO Trust Fund project GCP/GLO/959/NOR “Supporting member countries implement climate change adaptation measures in fisheries and aquaculture”. The activities in Saint Lucia were carried out in close cooperation with the FAO Sub-regional Office for the Caribbean (FAOSLC) and the FAO Fisheries Division, in particular Yinka Jagbir-Garcia (National Fisheries Project Coordinator – Trinidad), Seon Ferrari (National Fisheries Project Assistant – Saint Lucia), and Raymon van Anrooy (Senior Fishery Officer).

The survey took place in November 2020 in a number of fishing ports in Saint Lucia.

The information obtained through the survey was shared with the fisherfolk that participated in the survey and with the wider fisherfolk community in Saint Lucia, via a brochure.

On-the-ground assistance with the surveys was provided by the following 5 Department of Fisheries staff in Saint Lucia:

- Onella Zephirin
- Hardin Jn Pierre
- Rita Harrison
- Daniel Medar
- Shepherd Joseph

FAO and FSF acknowledge their valuable input and assistance, and thank them.

A final presentation was made to Thomas Nelson (Deputy Chief Fisheries Officer – Department of Fisheries, Saint Lucia) and other members of the team on 20 November 2020. The local team was given an opportunity for final feedback / comment, with the survey report finalised in the last week of November.

This baseline report was disseminated by the Department of Fisheries in early 2021.



A view towards a rocky headland at the entrance to Castries harbour, Saint Lucia

ABSTRACT

Following on from earlier work with the Department of Fisheries in Saint Lucia, a baseline survey – seeking both quantitative and qualitative information – was undertaken in October 2020 to scope safety practices and attitudes among fishers, as well as to determine the level of knowledge and understanding of the relevant safety at sea legislation, and the willingness to report accidents among small-scale fishers in Saint Lucia.

The survey was undertaken by a team of enumerators, guided by input from the FSF and FAO. The enumerators recorded the responses received, and forwarded this to the FSF to be collated by the FSF team and results analysed. This was then shared with the local FAO team and the DOF enumerators, and an opportunity was given to provide comments.

The survey was successful in identifying the prevalent attitudes, behaviour and legislative understanding of small-scale fishers related to safety at sea in Saint Lucia.

Responses to the survey questions suggest that, while there is a clear understanding of, and compliance to the requirements by many fishers, there was also a lack of knowledge (and/or disregard) of the legislation identified. And with regards to the specific requirement to report accidents to the Authorities, there was also an almost equal split between showing a distrust of reporting through the official channels, and a positive understanding that this information can / will be used to improve safety at sea for fishers.

The results of this survey have been discussed with the Department of Fisheries in Saint Lucia, and will be incorporated into the legislative development program currently underway – especially the accident reporting program as required by the Shipping Act (Saint Lucia) – with an additional emphasis on meeting, where possible and appropriate, requirements as outlined by the ILO Work in Fishing Convention (C188).



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BACKGROUND AND INTRODUCTION

Working in the fishing industry is universally recognised as one of the most the most hazardous occupations with estimates of the annual fatality numbers ranging from 24 000 (ILO) to 32 000 (FAO).

Recognising the inherent danger in this sector, the FAO has contracted the FISH Safety Foundation (FSF) to work with the Department of Fisheries in Saint Lucia on a number of initiatives aimed at improving safety in the fishing sector in that country. This falls within the project “Follow up activities on safety at sea for small-scale fishers in Saint Lucia” which is financed by the Government of Norway - FAO Trust Fund project GCP/GLO/959/NOR “Supporting member countries implement climate change adaptation measures in fisheries and aquaculture”.

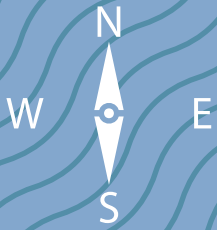
This Safety at sea baseline survey is part of that project and was undertaken with the objective of gaining insight into safety practices and attitudes among fishers in the country. In addition, an indication of knowledge and understanding of the relevant safety at sea legislation, and the need to report accidents was also sought.

The survey sought to gain information based on fisher experience and understanding of:

- fisher details, including age, training, experience, time fishing;
- fishery details, including type, fishing ports;
- vessel details, including type, size, construction, engine power and type;
- accident details, including severity, type of injury, illness experience;
- causes of accidents, including technical factors and human factors;
- safety equipment carried on board;
- understanding of safety legislation, and
- requirements, understanding and options for accident reporting.

The results of the survey are presented in this report, with the necessary analysis as appropriate, and this will be incorporated into current and future work being undertaken by the Department of Fisheries and others with a responsibility to fishers’ safety, focusing in particular on:

1. Promoting the understanding and use of mandatory and confidential accident reporting systems,
2. Providing input into the review of the legal framework to support safety at sea in Saint Lucia, and



Source: Department of Fisheries of Saint Lucia

3. Developing intervention/promotion programmes to assist in improving knowledge and understanding of the legal framework on safety in the fishing industry in Saint Lucia.

In order to provide some context to the fishing sector in Saint Lucia, the following *Country Profile* is provided.

Over the past decade the fishing industry in Saint Lucia has evolved from one that was essentially artisanal to a more commercial fishery, harvesting a tropical multispecies stock. Total capture production in Saint Lucia was estimated at 2 097 tonnes in 2016. Over 50 percent of annual fish catches comprises offshore migratory pelagics such as dolphin fish, wahoo and tuna and tuna-like species. Flying fish forms an important but variable component of the catch, and a multitude of shallow reef and coastal pelagic species are also key components of the catch.

In 2016, over 822 undecked, powered vessels were reported as Saint Lucia fleet with all but 7 of these under 12 meters, length overall.

The fishery sector in 2019 provided direct employment to 3 364 people in marine fishing, of which 182 were women. Moreover, the small-scale fishery sector contributes significantly to poverty reduction and food security.

The fleet has a range of vessel classes but is dominated by open fibreglass pirogue and traditional dig out canoes. Vessel sizes range from 3-25 m.

Because of the multi species nature of the fishery, most fishing vessels are usually equipped with a combination of hand lines, trolling lines, nets and pots. Fishing trips are usually one-day trips ranging from 3-8 hours durations on average. All commercial vessels are required to be registered and are inspected and licensed annually for safety and navigational equipment.

While not a target in this survey, it is worth noting that there is an increasing number of small, locally owned and operated longlining vessels (greater than 12 m in length) entering the national fleet.

The survey was conducted within a defined sub-section (small-scale fishers on vessels less than 12 m in length) of the total fishing population with exactly 100 fishers surveyed.



Fisherman at Anse La Raye beach

METHODOLOGY

The survey can be found in Annex 1 of this report.

The survey team, consisting of extension officer was trained and it was decided to seek both quantitative information on injury numbers, safety gear carried on board, etc. as well as qualitative feedback, such as attitudes and understanding to legislative requirements, accident reporting, etc.

It was also decided that the respondents names would not be recorded on the survey forms – so encouraging honest answers as far as possible.

It was decided to use 5 enumerators – each surveying 20 fishers / captains / owners, randomly selected from around the country (out of 12 different ports) out of the recorded 3 3364 total fishery sector participants (2019).

Given the predominantly attitudinal and perception-based responses sought in the survey it was felt that this small group of 100 respondents based in 12 geographic locations around then country would provide a sufficiently accurate indication of the general thought process.

These surveys took place in the period 23 to 26 October 2020 and were enumerator-led with answers to the relevant questions recorded appropriately. A mixture of objective (factual) information and subjective feedback was sought. Free text answers were encouraged to better understand attitudes, experiences, etc.

The completed survey forms (all 100) were returned to the FSF, where the relevant information was collated, and a draft report was developed. This was presented to the local FAO team for comment and input.

It should be noted here that this survey was taken 8 months into the COVID-19 Pandemic, which may have had an influence on participation and responses.



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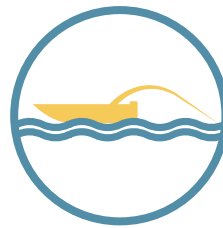
Fisherman at Anse La Raye beach

DISCUSSION OF RESULTS

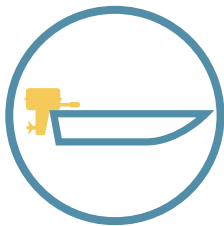
As indicated, information was sought on fisher experience and understanding of:



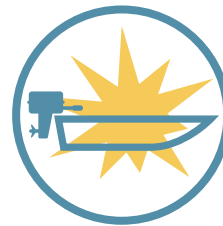
FISHER DETAILS,
including age, training,
experience, time fishing



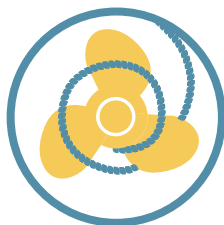
FISHERY DETAILS,
including type,
fishing ports



VESSEL DETAILS,
including type, size,
construction,
engine power and type



ACCIDENT DETAILS,
including severity,
type of injury,
illness experience



CAUSES OF ACCIDENTS,
including technical factors
and human factors



**SAFETY EQUIPMENT
CARRIED ON BOARD**



**UNDERSTANDING
OF SAFETY LEGISLATION**



**REQUIREMENTS,
UNDERSTANDING
AND OPTIONS FOR
ACCIDENT REPORTING**



1. FISHER DETAILS

Operating site	Female			Male			Grand total
	Full	None	Part	Full	None	Part	
Anse La Ray	0	2	1	87	13	56	159
Banannes	0	2	1	71	16	56	146
Canaries	0	8	0	84	13	49	154
Castries	1	4	3	198	25	149	380
Choiseul	0	7	1	130	12	47	197
Cul de Sac	0	1	0	2	1	4	8
Dennerly	3	25	4	246	35	112	425
Gros Islet	1	8	0	152	23	86	270
Laborie	1	9	1	105	8	70	194
Marigot Bay	0	1	0	11	3	4	19
Marisule	0	0	0	4	2	12	18
Micoud	1	6	0	138	6	105	256
Monchy	0	0	0	4	0	8	12
Praslin	0	2	1	48	4	26	81
River Doree	0	0	0	15	0	9	24
Roseau	0	1	0	1	0	3	5
Savannes Bay	0	4	0	45	6	15	70
Soufriere	1	6	3	136	7	86	239
Vieux Fort	7	36	13	401	39	211	707
Grand total	15	122	28	1 878	213	1 108	3 364

Table 1
Register of Fishers
as at 31 December 2019

Source: Saint Lucia Register
of Fishers (2020)

Note: The Register of Fishers records less than 1 900 fishers (56% of the total) as fishing "full time" with 15 female and 1 878 male fishers recorded.

Occupational and demographic characteristics of respondents

Gender The respondents to this survey were all male. According to the Register of Fishers, some 95 percent of registered fishers in Saint Lucia are male.

The lack of female respondents can be explained by the fact that very few women are employed as fishing vessel owner or captain/crew member. In general, most women in the industry are active in the fish processing and vending sector.

Age group The majority of the fishers surveyed (66 percent) were aged 40 and over.

Anecdotally, the results are a fair reflection of the age profile of the fishers in Saint Lucia. This is a cause for concern given that it would suggest that younger fishers either aren't joining the industry, or they are not staying in the industry. Fishing is demanding physically, and older fishers are more

prone to cumulative injuries and illness, thus placing greater demand on medical services – both at present, and in the future.

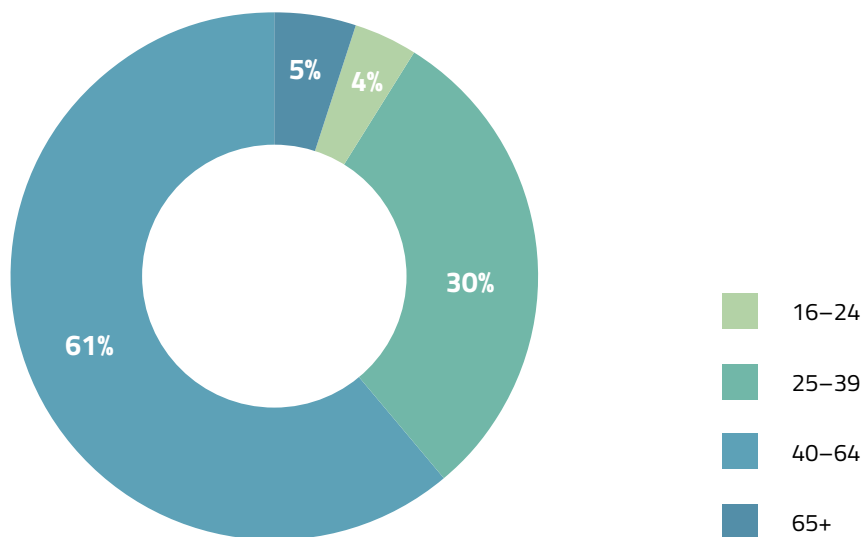


Figure 2
Percentage of fishers per age group

Work arrangement The respondents were well represented across the spectrum, with the following crew type / work arrangement recorded:

Owner	28%
Owner / captain	5%
Captain	34%
Crewmember	25%
Not provided	8%

Training and experience Regarding the vocational training of skippers and crew members, most respondents stated that they had not received formal training to become captain or fisher. They learned their skills on the job and through attending short training sessions/courses on navigation and safety-at-sea.

Specific courses mentioned included receiving training in the use of basic safety gear, vessel repair and construction, navigation and first aid, among others. This was not the majority response though, indicating a need for a formal safety educational program to be instituted and the necessary training undertaken across the fishing fleet.

Years' experience In line with the age profile outlined above, the fishing experience response showed that the majority of respondents (84 percent) had more than 10 years' experience, with 58 percent indicating more than 20 years.

Fish all year round or seasonally?

Most fishers surveyed fished all year round, with 87 percent indicated this.

Time spent on board on an average trip and average hours worked per week on the job

The majority of fishing activity is day-based, with nearly 80 percent of respondents indicating that they fished less 12 hours a day on an average trip.

As shown in the accompanying chart the majority of respondents (more than 90 percent) also indicated a working week of less than 50 hours.

Given the broad recognition of the dangers of fatigue to working safety – while recognising that working hours aren’t the sole determinant to fatigue – this is nevertheless a positive finding.

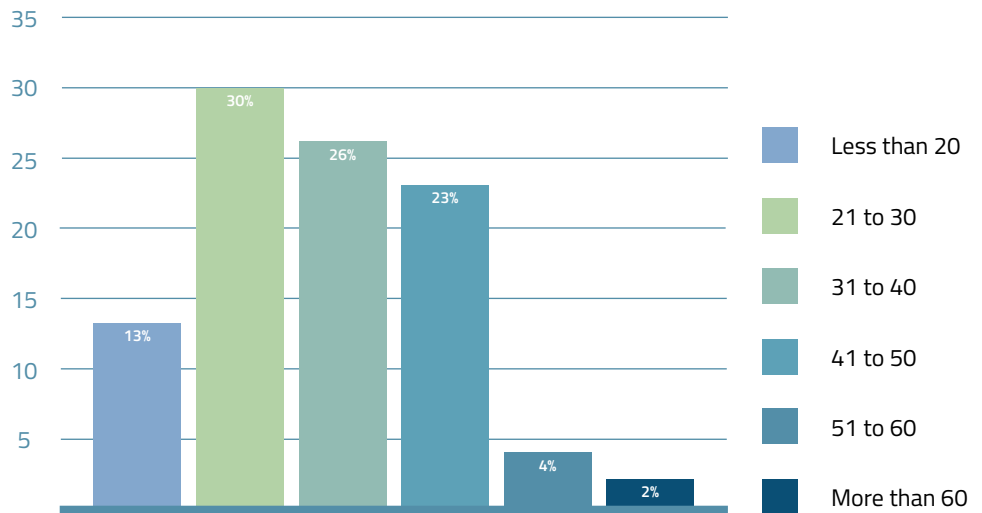


Figure 3
Average number of working hours at sea per week by fisher (in percentage of total number of respondents)



Figure 4
Fisherfolk being interviewed on Ocean plastics in Bannanes



2. FISHERY DETAILS

Type of fishery The responses to this question clearly indicate that many fishers practice a variety of fishing methods and use multiple gear types. This has implications for training and certification, and will have to be factored into any future fishery / safety development plan.

Over two thirds of annual fish landings comprise offshore migratory pelagics, such as dolphinfish, wahoo, tuna and tuna-like species. Flying-fish form an important but variable component of the catch. A multitude of shallow reef and bank fish species and several coastal pelagic species are also key components of the catch.

Pelagic species are captured using surface trolling by hand and, to an increasing extent, mechanized midwater longlines. Fish traps capture reef fishes and lobsters. Gillnets are also used to capture bottom fish, and coastal pelagics are brought ashore using encircling nets i.e. gillnets and seines.

There is a traditional fishery for small cetaceans and a regulated conch and sea urchin fishery.

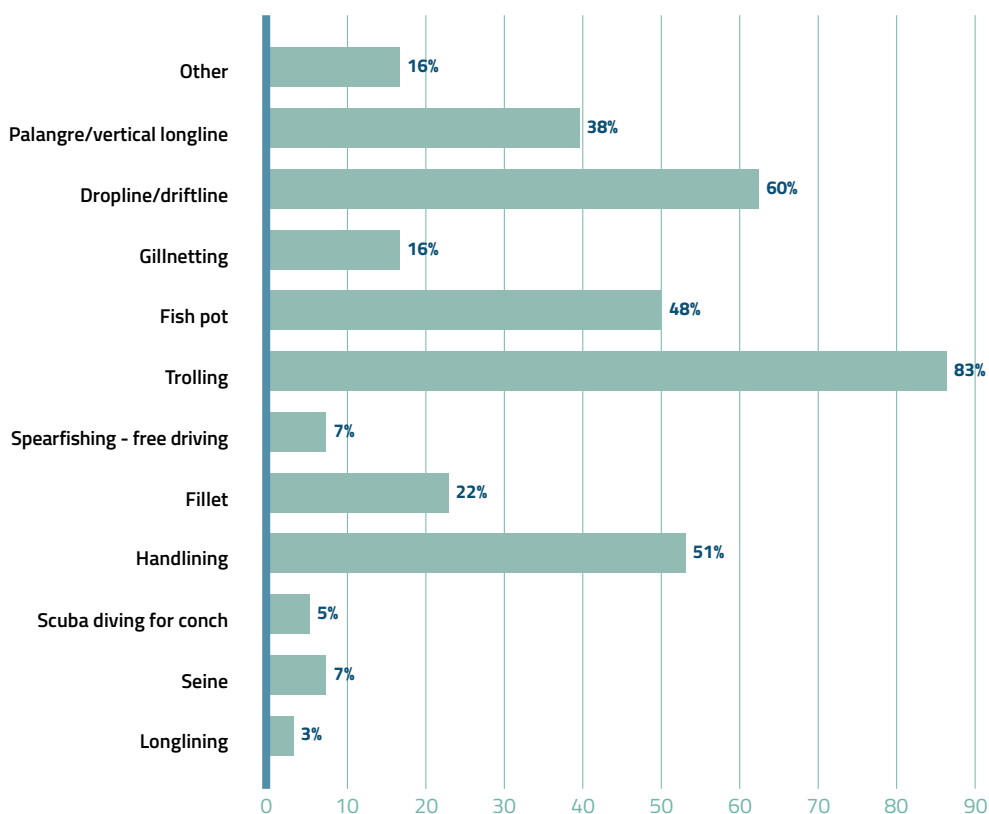


Figure 5
Range of fishing methods applied by the fishers in percentages

Operating port The responses indicate that the respondent group was well-represented across the country.

Site	CANOE	LONG LINER	PIROGUE	SHALOOB	TRANSOM	WHALER	Grand total	Fishers surveyed
Anse La Ray	3	0	20	0	0	0	23	9
Banannes	2	2	38	0	14	0	57	9
Canaries	18	0	9	5	4	1	37	8
Castries	1	4	68	2	21	1	97	10
Choiseul	12	0	43	4	0	0	59	8
Cul de Sac	0	0	6	1	6	0	13	
Dennery	0	0	90	0	0	1	91	8
Gros Islet	1	3	45	1	5	0	55	11
Laborie	3	0	57	1	2	0	63	5
Marigot Bay	0	1	13	0	0	0	14	
Marisule	2	0	2	2	1	0	7	
Micoud	0	0	36	0	1	0	37	8
Praslin	1	0	26	4	0	0	27	4
Roseau	1	0	0	1	1	0	3	
Savannes Bay	1	0	25	0	0	1	27	4
Soufriere	23	0	45	11	8	1	88	5
Vieux Fort	4	3	213	2	2	5	229	11
Grand total	72	13	736	30	65	10	927	100

Table 2

Number and type of fishing vessels per site and the number of fishers surveyed

Source: Saint Lucia Register of Fishing Vessels (2020)

The highlighted ports were chosen as survey sites as they individually were the largest ports (as indicated by the number of vessels registered at 31 December 2019) and represented the most fishers.

The ports of Castries, Choiseul and Dennery together handle nearly 80 percent of annual landings.



Figure 6
Choiseul

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3. VESSEL DETAILS

Type Most of the vessels were listed as pirogues. This is the typical type of boat used by fishers in Saint Lucia. It's generally an open fibreglass boat, less than 12m in length, powered by a mid-sized outboard engine, and crewed by 2 or 3 fishers.



Figure 7
Skiffs anchored at Gros islet



Figure 8
Skiffs anchored at Banannes bay

©FAO/Oneka Zéphirin

©FAO/Oneka Zéphirin

Vessel size The majority (more than 94 percent) of the vessels used by those surveyed were below 12m length, with the groupings as shown:

Under 6m: 21%
 Between 6 and 12m: 73%

The importance of fishing vessels of less than 12 m (40 foot) length is reflected in the national statistics shown below.

Lenght in fit	CANOE	LONG LINER	PIROGUE	SHALOOOP	TRANSOM	WHALER	OTHER	TOTAL
Less than 19ft	15	0	69	21	55	3	0	163
19ft–39ft	57	6	667	9	10	7	1	757
40ft–59ft	0	6	0	0	0	0	0	0
Greater than 59ft	0	1	0	0	0	0	0	0
Total	72	13	736	30	65	10	1	927

Table 3
 Vessel lenght distribution in Saint Lucia

Given the predominance of vessels under 12m, it is suggested that special attention is given to this group and that the FAO/ILO/IMO document *“Safety Recommendations for Decked Fishing vessels of Less than 12 metres in Length and Undecked Fishing Vessels”* is used as a basis to develop specific standards and further improve safety for these fishers.

Vessel complement Most vessels had 2–3 crew, with some responses indicating up to 5.

Vessel construction Fibreglass was the preferred construction material with 75 percent of the vessels made of this material, with the rest constructed in wood.

- Vessel engine**
- Engine horsepower ranged from 8 to 300, with most outboards (67 percent) in the 40 to 75 HP range.
 - Yamaha outboard engines were the most popular engine specified by far.
 - Two-stroke engines (72 percent of total) were most popular.



4. ACCIDENT / INJURY DETAILS

The objective of this section was to gain an understanding of accident, injury and ill-health experience in the survey group, and gain a representative overview. As stated earlier, the ILO and FAO estimate that between 24 000 and 32 000 deaths occur annually in the pursuit of fishing – making fishing the most hazardous occupation in the World.

But the fishing industry globally also has disproportionately high negative health effects on industry participants. Various studies have shown for example that working in a constantly moving, vibrating workplace can lead to a number of serious health issues including stress, poor dietary habits, fatigue, high blood pressure, high triglycerides, diabetes and obesity, alcohol and drug abuse, musculoskeletal disorders, as well as high-risk behaviours such as smoking and physical inactivity – and these are also often much more common among fishers than among respective general populations.

This section then asked questions both about injury and illness experience, in addition to accident experience.

Vessel accidents In answer to the question as to whether the respondents had been involved in a 'vessel accident' 11 percent indicated that they had experienced a personal injury on board. It was further reported that 4 vessels had sunk (1 due to heavy rain), but no further details were provided.

Significantly, there were not any reports on serious events like capsizing, collision, someone lost overboard, fire / explosion, etc. Events like these have the potential for multiple lives lost, so it is encouraging that none of these events were recorded.

Personal accident experience Fishers were asked about their personal accident / injury experience over the preceding 12 months. It was encouraging to note that a number of fishers (more than 10 percent) reporting a 'near miss' – recognising that something had happened that could have impacted on their physical safety, but fortunately, had not.

More concerning was the fact that a third of respondents reported that they had suffered a 'minor / first-aid' injury, while 6 had suffered a 'serious injury'. The need to address the physical dangers in fishing is clear.

It has been suggested that future surveys look at a 24-month period for this, and related questions – especially given the potential impact of the COVID-19 Pandemic currently a factor.

In exploring the personal injury responses further, the respondents were asked about the nature of the injury experienced. As would be expected by the nature of the manual / physical work involved in fishing, the majority of the injuries were cuts and abrasions (more than 35 percent), and hook injuries – hooks getting stuck in hands and arms.

Twists, fractures, strains and bites were also mentioned as causes of injury. Fingers (12 percent) and hands (25 percent) generally were reported as the most likely injury locations. This is as expected given the manual tasks associated with fishing.



Figure 9
Fishers loading boat
with gill net, Gros Islet

Respondents were also asked whether any of their colleagues had experienced an accident in the last 12 months – noting that many fishers move from vessel to vessel during the fishing year.

A question was asked to try and gain an even broader idea of accident exposure in the local industry. There were a surprising number of “engine failure”, “vessel disabled”, “engine broke down” events recorded (some 15 percent). Other reported events included injuries sustained while fishing (stings, hooks in hand, etc), near misses (undefined) and 2 collisions.

Personal occupational illness experience

As outlined in the introduction to this section, less consideration generally is given to the health effects of fishing, but the survey responses show that exposure to the sun (as expected) is listed often. It is suggested that this is factored into future training, and possibly an awareness campaign could be launched to provide information and guidance here. It would also be interesting to see if there is a correlation to skin cancer.

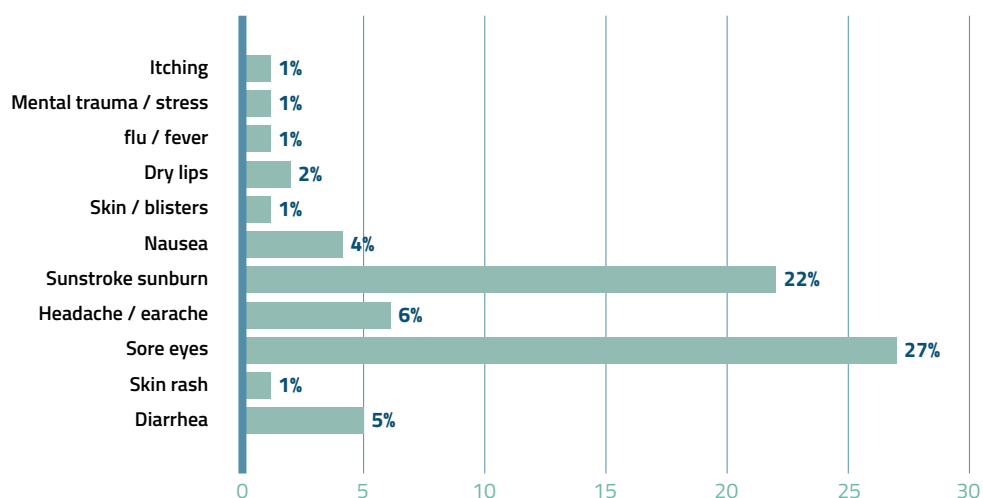
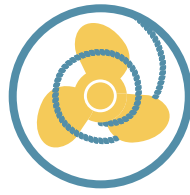


Figure 10
Fishing-related illness

It should be noted that studies into occupational health and wellness within fishing are generally fairly dated and inconclusive. However, an indicative report, *“The health of fishermen in the catching sector of the fishing industry: a gap analysis”* (C Matheson , S Morrison, E Murphy, T Lawrie, L Ritchie, C Bond), highlighted this issue in its conclusion as follows:

The studies reviewed, although sometimes limited in their design, clearly demonstrate the greatly increased risk of ill-health incurred in the fishing population. However, there are several areas in which evidence, particularly current, is lacking. These are: causes of death onshore, morbidity studies of (UK) fishermen, prevalence of smoking and illicit drug use, and the influence of diet, fatigue and potential hazardous exposures on long-term health, as well as occupational accidents. There may be a need for evidence- based occupational health support in the fishing industry and we recommend that further research is conducted in these areas before evidence-based guidelines are developed.

While acknowledging the different circumstances and fishery, another report *“Occupational injuries and diseases among commercial fishers in Finland 1996-2015”* (Kim O Kaustell , Tiina E A Mattila, Risto H Rautiainen), again points to the importance of injury prevention education and campaigns.



5. CAUSES OF ACCIDENTS

The objective of this part of the survey was to try and gain an understanding of fishers’ perceptions regarding the main cause(s) of accidents. To assist in framing answers – in what could be a very open, subjective section – an indicative list of possible causation factors was listed under both ‘Technical’ and ‘Human’ causation factors.

It should be noted that this section was seeking individual perceptions / opinions and was not based on any thorough structured accident investigation. Respondents were free to list as many factors as they wanted.

The ‘Technical factors’ responses are shown below.

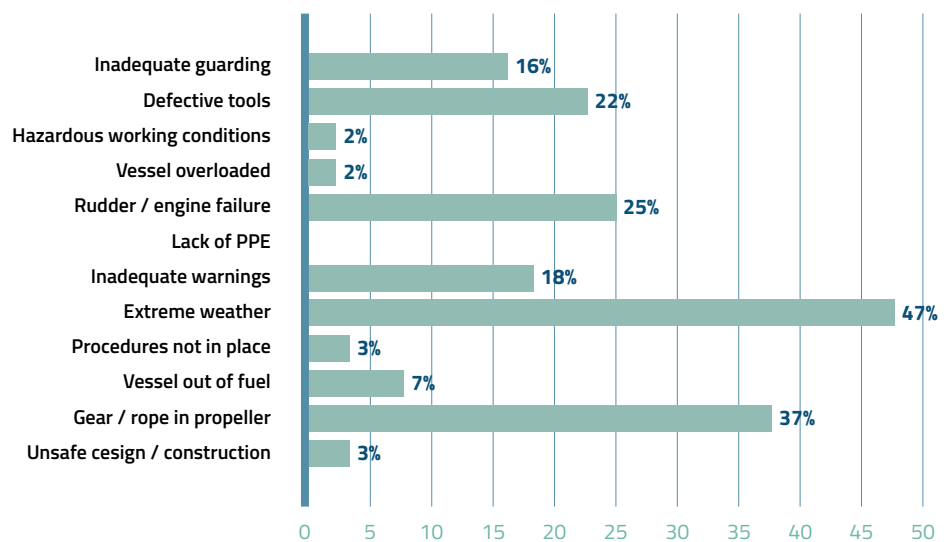


Figure 11
Technical factors that were listed as main causes of accidents at sea

It was interesting to note the high percentage afforded ‘extreme weather’ as a causation factor in accidents – this was mentioned by 47 respondents. This is concerning in that either weather warnings aren’t available, or they are being ignored. It is suggested that this is an area for follow-up investigation and possible intervention.

Disablement (‘rudder or engine failure’ and ‘gear / rope in propeller’) was also reported often – 62 responses in total.

Additional factors mentioned included comments about the vessels themselves – noting that some vessels were better suited for sea conditions, and that some may take on water faster than others.

Lack of maintenance (not checking / servicing gears and equipment / engines in a timely manner) was mentioned a number of times. It was noted that this could be because of lack of knowledge.

'Human factors' responses are shown below.

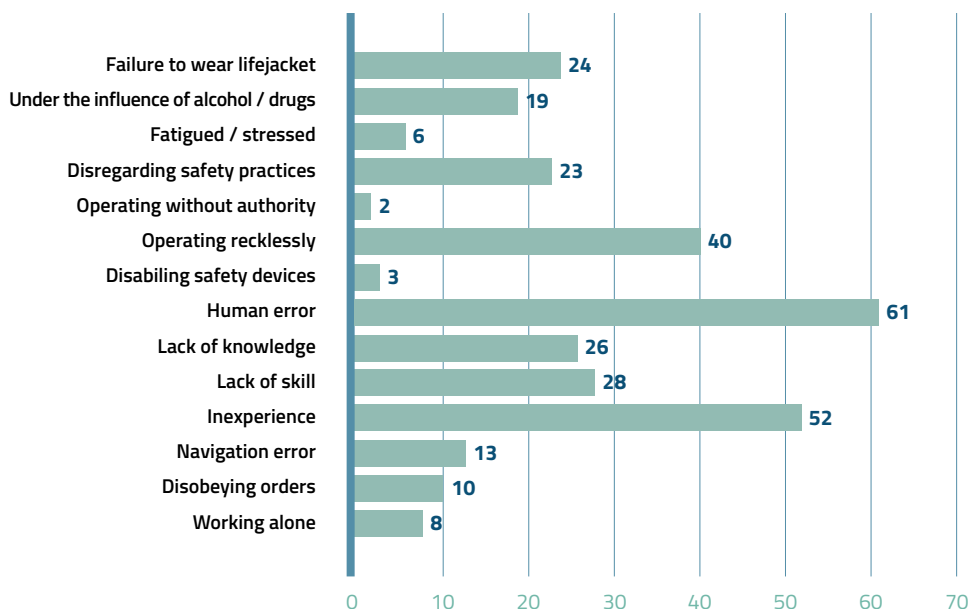


Figure 12
Human factors that were listed as causes for accidents at sea

These causation factors are more difficult to objectively assign as the possible cause of an accident. A case in point would be the high scores on a number of factors like 'human error' (61 responses), 'inexperience' (52 responses), 'lack of knowledge' (26 responses) and 'lack of skill' (28 responses) where earlier it was noted that the majority of respondents (84 percent) had more than 10 years' experience, with 58 percent indicating more than 20 years.

There were concerning safety findings as well with regards to operational issues – it was reported that 'failure to wear a lifejacket' (24 responses), 'working under the influence of drugs / alcohol' (19 responses), and 'operating recklessly' (40 responses) – were still prevalent.

Additional answers included concerns about lack of training, and lack of training opportunities especially for new entrants into the fishing industry. Sometimes this lack of training was assigned to personal choice. This is something that needs further investigation and corrective action. As noted elsewhere, a lack of a mandatory education pathway into the fishing sector should be addressed in order to improve safety outcomes.

There were a number of responses critical of vessel captains' skill, carelessness and level of professionalism. This is concerning given the legal and moral obligations vested in the role.

This section will require more in-depth discussion with respondents in future surveys. It was clear that opinions rather than evidence-based answers were generally provided.

Given that this is an often-subjective question, it may be worth examining past accident investigations to try and get a clearer view of this. Education in accident investigation techniques and analysis would be beneficial here.

The causation factors used in the survey aren't new. An earlier *National Research Council* study ("*Fishing Vessel Safety: Blueprint for a national program*", 1991) provides the following vessel-related and behavioural causation factors. Not much has changed in 30 years unfortunately.



Technical / vessel-related factors included:

- Non-availability or lack of adherence to structural guidelines, classification society rules and similar standards during vessel design and construction or conversion;
- general non-availability of stability data for each vessel;
- inadequate condition of vessels and equipment, especially machinery, alarm systems and survival equipment;
- unavailable or inadequate operating equipment, including bilge alarms and smoke detectors, bilge pumps and fire-fighting systems;
- use of machinery and fishing gear with inadequate occupational safety and health features;
- inadequate personal occupational safety equipment; and
- inadequate or insufficient survival equipment.



Human / behavioural factors included:

- Fatigue / stress;
- improper or inadequate procedures (including inadequate or unsafe loading / stability practices) and inadequate watchkeeping;
- improper maintenance;
- inattention (including carelessness);
- inadequate human engineering in design;
- inadequate physical condition;
- incapacitation through use of alcohol and drugs;
- inexperience (including inadequate knowledge and skills and insufficient familiarity with the vessel or fishing activity);
- judgmental errors (including faulty decision-making and risk-taking);
- Navigational / operator error (including inexperience and errors in judgement);
- neglect (including wilful negligence);
- personnel relationships; and
- working conditions.



6. SAFETY EQUIPMENT NORMALLY CARRIED ON BOARD

On this subject the answers were uniformly positive, with many respondents listing most of the required gear as being generally carried on board.

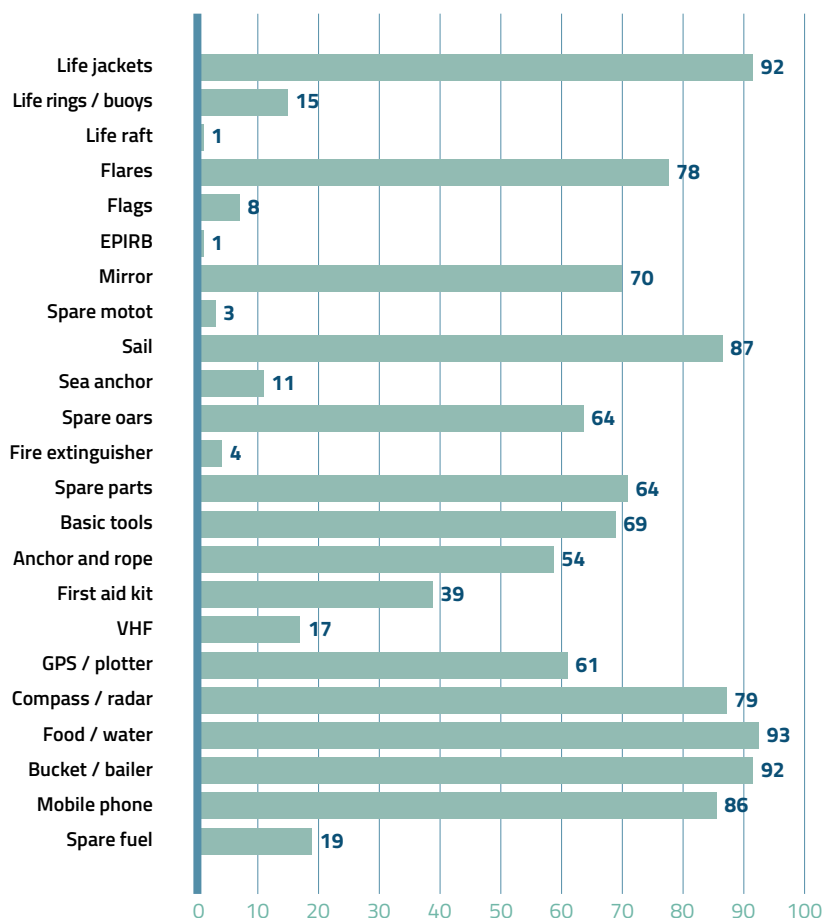


Figure 13
Safety equipment normally carried on board

However, there were problems identified. The majority of fishers surveyed used smaller open boats, and generally carried only a mobile phone for communication purposes. The limitations with mobile phones are well known and the lack of use of VHF radios is concerning. The limited use of proper communication equipment makes it difficult for fishers to make contact with other boats or shore and thus to locate them in case they are lost at sea, in case of accidents or when a vessel is disabled because of engine failure, broken rudder or other causes.

More focus on the practicalities like more spare fuel, sea anchors, etc would be beneficial here. Concerning too is the low number of first aid kits carried on board – only 39 respondents indicated that they normally have this essential safety item on board.

In response to the follow-up question, “*Is this safety gear always on board as required? If not, why is that?*”, the response was not that positive. While the predominant reply here was that equipment was always carried on board (75 percent of respondents), there was still a sizable group (25 percent) who did not always carry the required safety gear. Most of these respondents used ‘fishing close to shore’ as their excuse.

This is concerning – there appears to be a fairly widely-held belief that fishing close to the shore is somehow safer and does not require safety gear to be carried on board. An educational campaign would be suggested here – something that clearly highlights the dangers to ALL fishers and promotes the carrying and use of safety equipment at all times.

A recent FAO briefing highlights some of the dangers to small-scale fishers and these would be useful in highlighting to all participants in the local industry – including very clearly those who fish close to shore and choose not to carry the required safety gear onboard. Extracts from this publication includes:



BAD WEATHER

Sudden gales, major storms and heavy fog are significant causes of small boat accidents often resulting in capsizing, grounding, becoming lost and collisions. Where weather warning systems and radio communication with fishermen at sea are poor or non-existent, casualties due to bad weather are more frequent.



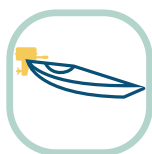
LOSS OF POWER

This is a major cause of accidents. Many small fishing boats are powered by an outboard motor and do not carry either a spare engine or sailing rig.



FIRE ON BOARD

This is less common on board small fishing craft, as most of them are open boats or rafts where fire detection is usually instantaneous. However, fire on board canoes (and pirogues) powered with outboard engines and carrying large amounts of spare fuel is extremely dangerous.



INADEQUATE BOAT CONSTRUCTION STANDARDS

Many small-scale fishing boats are not designed and constructed to sufficient safety standards. Frequently, also, the boats’ design and construction are unsuitable for the conditions they are used in.



UNSUITABLE BOATS

During the last decades of the twentieth century, small fishing craft are sailing farther offshore on prolonged fishing trips. Many of these craft, built for inshore fishing and day trips and often lacking basic safety equipment, are too small and otherwise unsuitable for offshore operations. Consequently, their crews’ safety has steadily deteriorated.



INADEQUATE COMMUNICATION

Lack of radio contact essentially precludes efficient search and rescue (SAR) action. Additional problems may arise where radio-telephone contact exists, but there is no adequate common language between the people at sea and the people who may help them. Consequences may be tragic.

The dangers outlined above apply just as much to fishers operating close to shore.

It should be further noted that carrying safety equipment is a mandatory requirement under the Fisheries Act (Chapter 7.15). This Act clearly states in the Subsidiary Legislation, Fisheries Regulations – Section 39, Regulation 4, the following:

Safety Equipment Every vessel shall carry on board:



a bailer capable of removing water from the vessel;



a hand-held compass or other compass approved by the Chief Fisheries Officer;



not less than 13.64 litres of fresh drinking water stowed in a closed container for each person on board the vessel less than 7.62 metres in length over-all or 22.73 litres per person on a vessel 7.62 metres and over;



one set of oars and one main sail;



a battery-operated water-proof flash light;



non-perishable rations stowed in a waterproof container, sufficient to sustain each person for at least 5 days;



a small glass mirror capable of being used as a reflector;



at least 2 flares suitable for use at night;



at least 2 flares suitable for use in daylight;



a sea anchor of a size and design appropriate to the vessel;



at least one lifejacket for each person on board the vessel;



a radar reflector.

It should be noted here that these Regulations apply to any fishing vessel or other vessel *capable of being used for fishing within the fishery waters at a distance greater than 3 miles from the nearest land*. And as all the fishers surveyed operated on vessels in this category, these requirements directly apply, whether they are fishing close to shore, or further than 3 miles out to sea.

In addition to the requirements (above), there is also further legislative guidance contained in the Shipping Act (Chapter 13.27). There is a set of Regulations – the Shipping (Safety of Pleasure Vessels) Regulations (S.I. 17/2010) [Statutory Instrument 17/2010 in force 22 February 2010] that addresses the issue of fishing safety. These Regulations apply to all Saint Lucian fishing and pleasure vessels of less than 24 metres in length.

The Regulations contains some guidelines / requirements, including:

- PART A Checklist of Requirements for the Safety of pleasure Vessels;
- PART B Guidance for Surveyors, Inspectors, Owners of Pleasure Boats and Fishermen;
- PART C First Aid Kits.

Whilst there is some work to be done consolidating and standardising these requirements across the various pieces of legislation, the intention of the Regulator is clear. Fishing vessels are to have on board the required safety equipment at all times.



7. UNDERSTANDING OF SAFETY LEGISLATION

There are two pieces of legislation that have direct relevance to fishing safety in Saint Lucia – the Shipping Act (Chapter 13.27) and the Fisheries Act (Chapter 7.15).

The survey question here was framed to try and determine knowledge and attitudes to existing safety at sea legislation, asking: *“With regards to health and safety, what is your understanding of the legislation/maritime rules that apply to fishing?”*

There was a wide range of answers here – ranging from a lack of knowledge (and/or disregard) about the legislation, to a clear understanding, and seeing the need for a legislative framework. As this was a free text question, responses are included in this summary.

The most common answer was “Very limited knowledge of legislations/ maritime rules”. [for example: “Not aware of maritime laws. I jump on a vessel to make my money”].

There were also responses claiming that there were “no health and safety rules in St. Lucia”, and that the rules that were in place, were “arbitrary” and “backward”. There were further comments to the effect that while rules were a good thing, “nobody (was) enforcing rules”. A further comment here was that “law makers do not do a good job of enforcement”. Another respondent pointed out that safety was legislated, but health was not.

Encouragingly though, there was also strong support for safety legislation, with one respondent stating that the rules were there to keep them safe, and “the person that breaks them should be charged”.

It was noted that training and awareness creation in the requirements of the legislation would be helpful. In a similar vein, a respondent noted that he was “not familiar (with the legislation) as laws have changed and there is no information sharing.” Another noted that “laws need improvement as they are becoming outdated”.

It is strongly suggested that training is provided to fishers and associated bodies, as well as an awareness program generally.



Figure 14
Shipping Act
and Fisheries Act



8. REQUIREMENTS, UNDERSTANDING AND OPTIONS FOR ACCIDENT REPORTING

It is important to note here that accident reporting is a legal requirement. The Shipping Act (Chapter 13.27) requires, under Sections 252 and 299, that the owner or master must report an accident to a person or vessel.

252. Reports of accidents to ships

- **When a ship—**
 1. has sustained or caused any accident occasioning loss of life or any serious injury to any person;
 2. has sustained any material damage affecting the seaworthiness or the efficiency of the ship, either in the hull or in any part of the machinery of the ship; or
 3. has been in collision with another ship, the owner or master of the ship shall, within 24 hours after the accident, damage or collision or as soon as possible thereafter, transmit to the Director, a report of the accident, damage or collision.

299. Notice of accident, defect or alterations affecting the efficiency or seaworthiness of the ship

- Whenever an accident occurs to a ship or a defect is discovered, or any alteration is made to the ship's hull, equipment, appliances or machinery, which affects the safety of the ship or the efficiency, completeness or seaworthiness of the ship, the owner or master shall, as soon as practicable following such accident, discovery of defect, or alteration, give written notice to the Director containing full particulars of the accident, defect or alteration, as the case may be.

Figure 15
*Relevant articles from
the Shipping Act*

Accident reporting, when followed up by causation investigation and analysis, is an important and proactive step in promoting safety in the fishing industry.

Responses in this section were illustrative in gaining a fuller understanding of the perceptions of fishers in Saint Lucia regarding safety at sea in this sector.

A number of questions were asked under this section which focused on:

- Awareness of the regulatory requirement to report;
- Whether accidents are reported, and if not, why not;
- The use of a voluntary confidential reporting system;
- Awareness of the FISHER App reporting tool;
- Understanding of what accident information is used for.

These questions are reproduced below with responses, and analysis / commentary where necessary.



Figure 16
*Fishermen cutting rope
off net, Choiseul*

Awareness of the regulatory requirement to report accidents, and actual reporting

Only 43 percent of respondents answered 'yes' when asked whether they knew that they had to report accidents to the relevant Authorities. This is relatively low. Reporting accidents is a basic requirement in law, and an education campaign or similar is needed to promote this requirement.

In following up on the initial question, respondents were then asked whether they had always reported their accidents as required, and if not, why that was. Only 38 percent replied affirmative here – although there are mitigating factors in the 'no' responses. Most of those who answered 'no' said that they had not had an accident, so had nothing to report. There was a concerning answer though, in that one respondent answered that he was "not dealing with Police". A further two respondents simply weren't interested in reporting as required, nor did they see the need to.

It should be noted that there were no records of accidents and injuries available from the Department of Fisheries, and only 3 were provided by the Police Marine Unit. Yet 6 percent of the survey sample (100 out of more than 3 300 total industry participants) respondents replied that they had experienced a serious accident, and more noted that they knew of sinkings, etc in the past 12 months. This would indicate that not all accidents are being reported to the Authorities.

Given the low percentage in the 'yes' responses, it is suggested that an education campaign or similar is needed to promote this requirement.

Voluntary/confidential reporting systems

The respondents were then asked whether they would make use of a voluntary / confidential reporting system if it were an available option. The vast majority (87 percent of respondents) said 'yes' they would. This is a very encouraging answer in that it shows a willingness to report accidents. Hopefully this is also an indication of the understanding of the advantages of reporting accidents.

Feedback from an earlier intervention on the ground in Saint Lucia, and much global anecdotal evidence suggests that many fishers are in favour of a confidential reporting system (either supplementing the mandatory reporting system, or as a stand-alone option) for many reasons – including, protection of privacy, avoidance of conflict, or simply as the reply above: "not dealing with Police".

Respondents were then asked whether they were aware of the new confidential FISHER App reporting tool. 99 percent said 'no'. This is not surprising given that the app is just being launched. Promotion of the test phase will be worked on as part of the project requirements.

Use of accident information

The final question in this section was aimed at trying to assess what the majority of respondents thought this reported accident information would be / is used for. In many ways this is related to the question of whether fishers would report an accident or not, so the free text answers were very informative.

Overall the answers indicated an almost equal split between showing a distrust of reporting through the official channels [in the sense that the information might be used against them], and a positive understanding that this information can / will be used to better safety at sea for fishers.

As examples of 'distrustful' answers, the following are perhaps the most illustrative: a number of fishers stated that the information would be used against them, to "arrest fishers" or "for evidence, to use in court", or "so the authority will know the person is a repeat offender".

Neutral answers from respondents included: "not sure / I have no idea" and "it would be used for nothing".

On the positive side of the ledger, responses included: "to know how accidents are occurring at sea", "to make better rules for fishing vessels", and "to analyse the safety of fishers at sea". This was seen as a way to help out fishermen with better boats and equipment. One respondent summed it up well when he said that it would be "used to point out the things that fishers do that can cause accidents so they can be aware and take steps to prevent it from happening again". And this was backed up by a number of respondents that stated information would be used for investigation purposes and data collection.

Interestingly, there were also responses indicating that this information could / would be by insurers "to help fishermen be safer and help with insurance", "for insurance purposes for claims and payouts", and so that "insurance companies, fishermen's co-op can use this information to disperse funds for claims and to assist accident victims".

A final response was that the collected information would be used "by companies who manufacture safety gear and equipment to see which one's would sell more..."

Given the wide range of answers (perceptions / opinions) here it is again suggested that an education campaign or similar is needed to promote understanding and trust in the system of accident reporting.

SUMMARY AND CONCLUSION

A representative population of 100 fishers – geographically spread across the country – was surveyed to identify the prevalent attitudes, behaviour and legislative understanding in a number of key areas concerned with safety at sea for small-scale fishers in Saint Lucia. The survey found the following:



The resident population of fishers in Saint Lucia is aging, with few new entrants.



Fishing hours generally aren't excessive, with mostly day trips being undertaken.



Vessels used were seen to be fit-for-purpose, and serious vessel accidents were rare.



A third of respondents reported that they had suffered a 'minor / first-aid' injury (mostly cuts / abrasions of hands / fingers), while 6 had suffered a 'serious injury'.



There were a number of "engine failure", "vessel disabled", "engine broke down" events recorded (some 15 percent) – in the wider industry.



Illness as a result of exposure to the sun was reported as the biggest problem.



47 percent of respondents cited 'extreme weather' as a technical causation factor.



Disablement ('rudder or engine failure' and 'gear / rope in propeller') was also reported often – 62 responses in total.



When asked about human causation factors in accidents, respondents gave high scores to 'human error' (61percent responses), 'inexperience' (52 percent responses), 'lack of knowledge' (26 percent responses) and 'lack of skill' (28 percent responses).



There were operational issues as well – it was reported that 'failure to wear a lifejacket' (24 percent responses), 'working under the influence of drugs / alcohol' (19 percent responses), and 'operating recklessly' (40 percent responses) – were still prevalent.



A number of crew were critical of vessel captains' skill, carelessness and professionalism.



Issues were identified with regards to communication equipment (mobiles instead of VHF), lack of practical safety equipment, like first aid kits and sea anchors by many fishers.



Furthermore, the necessary safety equipment was often not carried on board when fishers were operating close to shore – even though this is required by law.



When questioned about their understanding of the safety legislation relevant to the fishing sector, responses ranged from a full understanding, to none at all.



There was an almost equal split between showing a distrust of reporting accidents through the official channels, and a positive understanding that this information can / will be used to better safety at sea for fishers.



Not all accidents are reported to the Authorities as required.

The general (minor) injury rate in the fisheries sector is relatively high. It would appear that there are some problems with safety attitudes and behaviour, like following safe working practices and using safety equipment at all times. There are also issues with regards to understanding and meeting the necessary legislative requirements.

RECOMMENDATIONS

Given the findings of the survey, there are two sets of recommendations – one to the Department of Fisheries, and the other to the fishing community.

Recommendations for the *Department of Fisheries*

- 1 Continue with the review of national fishing-related legislation currently underway, with the aim of developing an industry-specific suite of legislation that clearly informs both Industry and Regulator of the required standard.
- 2 Once the required legislation is in place, it is advised that an education/promotional programme be established by the DOF to better inform fishers and communities of the relevant health and safety legislative, and good practice requirements, including the need to report accidents.
- 3 It is advised to develop a comprehensive accident reporting, recording and analysis system (including a secure database) to better manage accident events.
- 4 Once this system is in place, the relevant staff will need to be trained in accident investigation techniques, in order to fully investigate accidents as required under Section 437 of the Shipping Act.
- 5 A structured, mandatory educational / training pathway for involvement in the fishing industry should be considered.
- 6 Given the high percentage of fishers citing weather as a factor in accidents at sea, this requires detailed examination – education, weather forecasting and standards.

Recommendations for the *Fishing community*

- ① The fishing community needs to examine the reasons for youngsters not entering the sector, and start actively encouraging new blood into the profession.
- ② Fishers need to proactively upskill themselves in safety practices. The accident/injury rate is high, and much of this is likely down to work methods, etc.
- ③ The use, and carriage on board of the required safety equipment should be a given!
- ④ Self-responsibility in terms of medical issues need to be addressed – including measures to maintain personal health and protect against the dangers of the sun.
- ⑤ Fishers need to report accidents – both because of the legal requirement to do so, as well as understanding that this leads to improvements in safety for the sector.

Finally, it is recommended that this survey is repeated in 24 months' time, both to check validity of responses this time around, as well as to continue building up a body of knowledge on fishers' perceptions, practices and understanding of safety in their industry.

ANNEX 1:

Safety at sea baseline survey: Saint Lucia

Interviewer:
Name in print

Personal details

- Gender: Male Female
- Age group: <16 16–24 25–39
 40–64 65+
- Work arrangement: Owner Captain Crewmember

Training / experience

Training:
.....
.....
.....

Years' experience

- Less than 1 year 1–2 years 3–5 years
 6–9 years 10–19 years 20+ years

Time on board on average trip

- Fewer than 8 hours 8–12 hours 13–24 hours
 Longer than 24 hours Varies considerably

Do you fish all year round / seasonally?

- All year round Seasonally How many months a year?
.....

On average, how many hours do you work a week on the boat / at sea?

- Less than 20 hours 23–30 hours 31–40 hours
 41–50 hours 51–60 hours More than 60 hours

Fishery details

What tipe of fishery are you involved in?

- Longlining Seine Lobster trap
 Handlining Fillet Spearfishing / free diving
 Trolling Diving Fish pot
 Gillnetting Dropline Scuba diving
 Other — *Provide details:*

Vessel details

Type:

Size:

- Under 6 m (20 foot) 6–12 m (20–40 foot) 13–24 m (40–80 foot)
 Over 24 m (over 80 foot)

Complement / number on board:

Construction

- | | | |
|--------------------------------|-------------------------------------|----------------------------------|
| <input type="checkbox"/> Wood | <input type="checkbox"/> Fibreglass | <input type="checkbox"/> Plastic |
| <input type="checkbox"/> Steel | | |

Engine/power

- | | | |
|--|----------------|-----------|
| <input type="checkbox"/> Outboard | HP: | kW: |
| <input type="checkbox"/> Inboard | HP: | kW: |
| <input type="checkbox"/> Sail / oars / other | Details: | |

Type of engine

- | | |
|--|---|
| <input type="checkbox"/> Two-stroke engine | <input type="checkbox"/> Four-stroke engine |
|--|---|

Operating port

- | | | |
|-------------------------------------|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> Banannes | <input type="checkbox"/> Laborie | <input type="checkbox"/> Savannes |
| <input type="checkbox"/> Castries | <input type="checkbox"/> Soufriere | <input type="checkbox"/> Marisule |
| <input type="checkbox"/> Dennery | <input type="checkbox"/> Vieux Fort | <input type="checkbox"/> Monchy |
| <input type="checkbox"/> Gros Islet | <input type="checkbox"/> Anse la Raye | <input type="checkbox"/> Praslin |
| <input type="checkbox"/> Micoud | <input type="checkbox"/> Canaries | <input type="checkbox"/> Roseau |
| <input type="checkbox"/> Choiseul | <input type="checkbox"/> River Doree | |

Fishing area

.....
.....



Accident details

In the last 12 months, have you been involved in a *vessel* accident?

- | | | |
|------------------------------------|--|--|
| <input type="checkbox"/> Sinking | <input type="checkbox"/> Fire / explosion | <input type="checkbox"/> Personal injury |
| <input type="checkbox"/> Capsize | <input type="checkbox"/> Engine failure | <input type="checkbox"/> Someone lost overboard |
| <input type="checkbox"/> Collision | <input type="checkbox"/> Vessel disabled / towed | <input type="checkbox"/> Vessel struck by lightning |
| <input type="checkbox"/> Grounding | <input type="checkbox"/> Piracy | <input type="checkbox"/> Other — <i>Provide details:</i> |

In the last 12 months, have you had a *personal* accident? What was the severity of the accident?

- | | | |
|---|--|---|
| <input type="checkbox"/> Near miss
(something happened
but luckily no injury) | <input type="checkbox"/> Minor / first aid | <input type="checkbox"/> Serious Injury |
|---|--|---|

In the accident *you* described above, what type of injury did you have?

- | | | |
|---|---|--|
| <input type="checkbox"/> Abrasions / cuts | <input type="checkbox"/> Electric shock | |
| <input type="checkbox"/> Twist / fracture | <input type="checkbox"/> Suffocation | |
| <input type="checkbox"/> Burns / chemicals | <input type="checkbox"/> Amputation | |
| <input type="checkbox"/> Fish related — <i>Provide details:</i> | <input type="checkbox"/> Diving related — <i>Provide details:</i> | <input type="checkbox"/> Other — <i>Provide details:</i> |

What part of *your* body was affected?

- | | | |
|-----------------------------------|-----------------------------------|--------------------------------|
| <input type="checkbox"/> Head | <input type="checkbox"/> Abdomen | <input type="checkbox"/> Groin |
| <input type="checkbox"/> Eyes | <input type="checkbox"/> Internal | <input type="checkbox"/> Legs |
| <input type="checkbox"/> Neck | <input type="checkbox"/> Arms | <input type="checkbox"/> Knees |
| <input type="checkbox"/> Shoulder | <input type="checkbox"/> Hands | <input type="checkbox"/> Feet |
| <input type="checkbox"/> Back | <input type="checkbox"/> Fingers | <input type="checkbox"/> Toes |

In the last 12 month, have you suffered from a *fishing-related* illness?

- | | | |
|--|--|---|
| <input type="checkbox"/> Diarrhea | <input type="checkbox"/> Skin rash / blisters | <input type="checkbox"/> Sun stroke / sunburn |
| <input type="checkbox"/> Constipation / cramps | <input type="checkbox"/> Headache / earache | <input type="checkbox"/> Decompression illness |
| <input type="checkbox"/> Food poisoning | <input type="checkbox"/> Nausea | <input type="checkbox"/> Seizure |
| <input type="checkbox"/> Flu / fever | <input type="checkbox"/> Infection | <input type="checkbox"/> Mental trauma / stress |
| <input type="checkbox"/> Sore eyes | <input type="checkbox"/> Bladder / urinary | <input type="checkbox"/> Hayfever / allergies |
| <input type="checkbox"/> Dehydration | <input type="checkbox"/> Other — <i>Provide details:</i> | |

In the last 12 month, has someone you work with had an accident, and if so, what was the severity of accident?

- | | | |
|---|------------------------------------|--|
| <input type="checkbox"/> Fatal | <input type="checkbox"/> Near miss | <input type="checkbox"/> Minor / first aid |
| <input type="checkbox"/> Serious injury | <input type="checkbox"/> missing | <input type="checkbox"/> Drowning |

Causes of accidents

In your opinion, what is the main cause(s) of fishing accidents in Saint Lucia?

Technical factors:

- | | | |
|--|---|---|
| <input type="checkbox"/> Inadequate guarding / unguarded | <input type="checkbox"/> Inadequate warnings / signs / instructions | <input type="checkbox"/> Defective tools, equipment, or gear |
| <input type="checkbox"/> Extreme weather | <input type="checkbox"/> Hazardous working conditions | <input type="checkbox"/> Procedures not in place / inadequate |
| <input type="checkbox"/> Vessel overloaded | <input type="checkbox"/> Vessel out of fuel | <input type="checkbox"/> Rudder / engine failure |
| <input type="checkbox"/> Gear / rope in propeller | <input type="checkbox"/> Lack of Personal Protective Equipment (PPE - shoes, gloves, safety glasses etc.) | |
| <input type="checkbox"/> Unsafe design or construction | <input type="checkbox"/> Other — <i>Provide details:</i> | |

Human factors:

- | | | |
|---|---|--|
| <input type="checkbox"/> Failure to wear lifejacket / PPE | <input type="checkbox"/> Under the influence of alcohol / drugs | <input type="checkbox"/> Fatigued / stressed |
| <input type="checkbox"/> Disregarding safety practices | <input type="checkbox"/> Operating without authority | <input type="checkbox"/> Operating recklessly |
| <input type="checkbox"/> Disabling safety devices | <input type="checkbox"/> Human error | <input type="checkbox"/> Lack of Knowledge |
| <input type="checkbox"/> Lack of Skill | <input type="checkbox"/> Inexperience | <input type="checkbox"/> Navigation error |
| <input type="checkbox"/> Disobeying orders | <input type="checkbox"/> Working alone | <input type="checkbox"/> Other — <i>Provide details:</i> |

Safety equipment

Which of the following mandatory and/or recommended safety devices / equipment is normally on board your vessel?

- | | | |
|---|--|--|
| <input type="checkbox"/> Life jackets | <input type="checkbox"/> Sail | <input type="checkbox"/> Fire blankets |
| <input type="checkbox"/> Life rings / buoys | <input type="checkbox"/> Sea anchor and line | <input type="checkbox"/> First aid kit |
| <input type="checkbox"/> Life raft | <input type="checkbox"/> Spare oars | <input type="checkbox"/> VHF radio |
| <input type="checkbox"/> Flares (parachute / smoke) | <input type="checkbox"/> Fire extinguisher / pump | <input type="checkbox"/> GPS / plotter |
| <input type="checkbox"/> Flag / signs | <input type="checkbox"/> Spare parts (plugs, etc.) | <input type="checkbox"/> Compass / radar |
| <input type="checkbox"/> EPIRB | <input type="checkbox"/> Basic tools | <input type="checkbox"/> Food / water |
| <input type="checkbox"/> Reflecting mirror | <input type="checkbox"/> Anchor and rope | <input type="checkbox"/> Bucket / bailer |
| <input type="checkbox"/> Spare outboard motor | <input type="checkbox"/> Spare fuel | <input type="checkbox"/> Mobile phone |

Is this safety equipment always onboard as required? If not, why is that?

With regards to health and safety, what is your understanding of the legislation / maritime rules that apply to fishing?

Accident reporting

Are you aware of the regulatory requirement to report accidents?

Do you report accident as required - all the time? If not, why not?

Would you use a voluntary / confidential reporting system if it were available?

Are you aware of the confidential FISHER App reporting tool?

What do you think accident information is used for?

This report summarizes the findings of a fisheries safety at sea baseline survey carried out in 2020 in Saint Lucia. The baseline survey investigated the safety practices, attitudes and legislative understanding among a selected group of 100 fishers in Saint Lucia. The survey methodology was developed and managed by the FISH Safety Foundation and FAO. The survey was implemented in 2020 by the Department of Fisheries of Saint Lucia, FSF and FAO and the findings were disseminated and used for fishers' safety training in 2021.

