CARICOM FISHERY REPORT NO. 8
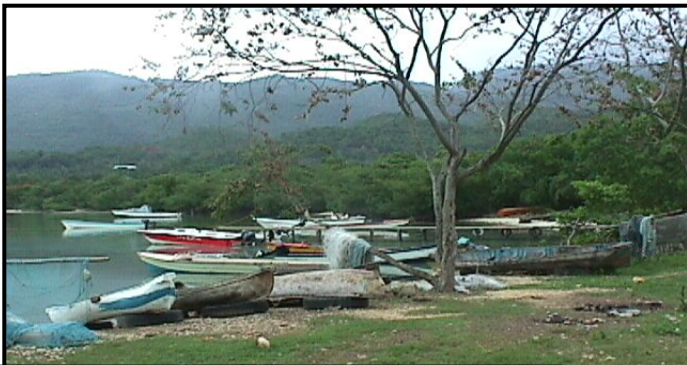
Caribbean Community Secretariat

CARICOM Fisheries Unit

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MARINE FISHERIES CENSUS OF JAMAICA, 1998

CARICOM FISHERIES UNIT, BELIZE CITY, BELIZE

CARICOM FISHERY REPORT NO. 8

MARINE FISHERIES CENSUS OF JAMAICA, 1998

by:

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MARINE FISHERIES CENSUS OF JAMAICA, 1998

Cover photographs (clockwise from top left): Belmont beach, Westmoreland; a beach seine; mending nets at Old Harbour Bay beach; the Antillean Z-trap; reef fishes in a canoe at Savannah la Mar; a 28ft mechanised fiberglass canoe.

ABSTRACT

In 1998 the Government of Jamaica undertook a census of fishing units in the marine fisheries, including vessels and fishers that fish without vessels. A two-stage process was used: a listing survey that encompassed all coastal areas; and a questionnaire census of all listed units. The questionnaire comprised 10 sections seeking information on the following subject areas: Respondent; Fisher or boat owner; Captain and crew; Fishing operations; Fishing practices; Gear used; Details of the catch; Marketing of the catch; and with regard to Pedro Bank, the damage caused by Hurricane Mitch. Information was collected from a total of 5492 units, of which 4107 were boats and 1385 were fishers without boats, including spearfishers. An unexpectedly high proportion of surveyed vessels were reported as being inactive (18%). The fishing units were distributed among 200 sites ranging in size from 1 – 300 boats/site. The median number of boats per site was 15. The vessels were predominantly canoes fishing small-scale gear: traps, lines and nets. These data will form the basis of future development and management plans. They can support a variety of analyses many of which cannot easily be foreseen at present. Therefore, rather than attempt a complete analysis that will be published in a report, they are being set up in an accessible format in SPSS with instructions for users who wish to query the data for various purposes. This report includes basic analyses to illustrate the contents of the database.

ACKNOWLEDGEMENTS

FISHERMEN!

Cooperate with the Fisheries Division as it carries out its Fisheries Census.

What is a Fisheries Census?

It is a count of the fishers and vessels. As of the second week in September interviewers will be asking you questions about your work and the equipment you use.
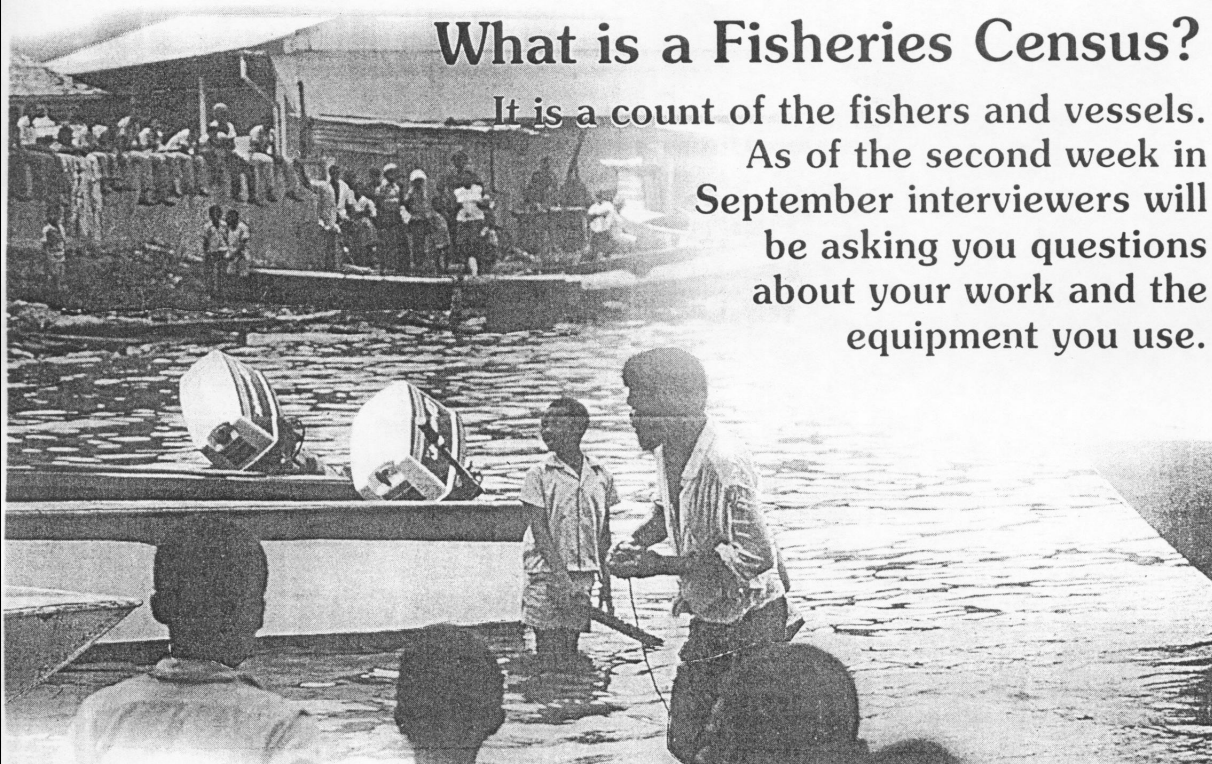
This will benefit only YOU!

The information you give will be used to plan for a better future. Therefore, assist the interviewers when they come around.

For further information contact:

The Ministry of Agriculture
Fisheries Division
Marcus Garvey Drive
P.o. Box 470
Kingston, Jamaica
Tel: 923-8811-3, 923-7571-2

Your livelihood depends on it!

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1 INTRODUCTION

In 1995 with the assistance from the CARICOM Fisheries Resource Assessment and Management Program (CFRAMP), the Fisheries Division started a data collection programme based on random stratified sampling. Prior to this the Division relied on landing estimates from sample surveys (1962, 1968, 1973 and 1981). In 1994, the Division computerized its licensing and registration system and underwent an island wide registration programme, which served as a frame of fishers, vessels and gears in the data collection programme. An accurate frame was needed, of registered and unregistered fishers and vessels. The objectives of the census were:

- To obtain an accurate frame of vessels (artisanal, industrial and recreational) and gear by landing sites and fishery to ensure the data collection programme captures statistically acceptable data for resource assessment purposes, national accounting and other purposes.
- To validate vessel and owner/captain data stored in the Licensing and Registration Software.

The census was a collaborative effort between the Fisheries Division (FD), the Statistical Institute of Jamaica (STATIN), the Jamaica Information Service (JIS) and CFRAMP. Each organization had a role in conducting the survey.

The role of the Fisheries Division:

- Develop a project outline on the terms and conditions of the survey
- Design questionnaires and manual
- Train interviewers on the fishery component
- Monitor and evaluate pilot and census
- Develop the awareness programme in conjunction with a Communications Specialist and the Jamaica Information Service
- Assist in the analysis and interpretation of the data
- Data management
- Provide funding to carry out the survey

The role of STATIN:

- Provide guidance to the FD on the survey
- Train interviewers in non-fishery component
- Conduct field interviews
- Data entry

The role of JIS:

- Development of a public awareness programme (posters, public address, media advertising)

The role of CFRAMP:

- Provided technical support through a consultant, to assist in the analysis of the data. The data and information obtained will be used to conduct the following:

- Refine existing data collection systems for catch, effort, biological and economic data from the Fisheries;

- Review and revise the data in the Licensing and Registration System (LRS) in keeping with the objectives for the use of the system;

- Contribute to the development of a geographical information system (GIS) for the marine capture fishery and analyses necessary to provide baseline information for national accounting.

2 METHODOLOGY

2.1 Overview

The initial activities in conducting this survey was done in phases:

Phase 1: Development of a project outline

In 1997, the Fisheries Division developed a project outline. Several meetings were held with the FD, STATIN and CFRAMP, to discuss the role of each organization in delivering this survey. STATIN agreed to conduct the survey during the period September to December, 1998. It was decided, due to financial constraints, to conduct a marine census of vessels (artisanal, industrial and recreational) in Jamaica.

Phase 2: Questionnaire and Interviewer's Instruction Manual design

Three questionnaires (main, listing and supplemental) and an interviewer's instruction manual were developed (section 2.2).

Phase 3: Sensitisation programme

The services of the Jamaica Information Services (JIS), was contracted to develop an awareness programme to sensitise fishers and the public about the census. This was done to obtain the fishers cooperation. This activity involved, the development and distribution of posters (see frontispiece) to all fishing beaches and communities around the island, commercials on radio, television and the printed media. On completion of the awareness programme, the main survey was conducted.

2.2 The Survey Instruments

2.2.1 Listing Record

The listing record was designed by STATIN. This was developed to ensure that if boats were not censused, they would be listed and counted (Appendix 1). The listing record questionnaire recorded all the vessels that were moored/sleep at a landing site. Once the vessels were listed, the main questionnaire was then administered.

2.2.2   Main Questionnaire

The design of the questionnaire went through numerous drafts. The first draft was reviewed by CFRAMP, the second draft by STATIN, and the final draft was developed with the assistance of Mr. Peter Espeut. The main questionnaire (Appendix 2) had nine sections:

- Section 1 - information on respondent (name, address, role, education, experience);
- Section 2 - information on vessel owners and users;
- Section 3 - information on vessel (name, name of fishers);
- Section 4 - information on crew;
- Section 5 - fishing operations (fishing grounds, operations, vessels involved);
- Section 6 - fishing practices (gas used, fishing duration, purpose, storage);
- Section 7 - gear specification (gear types and usage);
- Section 8 - catch characteristics (catch composition, seasonality); and
- Section 9 - marketing arrangements (catch distribution).

2.2.3   Supplemental Questionnaire

In October 1998, Hurricane Mitch affected the island. There was extensive equipment damage on the Pedro Bank. The south shelf also suffered damages to fishing equipment. In order to capture the pre-Mitch situation (main questionnaire) and post-Mitch situation on the Pedro and Morant Bank, a supplemental questionnaire was developed (Appendix 3). The supplemental questionnaire (section 10: the impact of hurricane Mitch), focused mainly on the value of damages to fishing equipment, changes in fishing activities and financial support to replace or repair equipment. This questionnaire was also developed by Mr. Peter Espeut.

2.2.4   Interviewer's Instruction Manual

An interviewer's instruction manual was developed, which explained all the questions in the main questionnaire (Appendix 4). The manual covered; overview of the fisheries sector, explanatory note, the interviewer's task, general survey procedures, guidelines for completing the questionnaire, the questionnaire, notes on boat size, vessel types, fishing areas in Jamaica, storage facility, gear type and fish types.

2.3   Data collection process (testing and main survey)

2.3.1   Testing

The fisheries census was planned to follow the framework of:

- A census,
- The requisite guidelines of the international organizations that have precedence in conducting surveys of this type
- Specific local situations.

STATIN was chosen because of its experience on surveying and censuses and also due to its spread of interviewing personnel across the island. The first questionnaire was developed using a CFRAMP questionnaire with the introduction of local situations

The single pre-test was conducted in July 1998. This 'early' activity was to facilitate extensive comments from all the parties concerned locally and abroad particularly CFRAMP and the consultant. After the pre-test a few changes were made to the questionnaire. The manual and the control forms were finalized. There were also a few last minute changes in the questionnaire to accommodate some additional information that was needed by the Fisheries Division (FD).

Out of the pre-test the listing record was further developed. The need to have a control form on which all of the potential respondents would be listed was seen primarily as aid for the interviewer, secondly an internal check on estimated coverage not a data source. The final aim was not to have too large a questionnaire.

2.3.2   Main survey

2.3.2.1   Training and Assignments

The main survey started in September 1998. The main training session was held in Kingston and there were training classes at 2 other locations. Training for the pre-test and the main survey was the responsibility of STATIN with representatives of the Fisheries Division responsible for training on the fisheries concepts. All trainers from STATIN were statisticians.

The fieldwork started on September 5 1998. The work was assigned by area, as Jamaica is divided into 4 contiguous non-overlapping areas for census purposes. A Senior Supervisor manages each area. Within each area there are zones and these zones contain one supervisor and five interviewers.

Areas 1 & 2 were given the coastlines of the parishes of Kingston, St Andrew, St Thomas, Portland, St Mary and St Ann. Area 3 was given the coastlines of the parishes of St James, Hanover, Trelawny, St Elizabeth, Westmoreland, Manchester and; Area 4 was given the coastlines of Clarendon and St Catherine (See Table 1 for the number of assignments by parish).

2.3.3   The Fieldwork

This aspect of the work was expected to last six to eight weeks commencing in September 1998. By and large this was achieved with the exception of two main cases. The first was the advent of Hurricane Mitch, which devastated the Pedro Cays, necessitating the readjustment of plans for organized interview on that site.

The second was the negative general response from the fishermen of Parrottee, St Elizabeth, due to some previous negative association with the Fisheries Division.

There were two main instruments, a listing record C2 (Appendix 1) which in most cases was completed first and contained public opinion of the boats that moored /slept on the designated slip of coast line. The second was the detailed census instrument C1 that recorded the details of those boats on the list that could be found for interviewing (Appendix 2). Owing to the reported

damage by Hurricane Mitch to boats and gear from Pedro Cays, a supplemental questionnaire was developed for that area to take account of the before and after Mitch situation (Appendix 3).

As an additional help to ensure that there was not an undercount, the boats as registered at beaches by parish were given to supervisors on a list supplied by the Fisheries Division. The supervisors in turn assisted the interviewers in obtaining a more complete count. Note was taken of the age of the list and the possibility of incorrect or false information. An additional list of sport fishermen was provided and these were also interviewed.

The interviewers were asked to systematically canvass the length of the coastlines that fell within their boundaries and record and interview all fishing activity. They were then to interview all boat owners or suitable respondents since our requirement was mainly a count of boats and their activities. Table 1 shows the numbers of questionnaires received by parish.

Census takers were provided with a manual prepared by the Fisheries Division giving details of the various types of boats, gear and fishes (Appendix 4).

2.4 Data management -- Printing, Training, Editing, Coding and Data Entry

The questionnaires were printed using a Fisheries Division estimate of the numbers required. They were then distributed to the relative zones according to assignment and the parish estimate. All questionnaires estimated as needed were printed so there was no shortfall at any time. Instructions were given that each returned set of questionnaires should be noted on the accompanying listing record and report form.

The Surveys Division and the Computer Division of STATIN provided training on editing, coding and on data entry. When the questionnaires arrived at the editing location they were assigned a number according to the parish that they came from. This facilitated quick reference in the data entry process and retrieval for the secondary edits.

From the pre-test and documents received from Fisheries Division a system of codes was set up. Additional codes however were needed as the census revealed a greater variety of responses.

The first cross-reference was the assigned identification and with the listing record this would ensure that a fisherman was not counted twice or given two questionnaires for the same boat. The listing record was also of secondary use as an estimate of de-jure coverage. The listing record was to be entered also. The first edit checks were run using given parameters and other cross-references. A printout was run for each batch of questionnaires that was submitted to the data entry operators. After the first corrections the further edit checks were run; where there were further errors, this however was corrected by the data entry operators and the assigned statisticians.

2.5   Analysis (access via SPSS)

The approach adopted with this census has been to attempt to make the data available in a form that can be readily accessed by potential users, rather than to provide a large number of pre-analysed tables. With this approach users can query the data and obtain specific answers to their questions. Consequently, the data from this census have been made available as files that can be used by the Statistical Package for the Social Sciences (SPSS). This statistical software package provides a readily available means of accessing the data for export to other programs or for analysis within SPSS. SPSS is an intuitive, Windows-based program. A user with proficiency in Windows and basic knowledge of data analysis techniques should be able to access the data for simple extraction, tabulation, and summarisation within a few hours. SPSS also includes many complex statistical analysis procedures, its use, requires prior knowledge of the relevant statistical theory. Descriptions of the data and the mean for accessing them are provided in Appendices 5-8.

3   RESULTS

3.1   Overview of the census data

The purpose of the listing survey was to provide a list of all vessels as a cross check for the census. Therefore, all vessels in the listing survey should have appeared in the census, and few if any new vessels should have been encountered in the census. The listing survey recorded 3,619 vessels of which 549 were not in the census (Table 2). The census recorded 3,558 vessels of which 488 were not in the listing survey. The total number of vessels recorded by both surveys was 4,107.

In order to provide a database that included all the vessels encountered, the census data and the listing survey data were merged into a single file. However, for these vessels, the majority of data collected in the census is missing. Few of the vessels that were in the listing survey but not in the census could be categorised as to vessel type. Of the 3,558 vessels in the census only 78 (2%) could not be categorised as to vessel type. Of these 23 were vessels that were not in use. For certain types of analyses that required information on the total numbers of vessels per landing site, the vessels that could not be categorised were allocated proportionally to the vessels categories based on those that could be categorised.

Vessels were found to be operating from a total of 194 fishing beaches (Figure 1). Whereas many of these are well known beaches, several are here recorded for the first time.

3.2   Characteristics of vessel owners, owner/captains and marketing

The numbers of owners, captains and owner/captains in the survey is shown in Table 3. The proportion of owners that captain their own vessels is lowest for the largest vessels and is lower for mechanised vessels in each of the two smaller vessel types.

The characteristics of the vessel owners are shown by vessel category and parish in Table 4. The proportion of female vessel owners is highest for the mechanised fibreglass vessels < 32ft and the larger vessels. It is almost negligible for other categories.

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The proportion of vessels that is rented, leased or lent to other groups of fishers is low; only 4% overall (Table 5). The number of groups to which vessels are rented, leased or lent, is seldom more than 2 (Table 6). The extent of these practices appears to be higher for owners with more than one vessel (Table 7).

The disposition of fish caught to various purchaser groups differed considerably according to the type of fish and the parish (Table 8). For example, in St. Elizabeth the proportion sold to vendors is high, whereas in St. James the proportions sold to hotels and restaurants is relatively high. On the Pedro Cays, virtually all fish is sold to carrier boats.

3.3   Characteristics of the fleet

The distribution of vessels by vessel type and parish is summarised in Table 9 and given by landing site in Table 10. A relatively high proportion of recorded vessels were deemed to be inactive (not in use) (Table 9). This table also shows the number of individuals surveyed that were designated as "No boat fishers". These included both spear fishers and land-based fishers. Although the census has gathered a considerable amount of information on this hitherto little known group of fishers, it is not a census for these groups as it was not designed to census them, and they were interviewed opportunistically. The distribution of no boat fishers by landing site is given in Table 11.

The numbers of boats targeting the various categories of fishery resources is shown by landing site in Table 12.

The average numbers of crew and other workers to be found on vessels is shown by vessel category and parish in Table 13.

The length frequency distribution of vessels by vessel category is shown in Figure 2.

Vessels were categorised according to whether they were fishing vessels, recreational vessels or carrier vessels based on the vessel type and main use as stated by the responded. The distribution of recreational and carrier vessels is shown in Table 14.

3.4   The fishing operations, gear and practices

The numbers of vessels of each category and overall that use each type of gear is shown by parish in Table 15. The distribution of secondary gear by parish is shown in Table 16. The extent to which various combinations of gears are used by vessels is shown in Table 17. When nets are the main gear, pots are the most common second gear, but only slightly more so than lines. When lines are the main gear, pots are the most common second gear.

3.5   The catch, estimates of landings, and seasonality

The average catch /trip in kg per vessel and gear type is shown in Tables 18-21 for traps, diving, lines and nets. Note that these values are as reported by the respondents from memory and are therefore only useful as general indicators of catch.

The seasonality for low/high catch by type of fishery as reported by the respondents is shown in Table 22.

3.6   The numbers of fishers

The numbers of individuals directly engaged in fishing in Jamaica cannot be reliably determined from the data in this survey because it was a survey of vessels not fishers. However, the data on numbers of vessels (Table 10) and crew (Table 13) for the various types of vessels can provide some indication of the minimum number of persons engaged in fishing. The estimated number of crew for vessels of all types is 7,691. There are also an estimated 520 workers that go out on fishing vessels. Adding to this the 3,382 vessel captains give an overall estimate of at least 11,593 individuals actively engaged in the harvesting of fish. Many more are involved in other aspects of the industry. This is a minimum estimate because vessel owners and captains may change crew. Thus, although there may be 11,593 captain, crew and worker positions on fishing vessels, if many of these are part time, then the actual total number of individuals who derive some or all of their income from working in the harvesting subsector may be considerably higher.

The above estimate of the number of fishers in Jamaica is very close to that which is available for the Licensing and Registration System (LRS), i.e. about 12,000. However, the LRS includes some vendors and some foreign fishers licensed for the industrial conch fishery.

4   FUTURE DIRECTIONS

4.1   Lessons learned

- Carefully plan all activities in the delivery of the census, from census outline to generating the final report
- Monitoring all aspects of the survey - Clearly define all aspects of the survey and monitor each part. This will allow for quick changes before the survey ends.
- Keep the questionnaire simple - Although the fishery may be complex, it is important to simplify questions. This will reduce ambiguity in the response and analysis.
- A good questionnaire in important.
- Due to the financial and human resources required to conduct an intense fishery census every five years, regular updates can be very effective.
- A census may not necessarily answer all your questions; it may create more questions.
- Keep it simple – the survey, the questionnaire, the logistics, etc.

4.2   Other analyses with these data

This report provides only an introductory analysis of the survey data with the aim of making the reader aware of the information that is available. These survey data can be further analysed to

provide information on a wide variety of issues that are relevant to fisheries management and development in Jamaica.

4.3   Other supplemental data needs

There is the need for these survey data to be supported by a good system of recording information on landing sites, and of mapping landing sites. Ideally, this information would be stored in a GIS and updated regularly. However, a paper filing system with an information sheet on each landing site and a wall map would be useful to provide all Fisheries Division members with ready access to the information.
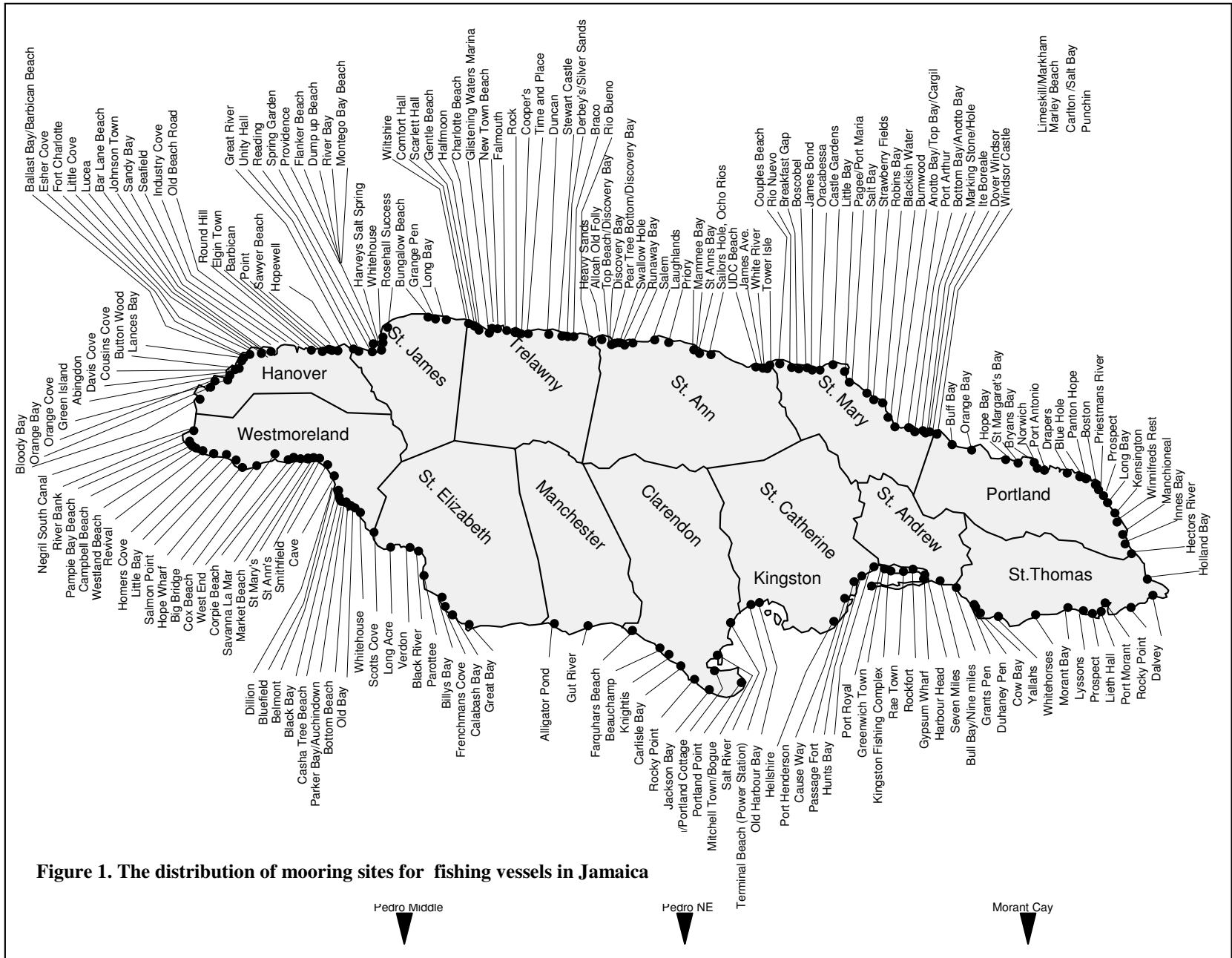
Figure 1. The distribution of mooring sites for fishing vessels in Jamaica
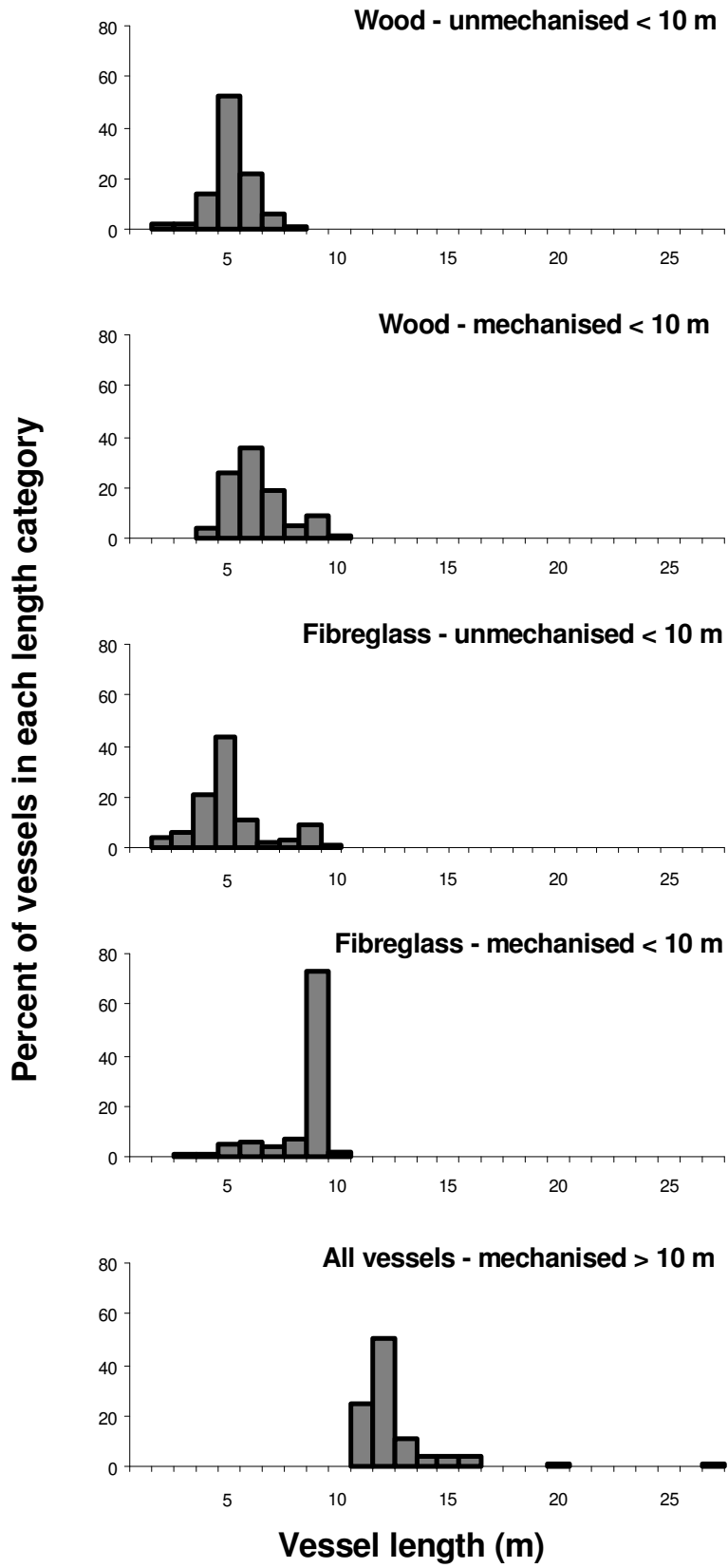
Figure 2. The length distribution of vessels in the five vessel categories.

5 TABLES

Table 1. Survey details by parish

Parish	Number of EDs assigned by parish	Number of questionnaires received	Number of units in listing survey	Percent of listing survey units received as questionnaires
Kingston	27	342	380	90.0
St Andrew	15	130	152	85.5
St Thomas	34	202	246	82.1
Portland	70	254	325	78.2
St Mary	36	331	436	75.9
St Ann	25	214	283	75.6
Trelawny	11	253	348	72.7
St James	24	279	436	64.0
Hanover	39	506	697	72.6
Westmoreland	26	526	597	88.1
St Elizabeth	15	159	194	82.0
Manchester	8	164	198	82.8
Clarendon	11	428	472	90.7
St Catherine	14	549	703	78.1
Total	**355**	**4337**	**5467**	**79.3**

Table 2: Cross tabulation of active boats by whether from census, listing record or both sources.

Vessel category	In Census not in LR			In LR not in Census			In LR and Census			Total
	Not in use	In use	Total	Not in use	In use	Total	Not in use	In use	Total	
Wood unmech < 32 ft.	25	81	106		0	0	113	731	844	950
Wood mech < 32 ft	6	31	37		2	2	73	315	388	427
Fiber unmech < 32 ft	19	24	43		0	0	34	134	168	211
Fiber mech < 32 ft	54	180	234		23	23	304	1199	1503	1760
All mech 32-75 ft	5	19	24		0	0	25	96	121	145
Other	1	1	2		0	0	3	7	10	12
Missing	8	34	42	40	484	524	15	21	36	602
Total	118	370	488	40	509	549	567	2503	3070	4107

Table 3: The numbers of captains, owners and owner-captains plus the percentage of owners who captain their vessels.

Role	Wood unmech <32ft.	Wood mech <32ft	Fiber unmech <32ft	Fiber mech <32ft	All mech 32-75ft	Other	Missing	Total
Captain only	68	41	14	305	27	2	99	556
Owner only	39	24	11	202	35		162	473
Owner- captains	668	251	124	736	41	5	82	1907
Percentage of owner-captains	86%	79 %	83 %	59 %	40 %	71 %	24 %	65 %

Table 4: Characteristics of vessel owners by vessel type and parish and no-boat fishers by parish.

Parish/vessel category	Sex		Education (percent of respondents)							Age in years			Years fishing (mean)
	Males	Females	None	Primary	New/Junior secondary	Traditional/Comp. high	College/University	school/other	No. of responses	Mean	Min	Max	
Wood unmech < 32ft.													
Kingston	1		-	-	100	-	-	-	1	.	.	.	10
St. Andrew	14		8	38	54	-	-	-	13	52	24	76	29
St. Thomas	31	1	3	53	33	10	-	-	30	42	26	70	21
Portland	32	-		86	10	3	-	-	29	55	27	83	28
St. Mary	70		-	88	12	-	-	-	65	50	27	76	22
St. Ann	42	-		63	34	2	-	-	41	53	30	82	25
Trelawny	75		3	84	8	5	-	-	73	55	29	78	25
St. James	64		4	80	16	-	-	-	55	54	2	79	28
Hanover	188		2	80	5	13	-	-	187	53	14	90	26
Westmoreland	165		-	74	26	-	-	-	165	51	20	78	26
St. Elizabeth	20		16	74	11	-	-	-	19	52	23	79	26
Manchester	1		-	100	-	-	-	-	1	67	67	67	50
Clarendon	39	3	-	73	23	5	-	-	40	51	32	77	20
St. Catherine	62	-		59	40	2	-	-	58	39	22	69	19
Total	804	4	2	75	19	5	-	-	777	51	14	90	25
Wood mech <32ft													
Kingston	3		-	100	-	-	-	-	2	55	50	60	26
St. Thomas	10		-	78	22	-	-	-	9	48	27	78	23
Portland	3		-	100	-	-	-	-	3	57	50	64	15
St. Mary	9		-	67	33	-	-	-	9	47	27	76	20
St. Ann	12		-	60	30	10	-	-	10	48	0	80	26
Trelawny	10		-	90	-	10	-	-	10	50	29	68	17
St. James	37	1	-	68	16	14	3	-	37	51	27	76	26
Hanover	91		1	49	21	27	1	-	91	45	23	79	19
Westmoreland	131	6	-	75	22	3	-	-	137	49	25	83	22
St. Elizabeth	9		-	100	-	-	-	-	9	40	25	54	17
Manchester	2		-	100	-	-	-	-	2	35	34	36	21
Clarendon	6		-	83	-	17	-	-	6	42	24	74	13
St. Catherine	13		-	58	42	-	-	-	12	44	28	60	25
Pedro Cays	1								0	.	.	.	.
Total	337	7	0	68	20	11	1	-	337	48	23	83	22
Fiber unmech <32ft													
Kingston	4	1	-	25	50	25	-	-	4	38	29	56	14
St. Andrew	19		-	61	28	11	-	-	18	52	22	75	23
St. Thomas	8		-	88	13	-	-	-	8	47	31	66	21
Portland	9		-	56	11	33	-	-	9	46	29	54	18
St. Mary	17		-	82	12	-	-	6	17	53	38	78	24
St. Ann	16		-	44	38	19	-	-	16	49	35	70	22
Trelawny	8		-	88	13	-	-	-	8	51	37	66	24
St. James	6		-	67	33	-	-	-	6	35	23	52	18
Hanover	5		-	80	20	-	-	-	5	41	24	61	12
Westmoreland	1		-	-	100	-	-	-	1	39	39	39	10
St. Elizabeth		1	-	100	-	-	-	-	1	60	60	60	42
Manchester	2		-	100	-	-	-	-	2	41	41	41	10

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Parish/vessel category	Sex		Education (percent of respondents)							Age in years			Years fishing (mean)
	Males	Females	None	Primary	New/Junior secondary	Traditional/ Comp. high	College/ University	vocational school/ other	No. of responses	Mean	Min	Max	
Wood unmech < 32ft.													
Clarendon	12		-	83	17	-	-	-	12	53	28	74	26
St. Catherine	43	2	-	57	41	2	-	-	44	42	18	68	19
Pedro Cays	2		-	100	-	-	-	-	1	56	56	56	20
Total	152	4	-	65	28	7	-	1	152	47	18	78	21
Fiber mech <32ft													
Kingston	79	12	-	48	22	27	3	-	77	45	27	79	19
St. Andrew	42	1	-	46	37	17	-	-	41	50	18	76	27
St. Thomas	78	3	1	69	18	9	3	-	67	46	23	71	22
Portland	100	4	-	63	9	25	2	-	95	45	20	71	18
St. Mary	69	1	-	75	18	-	7	-	60	45	22	75	21
St. Ann	54	2	-	47	37	10	6	-	49	46	24	76	21
Trelawny	39		-	79	12	3	6	-	33	51	25	74	23
St. James	37		6	43	34	14	-	3	35	43	20	73	25
Hanover	25		-	75	4	21	-	-	24	47	23	66	26
Westmoreland	59	4	-	52	44	3	-	-	63	46	18	73	20
St. Elizabeth	80	2	4	59	36	1	-	-	80	43	20	76	18
Manchester	83	16	1	84	14	1	-	-	92	41	21	65	19
Clarendon	193	47	-	52	39	8	1	-	233	42	19	80	17
St. Catherine	198	16	1	53	41	5	0	-	203	45	20	98	20
Pedro Cays	127	2	3	55	42	1	-	-	108	37	20	66	16
Total	1263	110	1	58	31	8	1	0	1260	44	18	98	19
All mech 32-75ft													
Kingston	5	1	-	-	100	-	-	-	3	47	47	47	22
St. Thomas	1								0	52	52	52	25
Portland	2		-	-	-	100	-	-	2	35	28	41	13
St. Mary	2		-	-	-	100	-	-	2	56	44	68	23
St. Ann	5		-	50	-	-	50	-	2	40	25	54	25
Trelawny	6		-	-	-	-	100	-	3	58	41	66	28
St. James	5		-	-	33	67	-	-	3	46	33	54	23
Westmoreland	43	7	-	74	21	4	-	-	47	46	29	83	21
St. Elizabeth	9		-	63	38	-	-	-	8	40	29	50	13
Clarendon	8	6	-	43	29	21	7	-	14	41	17	54	11
St. Catherine	9	1	-	56	44	-	-	-	9	42	29	52	23
Pedro Cays	2		-	50	50	-	-	-	2	33	20	45	20
Total	97	15	-	56	27	12	5	-	95	45	17	83	20
Other													
Portland	3		-	67	-	33	-	-	3	38	27	49	9
St. Ann		1							0				.
Trelawny	1		-	100	-	-	-	-	1	75	75	75	30
Westmoreland	2		-	100	-	-	-	-	2	58	54	62	30
St. Catherine	1		-	-	100	-	-	-	1	24	24	24	2
Total	7	1	-	71	14	14	-	-	7	47	24	75	17
Spear fishers									0				
Kingston	7		-	33	17	50	-	-	6	36	23	53	16
St. Andrew	1		-	-	100	-	-	-	1	40	40	40	10

Parish/vessel category	Sex		Education (percent of respondents)							Age in years			Years fishing (mean)
	Males	Females	None	Primary	New/Junior secondary	Traditional/ Comp. high	College/ University	school/ other	No. of responses	Mean	Min	Max	
Wood unmech < 32ft.													
St. Thomas	34		-	18	65	18	-	-	34	31	18	62	10
Portland	48		-	48	13	40	-	-	48	30	17	56	10
St. Mary	60		-	56	39	5	-	-	57	34	17	98	11
St. Ann	50		-	16	61	22	-	-	49	35	22	61	14
Trelawny	80		1	61	24	13	1	-	80	31	17	58	11
St. James	85		-	49	38	13	-	-	84	30	13	62	9
Hanover	133		-	55	23	23	-	-	133	33	14	78	10
Westmoreland	17		-	18	65	6	-	12	17	32	22	43	14
St. Elizabeth	10		-	30	70	-	-	-	10	27	18	47	6
Manchester	10		11	33	44	11	-	-	9	31	21	43	10
Clarendon	12		-	75	17	8	-	-	12	29	17	53	11
St. Catherine	87		-	59	38	4	-	-	85	37	17	66	14
Pedro Cays	1		-	-	100	-	-	-	1	30	30	30	20
Total	635		0	48	35	16	0	0	626	33	13	98	12
No boat fishers													
Kingston	12	1	-	42	25	33	-	-	12	36	20	57	7
St. Andrew	24		-	14	57	29	-	-	21	35	17	63	12
St. Thomas	4		-	25	50	25	-	-	4	38	29	49	10
Portland	9		11	44	11	33	-	-	9	42	27	59	18
St. Mary	20	1	-	75	25	-	-	-	20	35	16	69	12
St. Ann	1	1	-	50	-	50	-	-	2	37	36	37	6
Trelawny	2		-	100	-	-	-	-	2	36	34	38	14
St. James	18		-	44	56	-	-	-	18	30	13	58	8
Hanover	9		-	56	11	33	-	-	9	39	16	53	15
Westmoreland									0				
St. Elizabeth	18		-	50	50	-	-	-	18	38	19	69	17
Manchester									0				
Clarendon	4		-	75	25	-	-	-	4	46	23	79	24
St. Catherine	9		-	75	25	-	-	-	8	39	23	72	14
Pedro Cays									0				
Total	130	3	1	49	36	14	-	-	127	36	13	79	13
Missing													
Kingston	11								0	38	24	45	26
St. Andrew	7		-	50	50	-	-	-	2	41	20	60	22
St. Thomas	17		-	-	100	-	-	-	1	35	27	52	
Portland	34	1							0	41	2	71	
St. Mary	49		-	50	25	25	-	-	4	47	22	80	21
St. Ann	31	1	-	-	100	-	-	-	2	37	21	64	20
Trelawny	19		-	100	-	-	-	-	1	50	20	77	25
St. James	39	3							0	42	21	64	
Hanover	59		-	83	17	-	-	-	6	48	22	76	27
Westmoreland	43	1							0	44	24	78	.
St. Elizabeth	20								0	45	25	61	.
Manchester	22								0	36	20	70	.
Clarendon	40	6	-	100	-	-	-	-	1	40	17	74	15

Parish/vessel category	Sex		Education (percent of respondents)							Age in years			Years fishing (mean)
	Males	Females	None	Primary	New/Junior secondary	Traditional/ Comp. high	College/ University	school/ other	No. of responses	Mean	Min	Max	
Wood unmech < 32ft.													
St. Catherine	64	2	-	-	100	-	-	-	2	46	16	67	30
Pedro Cays	10								0	35	23	56	.
Total	465	14	-	53	42	5	-	-	19	43	16	80	24

Table 5: The extent to which vessels are rented, leased or lent.

Parish	Type of use				Total
	Rented	Leased	Lent	None of the above	
Kingston			2	96	98
St. Andrew		1	5	68	74
St. Thomas	5	1	2	125	133
Portland	1		9	142	152
St. Mary	3		4	155	162
St. Ann	2			132	134
Trelawny	6		5	128	139
St. James	1		9	138	148
Hanover	1		5	304	310
Westmoreland	1		5	409	415
St. Elizabeth		1	2	118	121
Manchester	1		1	98	100
Clarendon	4	1	1	305	311
St. Catherine	16		11	314	341
Pedro Cays	3	1	10	121	135
Morant Cay				9	9
Total	44	5	71	2,662	2782

Table 6: The number of groups to which vessels are rented, leased or lent.

Number of groups	Type of use				Total
	Rented	Leased	Lent	None of the above	
1	29	5	49	4	87
2	2		11		13
3			4	1	5
4			1		1
Total	31	5	65	5	106

Table 7: The extent of renting, leasing or lending of vessels according to numbers of vessels owned.

Number of vessels owned	Type of use				Total
	Rented	Leased	Lent	None of the above	
1	24	2	49	2076	2151
2	8	2	18	376	404
3	6		2	105	113
4	2		1	34	37
5	4			20	24
6				13	13
7				1	1
10				2	2
Total	44	4	70	2627	2745

Table 8: The distribution of fish in each of the species categories to various groups by parish. (N = number of respondents.)

Group to which fish is sold or given	Percentage of fish going to each group.													
	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Oyster	Conch	Crab	Lobster	Bait	Shark	Irish moss	Unknown
Kingston														
% Kept by fisher	8	14	14	.	9	.	.	.	.	1	.	.	.	.
% Given to family/friends	13	8	12	.	3	.	.	.	.	0	.	.	.	.
% Sold to carrier boat	8	3	11	.	4	.	.	.	.	0	.	.	.	.
% Sold to wholesale vendors	19	9	22	.	23	.	.	.	.	0	.	.	.	.
% Sold to vendor	26	50	25	.	41	.	.	.	.	0	.	.	.	.
% Sold to hotel/restaurant	0	8	0	.	6	.	.	.	.	0	.	.	.	.
% Sold to processing plants	0	0	0	.	0	.	.	.	.	0	.	.	.	.
% Sold to consumer	28	8	17	.	12	.	.	.	.	99	.	.	.	.
% To other	0	0	0	.	0	.	.	.	.	0	.	.	.	.
N	24	75	54		88					1				
St. Andrew														
% Kept by fisher	13	11	10	8	13	.	.	.	.		0	.	0	0
% Given to family/friends	11	7	10	8	6	.	.	.	.		5	.	0	5
% Sold to carrier boat	0	0	0	0	0	.	.	.	.		0	.	0	0
% Sold to wholesale vendors	17	15	6	40	13	.	.	.	.		0	.	0	0
% Sold to vendor	54	60	59	36	60	.	.	.	.		95	.	90	95
% Sold to hotel/restaurant	2	0	0	0	0	.	.	.	.		0	.	0	0
% Sold to processing plants	0	0	0	0	0	.	.	.	.		0	.	0	0
% Sold to consumer	12	11	17	9	11	.	.	.	.		0	.	10	0
% To other	0	0	0	0	0	.	.	.	.		0	.	0	0
N	33	73	109	4	72						1		1	1
St. Thomas														
% Kept by fisher	16	9	11	23	10	.	.	.	.	16	.	.	.	5
% Given to family/friends	9	6	7	8	8	.	.	.	.	0	.	.	.	2
% Sold to carrier boat	1	1	1	0	1	.	.	.	.	0	.	.	.	0
% Sold to wholesale vendors	11	1	4	0	5	.	.	.	.	9	.	.	.	0
% Sold to vendor	55	65	55	58	57	.	.	.	.	24	.	.	.	93
% Sold to hotel/restaurant	0	4	0	0	1	.	.	.	.	18	.	.	.	0
% Sold to processing plants	0	0	0	0	0	.	.	.	.	0	.	.	.	0
% Sold to consumer	7	14	20	13	16	.	.	.	.	9	.	.	.	0
% To other	1	0	0	0	1	.	.	.	.	0	.	.	.	0
N	59	121	230	6	109					22				4

Group to which fish is sold or given	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Oyster	Conch	Crab	Lobster	Bait	Shark	Irish moss	Unknown
Portland														
% Kept by fisher	9	16	15	11	13	0	.	.	.	37	.	5	.	26
% Given to family/friends	9	11	9	8	7	10	.	.	.	1	.	5	.	18
% Sold to carrier boat	0	0	0	0	0	0	.	.	.	0	.	0	.	0
% Sold to wholesale vendors	10	5	5	2	5	0	.	.	.	0	.	0	.	0
% Sold to vendor	28	22	19	18	22	90	.	.	.	19	.	43	.	0
% Sold to hotel/restaurant	2	6	0	8	2	0	.	.	.	10	.	40	.	20
% Sold to processing plants	0	0	0	0	0	0	.	.	.	0	.	0	.	0
% Sold to consumer	41	42	52	54	52	0	.	.	.	34	.	8	.	50
% To other	0	0	0	0	0	0	.	.	.	0	.	0	.	0
N	63	209	400	40	166	1				10		2		5
St. Mary														
% Kept by fisher	27	23	26	16	25	10	.	.	.	26	.		.	25
% Given to family/friends	5	7	5	2	4	5	.	.	.	2	.		.	6
% Sold to carrier boat	0	0	0	0	0		.	.	.	0	.		.	0
% Sold to wholesale vendors	1	10	5	0	8		.	.	.	0	.		.	10
% Sold to vendor	37	49	47	74	45	85	.	.	.	28	.		.	40
% Sold to hotel/restaurant	0	1	1	0	0		.	.	.	0	.		.	0
% Sold to processing plants	0	0	0	0	0		.	.	.	0	.		.	6
% Sold to consumer	37	42	38	50	40		.	.	.	55	.		.	47
% To other	0	1	0	0	1		.	.	.	0	.		.	0
N	53	312	459	10	170	1				5				28
St. Ann														
% Kept by fisher	18	19	19	18	14	100	0	.	.	15	.	70	.	18
% Given to family/friends	3	6	4	1	5	0	100	.	.	10	.	5	.	1
% Sold to carrier boat	0	0	0	0	0	0	0	.	.	0	.	0	.	0
% Sold to wholesale vendors	8	2	7	0	5	0	0	.	.	.	.	0	.	0
% Sold to vendor	19	25	25	13	27	0	0	.	.	.	.	0	.	0
% Sold to hotel/restaurant	10	10	3	42	9	0	0	.	.	.	.	0	.	0
% Sold to processing plants	0	0	0	0	0	0	0	.	.	.	.	0	.	0
% Sold to consumer	45	41	47	40	45	0	0	.	.	100	.	25	.	82
% To other	0	0	0	0	0	0	0	.	.	.	.	0	.	0
N	33	180	271	8	133	1	1			7		2		8
Trelawny														
% Kept by fisher	22	31	25	21	22	.	.	.	.	18	.		.	17
% Given to family/friends	4	6	5	4	5	.	.	.	.	14	.		.	2
% Sold to carrier boat	0	0	0	0	0	.	.	.	.	0	.		.	0
% Sold to wholesale vendors	17	10	19	8	8	.	.	.	.	0	.		.	19
% Sold to vendor	2	6	4	13	8	.	.	.	.	0	.		.	12

Group to which fish is sold or given	Percentage of fish going to each group.													
	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Oyster	Conch	Crab	Lobster	Bait	Shark	Irish moss	Unknown
% Sold to hotel/restaurant	0	4	1	0	3	.	.	.	.	13	.	.	.	0
% Sold to processing plants	0	0	0	0	0	.	.	.	.	0	.	.	.	0
% Sold to consumer	57	53	58	58	65	.	.	.	.	55	.	.	.	50
% To other	0	0	0	0	0	.	.	.	.	0	.	.	.	0
N	41	106	351	14	141					16				15
St. James														
% Kept by fisher	24	15	21	3	14	.	.	0	3	7	.	0	.	26
% Given to family/friends	1	3	4	0	1	.	.	.	0	0	.	68	.	5
% Sold to carrier boat	0	0	0	0	0	.	.	.	0	0	.	0	.	0
% Sold to wholesale vendors	0	2	0	0	0	.	.	.	0	0	.	0	.	0
% Sold to vendor	3	7	3	0	2	.	.	.	0	0	.	0	.	0
% Sold to hotel/restaurant	7	15	5	20	7	.	.	100	30	0	.	0	.	0
% Sold to processing plants	0	0	0	0	0	.	.	.	0	0	.	0	.	0
% Sold to consumer	67	70	73	80	80	.	.	.	50	93	.	40	.	69
% To other	0	0	0	8	0	.	.	.	50	0	.	0	.	0
N	28	301	410	15	205				1	3	3		4	25
Hanover														
% Kept by fisher	13	5	11	12	5	2	.	.	.	9	.	.	.	14
% Given to family/friends	2	1	3	1	1	1	.	.	.	3	.	.	.	4
% Sold to carrier boat	0	0	0	0	0	.	.	.	.	0	.	.	.	0
% Sold to wholesale vendors	2	2	1	0	1	.	.	.	.	0	.	.	.	0
% Sold to vendor	7	13	7	19	13	40	.	.	.	8	.	.	.	20
% Sold to hotel/restaurant	2	11	2	14	8	57	.	.	.	43	.	.	.	2
% Sold to processing plants	3	1	1	0	2	.	.	.	.	0	.	.	.	0
% Sold to consumer	75	70	78	61	76	.	.	.	.	45	.	.	.	63
% To other	0	0	0	0	0	.	.	.	.	0	.	.	.	0
N	64	343	885	19	348	1				12				58
Westmoreland														
% Kept by fisher	5	4	5	6	5	0	.	.	.	1	.	0	.	3
% Given to family/friends	2	0	1	1	0	0	.	.	.	0	.	0	.	0
% Sold to carrier boat	0	0	0	0	0	0	.	.	.	0	.	0	.	0
% Sold to wholesale vendors	9	16	6	0	4	0	.	.	.	56	.	0	.	0
% Sold to vendor	32	47	40	30	39	0	.	.	.	33	.	0	.	45
% Sold to hotel/restaurant	0	2	2	0	3	0	.	.	.	11	.	0	.	0
% Sold to processing plants	1	0	0	2	1	0	.	.	.	0	.	0	.	0
% Sold to consumer	55	39	49	72	53	100	.	.	.	11	.	100	.	55
% To other	0	0	0	0	0	0	.	.	.	0	.	0	.	0
N	137	452	745	13	309	4				32		1		17

Group to which fish is sold or given	Percentage of fish going to each group.													
	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Oyster	Conch	Crab	Lobster	Bait	Shark	Irish moss	Unknown
St. Elizabeth														
% Kept by fisher	23	13	8	0	9	.	.	.	.	5	.	.	.	2
% Given to family/friends	4	1	3	0	1	.	.	.	.	0	.	.	.	1
% Sold to carrier boat	0	0	0	0	0	.	.	.	.	0	.	.	.	0
% Sold to wholesale vendors	12	28	25	100	19	.	.	.	.	62	.	.	.	0
% Sold to vendor	41	42	50	0	41	.	.	.	.	16	.	.	.	64
% Sold to hotel/restaurant	0	1	1	0	2	.	.	.	.	4	.	.	.	0
% Sold to processing plants	0	0	0	0	1	.	.	.	.	0	.	.	.	0
% Sold to consumer	19	16	12	0	25	.	.	.	.	13	.	.	.	33
% To other	0	0	0	0	0	.	.	.	.	0	.	.	.	0
N	12	106	283	3	80					26				4
Manchester														
% Kept by fisher	32	8	6	0	6	.	.	.	.	2	.	.	.	50
% Given to family/friends	2	0	2	0	1	.	.	.	.	1	.	.	.	2
% Sold to carrier boat	0	0	1	0	0	.	.	.	.	0	.	.	.	0
% Sold to wholesale vendors	0	7	5	0	5	.	.	.	.	7	.	.	.	0
% Sold to vendor	67	63	74	100	72	.	.	.	.	71	.	.	.	48
% Sold to hotel/restaurant	0	10	2	0	3	.	.	.	.	19	.	.	.	0
% Sold to processing plants	0	0	1	0	0	.	.	.	.	0	.	.	.	0
% Sold to consumer	0	12	9	0	12	.	.	.	.	0	.	.	.	0
% To other	0	0	0	0	0	.	.	.	.	0	.	.	.	0
N	3	28	289	1	89					26				2
Clarendon														
% Kept by fisher	8	5	9	17	7	.	.	50	.	7	.	.	.	18
% Given to family/friends	6	6	7	12	6	.	.	50	.	4	.	.	.	10
% Sold to carrier boat	0	0	0	0	0	.	.	0	.	2	.	.	.	0
% Sold to wholesale vendors	13	40	34	42	31	.	.	0	.	47	.	.	.	0
% Sold to vendor	46	38	37	30	42	.	.	0	.	35	.	.	.	55
% Sold to hotel/restaurant	3	1	1	0	4	.	.	0	.	2	.	.	.	0
% Sold to processing plants	1	0	0	0	0	.	.	0	.	0	.	.	.	0
% Sold to consumer	24	11	11	0	10	.	.	0	.	5	.	.	.	18
% To other	0	0	0	0	0	.	.	0	.	0	.	.	.	0
N	56	81	742	6	153			1		47				2
St. Catherine														
% Kept by fisher	7	12	7	10	6	2	.	.	0	4	.	.	.	3
% Given to family/friends	7	8	6	40	3	0	.	.	0	4	.	.	.	21
% Sold to carrier boat	0	0	0	0	0	0	.	.	0	0	.	.	.	0
% Sold to wholesale vendors	9	13	9	0	9	2	.	.	0	43	.	.	.	24
% Sold to vendor	35	50	49	0	60	89	.	.	33	29	.	.	.	49

Group to which fish is sold or given	Percentage of fish going to each group.													
	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Oyster	Conch	Crab	Lobster	Bait	Shark	Irish moss	Unknown
% Sold to hotel/restaurant	2	1	0	0	1	1	.	.	67	6	.	.	.	0
% Sold to processing plants	0	0	0	0	0	0	.	.	0	0	.	.	.	0
% Sold to consumer	39	16	28	50	21	5	.	.	0	14	.	.	.	4
% To other	0	0	0	0	1	0	.	.	0	0	.	.	.	0
N	122	99	554	2	306	42			3	15				8
Pedro Cays														
% Kept by fisher	4	1	2	.	4	.	.	0	.	5	.	.	.	.
% Given to family/friends	1	0	3	.	2	.	.	7	.	4	.	.	.	.
% Sold to carrier boat	92	85	88	.	87	.	.	93	.	69	.	.	.	.
% Sold to wholesale vendors	2	8	4	.	0	.	.	0	.	18	.	.	.	.
% Sold to vendor	0	5	2	.	7	.	.	0	.	4	.	.	.	.
% Sold to hotel/restaurant	0	0	0	.	0	.	.	0	.	0	.	.	.	.
% Sold to processing plants	0	0	0	.	0	.	.	0	.	0	.	.	.	.
% Sold to consumer	1	0	0	.	0	.	.	0	.	0	.	.	.	.
% To other	0	0	0	.	0	.	.	0	.	0	.	.	.	.
N	39	37	247		14			6		71				
Morant Cay														
% Kept by fisher	2	.	0	.	.	.	.	.	.	0	.	.	.	.
% Given to family/friends	0	.	0	.	.	.	.	.	.	0	.	.	.	.
% Sold to carrier boat	58	.	60	.	.	.	.	.	.	50	.	.	.	.
% Sold to wholesale vendors	34	.	34	.	.	.	.	.	.	50	.	.	.	.
% Sold to vendor	0	.	0	.	.	.	.	.	.	0	.	.	.	.
% Sold to hotel/restaurant	0	.	0	.	.	.	.	.	.	0	.	.	.	.
% Sold to processing plants	0	.	0	.	.	.	.	.	.	0	.	.	.	.
% Sold to consumer	6	.	6	.	.	.	.	.	.	0	.	.	.	.
% To other	0	.	0	.	.	.	.	.	.	0	.	.	.	.
N	5		5							2				

Table 9: The numbers of fishing vessels in use, and not in use by vessel category and parish.

Main areas	Wood Unmechanised < 32 ft.		Wood Mechanized < 32 ft		Fiber Unmechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other (raft etc.)		All vessels				No-boat fishers		
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Us	Both	% in Use	Spear-fishers	Land based	Total
North Coast																			
Portland	40	4	4	1	11	4	128	36	2		4		189	45	234	81	77	14	91
St. Mary	94	10	12	5	23	6	94	28	3	1		1	226	51	277	82	122	37	159
St. Ann	55	7	16	4	21		71	6	10			1	174	18	192	91	88	3	91
Trelawny	88	15	13	1	9		46	5	7			1	165	21	187	88	157	5	162
St. James	84	14	50	7	8		48	5	7	1			196	27	223	88	179	34	213
Hanover	224	23	108	20	6		30	6	0	0		1	368	51	419	88	261	17	278
Subtotal	585	74	203	39	78	10	418	86	28	2	6	2	1318	213	1531	86	879	110	989
South Coast																			
Kingston	1		3	3	6	2	120	45	7	2		1	137	53	190	72	16	22	38
St. Andrew	15	5			21	4	49	15	0	3			85	27	112	76	4	36	40
St. Thomas	38	4	12	5	9	4	95	16	1			1	155	31	186	83	56	4	60
Westmoreland	182	36	151	29	1	1	70	25	55	11	2		462	102	564	82	33		33
St. Elizabeth	23	2	11		1	3	96	3	11	1			142	10	152	93	18	24	42
Manchester	1		3		3	1	133	39	0				140	40	180	78	18		18
Clarendon	48	5	7		14	4	277	66	16	8			362	83	445	81	20	7	27
St. Catherine	76	21	16	7	55	24	265	87	12	4	1		426	144	570	75	122	11	133
Subtotal	381	77	208	48	107	38	1103	294	106	31	3	2	1909	490	2399	80	292	104	396
Pedro Cays			1		3	10	140	9	2				146	19	165	88	1		1
Morant Cays			2				7	3					9	3	12	75			0
Total	**966**	**151**	**414**	**87**	**188**	**58**	**1668**	**392**	**137**	**33**	**10**	**4**	**3382**	**725**	**4107**	**88**	**1172**	**214**	**1386**

Table 10: The numbers of vessels of various types by fishing beach, parish and fishing area.

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Un-mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other		Unknown		Total		Grand total
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	
KINGSTON																	
Greenwich Town	6	4			1	2	30	12		3					37	21	58
Gypsum Wharf													2		2	0	2
Harbour Head							5	1	2						7	1	8
Kingston Fishing Complex							1			2					1	2	3
Rae Town		1	1	2	2		25	11	2	0					31	14	45
Rockfort	1			1	2		5		1						9	1	10
Port Royal							56	24	1			1			57	25	82
ST. ANDREW																	
Bull Bay/Nine miles	12	1			20	4	16	2	1						49	7	56
Hunts Bay	5	9			2	3	9	7	1						17	19	36
Seven Miles								1					1		1	1	2
ST. THOMAS																	
Cow Bay	12	1		1	2	4	7	1							20	7	27
Dalvey	5	1	5	1			7	1							16	3	19
Duhaney Pen			1				4								5		5
Grants Pen	6				1		1								8		8
Holland Bay						1	2								2	1	3
Leith Hall	3	2					12	1				1			15	4	19
Lyssons	4			1	2	2	12	2							18	5	23
Morant Bay			2				23	2							25	2	27
Port Morant	1		1		2		16	5							20	5	25
Prospect	2	1	3	2	1	1	8	1							14	5	19
Rocky Point	3		2				12	2	2						18	2	20
Whitehorses			1				6	2							7	2	9
Yallahs	3				1		8	1							12	1	13
PORTLAND																	
Blue Hole						1	2	3							2	4	6
Boston	1					1	3								4	1	5
Bryans Bay	1					1	14	3							15	4	19
Buff Bay			1		4		1	1							7	1	8
Drapers	1						4								5		5
Hectors River	2	1	1												3	1	4
Hope Bay	1	2				1	3								4	3	7
Innes Bay	3						3								5		5
Kensington													5		5		5
Long Bay							1								1		1
Manchioneal	3			1	1	1	60	17							64	19	83
Norwich							3	1							3	1	4
Orange Bay	2	1			2		5	1							9	2	11
Panton Hope	1														1		1
Port Antonio							15	4	1						16	4	20
Priestmans River	1						2								3		3
Prospect	1				1		7	1			1				10	1	11

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Un-mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other		Unknown		Total		Grand total
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	
St Margaret's Bay	12				1		2	1			2				17	1	18
Windsor Castle	4														4		4
Winnifred Rest								2								2	2
ST. MARY																	
Anotto Bay/Top Bay/Cargil	10	1			4		16	2							31	3	34
Blackish Water	1														1		1
Boscobel			1		1		4	4							5	5	10
Breakfast Gap	12	2	1				2								14	3	17
Carlton /Salt Bay	2	1				1									2	2	4
Castle Gardens	4					1	3								7	1	8
Couples Beach								5								5	5
Dover Windsor	5				1		3								9		9
Ite Boreale	2	1				1									2	2	4
James Bond					2	6	2								4	6	10
Limeskill/Markham	1	1		1			1								2	2	4
Little Bay	2	1			1		1								4	1	5
Marking Stone/Hole	1						4								5		5
Marley Beach	4						1								5		5
Oracabessa	18		4		6		10	6	3	1					41	7	48
Pagee/Port Maria	4	1	4		1		36	2						1	46	4	50
Rio Nuevo	9		1		1		2								13		13
Robins Bay	5		2		5		2								14		14
Salt Bay	2	1			2		4	2							7	3	10
Strawberry Field						1										1	1
Sand Lane	1														1		1
Tower Isle	2				1			1							3	1	4
Bottom Bay/Anotto Bay													2		2		2
Burnwood	5	2			1		1								7	2	9
Punchin	1		2				5	1							8	1	9
ST. ANN																	
Alloah Old Folly/Discovery Bay	6	1	1	2			3	1			1				11	4	15
Heavy Sands	2														2		2
Laughlands	2				1		1								4		4
Mammee Bay	2				2		6	2							9	2	11
Priory	9	4			2		3	1	1						15	5	20
Runaway Bay	1				1		1								3		3
Sailors Hole, Ocho Rios	10			1	1		18	1	1						31	2	33
Salem	3		2		1		4								10		10
St Anns Bay	1				8		4								13		13
Swallow Hole	6	1			3		9	1							18	2	20
Top Beach/Discovery Bay	5	1	2	1			4	1	1						12	3	15
UDC Beach	0								5						5		5
White River	6		10	1	1		22	2							40	3	43
Pear Tree	1														1		1

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Un-mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other		Unknown		Total		Grand total
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	
Bottom/Discovery Bay																	
TRELAWNY																	
Braco	3				1		1								5		5
Charlotte Beach	3		1				1								5		5
Comfort Hall	4														4		4
Cooper's	10	4	3	1			3	1							17	6	23
Derbey's/Silver Sands	6		2		3		8	1							20	1	21
Duncan	0						1								1		1
Falmouth	16	5	2		2		6	2	5						30	7	37
Gentle Beach		1													0	1	1
Glistening Waters Marina							4		3						7		7
Halfmoon	6	1	1				5	1							12	2	14
New Town Beach	1		1				1								3		3
Rio Bueno	21	2					6								27	2	29
Rock	6	1	2				4	1			1				13	2	15
Scarlett Hall	5				1		1								7		7
Stewart Castle	2				2										3		3
Time and Place					1										1		1
Wiltshire	3		1				2								6		6
ST. JAMES																	
Bungalow Beach	6														6		6
Dump up Beach			2		2										3		3
Flanker Beach			2				9							1	11	1	12
Grange Pen	20	4	3												23	4	27
Great River	5						2								7		7
Harveys Salt Spring	9		2		1			2							14		14
Long Bay	8				2		3								13		13
Montego Bay Beach			2				2	1	1						5	1	6
Providence	2		2				2								6		6
Reading	2		2				1								5		5
River Bay	20	5	21	5	1		4	2	1	1					47	13	60
Rosehall Success	7	2	9				4								20	2	22
Spring Garden	8	3				1	2								10	4	14
Unity Hall													2		2		2
Whitehouse			1	1	1		25	2	1						29	3	32
HANOVER																	
Abingdon	9	2	2												11	2	13
Ballast Bay/Barbican Beach	1		1												2		2
Bar Lane Beach	3		1												4		4
Bloody Bay	2					2									2	2	4
Button Wood	7		1				5								13		13
Cousins Cove	10	3	2	3			1								13	6	19
Davis Cove	12		3												15		15
Elgin Town	7	1	4		1										13	1	14
Esher Cove	4		2					1							6	1	7

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Un-mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other		Unknown		Total		Grand total
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	
Great River	6	1	1												7	1	8
Green Island	34	2	9	1											43	3	46
Hopewell	1		3		1										5		5
Industry Cove	11	1													11	1	12
Johnson Town	5	1	8		2										15	1	16
Lances Bay	14		5				1								20		20
Little Cove	5		1					2							6	2	8
Lucea	10	5	41	10			6	1							57	16	73
Old Beach Road											1				1		1
Orange Bay	30	2	12	3			9	1							52	6	58
Orange Cove	9	1	2												11	1	12
Round Hill	1	1													1	1	2
Sandy Bay	31	2	9	2	2		1							1	44	5	49
Sawyer Beach	2	1					3	1							5	2	7
Seafield	2														2		2
WESTMORELAND																	
Belmont	8	6	3	1			8	6		2					19	15	34
Big Bridge	4	1	2				1								7	1	8
Black Bay	8			1	1	1	5	1							15	3	18
Bluefield	4	1													4	1	5
Bottom Beach									3	1					3	1	4
Campbell Beach	4	1													4	1	5
Casha Tree Beach							3								3		3
Cave	8		3	1			4	2							15	3	18
Corpie Beach			1	1											1	1	2
Cox Beach	2		6	1											8	1	9
Dillion	8	1					1								9	1	10
Homers Cove	18		8	2			2								28	2	30
Hope Wharf	23	2	5				2								30	2	32
Little Bay	9		2				3	1							14	1	15
Market Beach	1		7	1											8	1	9
Negril South Canal	2			1			1	2							3	3	6
Old Bay	1		4	1					29	3					34	4	38
Pampie Bay Beach	1		2	1											3	1	4
Parker Bay	10	4	1				4								16	4	20
Revival	1						0								1		1
River Bank	10	5	27	5			18	8				1			57	18	75
Salmon Point	25	2	8				2								35	2	37
Savanna La Mar								1								1	1
Scotts Cove			12	1			2								14	1	15
Smithfield	7	3	4	4			6	1		2	1				18	10	28
St Ann's	11	3	11	2			3	3	1						27	8	35
St Mary's	15	3	14	3			3	1							33	7	40
West End	3	2	0												3	2	5
Westland Beach	2	1	2				1								5	1	6

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Un-mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Other		Unknown		Total		Grand total
	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	In Use	Not in Use	
Whitehouse	1		26	4			1		19	3					47	7	54
ST. ELIZABETH																	
Billys Bay						1	8								8	1	9
Black River	2						9		5						16		16
Calabash Bay			1			2	13	5	2						16	7	23
Frenchman's Cove							8	2	1						9	2	11
Great Bay	2						24	2							26	2	28
Long Acre	6	2	8		1		10	1							25	3	28
Parottee	14		4				29	5							47	5	52
Verdon	1														1	0	1
MANCHESTER																	
Alligator Pond	1		3		3	2	132	40							139	42	181
Gut River							1								1		1
CLARENDON																	
Barmouth/Portland Cottage	12	3	5			1	33	9							49	13	62
Beauchamp	4						13	2							17	2	19
Carlisle Bay			1												1		1
Farquhars Beach					1		15	6	1						17	6	23
Jackson Bay		1			1		1								2	1	3
Knightis					1	1	7	1							8	2	10
Mitchell Town/Bogue	6				4		3								13		13
Portland Point							1								1		1
Rocky Point	5	1	2		5	2	192	33	13	7					216	43	259
Salt River	3						5	10	1	1					9	11	20
Welcome	11						5								16		16
West Harbour	12				2		3	1							17	1	18
ST. CATHERINE																	
Cause Way	38	1	1		13		49		1						103	1	104
Hellshire	2		2	1	1	1	27	14							32	16	48
Old Harbour Bay	18	2	10	6	12	8	149	67	12	4					202	87	289
Passage Fort	1	2	1		4		4	2			1				11	4	15
Port Henderson	3	1			11	6	19	3							34	10	44
Terminal Beach (Power Station)			2				3								5		5
Salt Pond	9				10		3								22		22
PEDRO CAYS																	
Pedro Middle					2	8	60	5	3						65	13	78
Pedro NE			1		1	2	81	5							83	7	90
MORANT CAYS																	
Morant Cays			2				7	3							9	3	12
TOTAL	961	141	409	83	192	67	1669	401	129	30	9	4	3382		3382	727	4109

Table 11: The numbers of no boat fishers by landing site.

Fishing beach	Spear fishers	Land-based	Total
KINGSTON			
Greenwich Town		1	1
Gypsum Wharf		26	26
Harbour Head	1	1	2
Port Royal	4	6	10
Rae Town	8	10	18
Rockfort	3	4	7
ST. ANDREW			
Bull Bay/Nine miles	4	4	8
Seven Miles	2	5	7
ST. THOMAS			
Cow Bay	6	2	8
Dalvey	13	1	14
Duhaney Pen	1		1
Grants Pen	1		1
Holland Bay	9	1	10
Lyssons	8		8
Prospect	14		14
Rocky Point	4		4
Yallahs	2		2
Morant Bay		1	1
PORTLAND			
Blue Hole		2	2
Boston	12		12
Bryans Bay	2		2
Buff Bay	2		2
Drapers	5		5
Hectors River	2	1	3
Hope Bay	6		6
Innes Bay	2		2
Kensington	5	3	8
Long Bay	10		10
Manchioneal	8		8
Orange Bay	2		2
Panton Hope	1		1
Port Antonio	2	4	6
Priestmans River	2		2
Prospect	8	4	12
Windsor Castle	2		2
Winnifreds Rest	4		4
ST. MARY			
Anotto Bay/Top Bay/Cargil	9	17	26
Boscobel	3	2	5
Bottom Bay/Anotto Bay		4	4
Breakfast Gap	15	2	17
Carlton /Salt Bay	8	1	9
Castle Gardens	3		3
Ite Boreale	1		1
James Bond	3		3
Limeskill/Markham	5		5
Little Bay	1		1
Marking Stone/Hole	5		5
Marley Beach	3		3
Oracabessa	6		6
Pagee/Port Maria	26	1	27

Fishing beach	Spear fishers	Land-based	Total
Robins Bay	9	2	11
Salt Bay	12	3	15
Stewart Town	4		4
Tower Isle	4		4
Blackish Water		2	2
Port Arthur	1	3	4
Punchin	3		3
ST. ANN			
Alloah Old Folly/Discovery Bay	4		4
Discovery Bay	7	1	8
Heavy Sands	1		1
James Ave.	8		8
Laughlands	2		2
Mammee Bay	16		16
Priory	7		7
Sailors Hole, Ocho Rios	21	1	22
Salem	4		4
St Anns Bay	1		1
Top Beach/Discovery Bay	6		6
White River	10		10
Pear Tree Bottom/Discovery Bay	1		1
Swallow Hole		1	1
TRELAWNY			
Brace	27	1	28
Comfort Hall	1		1
Cooper's	10		10
Derbey's/Silver Sands	19	2	21
Duncan	1		1
Falmouth	74	2	76
Halfmoon	13		13
Rio Bueno	2		2
Rock	3		3
Scarlett Hall	7		7
ST. JAMES			
Bungalow Beach	11	4	15
Dump up Beach	2	12	14
Flanker Beach	28		28
Grange Pen	20	4	24
Harveys Salt Spring	32	4	36
Long Bay	4		4
Reading	2	2	4
River Bay	6		6
Rosehall Success	39		39
Spring Garden	20	5	25
Unity Hall	4		4
Whitehouse	11		11
Great River		3	3
HANOVER			
Abingdon	10		10
Ballast Bay/Barbican Beach	1	1	
Barbican	16		16
Button Wood	22	2	24
Cousins Cove	2		2
Elgin Town	1		1
Fort Charlotte	11	2	13
Green Island	47		47

Fishing beach	Spear fishers	Land-based	Total
Hopewell	14		14
Johnson Town	19	4	23
Lances Bay	2	1	3
Lucea	19	4	23
Orange Bay	6		6
Point	44	2	46
Round Hill	14		14
Sandy Bay	23		23
Sawyer Beach		1	1
Sawyer Beach	9		9
WESTMORELAND			
Homers Cove	2		2
Little Bay	4		4
Negril South Canal	7		7
Old Bay	2		2
Parker Bay	3		3
River Bank	9		9
St Ann's	2		2
St Mary's	2		2
Westland Beach	2		2
ST. ELIZABETH			
Black River	4	4	8
Great Bay	2	8	10
Long Acre	12	2	14
Billys Bay		3	3
Calabash Bay		5	5
Frenchman's Cove	2	2	
MANCHESTER			
Alligator Pond	18		18
CLARENDON			
Barmouth/Portland Cottage	9		9
Jackson Bay	2	4	6
Mitchell Town/Bogue	1	1	
Rocky Point	7	1	8
West Harbour	2	1	3
ST. CATHERINE			
Cause Way	60	1	61
Hellshire	42	7	49
Old Harbour Bay	7	1	8
Port Henderson	8		8
Salt Pond	5	2	7
RO	1		1
PEDRO CAYS	1		1

Table 12: The numbers of boats targeting the various groupings of fish by fishing beach and parish.

Fishing beaches	Coastal pelagic	Offshore pelagic	Reef	Deep Slope	Snapper	Shrimp	Conch	Crab	Lobster	Irish moss	Total
KINGSTON											
Greenwich Town	11	3	13		9				1		37
Harbour Head			1		6						7
Kingston Fishing Complex					1						1
Port Royal		7			50						57
Rae Town	7	1	1	1	20						31
Rockfort	2		5		2						9
ST. ANDREW											
Bull Bay/Nine miles	1	11	4		32				1		49
Hunts Bay		3	3		9	3					17
Seven Miles											
ST. THOMAS											
Cow Bay	4	6	2		8						20
Dalvey		1	13	1	1						16
Duhaney Pen	1		3		1						5
Grants Pen	1	3			4						8
Holland Bay			1		1						2
Lieth Hall		1	6		8						15
Lyssons	1	6	9		2						18
Morant Bay											
Port Morant		2	7	1	10						20
Prospect		4	6		3						14
Rocky Point		2	15		2						18
Whitehorses	2		2		3						7
Yallahs			3		9						12
PORTLAND											
Blue Hole					2						2
Boston			4								4
Bryans Bay		4	5	1	5						16
Buff Bay			6		1						7
Drapers		1	3		1						5
Hectors River			3								3
Hope Bay			2	1	1						4
Innes Bay			3	1	1						5
Long Bay			1								1
Manchioneal	3		44	3	15						64
Norwich			3								3
Orange Bay		4	3		2						9
Panton Hope			1								1
Port Antonio		15	1								16
Priestmans River					3						3
Prospect		1	4		4						10
St Margaret's Bay	2	3	5	1	6						17
Windsor Castle			4								4
ST. MARY											
Anotto Bay/Top Bay/Cargil	2	16	9		5						31
Blackish Water			1								1
Boscobel			3	1	1						5
Breakfast Gap			12	1	1						14
Carlton /Salt Bay			2								2
Castle Gardens		3	1	1	1						7
Dover Windsor		1	8								9
Ite Boreale			1		1						2
James Bond		1	3								4
Limeskill/Markham		1			1						2

Fishing beaches	Coastal pelagic	Offshore pelagic	Reef	Deep Slope	Snapper	Shrimp	Conch	Crab	Lobster	Irish moss	Total
Little Bay			3		1						4
Marking Stone/Hole		2	3								5
Marley Beach		1	4								5
Oracabessa		12	22	1	6						41
Pagee/Port Maria		33	8	2	3						46
Rio Nuevo		3	7		3						13
Robins Bay		3	6		6						14
Salt Bay		4	2	2							7
Sand Lane					1						1
Tower Isle		3									3
Bottom Bay/Anotto Bay		2									2
Burnwood		1	4		2						7
Punchin		5	3								8
ST. ANN											
Alloah Old Folly/Discovery Bay	1	2	7		1						11
Heavy Sands		1	1								2
Laughlands		1	1	1	1						4
Mammee Bay	2	2	3		3						9
Priory	1	1	11	1							15
Runaway Bay		1	2								3
Sailors Hole, Ocho Rios		10	17	1	3						31
Salem		4	4		2						10
St Anns Bay		4	6	1	2						13
Swallow Hole		4	11		3						18
Top Beach/Discovery Bay		2	6	1	3						12
UDC Beach		4	1								5
White River	1	21	13	1	4						40
Pear Tree Bottom/Discovery Bay		1									1
TRELAWNY											
Braco			4		1						5
Charlotte Beach			3		2						5
Comfort Hall				1	3						4
Cooper's			13		4						17
Derbey's/Silver Sands		2	15		2				1		20
Duncan		1									1
Falmouth		6	16		8						30
Glistening Waters Marina		7									7
Halfmoon		2	6		4						12
New Town Beach		2	2								3
Rio Bueno	3	4	15		5						27
Rock	1	1	7		4						13
Scarlett Hall			7								7
Stewart Castle	2		2								3
Time and Place			1								1
Wiltshire		1	5								6
ST. JAMES											
Bungalow Beach		2	4								6
Dump up Beach					3						3
Flanker Beach		6	3		2						11
Grange Pen	2	9	9		3						23
Great River	1	1	1		4						7
Harveys Salt Spring		3	1		10						14
Long Bay		3	5		5						13
Montego Bay Beach		5									5

Left table

Fishing beaches	Coastal pelagic	Offshore pelagic	Reef	Deep Slope	Snapper	Shrimp	Conch	Crab	Lobster	Irish moss	Total
Providence		1	5								6
Reading		1	2		2						5
River Bay	1	14	12		20						47
Rosehall Success		3	7		10						20
Spring Garden	1	1	4		3						10
Unity Hall			2								2
Whitehouse		18	7		4						29
HANOVER											
Abingdon		2	6		3						11
Ballast Bay/Barbican Beach		1			1						2
Bar Lane Beach					4						4
Bloody Bay			1	1							2
Button Wood	1	3	5		3						13
Cousins Cove		3	10								13
Davis Cove		3	12								15
Elgin Town			12		1						13
Esher Cove		1	5								6
Great River		3	1		3						7
Green Island	4	6	10		23						43
Hopewell			5								5
Industry Cove					11						11
Johnson Town		8	2		6						15
Lances Bay		6	14								20
Little Cove			6								6
Lucea	1	38	11	3	4						57
Orange Bay		8	42		2						52
Orange Cove		1	10								11
Round Hill			1								1
Sandy Bay	1	4	25	3	12						44
Sawyer Beach		2	2		1						5
Seafield			2								2
WESTMORELAND											
Belmont		10	1		8						19
Big Bridge		1	6								7
Black Bay		5	1		8						15
Bluefield			3		1						4
Bottom Beach	2		1								3
Campbell Beach			4								4
Casha Tree Beach		3	0								3
Cave	1	4	8		2						15
Corpie Beach			1								1
Cox Beach	5		3								8
Dillion		3	3		2						9
Homers Cove		13	11		3						28
Hope Wharf		3	20	2	4						30
Little Bay		8	5		1						14
Market Beach	1		6		1						8
Negril South Canal		1	2								3
Old Bay	1	4	26		2					1	34
Pampie Bay Beach			3								3
Parker Bay			10		6						16
Revival			1								1
River Bank		13	35	1	8						57
Salmon Point	1	11	22	1							35
Scotts Cove		4	9						1		14
Smithfield		3	10		5						18
St Ann's	2		24		2						27
St Mary's	4	4	14		7	3					33

Right table

Fishing beaches	Coastal pelagic	Offshore pelagic	Reef	Deep Slope	Snapper	Shrimp	Conch	Crab	Lobster	Irish moss	Total
West End			3								3
Westland Beach		1	2		2						5
Whitehouse		32	15								47
ST. ELIZABETH											
Billys Bay		3	5								8
Black River		5	1		10						16
Calabash Bay		3	12		1						16
Frenchman's Cove		4	5								9
Great Bay		9	14		3						26
Long Acre			14		10				1		25
Parottee	1	9	28		7				1		47
Verdon			1								1
MANCHESTER											
Alligator Pond		3	90		45				1		139
Gut River			1								1
CLARENDON											
Barmouth/Portland Cottage		4	38		6				1		49
Beauchamp			7		9				1		17
Carlisle Bay			1								1
Farquhars Beach	1		12		3						17
Jackson Bay			2								2
Knightis	1	1	4		1						8
Mitchell Town/Bogue	1		10		2						13
Portland Point			1								1
Rocky Point	2	5	156	1	35				16		216
Salt River		4	4		1						9
Welcome	1		13		1						16
West Harbour	2		12		3						17
ST. CATHERINE											
Cause Way	1		2		62	37		1			103
Hellshire		2	27		3						32
Old Harbour Bay	18	6	95		75				7		202
Passage Fort	2		5		5						11
Port Henderson	5		18		12						34
Terminal Beach (Power Station)			2		3						5
Salt Pond	10		6		5						22
PEDRO CAYS											
Pedro Middle	1	2	59		2		1				65
Pedro NE	4	1	75		2				1		83
MORANT CAYS											
Morant Cays			9		0						9
Total	**130**	**591**	**1687**	**40**	**819**	**43**	**1**	**1**	**35**	**1**	**3348**

Table 13: The average numbers of crew and workers on each vessel type by parish. (N = number of vessels responding.)

Parish	Wood unmech <32ft.		Wood mech <32ft		Fiber unmech <32ft		Fiber mech <32ft		All mech 32-75ft		Other		Missing	
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N
Crew														
Kingston	1.0	1	3.0	3	1.3	5	2.4	108	4.0	6	.		4	14
St. Andrew	1.7	14	.				2.0	19	2.6	44	.		.	3	8
St. Thomas	1.8	32	2.0	10	3.0	8	2.8	81	7.0	1	.		5	23
Portland	1.9	32	2.0	3	2.0	9	2.6	104	2.0	2	1.7	3	.	36
St. Mary	1.6	70	2.3	9	1.5	17	2.5	70	4.0	2	.		2.25	58
St. Ann	1.5	45	1.6	13	1.7	17	2.3	58	2.4	8	1.0	1	1.5	32
Trelawny	1.5	76	1.8	11	1.5	8	2.2	40	2.4	6	.	1	1	23
St. James	1.5	64	1.9	38	1.3	6	2.2	37	2.0	5	.		.	46
Hanover	1.2	188	1.7	91	1.2	5	2.1	25	.		.		1.4	59
Westmoreland	1.7	165	2.9	137	2.0	1	2.8	63	5.6	50	1.0	2	.	44
St. Elizabeth	1.7	20	2.1	9	2.0	1	2.9	82	4.3	9	.		.	21
Manchester	2.0	1	3.0	2	2.5	2	2.3	99	.		.		.	36
Clarendon	1.9	42	2.2	6	1.8	12	2.9	240	2.6	14	.		2	48
St. Catherine	1.9	62	1.8	13	1.9	45	2.9	215	3.9	10	.	1	6	80
Pedro Cays	.		.	1	.	3	2.7	130	2.5	2	.		3	10
Morant Cay	.		3.0	2	.		2.7	6	.		.		.	1
Workers														
Kingston	-	1	-	3	-	5	0.2	108	-	6	.		0	14
St. Andrew	-	14	.		0.1	19	0.2	44	.		.		0	8
St. Thomas	0.3	32	0.5	10	0.1	8	0.4	81	.	1	.		1	23
Portland	0.0	32	-	3	0.1	9	0.4	104	0.5	2	-	3	.	36
St. Mary	0.1	70	0.1	9	0.4	17	0.2	70	0.5	2	.		0.25	58
St. Ann	0.1	45	-	13	-	17	0.2	58	-	8	-	1	0	32
Trelawny	0.1	76	-	11	-	8	0.3	40	-	6	.	1	0	23
St. James	0.1	64	0.1	38	-	6	0.2	37	-	5	.		.	46
Hanover	0.0	188	0.1	91	-	5	0.1	25	.		.		0	59
Westmoreland	0.1	165	0.1	137	-	1	0.2	63	0.6	50	-	2	.	44
St. Elizabeth	0.1	20	0.6	9	1.0	1	0.2	82	0.1	9	.		.	21
Manchester	-	1	0.5	2	-	2	0.3	99	.		.		.	36
Clarendon	0.1	42	-	6	-	12	0.3	240	0.3	14	.		0	48
St. Catherine	-	62	-	13	-	45	0.1	215	-	10	.	1	0	80
Pedro Cays	.		.	1	.	3	0.1	130	-	2	.		0	10
Morant Cay	.		-	2	.		0.3	6	.		.		.	1

Table 14: The numbers of carrier and recreational vessels of each type by parish.

Fishing beaches	Wood Un-mechanized < 32 ft.		Wood Mechanized < 32 ft		Fiber Mechanized < 32 ft		All Mechanized 32-75 ft		Missing		Total	
	Carrier	Recreational	Carrier	Recreational	Carrier	Recreational	Carrier	Recreational	Carrier	Recreational	Carrier	Recreational
KINGSTON												
Rae Town					1				1		2	
ST. THOMAS												
Lieth Hall					1						1	
Lyssons					2						2	
Morant Cays			1		1						2	
Prospect					1						1	
Rocky Point					1		1				2	
PORTLAND												
Kensington									3		3	
St Margaret's Bay	1										1	
ST. MARY												
Breakfast Gap						1						1
Oracabessa								1				1
TRELAWNY												
Glistening Waters Marina								1				1
ST. JAMES												
Montego Bay Beach				2		2						4
ST. ELIZABETH												
Black River							1				1	
Great Bay					5						5	
Parottee	1				3						4	
ST. JAMES												
Whitehouse					2						2	
CLARENDON												
Rocky Point					9	1	4		1		14	1
Salt River						1	1				1	1
Welcome					1						1	
ST. CATHERINE												
Old Harbour Bay					2		4		3		9	
PEDRO CAYS												
Pedro Middle					1	1					1	1
Total	**2**		**1**	**2**	**30**	**6**	**11**	**2**	**8**		**52**	**10**

Table 15: The numbers of vessels of each type using each of the main gear types.

Parish	Wood Un-mechanized < 32 ft.					Wood Mechanized < 32 ft					Fiber Un-mechanized < 32 ft					Fiber Mechanized < 32 ft					All Mechanized 32-75 ft					Other					All vessels			
	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots	Total	Nets	Lines	Diving	Pots
Kingston		1			**1**		2		1	**3**	4	1		0	**5**	21	81		13	**115**		5			**5**						26	95	1	15
St. Andrew	8	6		2	**16**				0	**0**	10	10		2	**21**	23	13		12	**48**					**0**						40	29	0	16
St. Thomas	10	17	1	5	**34**	3	2		5	**11**	5	1		2	**8**	23	23	9	32	**86**			1		**1**						45	48	12	50
Portland	10	23		4	**36**		1		2	**3**	1	5		3	**9**	5	51	8	55	**119**	1	1			**2**	1	2			**3**	20	91	9	70
St. Mary	16	52	2	14	**84**		4		7	**11**	3	13		3	**20**	5	56	2	22	**84**	1	1			**2**						28	142	4	52
St. Ann	6	27		20	**53**	1	7		7	**15**	6	5	8	8	**27**	12	29		27	**68**		8		1	**9**	1				**1**	26	75	8	64
Trelawny	18	25	3	38	**84**	2	3	1	4	**11**	2	2		4	**9**	8	18	1	17	**43**		6			**6**						33	59	5	68
St. James	18	43		15	**77**	7	12		25	**44**		5	5		**10**	1	22	3	18	**44**		6			**6**						29	95	9	63
Hanover	25	104		86	**215**	6	73		26	**106**	2	3		1	**6**	2	10	4	15	**32**					**0**						36	196	4	132
Westmoreland	49	46	14	74	**183**	26	35	4	86	**150**		1			**1**	10	36	6	18	**69**		4	5	45	**54**		1		1	**2**	85	124	28	225
St. Elizabeth	10	8	1	3	**22**	1	2	1	5	**10**				1	**1**	1	15	1	65	**83**				8	**8**						14	30	3	95
Manchester		1			**1**	1			1	**2**	1			1	**2**	25	11	10	61	**106**					**0**						34	15	13	79
Clarendon	25	8		10	**43**	5	1			**6**	5	3		4	**13**	88	40	52	73	**253**	5	3	1	5	**15**						142	60	58	102
St. Catherine	61	1	1	4	**67**	11	1	1	1	**15**	46	2			**48**	102	53	26	54	**235**	2	2		4	**8**						254	67	33	72
Pedro Cays					**0**					**0**					**0**		3	14	121	**138**				2	**2**						1	3	14	127
Morant Cay					**0**					**0**					**0**				5	**5**					**0**						0	0	0	9
Total	**250**	**355**	**24**	**271**	**900**	**61**	**141**	**8**	**170**	**381**	**87**	**49**	**4**	**31**	**171**	**331**	**471**	**141**	**614**	**1557**	**10**	**37**	**8**	**66**	**122**	**2**	**3**	**0**	**1**	**7**	**811**	**1128**	**203**	**1240**

Table 16: The numbers of vessels using each type of secondary gear by parish.

Parish	Second gear				Total
	Nets	**Lines**	**Diving**	**Pots**	
Kingston				4	4
St. Andrew	3	13		1	17
St. Thomas	12	14	2	3	31
Portland	5	21	1	6	33
St. Mary		2		10	12
St. Ann	1	10	3	16	30
Trelawny	16	15	3	16	50
St. James		4		5	9
Hanover	2	9	4	15	30
Westmoreland	9	28	3	20	60
St. Elizabeth	2	15			17
Manchester				1	1
Clarendon	6	14	6	26	52
St. Catherine	3	8	2	13	26
Total	59	153	24	136	372

Table17: Frequency of main gear and cross tabulation with second main gear in vessels.

Main gear		Second gear				Total frequency
Type	**Frequency**	**% nets**	**% lines**	**% diving**	**% pots**	
Nets	742	5	43	5	47	119
Lines	1041	17	5	6	72	100
Diving	186	23	39		5	13
Pots	1144	24	67	9		137
Total	3113	16	42	7	36	369

Table 18: Median values of reported catch per trip (kg) for various types of traps by vessel category and parish. (N = number of cases.)

Parish	Wood unmech < 32 ft.										Wood mech < 32 ft								Fiber unmech < 32 ft						Fiber mech < 32 ft									
	Z-traps		Jack pots		Crab traps		Diamond		Bamboo wood		Z-traps		Jack pots		Crab traps		Diamond		Z-traps		Jack pots		Crab traps		Z-traps		Jack pots		Crab traps		Diamond		Bamboo wood	
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston													20	1											200	7								
St. Andrew	60	1	70	1															30	3	20	1			30	12	10	1	100	1				
St. Thomas	14	7	15	2							40	5							25	1	30	1			40	40	15	8						
Portland	9	5	5	5	4	1	6	1			13	2	30	1					20	1	25	2			50	58	50	10			23	10		
St. Mary	10	11	20	10	3	5	3	5	4	2	10	5	5	2	0	1			25	4	13	4	2	1	10	22	10	21	5	5	2	1		
St. Ann	16	13	20	7							20	3	15	6					20	5	20	6			20	11	30	24						
Trelawny	15	43									13	5							18	4					15	21	100	1						
St. James	15	22									10	23	3	1			15	2	15	1					23	25			15	1				
Hanover	10	93	18	4	30	3	30	1			11	50					30	1	13	2					15	21								
Westmoreland	12	82	10	1							20	95	10	5											23	36	50	1						
St. Elizabeth	20	4									30	5							60	1					45	63	15	3						
Manchester											46	2							30	1					38	74	110	2			100	1		
Clarendon	70	13																	45	3					70	95	100	3					100	1
St. Catherine	18	2			60	1			1		30	1							60	1					30	54	80	7	25	1	90	3		
Pedro Cays																									200	115	250	7						
Morant Cay																									215	4	280	1						

Continue on next page

Table 18: Cont.

Parish	All mech 32-75 ft				Other		Missing			
	Z-traps		Jack pots		Z-traps		Z-traps		Jack pots	
	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston							25	2		
St. Andrew										
St. Thomas							100	1	120	1
Portland					6	1				
St. Mary							10	1	5	1
St. Ann			20	1			30	5	28	3
Trelawny							20	1		
St. James	10	1					5	1		
Hanover							4	1		
Westmoreland	200	42			10	1				
St. Elizabeth	1809	8								
Manchester										
Clarendon	300	5					27	2		
St. Catherine	60	3					20	7	51	2
Pedro Cays	350	2								
Morant Cay										

Table 19: Median values of reported catch per trip (kg) for various types of diving by vessel category and parish. (N = number of cases.)

Parish	Wood unmech < 32 ft.				Wood mech < 32 ft						Fiber unmech < 32 ft		Fiber mech < 32 ft						All mech 32-75 ft				Missing					
	SCUBA		Free lung		SCUBA		Hooka		Free lung		Free lung		SCUBA		Hooka		Free lung		Hooka		Free lung		SCUBA		Hooka		Free lung	
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston																			1091	1		1			0	1	42	4
St. Andrew																	7	1					5	1			9	1
St. Thomas			18	2					18	1	1	1	123	4			23	13			318	1	45	1			5	32
Portland			5	1							9	1		1	55	1	14	3									7	47
St. Mary			4	1												1	1	1					3	3			4	53
St. Ann									14	1	9	1					20	2					9	1			5	32
Trelawny	14	1	9	2	27	1					7	1	9	1			9	4									11	71
St. James			9	1	11	1			11	1	16	2	4	1			5	1					9	1	3	1	5	84
Hanover			4	8					3	3			7	1			6	2									4	133
Westmoreland			8	18			14	1	7	7			27	2			11	7	41	4					15	2	3	17
St. Elizabeth			5	2					3	1			182	1			3	1									5	10
Manchester													45	6									12	6			6	4
Clarendon			24	2									68	22	91	18	27	13	27	1							11	11
St. Catherine			7	1					9	1	18	1	6	12			13	19					14	4			9	23
Pedro Cays													91	1	23	9	30	2										1

Table 20: Median values of reported catch per trip (kg) for various types of line by vessel category and parish. (N = number of cases.)

Parish	Wood unmech < 32 ft.												Wood mech < 32 ft											
	Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line		Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line	
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston			4	1													23	1						
St. Andrew	23	1	13	2	23	1	18	1																
St. Thomas			14	18	14	4			5	1	9	3	23	1	9	3	14	1	5	1				
Portland	4	10	3	15	2	4	5	11	10	2						1			7	2				
St. Mary	2	24	7	46		1	2	12			5	2	25	4	280	2								
St. Ann	20	6	9	17			13	4	4	1	9	1	9	2	6	4			4	2			14	1
Trelawny	14	9	9	18			11	10	5	1	22	3			14	4								
St. James	5	4	7	37			9	10					14	10	7	20			5	3				
Hanover	5	3	5	87			5	46			9	1	18	47	9	26			5	4	5	1		
Westmoreland	5	18	5	46			4	11					5	19	16	39			3	5	9	4		
St. Elizabeth	11	2	6	8							25	2	9	3	9	4			14	1				
Manchester	6	1																						
Clarendon	23	5	6	2					18	3	7	1			5	1								
St. Catherine			14	4			5	1							9	1								
Pedro Cays																								
Morant Cay																								

Table 20: Cont.

Parish	Fiber unmech < 32 ft												Fiber mech < 32 ft											
	Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line		Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line	
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston			5	1									36	5	27	34	27	13	50	28	45	5	36	17
St. Andrew	20	4	27	8	23	1	17	2					23	3	25	20	45	1	23	2	41	1		
St. Thomas			9	1	14	1							23	22	14	33	11	6	23	28	11	2	14	4
Portland	7	2	9	3			7	4			5	1	23	66	23	63	27	14	25	41	11	3	5	4
St. Mary	2	5	7	11		1	2	3					9	38	9	23	9	2	14	3	9	1	9	1
St. Ann	14	4	2	1			9	5					20	24	14	11			9	4	18	6	14	1
Trelawny			14	2			682	2					7	11	9	4	2	1	230	5	7	5		1
St. James	5	1	5	4				1					11	23	9	14			18	3	18	3		
Hanover			5	5									9	8	23	6			7	4				
Westmoreland			9	1									18	13	14	36			5	2	14	15		
St. Elizabeth													9	5	9	17	9	3	9	2	9	10	5	1
Manchester													.		15	10			27	1	18	5		
Clarendon			14	1					22	4			82	26	36	24			80	22	18	4	73	2
St. Catherine			18	3									27	7	27	43	16	2	18	12	91	1	23	4
Pedro Cays													23	9	30	2				1			27	1
Morant Cay															9	1			13	2				

Table 20: Cont.

Parish	All mech 32-75 ft												Other						Missing											
	Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line		Hand line		Palanca		Drop line		Trolling		Hand line		Palanca		Drop line		Rod & reel		Long line	
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston			45	1	45	3			194	1	909	1							1,364	1	9	12	45	3	18	3				
St. Andrew																			5	6	9	17					9	4		
St. Thomas																					3	6								
Portland	34	2	45	1									2	2	1	1	5	2			2	10								
St. Mary	218	1	145	1	136	1			45	1										1	3	24			1	3	2	1		
St. Ann	9	2	91	1					80	4									41	1	8	7			5	1				
Trelawny	5	3							9	2									230	4	455	4								1
St. James	12	5																	1	1	4	16			4	2	4	1		
Hanover																			14	2	3	11								
Westmoreland	136	1	125	4	136	1	95	2																						
St. Elizabeth																			5	3	5	16								
Manchester																														
Clarendon	7	1		1			23	1													5	3					9	1		
St. Catherine			50	2															8	5	17	39	23	2	18	6	6	2		
Pedro Cays																														
Morant Cay																														

Table 21: Median values of reported catch per trip (kg) for various types of net by vessel category and parish. (N = number of cases.)

Parish	Wood unmech <32ft. China net Median	N	Beach seine Median	N	Sprat net Median	N	Trammel Median	N	Cast net Median	N	Lobster net Median	N	Shove net Median	N	Trawl Median	N	Bait net Median	N	Gill net Median	N	Mullet net Median	N	Shrimp net Median	N	Wood mech <32ft China net Median	N	Beach seine Median	N	Sprat net Median	N	trammel Median	N	Cast net Median	N
Kingston																																		
St. Andrew	318	3					23	4																										
St. Thomas	9	1	19	1	45	3	13	12											9	1											18	2		
Portland			5	2			4	9	2	1																								
St. Mary	23	1			7	1	6	13				1		1			14	2																
St. Ann	23	1			10	1	14	3							55	1															9	1		
Trelawny	18	11			14	4	9	2							9	1						1			14	3								
St. James	11	17	11	1	14	1	.																		9	8	34	2			9	1		
Hanover	5	20	3	2	13	2	9	5									2	3							11	7								
Westmoreland	9	21	50	12	36	2	14	1							16	2							9	5	18	16	45	1	91	7	18	4	5	1
St. Elizabeth	9	7	2	1	1	1	7	3					9	1							5	1			7	1					9	1		
Manchester																									16	1								
Clarendon	22	21	73	2																					30	5								
St. Catherine	14	55			9	1	23	4						1											14	12								
Pedro Cays																																		

Table21: Cont.

| Parish | Fiber unmech<32ft | | | | | | | | | | | | Fiber mech<32ft | | | | | | | | | | | | | | | | | | | | | |
| | China net | | Beach seine | | Sprat net | | trammel | | Gill net | | Mullet net | | China net | | Beach seine | | Sprat net | | trammel | | Cast net | | Lobster net | | Shove net | | trawl | | Bait net | | Gill net | | Mullet net | |
	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N	Median	N
Kingston					23	1	6	2					118	3			23	11	14	7									136	3				
St. Andrew			45	1	32	1	27	8					68	2	45	1	45	14	45	11		1	27	3										
St. Thomas			92	2			9	5					36	3	5	1	27	4	23	33	18	1									5	1		
Portland							18	3							3	1			13	18														
St. Mary	18	1					5	3							2	1			3	7											5	1		
St. Ann		1	7	1			13	4					14	5			30	1	14	9														
Trelawny	14	2											14	7																				
St. James	7	1											27	4			9	1																
Hanover	8	1											14	4																	9	2		
Westmoreland													20	12	34	2	3	1	14	3														
St. Elizabeth													7	2	9	1																	5	1
Manchester	5	1											27	19	25	4			27	1														
Clarendon	27	5											45	82			7	1	45	2	9	1						1	11	1	82	2		
St. Catherine	18	33					28	2	3	1		2	18	78	11	2	18	5	20	16							23	2			31	2		
Pedro Cays													273	1																				

Table21: Cont.

Parish	All mech 32-75ft China net Median	N	Sprat net Median	N	Trammel Median	N	Other Sprat net Median	N	Trammel Median	N	Missing China net Median	N	Beach seine Median	N	Sprat net Median	N	Trammel Median	N	Cast net Median	N	trawl Median	N	Bait net Median	N
Kingston			159	1											36	2		1						
St. Andrew															45	1	45	1						
St. Thomas					45	1					16	2		1		1		1						
Portland					36	1			7	1							162	1						
St. Mary					455	1						1		1				2	9	1			8	2
St. Ann							5	1			16	6			7	3	14	3	14	2				
Trelawny											5	1			5	1			50	1				
St. James																								
Hanover											5	1	2	1										
Westmoreland																								
St. Elizabeth																								
Manchester																								
Clarendon	182	5																						
St. Catherine	295	2									15	14					18	3				1		
Pedro Cays																								

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Table 22: For each resource type, the percentage of respondents indicating that a particular month was the good fishing season (months > 50 % are in bold to indicate best season).

Month	Type of resource										
	Coastal pelagic	Offshore pelagic	Reef	Deep slope	Snapper	Shrimp	Conch	Crab	Lobster	Bait	Shark
January	49.1	34.7	**54.3**	31.8	30.3	39.5	**75.0**	50.0	**61.5**		**50.0**
February	43.4	27.7	**50.1**	24.7	26.3	18.2	**100.0**	50.0	**57.7**	0.0	**50.0**
March	39.2	29.1	**54.2**	35.6	25.8	15.9	**100.0**	75.0	37.1	0.0	**66.7**
April	38.5	27.9	**51.3**	43.7	24.4	18.6	**75.0**	50.0	20.4	0.0	**66.7**
May	38.3	25.9	47.2	40.2	23.4	23.3	50.0	25.0	17.3	0.0	40.0
June	47.2	33.5	**52.8**	33.7	31.8	59.1	25.0	50.0	29.0	0.0	40.0
July	50.5	37.9	**55.5**	36.9	35.8	61.4	25.0	75.0	47.5	0.0	40.0
August	**58.0**	**54.6**	**68.7**	**52.7**	49.2	63.6	50.0	100.0	**53.2**	0.0	40.0
September	**71.8**	**66.3**	**75.7**	**76.2**	**69.5**	47.7	75.0	100.0	**63.5**	50.0	40.0
October	**69.4**	**68.4**	**75.4**	**83.2**	**78.0**	**66.0**	75.0	100.0	**64.2**	100.0	**80.0**
November	**62.0**	**56.1**	**69.3**	**63.7**	**62.8**	**83.0**	50.0	50.0	**68.4**	0.0	**100.0**
December	**59.9**	47.5	**64.8**	**51.8**	48.0	**69.6**	50.0	25.0	**66.3**	0.0	**80.0**
Respondents	411	1500	3660	83	1498	43	1	4	94	2	5

PARISH		CONSTITUENCY		ED NO.		FISHING BEACH			

BOAT	OWNER/ OWNER CAPT NO.		BOAT NO.		CREW NO.		NAME	NICKNAME	BEACH	EX	GE	OLE	TYPE OF FISHING	NO. OF BOAT OWNED

ROLE: **1=OWNER**   **2=OWNER/CAPTAIN3=CAPTAIN**   **4=CREW(REGULAR)**   **7=CREW(TEMP)**

Role: **5=No Boat Fishing (land)**   **6=No Boat Fisherman (sea)**   **9=Other (specify_____)**

Type of Fishing: 1=Diving   **2=net**   **3=line**   **4=pot**   **5=Purchasing**   **6=Other (specify_____)**

CENSUS OF BOATS IN THE JAMAICAN FISHING INDUSTRY

FC - 002

Parish code		Constituency Code		Enumeration District			Questionnaire No.			

Interviewer: ____/____/____/____/ Date: ____/____/____ Interview Site _____

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6 INTERVIEWER INSTRUCTIONS

If a Spear fisherman (and fishers fishing without a boat), Do Section 1 and Sections 6 to 9

6.1.1.1 SECTION 1: INFORMATION ON RESPONDENT

1.1 Name of Respondent: _____

1.2 Nickname of Respondent:
   _____

1.3 What Is your role in the fishery? [1] Captain   [2] Owner *Go to Section 2*   [3] Owner/Captain *Go to Section 2*   [4] crew   [5] Spear fisherman   Other
   (specify)_____

1.4 Sex: [1] Male [2] Female   1.5 Date of Birth:
   _____

1.6 Home Address: _____
1.7 Home Telephone:
   _____

1.8 Are you a registered fisher? [1] Yes   [2] No   Fishers Licence Number:
   _____

1.9   How long have you been fishing? _____ Period [   ]   1=days 2=weeks 3=months
      4=year

      1.10   Which is the last school you attended?   [1] None   [2] Primary   [3] New/Junior
Secondary
                                    [4] Traditional/Technical/Comprehensive High   [5] College/University

6.2   SECTION 2: INFORMATION ON VESSEL OWNER AND USERS

2.1   Name of Vessel Owner: _____

2.2   Nickname of Vessel Owner: _____

2.3   Sex: [1] Male   [2] Female   2.4   Date of Birth:
      _____

      2.5   Home Address:
_____

2.6   Home Telephone:
      _____

2.7   Are you a registered fisher? [1] Yes [2] No   Fishers License Number:
      _____

      2.8   How longhave you been fishing? _____ Period [   ] 1=days 2=weeks 3=months
            4=year

      2.9   Which is the last school you attended?   [1] None   [2] Primary   [3] New/Junior
            Secondary
                              [4] Traditional/Technical/Comprehensive High   [5] College/University

      2.10   How many vessels do you own?   [   ]   ]

2.11   Are any of your boats [1]rented [2]leased [3]lend to any other users than present crew?   [4]No
            If no, skip to Section 3

2.12   How many groups of users? [   ]   ]

2.13   Please give me the names/nicknames and fishing beach of the groups of users:

Names of Group 1	Nicknames	Fishing Beach	Licence Number	Role

Names of Group 2	Nicknames	Fishing Beach	Licence Number	Role

6.2.1.1 SECTION 3: INFORMATION ON VESSEL

3.1   Name of Vessel:

_____

3.2   Is this vessel registered? [1] Yes [2] No   Vessel Registration Number: _____

3.3   Which beach is the boat registered at?   _____ [ ]] Parish
_____[ ]]

3.4   What is the size of this boat: Length: [ ]] feet   Width: [ ]] feet   Depth: [ ]] feet

3.5   What is this boat made of?   [1] Dug out   [2] Plywood   [3] Steel   [4] Fibreglass   [Other]
(specify)_____

3.6   Which colour(s) is this boat painted? outside_____   inside_____
deck_____

3.7   How is your boat powered?

(a) Non-mechanized: [1] Oars   [2] Sails   [3] Other *(Skip to 2.7)*

(b) Mechanized: [4] Outboard [5] Inboard   [6] Other (specify) _____

3.8   Please list the brand and horsepower of the engines are used on this boat:

Engine	Brand Name	Horsepower
1		
2		
3		
4		

3.9   When was this boat last used for fishing?   [ ] this week/month   [ ] last month ***Go to 3.11***

[ ] earlier this year   [ ] long time

3.10   Why is the boat not in use?   _____

_____

(TERMINATE INTERVIEW)

3.11   Where do you moor/parked/anchor the boat?_____ [ ]] Parish _____[ ]]

3.12   Which beach do you sell the catch?   _____ [ ]] Parish _____[ ]]

6.2.1.2 SECTION 4: INFORMATION ON THE CREW

4.1   What is the regular size of your crew?   [   ]   ]

4.2   How many additional workers do you have on the vessel?   [   ]   ]

4.3   How often do you change crew?   Times [   ]   ]   Period [   ]   ]

6.2.2   *Period class: 1 = day   2 = week   3 = fortnight   4 = month   5= year   6 = seldom   7 = never*

4.4   Please give me the name of the captain of your vessel and his license number:

[Self]   [Other] _____   Fishers Licence Number: _____

4.5   Please give me the names/nicknames and fishing beach of your crew:

Name	Nickname	Fishing Beach	Licence Number	Role

6.2.2.1   SECTION 5: FISHING OPERATIONS

5.1   What operations are this boat involved in?   *Select all that apply*
[1] Small-Scale fishing [2] large Scale fishing [3] Fish for fun [4] Fish for family
[5] Buy fish to sell
[Other] (specify): _____

5.2   How is this boat primarily used?   [1] Carrier [2] Packer [3] Big Head [4] Fishing
[5] Charter [6] Taxi
[Other]
(specify):_____

5.3   Do you fish within Jamaican waters (shelves, Pedro and Morant Banks)?   [1] Yes   [2] No

5.4   Do you fish outside Jamaican territorial waters (Baja Nuevo, Serrano, Alice Shoal)? [1] Yes   [2] No

5.5   Exactly where do you fish?   Primary   _____ _____   [ ]]]]

                                    Secondary   _____   [ ]]]]

6.2.2.2 SECTION 6: FISHING PRACTICES

6.2.2.3

6.1   Do you normally fish on weekends?   [1] Yes   [2] No   On holidays?   [1] Yes   [2] No

6.2   What time of day do you usually land your catch? _____ [   ]   ]   ]   ]

Why? _____ [   ]   ]   ]   ]

6.3   How far is your main fishing ground from your fishing beach?

   Distance [   ]   ]   ] Measure [   ]   *Miles = 1   Km = 2   Other (Specify)* _____

6.4   What is the average amount of gas used per trip? Amount [   ]   ]   ]   Measure [   ] *gallon = 1*
       litre = 2

6.5   Please describe the types of trips the vessel make:

Type of Trip	Du ration	P urpose	Trips per Week	Gea r Type	For Purchasers Only		
					Trips/ Average wt Month fish/ trip		# boats bought from at Cays

Type Codes   Duration Codes   Purpose Codes   Gear Codes

1 = Day   1 = 2 trips/dy   1 = fishing only   1 = nets

2 = Night   2 = 1 trip/day   2 = purchase fish   2 = lines

3 = Day/Night   3 = 2-3days/trip   3 = purchase & fishing   3 = dive

4 = 4+ days/trip   4 = taxi   4 = pot

Other (specify)   Other (specify) _____

_____

6.6   How long has the boat been involved in present activities? _____ Period [   ] 1=days 2=weeks 3=months 4=year

6.7   In what container do you store fish while at sea?   *N.B. Please specify units.*

Type	Number of	Storage Capacity (lbs/kg fish)
Basket		
Built-in Ice Box		
Freezer		
Portable Igloo		
Bottom of Boat	1	

6.8   How is the fish kept from spoiling while you are at sea? (**T*ick all that apply***)
       [1] Cover with banana leaf   [2] Cover with wet crocus bag   [3] Ice   [4] Gutted

       Other (specify) _____   [   ]

SECTION 7: GEAR SPECIFICATION

IF PURCHASER ONLY, go to question 8.1

   7.1   What is the main fish type this vessel is targeting? _____   [   ]   ]   ]   ]

   7.2   What is the main gear type this vessel uses? _____   [   ]   ]   ]   ]

   7.3   Could you give me an idea of all the gear used on this vessel and how it is used.

NETS

Type	M of Nets	esh Size	# of shoots per trip	Weight of the net(s) *Wt. Code* 1=Kg 2=1b		H ours spent fishing per trip	Average catch per trip in past 12 months	Main fishing ground
China								
Beach Seine								
Sprat Net								
Trammel								
Cast Net								
Lobster Net								
Shove Net								
Trawl Net								
Bait Net								

   LINES

Type	# lines used per trip	# of hooks per line	Line test	Hours spent fishing per trip	Average catch per trip in past 12 months	Main fishing ground
Troll Line						
Hand Line						
Palanca						
Drop Line						
Rod & Reel						

Long Line						

DIVING

Type	pear Gun	awaiian Sling	and, Grab	N o. of Dives per trip	N o of Divers per trip	Ti me under water per trip	Average catch per trip in past 12 months	Main fishing ground
SCUBA								
Hooka								
Free Lung								

POTS

Type	Z-Traps	Jack Pots	Crab Traps		
Average Size					
# of pots soaking					
# of pots on land					
# of pots being built					
Mesh size					
Soak Time (days)					
Average Catch/Trip					
Life Expectancy					
Main fishing ground					

SECTION 8: CATCH CHARACTERISTICS

8.1   Please indicate the types of fish the vessel lands (or purchase) on a typical trip.

Type of Fish	Co de	% of catch	Boat price per lb

SEASONALITY

8.2 Which months are high/low season, bad/good weather?

[1] low season [2] high season [3] bad weather [4] good weather

Type of fish	O	N	D	J	F	M	A	M	J	J	A	S

S = Season   W = Weather

SECTION 9: MARKETING ARRANGEMENTS

9.1 What percentage of your catch/stock is sold to:

List fish types at top on horizontal axis.

(Note: Catch must add up to 100%)	Lobster						
Retained by Fisher							
Given to Family and Friends							
Sold to Carrier Boats							
Sold to Wholesale Vendors							
Sold to Retail Vendors							

Sold to Hotels & Restaurants							
Sold to Processing Plants							
Sold to Consumer							

COMMENTS: _____

_____

SUPPLEMENTAL FORM

(POST - MITCH)

CENSUS OF BOATS IN THE
JAMAICAN FISHING INDUSTRY

FC – 005

Parish code		Constituency Code		Enumeration District			Questionnair e No.			

Interviewer: ____/____/____/____/   Date: ____/____/____   Interview Site

_____

7	INTERVIEWER INSTRUCTIONS

7.1.1   Pedro and Morant Cays Boat Owners Only

As a result of Hurricane Mitch in November 1998, the loss of equipment and gears on the Offshore Cays and the South Shelf has been extensive. The Fisheries Census would like to capture information on the extent of the damages and the rebuilding process. Thus we would like to ask a few more questions on how Hurricane Mitch has affected your fishing habits and practices.

7.1.1.1 SECTION 10: IMPACT OF HURRICANE MITCH

10.1   Was the engine for this vessel damaged in Mitch?   Yes [   ]   No [   ] *If no damage, go to question 10.2*

Please describe the Extent of the Damage:

[ ]   Slight damage (did not stop boat going to sea)

[ ]   Significant damages (less than $5,000 repairs before going to sea)

[ ]   Moderate damage (between $5,000 and $25,000 needed)

[ ]   Severe damage (needs J$25,000+ to repair)

[ ]   Engine totally destroyed/lost at sea

Please describe the Nature of the Damage: _____

_____

10.2   Was this vessel damaged in Hurricane Mitch?   Yes [ ]   No [ ] *If no damage, go to question 10.3*

Please describe the Extent of the Damage:
[ ]   Slight damage (did not stop boat going to sea)
[ ]   Significant damages (less than $20,000 repairs before going to sea)
[ ]   Moderate damage (between $20,000 and $100,000 needed)
[ ]   Severe damage (needs J$100,000+ to repair)
[ ]   Boat totally destroyed/lost at sea

Please describe the Nature of the Damage: _____

_____

10.3   Has this vessel been used for fishing since Mitch?

Yes [ ] *If yes,* On which date was it first used for fishing?_____

Where do you now operate the vessel? _____

Is the vessel fishing the same area now as before Mitch?
[ ]   Fishes in same area
[ ]   Fishes in different area (Name) _____

Is the same gear type in use now as before Mitch?
[ ]   Same gear
[ ]   Different gear (Name) _____

No [ ] *If no,* Do you intend this vessel to resume fishing?   Yes [ ]   No [ ]

When do you plan for this vessel to resume fishing? _____

What is determining how soon this vessel resumes fishing? _____ _____

From where do you intend to operate the vessel? _____

Do you intend the vessel to fish the same area as it did before Mitch?
[ ]   Will fish in same area
[ ]   Will fish in different area (Name) _____

Do you intend the vessel to use the same gear type as before Mitch?

[ ]   Same gear

[ ]   Different gear (Name) _____

If vessel is not going to sea, go to question 10.8

10.4   Since Hurricane Mitch, have you been able to rent/lease your boat to other users?   Yes [ ]   No [ ]
        If no, go to question 10.5

        How many groups of users?   [   ]   ]

        Have you rented/leased to any new users since Mitch?   Yes [ ]   No [ ]

10.5   Is the number of your crew members the same now as before Mitch?

        [ ]   Reduced numbers
        [ ]   No change
        [ ]   Increased numbers

10.6   Since Mitch, do you now fish on weekends?   [1] Yes   [2] No   On holidays?   [1] Yes   [2] No

10.7   Please describe the types of trips you have been making since Mitch:

Type of Trip	Du ration	P urpose	Trips per Week	Gea r Type	For Purchasers Only		
					Trips/ Average wt Month fish/ trip		# boats bought from at Cays

Type Codes	Duration Code	Purpose Codes	Gear Codes
1 = Day	*1 = 2 trips/dy*	*1 = fishing only*	*1 = nets*
2 = Night	*2 = 1 trip/day*	*2 = purchase fish*	*2 = lines*
3 = Day/Night	*3 = 2-3days/trip*	*3 = purchase & fishing*	*3 = dive*
	4 = 4+ days/trip	*4 = taxi*	*4 = pot*

7.1.1.1.1   *Other (specify) _____*   *Other (specify) _____*

10.8   Could you give me an idea of all the fishpots from this vessel, which were lost or damaged by Hurricane Mitch, and how the remainder is used.

Type	Z-Traps	Jack Pots			
Average Size					
Total pots before Mitch					
# damaged & fixable					
# pots destroyed/lost					
# pots with no damage					
# pots built/ repaired since Mitch					
# pots now soaking					
# pots now on land					
# of pots being built					
Mesh size					
Soak Time					
Average Catch/Trip					
Main fishing ground					

10.9   How have you financed your boat, engine and gear repairs/replacement up to now?

[ ]   no repairs/replacement yet
[ ]   self (from savings, partner)
[ ]   loan from relatives (local)   [ ]   loan from relatives (overseas)
[ ]   loan from financial institution
[ ]   gift from relatives (local)   [ ]   gift from relatives (overseas)
[ ]   gift from politician
[ ]   other (specify): _____

10.10   How do you intend to finance your boat/engine/gear repairs/replacement?

[ ]   self (from savings, partner)
[ ]   loan from relatives (local)   [ ]   loan from relatives (overseas)
[ ]   loan from financial institution
[ ]   gift from relatives (local)   [ ]   gift from relatives (overseas)
[ ]   gift from politician
[ ]   gift from government   [ ]   other (specify):
_____

7.1.1.1.1.1

7.1.1.1.1.2 **COMMENTS:**

CENSUS ON THE
FISHING INDUSTRY
1998

7.2   INTERVIEWER'S INSTRUCTION MANUAL

by

MINISTRY OF AGRICULTURE,
FISHERIES DIVISION & STATIN

7.2.1   <u>CONTENTS</u>

7.2.1.1 ANNEXES

Boat Size

Vessel Type

Fishing areas in Jamaica

Storage Facility

Gear Type

Fish Type

1. OVERVIEW OF THE FISHING INDUSTRY

The fishing industry plays an important role in the Jamaican economy as it provides direct employment for many people, it is a foreign exchange earner, and is traditionally an important source of protein. Many coastal communities have developed around fisheries. The fisheries of Jamaica comprise marine and freshwater components. Within these major components, the main resources exploited are finfish and shellfish, including some mollusks (conch).

1.1 The Marine Capture Fishery

The marine capture fishery is primarily artisanal in nature; ie. There is low technology cost and is conducted mainly by fishermen operating from canoes. The marine fishery is divided into 2 main regions:

- Inshore fishery – fishers operate on the island shelf (north, south, etc.)
- Offshore fishery – outside the shelves (eg. Pedro Bank and Morant Bank, etc…)

1.2 Fish Type

Commercial harvested species comprise:

- Reef fish (parrotfish, runt, doctorfish etc.), for marketing purposes this group is further divided into quality (parrotfish, goatfish), common (grunt) and trash (doctorfish etc.)
- Deepslope – silk and satin snappers
- Coastal Pelagics – sprat, pinchers, macaback
- Offshore Pelagics – mackerel, jacks, barracuda, dolphinfish, tuna, marlin
- Snappers
- Conch
- Lobster
- Shrimp
- Oyster
- Crab

1.3 Fishing Methods

The most common fishing method used in Jamaican water is:

- Fish traps or pots (Antillean Z-trap) used to catch reef fish;
- Gill, seine and throw nets are used mainly to catch offshore and coastal pelagics;
- Handlines, longline and troll lines used to catch reef and pelagic fishes;
- Diving includes hand-collection and speargun used for reef, pelagics, conch and lobster.

1.4 Fish processing

Many major companies process fish and shellfish for the export market. Largely fish processing standards used are those set by the importing countries. Various government agencies have an input in establishing regulations for the processing of fish to varying degrees eg. Ministry of Health, Veterinary Division, JAMPRO and the Bureau of Standards.

Fish is processed to various levels. Most fish is exported from the island either fresh or in frozen packages. Fish is also exported salted, pickled or canned. Conch on the other hand, one of Jamaica's largest export earners is processed to various levels 50%, 60%, 75% and 100%. The percentage of processing depends on the amount of cleaning the animal has undergone.

1.5 Distribution of Catch

The majority of Jamaica's fish catch is distributed to the consumers directly through the marketing system, or indirectly via fish processors, fish chefs, or restaurants. The rest, mainly conch and lobsters form a part of the export market.

2. EXPLANATORY NOTE

The Ministry of Agriculture, Fisheries Division is interested:

- In the continued development of the fishing sector, in order to improve the social and economic conditions of the fisheries of Jamaica.
- A healthy fish stock so that individuals who depend or earn a living from the fishery can continue to do so
- Where possible improve income, increase export and food supply

Over the years the Division has been operating without a true estimate of the number of fishers and boats operating in the sector. This survey will:

- Obtain a count of fishers, vessels and gears operating in the sector
- Provide the base-line information necessary to set priorities for policy decision
- Planning
- Further development of the fisheries
- Companies need to make plans, whether to expand or not, this decisions have to be based on the performance of the sector, which we can only get through a survey of this type.

3. THE INTERVIEWERS TASKS

The interviewer's role is "capital" to the survey. The quality of the data and of the whole survey will be determined by the quality of the interviewer's work. You must, therefore, follow exactly all the instructions contained in this manual. You must also be constantly in touch with your supervisor and inform him/her of any problem you encounter during your work in the field. The supervisor, for his/her part, will

- Provide you with all the necessary materials and instructions;
- Collect and check your work; and
- Help you to solve any problem which may arise

3.1 Interviews of boat owners and fishers that fish without a boat

Your main task is to conduct interviews with boat owners, where the boat owner is not available the operator, captain or the person left in charge of the boat. In some instances fishers' fish without a boat eg. spearfishers, they too are to be interviewed. This survey should be completed in 9 weeks.

3.2 Checking the completed questionnaires

The completed form must be checked after each interview to ensure that each section has been properly filled out.

No interviewer should make major changes to a question without posing the question again to the interviewee.

If the interviewer is not clear about the answer to a question, he/she should write the response on the questionnaire.

4. GENERAL SURVEY PROCEDURE

4.1 The Interview

You must be careful to follow all the instructions laid down in this manual. You are especially asked to bear the following in mind:

- Ask the questions exactly as they appear on the questionnaire
- The questionnaire should be filled in during the interview. You must not record the answers on scraps of paper and transfer them to the questionnaire; nor must you think that you can trust your memory for writing down the answers later
- The possible answers for many of the question have been coded so that you will write down numbers only. No letter or any other character should be written down. As the entire questionnaire is pre-coded, the numbers you will write down can be.

4.2 Keeping the tempo of the interview

You must maintain the tempo of the interview; in particular, avoid long discussions of the question with the respondents eg. **lady the reason we are not catching fish is pollution….** If you are receiving irrelevant or complicated answers from a respondent, do not break in too sharply, but listen to what the respondent is saying and then lead him/her back to the original question. Remember that it is you who are conducting the interview and that you must control the situation at all times.

4.3 When to approach Respondents

Most fishermen can be found at their site of operation at particular times, especially on days when the weather is good for fishing. The approach of the interviewers is critical, as these people are very suspicious and wary of outsiders. Most fishers are illiterate, but independent, thus at all time you should make them feel as if they are in control.

Things to remember:

- Never try to ask a Fisherman a lot of questions when he has just arrived from sea. His attention will be focused on selling his catch and collecting money.
- Never approach a Fisherman when he is selling his fish or collecting money from sales. Oftentimes, he will not have the time or the mind set to answer question then.
- The best time to approach a fisherman is when his catch has been sold.

4.4 Objectivity of the interviewer

Absolutely no prompting is allowed, if you start by prompting then you will find yourself answering most of the questions in this manner. eg. If you ask a Fisherman:

I: What types of fish do you catch?

F: Fish?

I: Yes like parrot, jack, lobster, etc.

F: Yes parrot, jack, and lobster

What the Fisherman has done is to repeat what the interviewer said, so is the answer from him or the interviewer?

The interviewer should therefore remain neutral and allow the interviewee to answer without showing surprise, approval or disapproval at the given answer.

4.5 Private nature of the interview

All data collected are strictly confidential. All questions should be put to the respondents in complete privacy in order to re-assure the respondents that his/her answers will remain confidential. The

presence of other people during the interview may cause him/her embarrassment or influence some of his/her answer eg.

> I: Mr. Brown, what do you think about fishing these days?
>
> F#1:   It's kinda OK
>
> F#2:   Tell her that it is bad, the pollution and all that
>
> F#1:   Well it bad you know, the pollution and thing

5.   GUIDELINES FOR COMPLETING THE QUESTIONNAIRE

5.1 How to read the questions

The questionnaire is set out in simple language that the fishermen will understand. It is therefore important that the questions are read as set out. In asking the questions however, the interviewer must realize that the educational level of the respondents may be very low and as such re-wording the questions without changing the desired answer may be required.

Eg. **How many years of experience do you have in fishing?**

Even though he understands what experience is the question may have been readily answered if he was asked, **How long have you been fishing**?

5.2 Encoding the answers

Some questions in the questionnaire are pre-coded in order to speed up the data entry. You should endeavor to enter the codes for an answer.

5.3 Uncertain about the response to a question

Write answer on any blank space on the questionnaire, tag/mark the questionnaire. Once the questionnaire returns to head office, the meaning will be interrupted. If this persists, the project manager for the Fisheries Division should be contacted immediately (923-8811-3).

5.4 Photos and Diagram

The fishing sector has many jargon that you may not be familiar with, photos and diagrams are attached

6.   THE QUESTIONNAIRE

6.1 THE COVER
6.1.1   Area Location
Make sure that the following information is filled out on the cover:

- ✪ Parish Code
- ✪ Constituency Code
- ✪ Enumeration District
- ✪ Questionnaire Number: number of the owner from the listing record; 1st three digits – owners number; last digit – boat 1 of 'n'

6.1.2   The interviewer
The interview should enter:

- ✪ His/her code

✪ Date the interview was done (dd/mm/yy)
✪ Interview site (Site where the interviews is being conducted; eg. it could be the fishers home)

6.1.3   Interviewer instruction

Note the no-vessel fishers – these are fishers that take the gear to se without using a boat eg. spear fishermen. It is important that these fishers are captured as the Division has no information on these activities.

6.2 GENERAL TERMS

Fisherman/Fishers	Person who lives by fishing
Fishing	Searching for, catching, taking or harvesting fish
Fish	Aquatic plant or animal whether piscine or not, and includes any mollusk, crustacean, coral, sponge, holothurians or other echinoderm, reptile and marine mammal, and includes their eggs and all juvenile stages.
Fishing vessel/boat	Any vessel, boat, ship or other craft, which is used for, equipped to be used or of a type that is normally used for fishing or related activities.

7.2.1.1.1.1 SECTION 1 – INFORMATION ON RESPONDENT

1.1	Name of Respondent	Name of the person actually filling out the form; It not the boat owner, could be the Captain or boat operator
1.2	Nickname	Alias or most commonly used name other than that specified by a birth certificate.
1.3	**Role in the fishery**	Means the part played by each person within the fishery eg. captain, crew, boat builders, investor.
	Captain:	Person who operate the engine and navigates while at sea
	Owner:	This person may be the registered owners as well as a non-registered owner of a vessel used for fishing
	Owner/Captain:	Person who owns and captain the vessel
	Crew:	Describes a group of persons working on a vessel including the Captain or the person in charge of the vessel at the time
	Spear fisher:	A person that free lung dives using a spear-gun to catch the fish
	Investor	Person who owns the boat, and obtain profit from fishing. Spends no time in fishing. Gives the boat to fisher to operate.
1.5	Date of Birth	As specified on birth certificate of the respondent. If fisher does not know, give an approximate age. (Do not leave the space blank)
1.6	Home Address	The mailing address of the respondent. Some fishers live in gear sheds or thatched houses (ranch) on the beach, if so, write live on the beach.
1.7	Home Telephone	Direct number where the person can be contacted (home, work)
1.8	Registered fisher	Person who has completed and sign an application form at the Fisheries Division, the application has been accepted and the fishers issued a licence number.
	Fishers Licence Number	The same as Fishers I.D. no. which is issued upon registration by the fisheries Division. The I.D. no. begins with a letter, which tells us which Parish the fisherman operates from, followed by a series of numbers eg. **A-1234**
1.9	How long fishing	How long has the fisher been actively fishing (does not include when he used to fish with his father etc.), fishing for a living.

1.10   **Last school attended**

Primary   grades 1-6; including the old elementary system (Book 1,2 etc.)

New/Junior Secondary   grades 7 – 9

Traditional/Technical/

Comprehensive High   grades 7 – 13

College/University   > grade 13

6.4   SECTION 2 – INFORMATION ON VESSEL OWNER AND USERS

2.1   Name of Vessel Owner: This person is the registered owner of the vessel.

NOTE: If two persons own the vessel, information is needed only for one owner.

2.2   Nickname   As 1.2

2.4   Date of Birth   As specified on birth certificate of the vessel owner. If fishers do not know, give an approximate age. (Do not leave the space blank)

2.5   Home Address   As 1.6

2.6   Home Telephone   As 1.7

2.7   Registered fisher   As 1.8

        Fishes licence number   As 1.8

2.9   Last school attended   As 1.10

2.10   Vessels owned   The number of vessels this boat owner has. This included vessels that are presently being used and vessels that need repair or has been damaged beyond repair within the last 12 months

2.11   Rented   Fishers periodical payment of owner of vessel for use of vessel

 Use vessel in exchange for part of the catch or at a set rate

        Lend   Allows other to use his vessel without any benefits attached

2.12   Groups of users   Groups of person using the vessels other than present crew

2.13   Licence number   = fisher licence number

        Fishing Beach   Beach that the fisher is registered to, or the beach the fisher is from

6.5   SECTION 3 – INFORMATION ON VESSEL

3.1   Name of Vessel   Name given to the vessel upon registration and displayed on the vessel as
        part of

                            its registration mark along with the registration number.

3.2   Vessel Reg. Number The boat also bears port identification marks which reflects the original port the boat was registered for followed immediately by the registration number, eg. For a boat registered at Hunts Bay the identification mark reflecting the port of origin is followed by registration number (**HB-1234**) and likewise for Greenwich (**GT-5678**).

3.3   Beach Boat is registered   Can tell from the beach the boat is registered by the letters of the vessel registration number, eg. GT – Greenwich Town etc.

3.4   Size of the boat   See appendix 1

3.5   What is the boat made of

Dugout	Hand-made canoes, 10 – 18 feet long and built from cottonwood or guango tree. These canoes are operated using paddles and oars.
Plywood	These canoes are built from plywood and encased in fiberglass to make it waterproof as well as to add strength to the structure.
Fibreglass	Made from fiberglass. They range in size from 10-40 feet in length and some may have decking, which is an additional covering over the bow or front of the boat.
Steel	The steel boats are the largest vessels ranging from 40 – 100 or more feet in length. The hull or body of the vessel is made from steel and they carry inboard or built in engines

3.6   Colour boat is painted

Outside – hull	Colour of the outside of the vessel
Inside – in-hull	Colour on the inside
Deck	Colour on top of the vessel

3.7   How is the boat powered

Non-mechanized	Vessel not powered mechanically (using oars, sails)
Oars	Wooden lever with a broad blade worked by the hands to propel a boat.
Sails	Sheet of canvas to catch wind for pushing forward boats.
Mechanized	Vessel powered by an engine
Outboard engine	Engine attached from the back of the boats and hangs in the water.
Inboard	Engine built inside the vessel

3.8	Brand name	Name of the engine
	Horsepower	Unit of rate of doing work
3.9	Boat last used	Determine if the boat is presently being used or not.
3.10	Why boat not in use	Want to determine what is presently wrong with the boat or engine to determine when this vessel will be back in the fishery
3.11	Moor/parked/anchor the boat anchors	Site at which the vessel is made fast using lines, cables or
	Parish	The parish where the vessel is moored or beached
3.12	Beach where fish is sold	This is the site where the fish that was caught is sold, and can be referred to as the marketing site; which is not necessarily the site where the boat is moored.

6.6   SECTION 4 – INFORMATION ON THE CREW

4.1	Crew	Describes a group of persons working on a vessel including the Captain or other person in charge of the vessel at the time.
4.2	Additional workers	Not a part of the regular crew, but will be hired to perform additional work on the vessel.

4.3	Ho often change crew	Does the fisherman stick to one set of crew or does he changes crew every time he is going to sea.
4.4	Name of Captain and license number	Could be as 1.1; If the captain is same as the person filling out this form, tick self, if not tick other.
4.5	Fishing Beach	Beach that the fisher is registered to or beach that the fisher is from
	License Number	= Fishers Licence Number

6.7 SECTION 5 – FISHING OPERATIONS
5.1 <u>Type of Operation</u>

Small-Scale fishing –Artisanal	Small scale commercial fishing which utilizes a variety of gear types and smaller size vessels. These fishing activities mainly occur near-shore whether from the mainland or Cays.
Large-Scale fishing – Industrial	Large-scale commercial operation, utilizing large steel vessels powered by inboard engines. These vessels target specific species and therefore use limited gear types.
Fish for fun – Recreational	Fishing for pleasure or as a part-time, not necessarily for economic gain.
Fish for family – subsistence	Fishing solely as a means of supplementing the diet. Buy fish to sell, buy fish from other fishermen, store it on the boat, return to the mainland and sell the fish to vendors.

5.2	**Primary use**	(See appendix 2)
	Carrier	Large semi-industrial motor fishing vessels are mainly used in the category. The hull or body of these vessels are made from steel and are powered by inboard engines. As carrier vessels these boats purchase fish from the offshore cays and transport then to the mainland where they are mostly sold wholesale.
	Packer	These are the smaller carrier vessels, which is an altered canoe. This boat is decked and an icebox installed.
	Big Head	These are the smallest carrier vessels, which is an altered canoe. The boat is decked and an icebox installed.
	Fishing	Searching for, catching, taking or harvesting of fish
	Charter	Transporting tourist or local for fishing, beaches or tours
	Taxi	Bats that transport fishers to fishing ground; fishers pay boat fee

	Outside Jamaican waters	(See Appendix 3)
5.3	Within Jamaica waters	Within Jamaica's water (north shelf, south shelf, Pedro, Morant Bank, etc.)
5.4	Outside Jamaican waters	Outside Jamaica's EEZ

5.5	**Where do you fish**	Where at sea do you set your gear to catch fish
	Main	Where do you mainly go to fish
	Secondary	The other areas you go fishing

6.8 SECTION 6 – FISHING PRACTICES (See Appendix 4)

6.1	Normally fish	Do you habitually or always fish on weekends or holidays
6.2	Usually land your catch	What time of day do you usually (on a good day) return fro sea
6.3	Distance of fishing ground	An average distance is required from fishing beach
6.4	Average trip types	The amount of gas taken to sea on any one trip
6.5	Describe trip types	A vessel may make more than one trip types depending on the type of gear used, the fisher should give all trip types. If trip type is not given describe in blank space. NOTE: should describe **all** types of activities
6.6	Boat in present activities	A fisher may be involved in fishing for many years, however, the vessel may be involved in question 6.5 activities for a shorter time.

6.7   **Container to store fish**

Ice box   Could be an igloo or one built from ply and fiberglass (specify)

Bottom of boat   stored inside the boat bottom

6.8   **Keep fish from spoiling**

Gutted   fish belly has been removed

Banana leaf   or any other leaf type

6.8 SECTION 7 – GEAR SPECIFICATION (See appendix 5)

7.1   Main fish type targeting   Main fish type caught; What is the main fish you are

trying to catch while at sea.

7.2   Main gear type   What is the number one gear the boat uses

7.3   Idea of all the gears used on the vessel The boat/vessel carries the gear to sea. In some instances members of the crew have their own gear (eg. pots, nets, etc.); We need to know the total amount of gears carried by this boat, eg. the owner has 50 pots; the bow-man (crew) has 10 pots and the other crew member has 5 pots. The total number of pots on the boat is 65. Thus, in the section on pots, information is required on the 65 pots and not just the 50 pots owned by the boat owner.

Also, requires detailed information on the use of the gear.

Mesh Size   Stretch length eg. inch and a half – 1.5 inches

# of shoots per trip   The number of times the fisher places the net in the water and pulls it back into the boat; if too many times to count, write it down

Weight of nets   Total amount of net purchases to build the net, including additions. Not including the buoys and lead (or brick) weight.

Hours spent fishing per trip The amount of time the net spends in the water; not including the travel time (time to and from fishing ground)

Average catch   We know that sometimes a fisher goes to sea and catches nothing. We are only interested in a good size catch per trip in the past 12 months.

Main fishing ground	Main area at sea that the fisher sets his net.

# lines used per trip	Number of lines the fisher takes to sea on any one trip
# hooks per line	The actual number of hook, regardless of size, the fisher place on his line; If multiple give a range
Line Test	The strength of the line eg. 120 lbs. Test
Hours spent fishing	The amount of time the line is in the water. Minus travel time (time to and from fishing ground)
Average catch per trip	We know that sometimes a fisher goes to sea and catches nothing. We are only interested in a good size catch per trip in the past 12 months.
Main fishing ground	Main area at sea that the fisher sets his lines

Speargun	Gun the fishers use to spear the fish and pull the fish towards them
Hawaiian Slings	sling used to spear the fish
Hand	The fishers used his hand to catch the fish
Grab	Metal hook used to pull the fish towards the fisher
Number of dives per trip	Number of times the fisher goes underwater then surfaces
Number of divers per trip	Number of divers in the boat per trip
Time under water	Total amount of time spent underwater fishing
Average catch per trip	We know that sometimes a fisher goes to sea and catches nothing. We are only interested in a good size catch per trip in the past 12 months.
Main fishing ground	Main area at sea that the fishers go to dive.

Average size	The size of the pots the fisher has (eg. 3 ft)
# of pots soaking	Number of pots presently at sea or in the water
# of pots on land	Number of completed pots, which for some reason or another, is on land eg. the fisher could be repairing the pot.
# of pots being built	Number of pots the fisher is presently building
	NOTE: Total number of pots = # at sea + # on land + # building
Mesh size	Stretch length eg. inch and a half – 1.5 inches
Soak time	Number of days the pot stays underwater before it is hauled again
	Time between (days) placing the pot in the water and the time it is hauled
Average catch per trip	We know that sometimes a fisher goes to sea and catches nothing. We are only interested in a good size catch per trip in the past 12 months
Life expectancy	On an average how long do you expect the pots to last you (not including theft or unforeseen circumstances)

Main fishing ground   Main are at sea that the fishers set their pots.

6.10 SECTION 8: CATCH CHARACTERISTICS

8.1   Type of fish   As given by the fisher

         Code   Fish type will be coded in office by the data entry personnel

         % catch   Percent of catch by fish type; total percent much add up to 100

         Boat price per lb   Price the fishers sell their fish

8.2   Months for season & weather In some cases the fisher may not be able to tell the different season or the months for good/bad weather, but on other instances and depending on the fish type they will be able to complete this section. If the fishers are not able to tell, the interviewer can omit this section.

6.11 SECTION 9 – MARKETING ARRANGEMENTS (See also appendix 6)
9.1   **Percent of catch**
         Retained by fisher   Percent of the catch fisher takes home

         Given to family and friends   Percent of the catch given to family, other than present home (eg. cousin, etc) and friends

         Sold to carrier vessels   Percent of the catch sold to boats that purchase fish

         Sold to wholesale vendors   Percent of the catch sold to vendor who purchase large quantities of fish for resale to other vendors

         Sold to retail vendor   Percent of the catch sold to vendors that purchase in small quantities, then sells to consumer

         Sold to hotels and restaurants Percent of the catch taken by the fisher and sold directly to the hotel and or restaurants; OR hotels and restaurants send their buyers directly to the

                                         fishermen

         Sold to processing plants   Percent of the catch going directly to the processing plants via the fisher or buyers for the processing plant.

         Sold to consumer   Percent of the catch where the consumer goes directly to the beach and purchase fish from the fishers

6.12 COMMENTS
This section is provided for any additional comments. If the interviewer is uncertain about any question(s) or any response the question(s), he/she is asked to write the details in the space provided. The interviewer should draw the supervisor's attention to the comments, so that the issue can be dealt with.

If fishers are requesting you to write on the questionnaire problems being faced in fishing, you can use this section to note it.

ANNEX A4.1
BOAT SIZE

Length - measured from the tip of the bow or front of the boat to the back of the boat or stern

Width - measured from the widest part of the boat from one side to the other

Length - measured from the surface or top of the vessel to the keel

ANNEX A4.2
VESSEL TYPE

DUG OUT Hand-made canoes, 10-18 feet long and built from cottonwood or guano tree. These canoes are operated using paddles and oars.

FIBREGLASS Made from fiberglass. They range in size from 10 – 40 feet in length and some may have decking, which is an additional covering over the bow or front of the boat.

PLYWOOD These canoes are built from plywood and encased in fiberglass to make it waterproof as well as to add strength to the structure

YACHT These vessels are also made from ply and fibre, but mainly used for sport fishing. They also carry sails along with engine.

STEEL The steel boats are the largest vessels ranging from 40 – 100 or more feet in length. The hull or body of the vessel is made from steel and they carry inboard or built in engines.

BIG HEAD These are the smallest carrier vessels, which is an altered canoe. The boat is

decked and an icebox installed
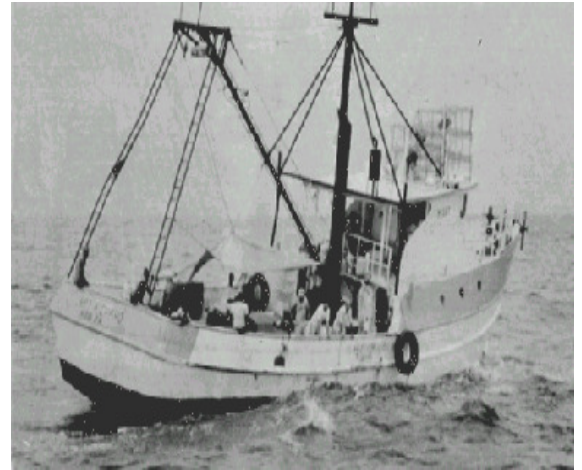
CARRIER Large semi-industrial motor fishing vessels are mainly used in this category. The hull or body of these vessels are made from steel and are powered by inboard engines. As carrier vessels these boats purchase fish from the offshore cays and transports them to the mainland where they are mostly sold wholesale.

PACKER These are smaller type carrier vessels 28-40 feet in length and are usually powered by outboard engines.

ANNEX A4.3
FISHING AREAS IN JAMAICA

INSHORE FISHING AREAS OF JAMAICA
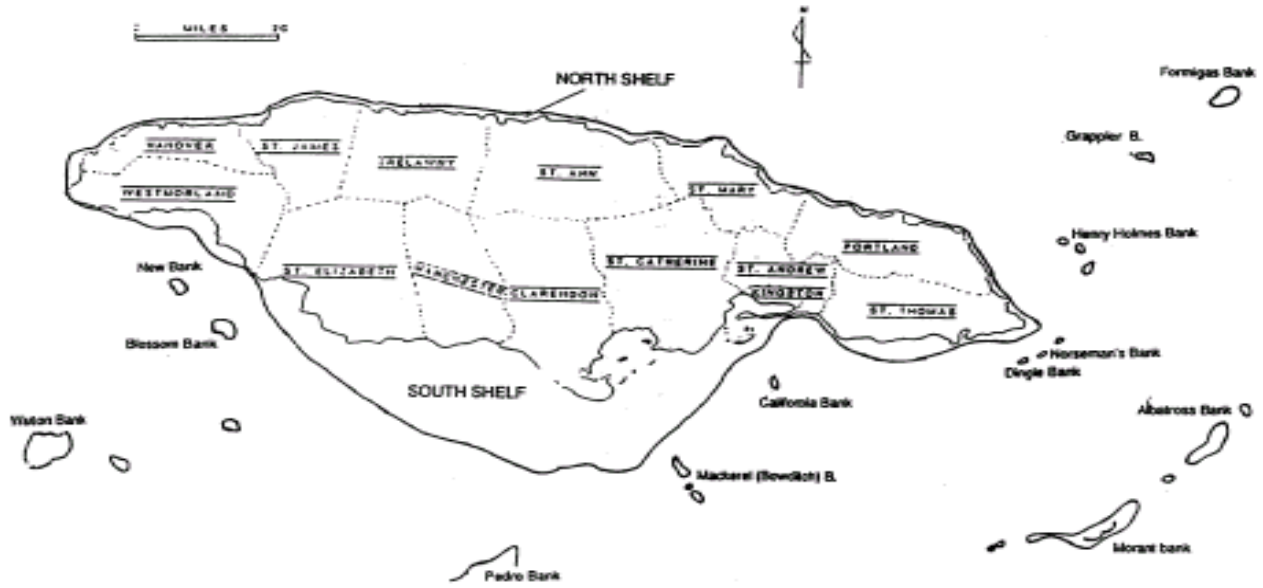
OFFSHORE FISHING AREAS OF JAMAICA
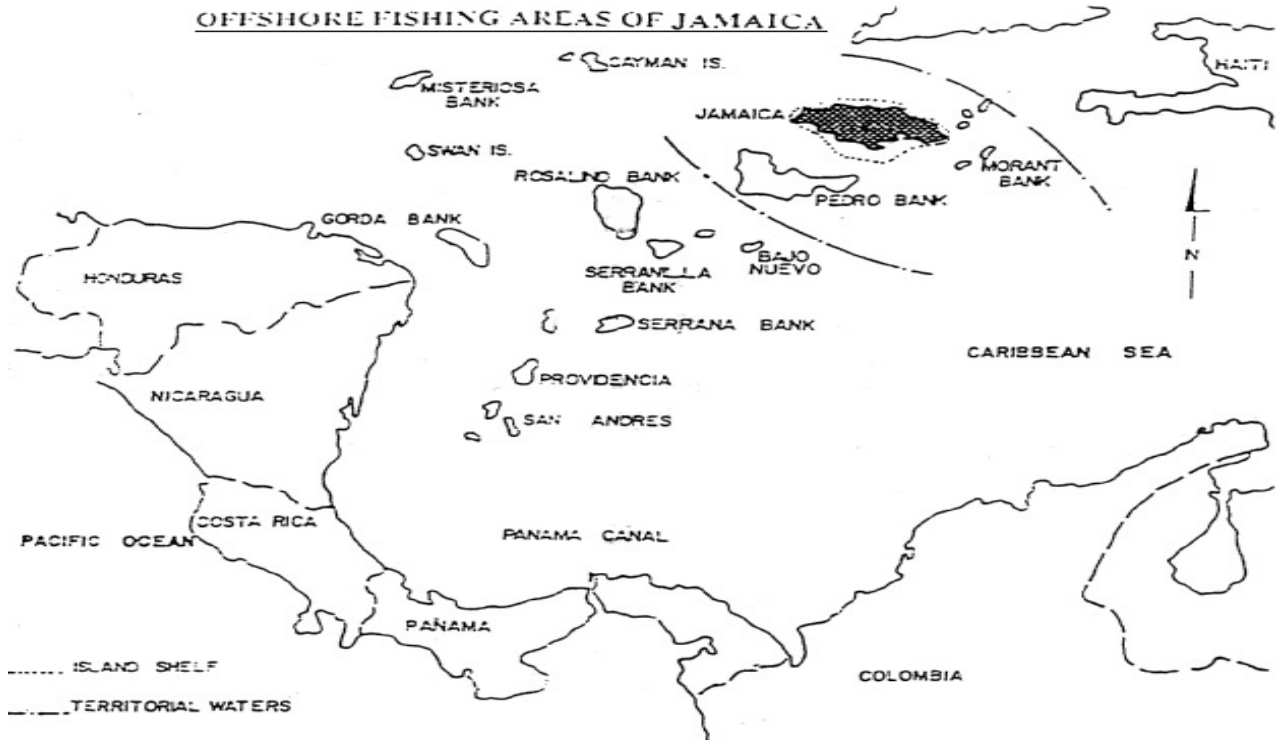
ANNEX A4.4

STORAGE FACILITIES
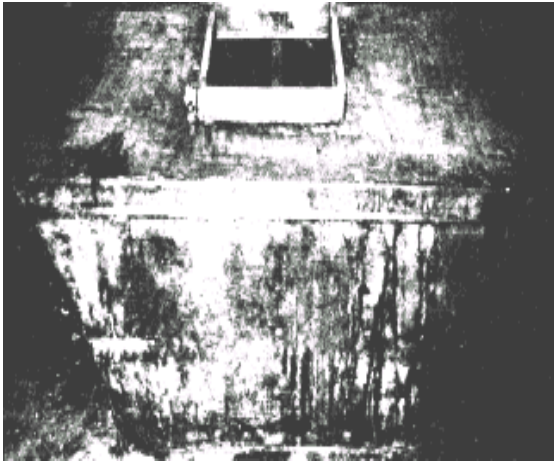
ICE BOX   Made from fiberglass material and built to fit inside the boat
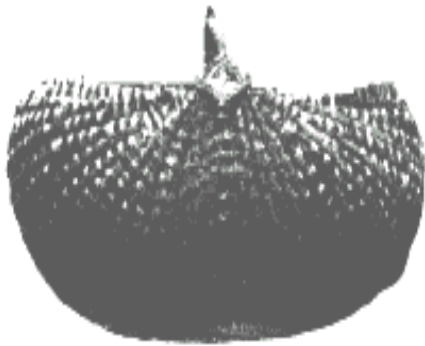
BASKET - A container made from interwoven straw
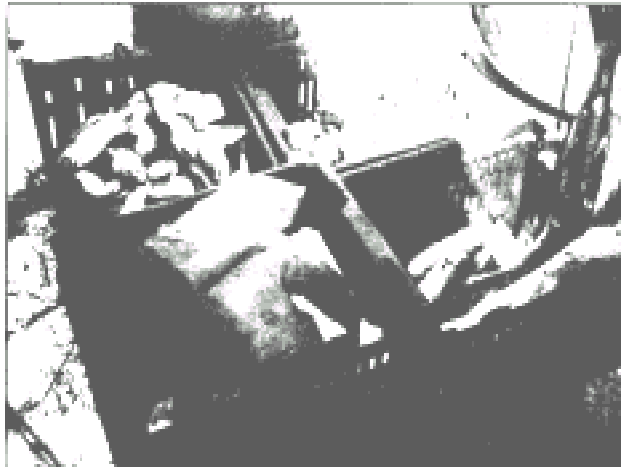
PLASTIC CRATES used mainly by spear fisher who uses no specific material to cover the catch for preservation purposes

ANNEX A4.5
GEAR TYPE

7.2.1.1.1.1.1 GILL NETS

These are multifilament or monofilament nylon nets which can be made for floating on the surface, middle water fishing or bottom fishing . Mesh size can range from less than 1 inch to 4 inches. This gear entangles the fish as it tries to pass through the meshes of nylon. Generally used in the small coastal pelagic fishery (sprat fishery), in open water, but use over coral reefs is avoided.

China net

The nylon netting is stretched between two ropes, one lightly leaded the other with floats placed at regular intervals. Its generally used in open waters, catches include jacks small king fish and herrings.

Deployment

The net is often used in conjunction with some device to attract the fish such as light or bells. The net is let down into the water and kept on the surface, or a certain depth depending on the amount of floats or anchors. The anchor is set at one end allowing the net to drift freely with the current.
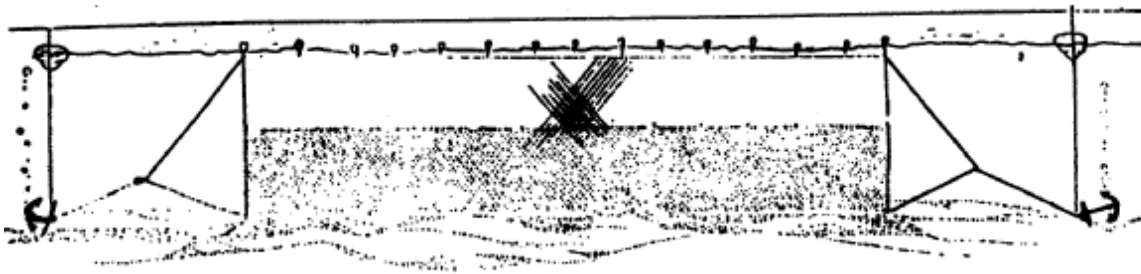
Shrimp net

Similar to China net but with smaller mesh sizes (1.38-1.93 cm)

Deployment

Deployed from a boat in a circular pattern in relatively shallow water. Its towed for a while and then hauled and the shrimp removed.

Sprat nets

Generally made from multifilament nylon, ballasting (bricks) and buoyancy attached at opposite ends. Used primarily in the taking Atlantic Thread Herrings (sprat). But can be used to catch other small coastal pelagics such as pinchers whitening bang or mullets.

Deployment

The fisher stands on the boat and drops the weighted end (bricks) of the net into the water. The nylon netting is pulled into the water after the weights and as it becomes suspended in the water column the top of the net is buoyed up by floats thus holding the net in place.

A. Surface Sprat net   B. Middle Water Sprat Net
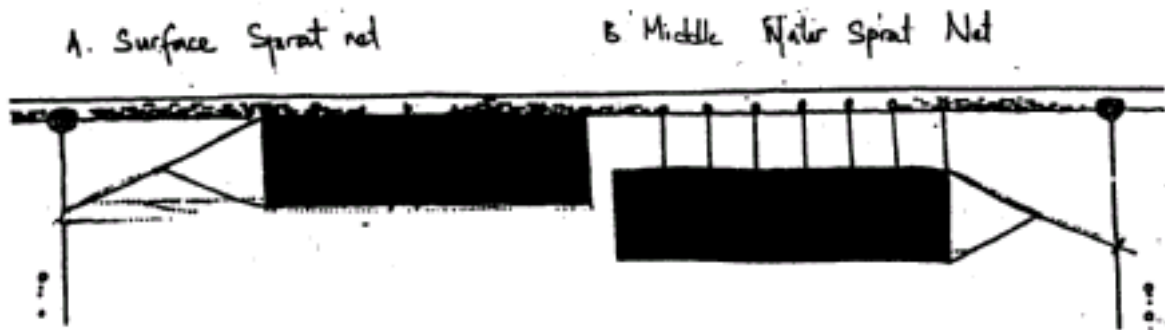
Shove nets

These are gill nets used for the taking of shrimp(usually juvenile or bait shrimp).There are two types of shove nets

(1)   **Push net -** a bag made of nylon netting fixed to a square wooden frame with a long wooden pole attached.
Deployment - One person operates this net. It's simply pushed into   areas where shrimp might be and "strain" them out of the water.
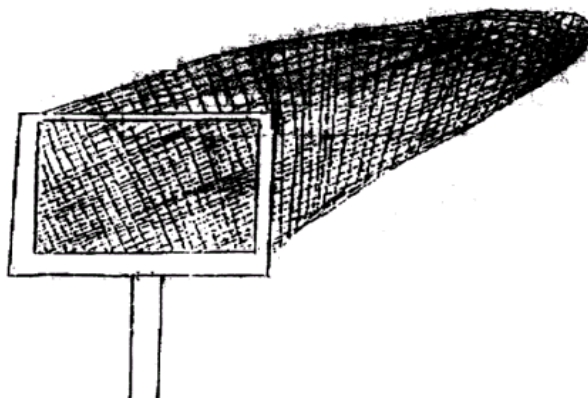
(2)   **shove net** - It comprises of two poles to which netting is affixed across the two poles.
       Deployment - Two person operate this net pushing it along the sea floor near the shore or in shallow water

A4 --21
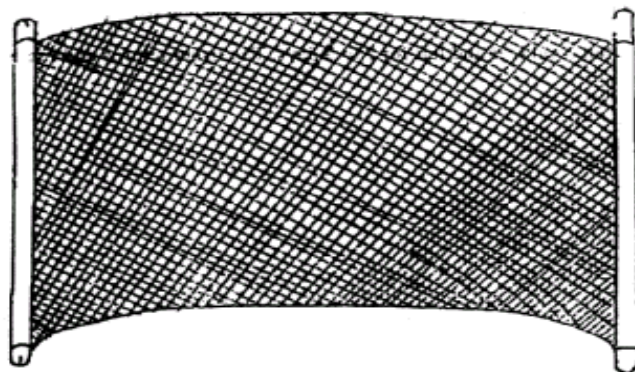
Trammel net

The "Jamaican trammel net" is made from monofilament nylon netting, weights(bricks) and buoy. Its construction and appearance is similar to the sprat net, but the mesh size is usually bigger. Used to catch snappers, grunts, jacks,

Deployment

Same as for sprat net.
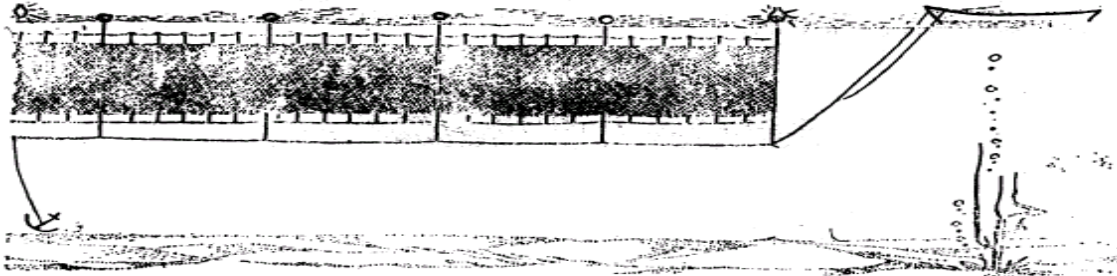
7.2.1.1.1.1.2 Lobster net

Structure is similar to china net except that the mesh size used is 4.5 inch and it targets lobster.

7.2.1.1.1.1.3 Deployment

The net is set just in front of the coral reef and left for 2-3 days. The fishers remove entangled lobsters.

SEINE NETS

Usually long nets, which can be used to surround an area of water. The net can have a bag at the center (as well as not) and two wings.
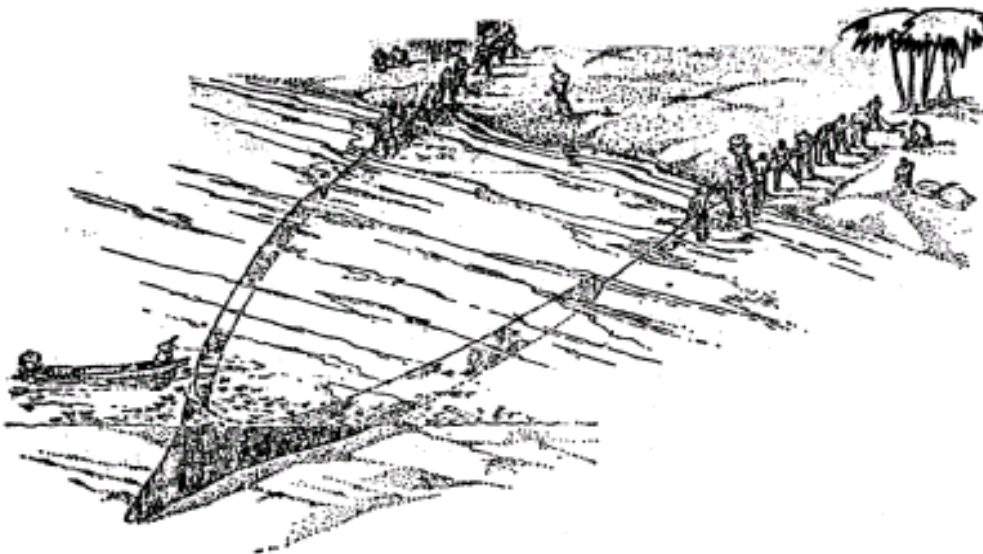
Beach Seine

Usually a long nylon net with two ropes fixed to its ends. The ropes are used both for hauling it in and for herding the fish. These nets are operated from land and use is generally restricted to shallow waters near the shore.

Deployment

The net is used to encircle a school of fish, the bottom and surface of the sea acts as natural barriers. The two end ropes are pulled together and the enmeshed fish hauled to the shore.

FALLING NETS

As the name suggest these nets catch fish by falling and closing in on them.

Cast Nets

Made from mono or multifilament nylon mesh material cut in a circular fashion. Lightly leaded rope trim the edges and provide a holdfast for the fisher. Usually smaller than sprat net Their use is usually restricted to shallow waters.

Deployment

Using considerable skill the net is twirled above the head then cast into the sighted school of fish. The net can be cast from a boat or from shore.
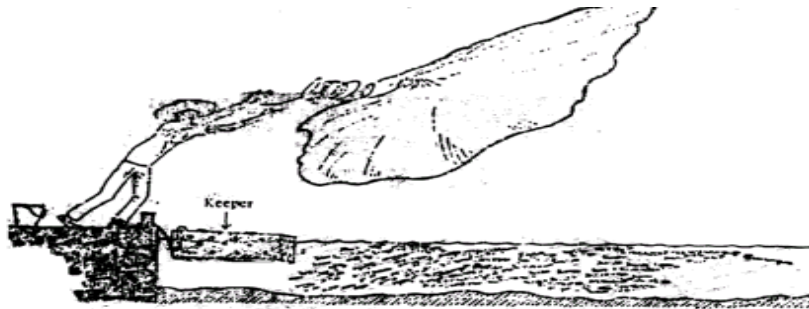
LIFT NETS

These can be made from monofilament or multifilament nylon netting and can be operated from a boat or from the shore.

Usually square or rectangular shaped nylon netting stretched between two galvanized pipes and operated by a minimum of two men. These nets are generally operated close to shore, near piers or adjacent to any underwater obstruction where fish might aggregate.

Deployment

The net is lowered horizontally to the desired depth by two attached ropes. Fish are caught by suddenly raising the net from below a passing school of fish.
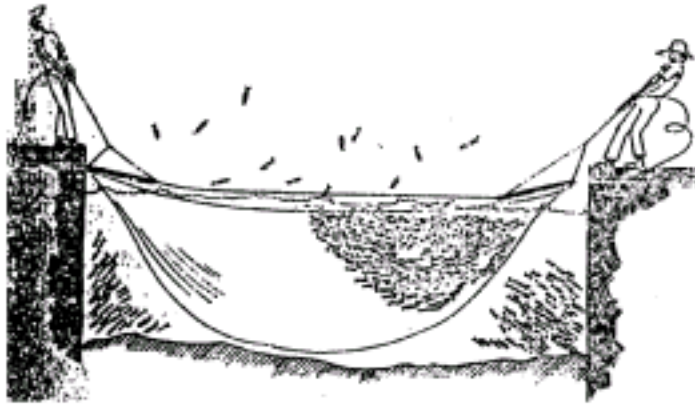
These are made from multifilament or monofilament nylon netting. Usually the gear has a cone shaped body closed by a bag and extended at the opening by wings. It's generally towed from the back of a boat(s). The net can be towed in midwater or along the bottom. The opening is generally kept open as its towed by a beam made from wood or a ballasted rope.

Bottom otter trawl

The cone shaped gear made from multifilament nylon mesh has its horizontal opening obtained by vertically placed boards(reinforced with steel) on either side. The boards are attached via a rope to the boat. It is used to capture fish that live on the bottom.

<u>Deployment</u>

The bottom otter trawl is attached to the back of the boat via long ropes and then gently let down into the water so that the gear is not twisted. The trawl is then towed at a constant speed for a set time then hauled into the boat.

These are structures made from wood and wire (metal mesh). Traps are the primary means of catching fish over the coral reefs of Jamaica

Bamboo pots

These are similar to fish pots except that the frame is made from bamboo.

Method of deployment is the same as for fish pot. Target species goat mullets.

Fish pots

"Z" or **"S"** shaped structures made from wood (long sticks) and wire mesh (chicken wire) of 1 to 4 inches. The frame of the pot is made from the wood and the wire mesh is stretched over the frame. Two funnel like openings (through which the fish enter) and a door for removing the fish are created in the wire mesh. Fish pot are often baited (to attract fish) and set on or near coral reefs. Catches include doctor fish, parrots, goatfish, angelfish and other coral reef fish.

<u>Deployment</u>

The trap is set by casting it overboard horizontally with the entrance of the funnels downwards. Buoys are attached to make where the traps are

Jack pots

These are big fish pots sometimes with steel frames use to target jack species

Deployment

Same as for fish pot.

Florida wooden traps

Diving as a fishing method is generally used in conjunction with some other gear,(grappling or wounding gear) and includes harpoons, spear guns, arrows, prongs, tongs, clamps, etc.

SCUBA

Scuba gear includes a tank containing compressed oxygen(generally carried on the back of the diver), and some device (mask and tubes) via which the oxygen can be transported to the diver. Using the ready oxygen supply divers can descend to great depths, and using wounding or killing instruments capture fish. The length of the dive is limited by the amount of oxygen stored in the tank. Scuba is generally used in the capture of lobsters and reef fishes.

Free lung

In this case the fisher, dives without taking a supply of oxygen with him/her.

The amount of time that can be spent under water is determined by the length of time the diver can do without breathing. The free lung divers also capture fish by wounding or killing with one of the gears listed above.

Used in the capture of lobster, mollusk and reef fish.

Hookah

This method is characterized by the supplying of compressed oxygen from a store onboard a boat on the surface of the water. The diver takes breaths of oxygen via long tubes. The length of the hookah dive is limited by the divers biology, as in most cases the store of oxygen is in excess. Hookah is also used in conjunction with some wounding or killing gear. Its primary use in Jamaica is in the conch industry, but can also be used to capture lobsters, other mollusk, and fin fish.

<u>HOOK AND LINE</u>

In its simplest form it's a hook placed at the end of a long line. A natural or artificial bait placed on the hook attracts the fish.

Handlines

These are hand operated hooks and line. Handlines may be used with or without a pole and reel. Catches are usually carnivores fishes snappers, tunas mackerels dolphin fish etc.

<u>Deployment</u>

the baited hook is moved (can be slow or fast) through the water to attract passing fish. When a fish swallows the bait and hook combination, it is pulled in.
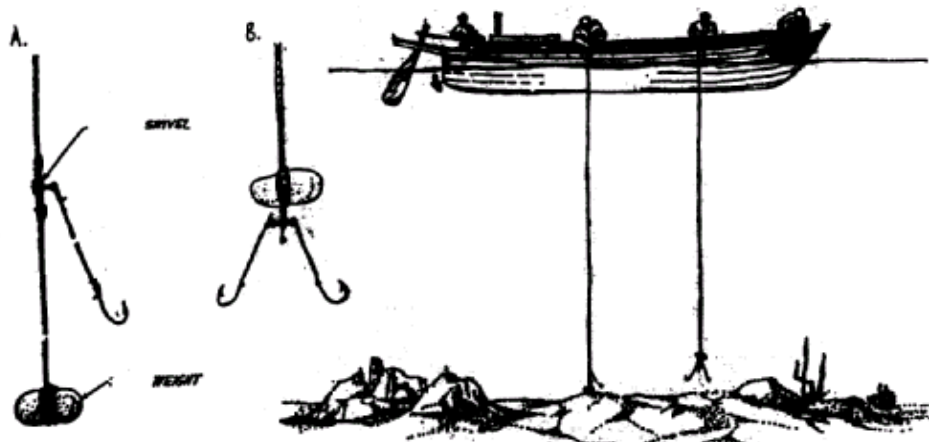
Trolling

These are simple lines provided with natural or artificial bait and trailed(using a stationary pole attached to the boat) near the surface or at a certain depth by a vessel. Several lines are usually towed at the same time.

Catches include tuna, dolphin fish and other large pelagics.

Dropline

A weighted line with several baited hooks attached. It is deployed vertically hanging from a float at the surface.
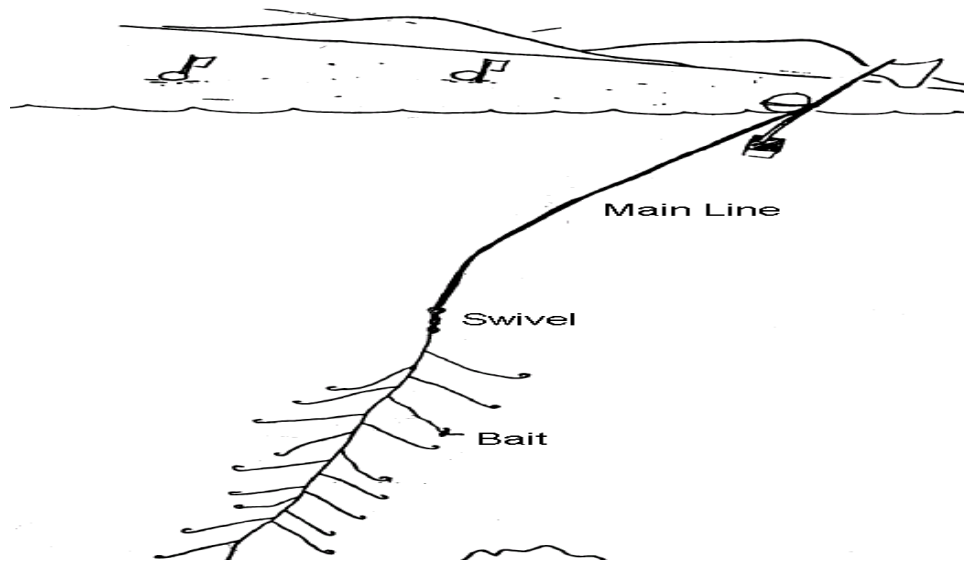
Long line

This consists of a main line (rope), which holds several other smaller line to which baited or unbaited hooks are attached. Longline can be set on the bottom Using weights or keep near the surface or at a certain depth using regularly spaced floats. Target fish , pelagics and snapper
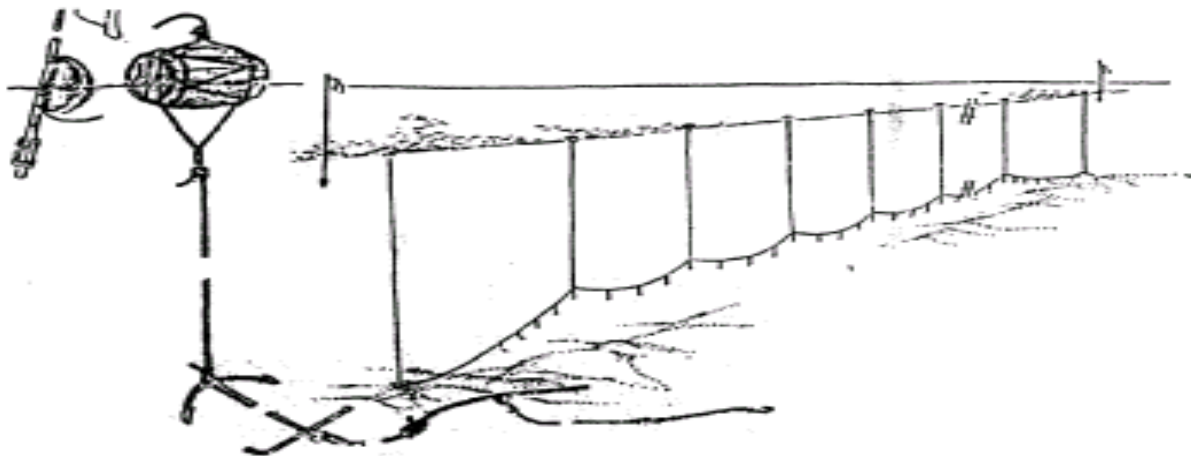
Palanca

Similar in structure to longline but is generally set on the bottom of coral reefs targeting bottom dwelling reef fish such as groupers
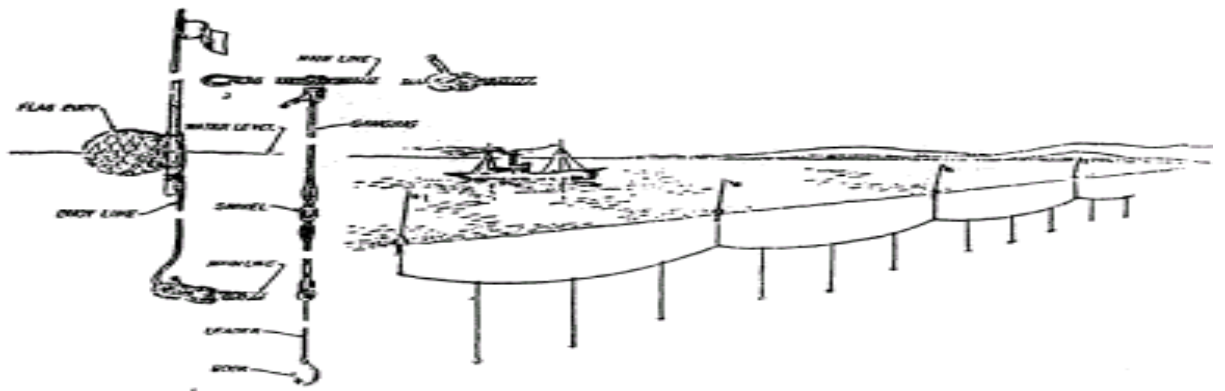
Rod and Reel

See Handline
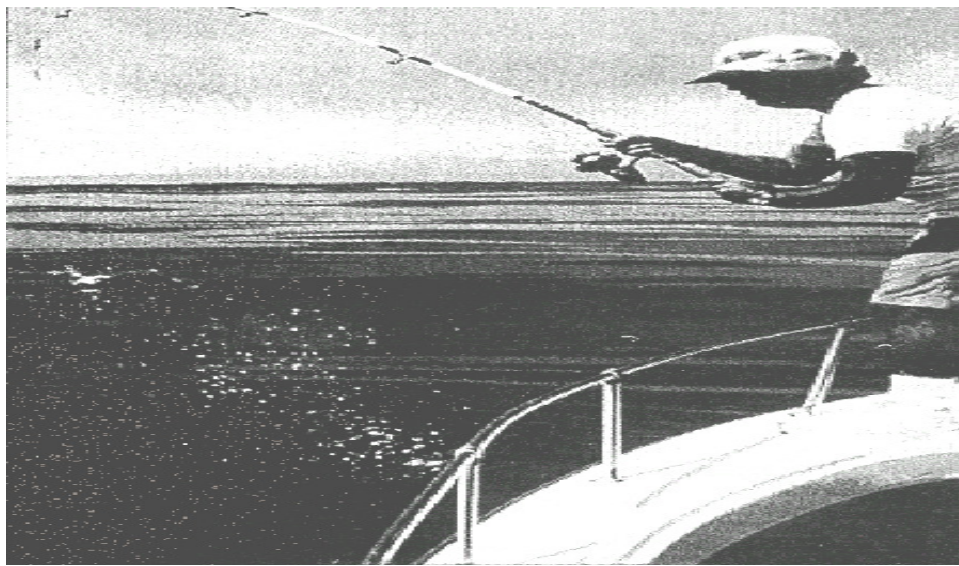
ANNEX A4.6
FISH TYPES

7.2.1.1.1.1.4

7.2.1.1.1.1.4.1.1 COASTAL PELAGICS

7.2.1.1.1.1.5

Sprat

Pinchers

Macaback

7.2.1.1.1.1.7 OFFSHORE PELAGICS

7.2.1.1.1.1.8

Mackerel   Jack   Barracuda   Dolphinfish   Tuna   Marlin

7.2.1.1.1.1.9 REEF

Parrotfish

Grunt
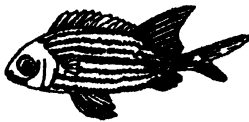
Squirelfish

Doctorfish
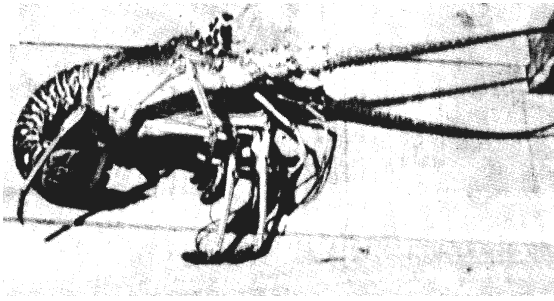
7.2.1.1.1.1.10   THE SPINY LOBSTER
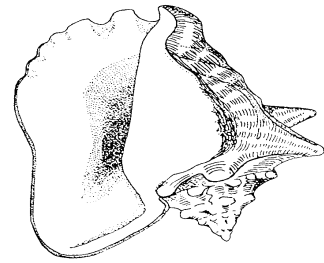
QUEEN CONCH - Queen conch is a mollusk belonging to the family Strombidae, commonly known as queen or pink conch.

Appendix 5: Data summary for Jamaica census data 1998

Original record number	Data record type — Main record (one record/vessel) (SPSS file name = Jamfishcen98 main.sav)	Data record type — Sub-records (several records/vessel) SPSS file names = Jamfishcen98 rec??.sav	Census section	Number of records	7.3 Notes
1	Questionnaire identification		0	4331	
2	Respondent information		1	4316	
3	Owner information		2	3519	
4		Details on user groups	2	142	One record per group, with up to 8 persons in the group
5	Vessel information		3	3532	
6	Captain and crew general		4	2801	
7		Details on crew members	4	3773	
8	Fishing operations general		5	2809	
9	Fishing practices general		6	3577	
10		Details on types of trips	6	3716	
11		Details on types of storage	6	3521	
12	Gear general		7	3562	
13		Details on nets	7	900	
14		Details on lines	7	1987	
15		Details on diving	7	766	
16		Details on pots	7	1467	
17		Details on the catch	8	13194	One record for each species caught
18		Details on seasonality	8	9286	One record for each species caught
19		Marketing	9	12415	One record for each species caught
20		Comments	9	842	
21	Mitch damage general		10	129	For Pedro bank fishers only
22		Details of trips	10	101	
23		Details of pots	10	117	

Appendix 6: **The variables that are included in the SPSS database files listed in Appendix ??. For each variable the following are provided: The original data record as per Appendix 7; the questionnaire number that it relates to; whether it is in the main file or a subfile; whether it has been recoded; whether it has been labeled; details regarding recoding, labeling, or other manipulation are given for created variables. Codes for original variables are given in Appendix ??. (SPSS syntax file names for labeling and recoding are given in quotation marks.**

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
1	recnum	1		M	Record number			
2	qnum	1	.4	M	Unique questionnaire number			
3	parish	1	.1	M	Parish		x	'label parish.sps'
4	constit	1	.2	M	Constituency code			
5	enumdist	1	.3	M	Enumeration district			
6	questno	1		M				
	btnbt			M	Detemines if fisher is a boat fisher =0 or a no-boat fisher = 1			Created variable
7	intervcd	1	.5	M	Interviewer name coded		x	'label interviewer.sps'
8	intdate	1	.6	M	Interview date			
	bstbeach			M	Combination of 'beachreg', 'moorloc' and 'selloc' aimed at providing the best estimate of the beach			Created variable
9	intvsite	1	.7	M	Interview site			
10	recnum	2		M				
11	qnum	2		M				
12	respname	2	.1	M	Respondent name			
13	respnick	2	.2	M	Respondent nichname			
14	resprole	2	.3	M	Respondent role		x	'label role.sps'
15	rolesp	2	.3	M	other roles			needs sorting out

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
16	respsex	2	.4	M	Respondent sex		x	'label sex.sps'
17	respborn	2	.5	M	Respondent date of birth			
18	respaddr	2	.6	M	Respondent home address			
19	resptel	2	.7	M	Respondent telephone			
20	respreg	2	.8	M	Is respondent registered			
21	resplic1	2	.8	M				
22	resplic2	2	.8	M				
23	resplong	2	.9	M	How long respondent fishing			
	rsplngyr			M	'respolong' recoded into years			Created variable
24	longcd	2	.9	M	Time code			
25	respeduc	2	.10	M	respondent education		x	'label educ.sps'
26	recnum	3	.0	M				
27	qnum	3	.0	M				
28	ownname	3	.1	M	Vessel owner name			
29	ownnick	3	.2	M	Vessel owner nickname			
30	ownsex	3	.3	M	Vessel owner sex		x	'label sex.sps'
31	ownbdy	3	.4	M	Vessel owner birth day			
32	ownbmn	3	.4	M	Vessel owner birth month			
33	ownbyr	3	.4	M	Vessel owner birth year			
	ownage			M	Owner age in years			Created variable
34	ownadd	3	.5	M	Vessel owner address			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
35	owntel	3	.6	M	Vessel owner telephone			
36	ownreg	3	.7	M	Is vessel owner registered			
37	ownlic1	3	.7	M	License type			
38	ownlic2	3	.7	M	License number			
39	ownlng	3	.8	M	Vessel owner, how long fishing			
	ownlngyr			M	'ownlng' recoded into years			
40	ownlngcd	3	.8	M	Code			
41	owneduc	3	.9	M	Vessel owner education		x	'label educ.sps'
42	vessown	3	.10	M	How many vessels owned			
43	vessrent	3	.11	M	Are vessels rented, leased, lent		x	'label vessrent.sps'
44	groups	3	.12	M	How many groups of users are there			
45	recnum	4		S				
46	qnum	4		S				
47	group	4	.13	S	Group number			
48	gname1	4	.13	S	First person name			
49	gnick1	4	.13	S	First person nickname			
50	beach1	4	.13	S	Fishing beach			
51	glic1	4	.13	S	First person license type			
52	glicn1a	4	.13	S	First person license number			
53	role1	4	.13	S	First person role		x	'label role.sps'
54	gname2	4	.13	S	Second person name			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
55	gnick2	4	.13	S	Second person nickname			
56	beach2	4	.13	S	Fishing beach			
57	glic2	4	.13	S	Second person license type			
58	glicn2a	4	.13	S	Second person license number			
59	role2	4	.13	S	Second person role		x	'label role.sps'
60	gname3	4	.13	S	Third person name			
61	gnick3	4	.13	S	Third person nickname			
62	beach3	4	.13	S	Fishing beach			
63	glic3	4	.13	S	Third person license type			
64	glicn3a	4	.13	S	Third person license number			
65	role3	4	.13	S	Third person role		x	'label role.sps'
66	recnum	5		M				
67	qnum	5		M				
68	vesname	5	.1	M	Vessel name			
69	vesreg	5	.2	M	Is vessel registered			
70	vesregn1	5	.2	M	Registration number			Should be beach code, but is mainly missing plus a few numeric values
71	vesregn2	5	.2	M	Registration number			
72	beachreg	5	.3	M	Beach where registered		x	'label beach.sps'
73	parreg	5	.3	M	Parish where registered		x	'label parish.sps'
75	veswid	5	.4	M	Vessel width			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
74	veslen	5	.4	M	Vessel length			Need categories, check units of measure, some unlikely values in these
76	vesdep	5	.4	M	Vessel depth			
	veslenm			M	Vessel length in meters			Created variable
	veslengm			M	Vessel length in 1 m groupings			Created variable
	veslengp			M	Vessel length groupings			Created variable: 1 = 0-5 m, 2 = 5-10 m, 3 = 10-25 m, 4 = >25 m
77	vesmat	5	.5	M	Vessel material		x	(used to create vessel type variable - vesstype) label vesmat.sps
	vesconst			M	vesel construction			Created variable: 1 = dug out, 2 = wood, 3 = metal, 4 = fibreglas, 5 = rubber, 6 = raft
	scsdscat			M	Vessel category (based on groupings used in South Coast Sustainable Development Study			
78	vescolo	5	.6	M	Vessel color outside		x	'label color.sps'
79	vescoli	5	.6	M	Vessel color inside		x	'label color.sps'
80	vescoldk	5	.6	M	Vessel color deck		x	'label color.sps'
81	vespow	5	.7	M	Vessel means of power		x	(use to create vessel type variable - vesstype) 'label vespow.sps'
82	eng1typ	5	.8	M	First engine brand			
83	eng1hp	5	.8	M	First engine horsepower			
84	eng2typ	5	.8	M	Second engine brand			
85	eng2hp	5	.8	M	Second engine horsepower			
86	eng3typ	5		M	Third engine brand			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			.8					
87	eng3hp	5	.8	M	Third engine horsepower			
88	eng4typ	5	.8	M	Fourth engine brand			
89	eng4hp	5	.8	M	Fourth engine horsepower			
90	lstuse	5	.9	M	When last used for fishing		x	recode to: 1, 2, 3, = 1= in use; 4,5 = 2 = not in use.
	vesinuse				Whether boat is in use or not or is a no boat fisher.			Created variable: 0 = not in use, 1 = in use, 2 = assumed in use, 3 = no boat fisher
91	whynot	5	.10	M	Why is boat not in use			
92	moorloc	5	.11	M	Where is vessel moored/parked		x	'label beach.sps'
93	moorpar	5	.11	M	Parish where boat is moored		x	'label parish.sps'
94	selloc	5	.12	M	Beach where catch is sold		x	'label beach.sps'
95	sellpar	5	.12	M	Parish where catch is sold		x	'label parish.sps'
96	recnum	6		M				
97	qnum	6		M				
98	crewsize	6	.1	M	Crew, regular size			
99	workers	6	.2	M	Crew, how many workers			
100	chngcrew	6	.3	M	Crew, how often changed			
101	chcrwcd	6	.3	M	Code			
	chcrwfr		.3	M	Frequency of crew change		x	'label chcrwfr.sps'
102	capself	6	.4	M	Is captain self		x	'label capself.sps'
103	capname	6	.4	M	Captains name			
104	caplic1	6		M	Captains license type			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			.4					
105	caplic2	6	.4	M	Captains license number			
106	recnum	7		S				
107	qnum	7		S				
108	crew	7	.5	S	Crew member number			
109	cname	7	.5	S	Crew member name			
110	cnick	7	.5	S	Crew member nickname			
111	beach	7	.5	S	Crew member beach		x	
112	clica	7	.5	S	Crew member license type			Z?, Missing value?
113	clicb	7	.5	S	Crew member license number			
114	role	7	.5	S	Crew member role			'recode role.sps'
115	recnum	8		M				
116	qnum	8		M				
117	operatn	8	.1	M				6?
118	howused	8	.2	M				7?
119	fishin	8	.3	M	Vessel fishes in Jamaican waters			
120	fishout	8	.4	M	Vessel fishes outside jamaican waters			
121	whrfish1	8	.5	M	Where does vessel fish - primary		x	
122	whrfish2	8	.5	M	Where does vessel fish - secondary		x	
123	whrfish3	8	.5	M	Where does vessel fish - third		x	
124	whrfish4	8	.5	M	Where does vessel fish - fourth		x	
125	recnum	9		M				

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
126	qnum	9		M				
127	weekend	9	.1	M	Does vessel fish weekends			
128	holiday	9	.1	M	Does vessel fish holidays			
129	timeland	9	.2	M	Time of day catch landed		x	Recode to time period variable perland
	timlangp		.2	M	Grouping of timeland		x	Created variable, 'label timlangp.sps'
130	whytime	9	.2	M	Why that time			
131	howfarkm	9	.3	M	How far is main fishing ground			converted to km
132	howfarcd	9	.3	M	Code			
133	gasuse	9	.4	M	Gas used per trip			Cannot be used -- see below
134	gasusecd	9	.4	M	Gas use code			all are zeros or missing (zeros are missing)
135	howlong9	9	.6	M	How long in present activities			to be converted
136	hwlngcd9	9	.6	M	Code			Code includes mainly 0s
137	fishkept	9	.8	M	How fish kept from spoiling		x	'label fishkept.sps'
	fshkepgp		.8	M	Grouping fishkept			Created variable, 'label fish kept group.sps'
138	recnum	10		S				
139	qnum	10		S				
140	triptyp	10	.5	S	Trip type		x	'label 10triptyp.sps'
141	tripdur	10	.5	S	Trip duration		x	'label 10tripdur.sps'
142	trippurp	10	.5	S	Trip purpose		x	'label 10 trippurp.sps'
143	tripw	10	.5	S	Trips/week			
144	gear1	10		S	Gear type used			'label 10 gear type.sps'

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Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			.5					
145	gear2	10	.5	S	Gear type used			'label 10 gear type.sps'
146	gear3	10	.5	S	Gear type used			'label 10 gear type.sps'
147	tripm	10	.5	S	Trips/month			
148	boats	10	.5	S	No of boats bought from			
149	wgt	10	.5	S	Weight of fish bought/trip			converted to kg
150	wgtcd	10	.5	S	Code			only 22 values all = 1
151	recnum	11		S				
152	qnum	11		S				
153	contain	11	.7	S	Container type		x	'label 11contain.sps'
154	contnum	11	.7	S	Container number of			
155	concapkg	11	.7	S	Container capacity			converted to kg
156	capcode	11	.7	S	Code			
157	recnum	12		M				
158	qnum	12		M				
159	mainfish	12	.1	M	Main fish type targeted			
160	mnfshgp	CR	.1	M	Groupings based on mainfish			New variable from -- 'recode species.sps'
161	mngear1	12	.2	M	Main gear 1			'label main gear.sps'
162	mngear2	12	.2	M	main gear 2			label main gear.sps
163	recnum	13		S				
164	qnum	13		S				
165	nettyp	13	.3	S	Nets type		x	'lable 13 nettype.sps'
166	netnum	13		S	Nets number			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			.3					
167	netmesh	13	.3	S	Nets mesh			Categorise
168	netshoot	13	.3	S	Nets shoots/trip			
169	netwgtkg	13	.3	S	Nets weight			converted to kg
170	netwgtcd	13	.3	S	Nets weight code			
171	nethours	13	.3	S	Net hours fished/trip			Group vs net type
172	netcatkg	13	.3	S	Nets catch/trip			converted to kg
173	netgrnd	13	.3	S	Nets fishing ground		x	
174	recnum	14	.3	S				
175	qnum	14	.3	S				
176	linetyp	14	.3	S	Lines type			'lable 14 nettype.sps'
177	linenum	14	.3	S	Lines number			
178	hooks	14	.3	S	Lines hooks			
179	linetest	14	.3	S	Lines test (in pounds)			
180	linehour	14	.3	S	Lines hours/trip			
181	lincatkg	14	.3	S	Lines catch/trip			converted to kg
182	lingrnd	14	.3	S	Lines fishing ground		x	
183	recnum	15	.3	S				
184	qnum	15	.3	S				
185	divetyp	15	.3	S	Diver type			'lable 15 divetype.sps'
186	spearnum	15	.3	S	Diver number of spears			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
187	slingnum	15	.3	S	Diver number of slings			
188	handnum	15	.3	S	Diver number of hand grabs			
189	divesnum	15	.3	S	Diver dives/trip			
190	divers	15	.3	S	Diver no of divers per trip			
191	divtime	15	.3	S	Diver time under water per trip			converted to decimal hours
192	dtimcd	15	.3	S	time code for divtim			clearly some errors here
193	divecat	15	.3	S	Diver catch/trip			converted to kg
194	divgrnd	15	.3	S	Diver fishing ground		x	
195	recnum	16		S				
196	qnum	16		S				
197	pottyp	16	.3	S	Pots type			'label 16 pot type.sps'
198	potsize1	16	.3	S	Pots size 1			Feet
199	potsize2	16	.3	S	Pots size 2			Feet, Unsure what this variable means
200	numsoak	16	.3	S	Pots number soaking			
201	numland	16	.3	S	Pots number on land			
202	numbuild	16	.3	S	Pots number being built			
203	potmesh	16	.3	S	Pots mesh			Categorise, some unlikely sizes here
204	potsoak	16	.3	S	Pots soak tme			In days -- 80 days
205	potcatkg	16	.3	S	Pots catch/trip			converted to kg
206	potcatcd	16	.3	S	Pots catch code			
207	potlife	16		S	Pots life expectancy			In months

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			.3					
208	potgrnd	16	.3	S	Pots fishing ground		x	
209	recnum	17		S				
210	qnum	17		S				
211	fshtype	17	.1	S	Type of fish caught		x	As per mainfish. Some codes not known
214	fshtpgp	17	.1	S	Categories of fshtype		x	Created variable
212	percent	17	.1	S	Percent of catch			categorise
213	price	17	.1	S	Price per pound			Jamaica dollars. Categorise
215	recnum	18		S				
216	qnum	18		S				
217	fshtyp18	18	.2	S	Type of fish caught		x	As per mainfish
218	fshtypgp	CR	.2	S	Categories of fshtype		x	Created variable
219	jans	18	.2	S	High or low season			'label 18 season.sps'
220	febs	18	.2	S	High or low season			'label 18 season.sps'
221	mars	18	.2	S	High or low season			'label 18 season.sps'
222	aprs	18	.2	S	High or low season			'label 18 season.sps'
223	mays	18	.2	S	High or low season			'label 18 season.sps'
224	juns	18	.2	S	High or low season			'label 18 season.sps'
225	juls	18	.2	S	High or low season			'label 18 season.sps'
226	augs	18	.2	S	High or low season			'label 18 season.sps'
227	seps	18	.2	S	High or low season			'label 18 season.sps'
228	octs	18	.2	S	High or low season			'label 18 season.sps'

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
229	novs	18	.2	S	High or low season			'label 18 season.sps'
230	decs	18	.2	S	High or low season			'label 18 season.sps'
231	janw	18	.2	S	Good or bad weather			'label 18 weather.sps'
232	febw	18	.2	S	Good or bad weather			'label 18 weather.sps'
233	marw	18	.2	S	Good or bad weather			'label 18 weather.sps'
234	aprw	18	.2	S	Good or bad weather			'label 18 weather.sps'
235	mayw	18	.2	S	Good or bad weather			'label 18 weather.sps'
236	junw	18	.2	S	Good or bad weather			'label 18 weather.sps'
237	julw	18	.2	S	Good or bad weather			'label 18 weather.sps'
238	augw	18	.2	S	Good or bad weather			'label 18 weather.sps'
239	sepw	18	.2	S	Good or bad weather			'label 18 weather.sps'
240	octw	18	.2	S	Good or bad weather			'label 18 weather.sps'
241	novw	18	.2	S	Good or bad weather			'label 18 weather.sps'
242	decw	18	.2	S	Good or bad weather			'label 18 weather.sps'
243	recnum	19		S				
244	qnum	19		S				
245	fshtype	19	.1	S	Type of fish			Categories
246	retained	19	.1	S	Kept by fisher			
247	given	19	.1	S	Given to family/friends			
248	carrier	19	.1	S	Sold to carrier boat			
249	wholsale	19	.1	S	Sold to wholesale vendors			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
250	vendor	19	.1	S	Sold to retail vendors			
251	hotel	19	.1	S	Sold to hotels and restaurants			
252	plants	19	.1	S	Sold to processing plants			
253	consumer	19	.1	S	Sold to consumer			
254	other	19	.1	S	Disposed of otherwise			
255	recnum	20		S				
256	qnum	20		S				
257	comcode1	20		S	Comments			
258	comcode2	20		S	Comments			
259	comcode3	20		S	Comments			
260	comment	20		S	Comments			
261	recnum	21		M				
262	qnum	21		M				
263	engdam	21	0.1	M	Mitch - engine damaged		x	'label engine damage.sps'
264	engdamex	21	0.1	M	Mitch - extent of engine damage		x	'label extent eng damage.sps (J$38 = US$1)
265	engdamnt	21	0.1	M	Mitch - nature of engine damage		x	'label nature eng damage.sps'
266	vesdam	21	0.2	M	Mitch - vessel damaged		x	label vessel damage.sps
267	vesdamex	21	0.2	M	Mitch - extent of vessel damage		x	'label extent ves damage.sps' (J$38 = US$1)
268	vesdamnt	21	0.2	M	Mitch - nature of vessel damage		x	'label nature ves damage.sps'
269	mvesuse	21	0.3	M	Vessel used since Mitch		x	'label vess used.sps'
270	musedy	21	0.3	M	Day vessel used since Mitch			
271	musemn	21	0.3	M	Month vessel used since Mitch		x	'label month used.sps'
272	museyr	21		M	Year vessel used since Mitch			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
			0.3					
273	whereop	21	0.3	M	From where is vessel now operating		x	All missing values
274	samarea1	21	0.3	M	Same area as before Mitch		x	
275	difarea1	21	0.3	M	Different area than before Mitch		x	
276	samgear1	21	0.3	M	Same gear as before Mitch		x	
277	difgear1	21	0.3	M	Different gear than before Mitch		x	'label different gear.sps'
278	resume	21	0.3	M	Intend to resume fishing this vessel?		x	
279	whenres	21	0.3	M	When will resume fishing			
280	whatdet	21	0.3	M	What will determine this		x	No codes available
281	wherop	21	0.3	M	From where will it operate		x	
282	samarea2	21	0.3	M	Same area as before Mitch		x	
283	difarea2	21	0.3	M	Different area than before Mitch		x	
284	samgear2	21	0.3	M	Same gear as before Mitch		x	
285	difgear2	21	0.3	M	Different gear than before Mitch			
286	rent1	21	0.4	M	Been able to rent or lease?		x	
287	mgroups	21	0.4	M	To how many groups			
288	rent2	21	0.4	M	Any new groups since Mitch			
289	crewchng	21	0.5	M	Number of crew same since Mitch?			
290	mwekend	21	0.5	M	Fish on weekend since Mitch			
291	mholidy	21	0.5	M	Fish on holiday since Mitch			

Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
292	finrep	21	0.9	M	How have repairs been financed			
293	hwfinrep	21	0.10	M	How will repairs be financed			Needs to be sorted out
294	mcomment	21		M	Comments			
295	recnum	22		S				
296	qnum	22		S				
297	trptyp22	22	0.7	S	Type of trip since Mitch		x	
298	trpdur22	22	0.7	S	Duration of trips since Mitch		x	
299	trppur22	22	0.7	S	Purpose of trips since Mitch		x	
300	trpnum22	22	0.7	S	Trips/week since Mitch			
301	gear122	22	0.7	S	Gear used since Mitch		x	
302	gear222	22	0.7	S	Gear used since Mitch		x	
303	gear322	22	0.7	S	Gear used since Mitch		x	No data
304	purtrps	22	0.7	S	Purchasing trips/month since Mitch			
305	purboats	22	0.7	S	No boats bought from since Mitch			
306	purwgt	22	0.7	S	Average weight of fish/trip since Mitch			
307	purwgtcd	22	0.7	S	Weight code			
308	recnum	23		S				
309	qnum	23		S				
310	mpottyp	23	0.8	S	Type of pot			
311	mpotsz1	23	0.8	S	Pot size			16 ft, 15, 12
312	mpotsz2	23	0.8	S				
313	mpot	23	0.8	S	Pots before Mitch			

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Sequence	Variable name	Original record	Question number	Variable location, M=main file, S=separate file	ADDITIONAL DESCRIPTION	Recode	Label	DETAILS
314	mpotfix	23	0.8	S	Pots damaged and fied			
315	mpotlost	23	0.8	S	Pots destroyed			
316	mpotok	23	0.8	S	Pots not damaged			
317	mpotbld	23	0.8	S	Pots built			
318	mpotsoak	23	0.8	S	Pots soaking			
319	mpotlnd	23	0.8	S	Pots on land			
320	mpotbuil	23	0.8	S	Pots being built			
321	mpotmesh	23	0.8	S	Mesh size			
322	mpotsktm	23	0.8	S	Soak time			
323	mpotcat	23	0.8	S	Pot catch			
324	mpotctcd	23	0.8	S	Code			24 Mising values
325	mpotgrnd	23	0.8	S	Fishing grounds			
	vesmnuse				Vessel main use			Created variable
	seqnumlr				Sequential number in the listing record file			
	lrbchmor				Mooring beach in listing record			
	inlrce				Whether boats were in both the listing record and census			Created variable: 1 = in census not in LR, 2 = in LR not in census, 3 = in both surveys
	active				Whether boat is active			Created variable: 0 = not active, 1 = active

```
              --------------------------------------------------------------------
              °QUESTIONNAIRE NO.: °°°°°°
              °
              °PARISH:                          °°
              °CONSTITUENCY:                    °°
              °ENUMERATION DISTRICT:            °°°
              °QUESTIONNAIRE Nø:                °°°°
              °
              °
              °
              °INTERVIEWER CODE:                °°°°
              °DATE OF INTERVIEW:               °°°°°°
              °INTERVIEW SITE:                  °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°
              °
              °
              °     CENSUS OF BOATS IN THE JAMAICAN FISHING INDUSTRY:  IDENTIFICATION
              °
              °
              --------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS

QUESTIONNAIRE NO   %1.000   4   6

PARISH   PARISH   1   10   2   QLN   ENCODEMENT:

                                                                  KINGSTON.......01
                                                                  ST. ANDREW.....02
                                                                  ST. THOMAS.....03
                                                                  PORTLAND.......04
                                                                  ST. MARY.......05
                                                                  ST. ANN........06
                                                                  TRELAWNY.......07
                                                                  ST. JAMES......08
                                                                  HANOVER........09
                                                                  WESTMORELAND...10
                                                                  ST. ELIZABETH..11
                                                                  MANCHESTER.....12
                                                                  CLARENDON......13
                                                                  ST. CATHERINE..14

CONSTITUENCY   CONST   1   12   2   QNT   VALUES RANGE FROM 1 TO 12
ENUMERATION DISTRICT   ED   1   14   3   QNT   VALUES RANGE FROM 1 TO 208
QUESTIONNAIRE Nø   QST   1   17   4   QNT   VALUES RANGE FROM 1 TO 9999
INTERVIEWER CODE   INT   1   21   4   QNT   VALUES RANGE FROM 1 TO 9999
DATE OF INTERVIEW   DATE   1   25   6   CHR
INTERVIEW SITE   SITE   1   31   35   TYP

```
              --------------------------------------------------------------------------------
              °QUESTIONNAIRE NO.: °°°°°°                                          SECTION 1
              °
              °
              °1.1 NAME OF RESPONDENT:      °°°°°°°°°°°°°°°°°°°°°°°°°
              °1.2 NICKNAME OF RESPONDENT:  °°°°°°°°°°°°°°°°°°°°°°°°°
              °
              °1.3 ROLE IN THE FISHERY?:    °°°°°°°°°°°°°°°°°°°°°°°°°
              °          SPECIFY: °°°°°°°°°°°°°°°°°°°°°°°°°
              °
              °1.4 SEX: °°°°°°°°°°        1.5 DATE OF BIRTH: °°°°°°
              °
              °1.6 HOME ADDRESS:        °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°
              °
              °1.7 HOME TELEPHONE:        °°°°°°°°
              °
              °1.8 REGISTERED FISHER?:      °°°°°°   LICENCE NO: °°°°°
              °
              °1.9 HOW LONG HAVE YOU BEEN FISHING°°   PERIOD:°°°°°°°°°°°°°°°°°°°°°
              °1.10 LAST SCHOOL ATTENDED?:   °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°
              °
              °    CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY: RESPONDENT INFORMATION
              --------------------------------------------------------------------------------
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VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO		%2.000	4	6		
1.1 NAME OF RESPONDENT	Q1_1	2	10	25	TYP	
1.2 NICKNAME OF RESPONDENT	Q1_2	2	35	25	TYP	
1.3 ROLE IN THE FISHERY?	Q1_3	2	60	1	QLN	ENCODEMENT:
						CAPTAIN..........1 (Q1_4)
						OWNER............2 (EOV)
						OWNER/CAPTAIN....3 (EOV)
						CREW.............4 (Q1_4)
						SPEAR FISHERMAN..5 (Q1_4)
						OTHER............6
SPECIFY	ROLESP	2	61	25	TYP	
1.4 SEX	Q1_4	2	86	1	QLN	ENCODEMENT:
						MALE....1
						FEMALE..2
1.5 DATE OF BIRTH	Q1_5	2	87	6	CHR	
1.6 HOME ADDRESS	Q1_6	2	93	45	TYP	
1.7 HOME TELEPHONE	Q1_7	2	138	7	QNT	VALUES RANGE FROM 500000 TO 9999999
1.8 REGISTERED FISHER?	Q1_8	2	145	1	QLN	ENCODEMENT:
						YES..1
						NO...2 (Q1_9)
LICENCE NO	LICNO1	2	146	1	TYP	
–	LICNO2	2	147	4	QNT	VALUES RANGE FROM 1 TO 9999

```
1.9 HOW LONG HAVE YOU BEEN FISHIN    Q1_9    2    151      2    QNT    VALUES RANGE FROM 1 TO 80

PERIOD                               Q1_9P   2    153      1    QLN    ENCODEMENT:
                                                                      DAYS....1
                                                                      WEEKS...2
                                                                      MONTHS..3
                                                                      YEARS...4

1.10 LAST SCHOOL ATTENDED?           Q1_10   2    154      1    QLN    ENCODEMENT:
                                                                      NONE.............................1
                                                                      PRIMARY.........................2
                                                                      NEW/JUNIOR SECONDARY............3
                                                                      TRADITIONAL/COMPREHENSIVE HIGH..4
                                                                      COLLEGE/UNIVERSITY..............5
                                                                      OTHER...........................6
```

```
   ---------------------------------------------------------------------------
              °QUESTIONNAIRE NO.: °°°°°°                                     °
              °                                                              °
              °                                                              °
              °2.1 NAME OF VESSEL OWNER:    °°°°°°°°°°°°°°°°°°°°°°°°°         °
              °2.3 NICKNAME OF VESSEL OWNER: °°°°°°°°°°°°°°°°°°°°°°°°°        °
              °                                                              °
              °2.3 SEX: ° °°°°°°°°        2.4 DATE OF BIRTH: °°°°°°          °
              °                                                              °
              °2.5 HOME ADDRESS:        °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°  °
              °                                                              °
              °2.6 HOME TELEPHONE:      °°°°°°°°                             °
              °                                                              °
              °2.7 REGISTERED FISHER?:     °°°°°°   LICENCE NO: °°°°°°        °
              °                                                              °
              °2.8 HOW LONG HAVE YOU BEEN FISHING°°   PERIOD:°°°°°°°°°°°°°°   °
              °                                                              °
              °2.9 LAST SCHOOL ATTENDED?:   °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°° °
              °                                                              °
              °2.10 HOW MANY VESSELS OWNED?:    °°                           °
              °2.11 ARE ANY LEASED/RENTED?:    °°°°°°°°°°                     °
              °2.12 HOW MANY GROUPS:           °°                            °
              °                                                              °
              °                                                              °
              °                                                              °
              °    CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: OWNER INFORMATION  °
   ---------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO		%3.000	4	6		
2.1 NAME OF VESSEL OWNER	Q2_1	3	10	25	TYP	
2.3 NICKNAME OF VESSEL OWNER	Q2_2	3	35	25	TYP	
2.3 SEX	Q2_3	3	60	1	QLN	ENCODEMENT: MALE....1 FEMALE..2
2.4 DATE OF BIRTH	Q2_4	3	61	6	CHR	
2.5 HOME ADDRESS	Q2_5	3	67	45	TYP	
2.6 HOME TELEPHONE	Q2_6	3	112	7	QNT	VALUES RANGE FROM 500000 TO 9999999
2.7 REGISTERED FISHER?	Q2_7	3	119	1	QLN	ENCODEMENT: YES..1 NO...2 (Q2_8)
LICENCE NO	LICNO1	3	120	1	TYP	
–	LICNO2	3	121	4	QNT	VALUES RANGE FROM 1 TO 9999
2.8 HOW LONG HAVE YOU BEEN FISHIN	Q2_8	3	125	2	QNT	VALUES RANGE FROM 1 TO 80
PERIOD	Q2_8P	3	127	1	QLN	ENCODEMENT: DAYS....1 WEEKS...2 MONTHS..3 YEARS...4

A7-4

```
2.9 LAST SCHOOL ATTENDED?          Q2_9    3    128    1    QLN    ENCODEMENT:
                                                                  NONE...........................1
                                                                  PRIMARY........................2
                                                                  NEW/JUNIOR SECONDARY...........3
                                                                  TRADITIONAL/COMPREHENSIVE HIGH..4
                                                                  COLLEGE/UNIVERSITY.............5

2.10 HOW MANY VESSELS OWNED?       Q2_10   3    129    2    QNT    VALUES RANGE FROM 1 TO 25
2.11 ARE ANY LEASED/RENTED?        Q2_11   3    131    1    QLN    ENCODEMENT:
                                                                  RENTED..1
                                                                  LEASED..2
                                                                  LENT....3
                                                                  NO......4 ( EOV)

2.12 HOW MANY GROUPS               Q2_12   3    132    2    QNT    VALUES RANGE FROM 1 TO 25
```

```
      ----------------------------------------------------------------------------
      °QUESTIONNAIRE NO.: °°°°°°
      °                                                                          °
      °                      GROUP NUMBER:  °°                                   °
      °                                                                          °
      °   NAMES                NICKNAMES          FISHING     LICENCE   ROLE      °
      °                                           BEACH         #                °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °°°°°°°°°°°°°°°°°°°°°° °°°°°°°°°°°°°°°°°°°°° °°°    °°°°°° °°°°°°°°°°°°°°°°° °
      °                                                                          °
      °                                                                          °
      °      CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: USER INFORMATION          °
      ----------------------------------------------------------------------------
```

VARIABLE   CODE   RT   FROM   LENGTH TYPE   REMARKS

QUESTIONNAIRE NO   %4.000   4   6
GROUP NUMBER   GROUP   4   10   2   QNT   VALUES RANGE FROM 1 TO 20

                               GNAME1 4   12   20   TYP
                               GNICK1 4   32   20   TYP
                               BEACH1 4   52   3   TYP
                               GLICN1 4   55   1   TYP
                               GLICN1A 4   56   4   QNT   VALUES RANGE FROM 1 TO 9999
                                ROLE1 4   60   1   QLN   ENCODEMENT:
                                                                 OWNER.........1
                                                                 OWN/CAPTN.....2
                                                                 CAPTAIN.......3
                                                                 REG. CREW.....4
                                                                 NO BOAT LAND..5
                                                                 NO BOAT SEA...6
                                                                 TEMP CREW.....7
                                                                 OTHER.........9

                               GNAME2 4   61   20   TYP   (CAN BE BLANK)
                               GNICK2 4   81   20   TYP   (CAN BE BLANK)
                               BEACH2 4   101   3   TYP   (CAN BE BLANK)
                               GLICN2 4   104   1   TYP   (CAN BE BLANK)
                               GLICN2A 4   105   4   QNT   VALUES RANGE FROM 1 TO 9999(CAN BE BLANK)

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```
    ROLE2      4     109       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             CAN BE BLANK)
    GNAME3     4     110      20     TYP     (CAN BE BLANK)
    GNICK3     4     130      20     TYP     (CAN BE BLANK)
    BEACH3     4     150       3     TYP     (CAN BE BLANK)
    GLICN3     4     153       1     TYP     (CAN BE BLANK)
    GLICN3A    4     154       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE3      4     158       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
    GNAME4     4     159      20     TYP     (CAN BE BLANK)
    GNICK4     4     179      20     TYP     (CAN BE BLANK)
    BEACH4     4     199       3     TYP     (CAN BE BLANK)
    GLICN4     4     202       1     TYP     (CAN BE BLANK)
    GLICN4A    4     203       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE4      4     207       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
    GNAME5     4     208      20     TYP     (CAN BE BLANK)
    GNICK5     4     228      20     TYP     (CAN BE BLANK)
    BEACH5     4     248       3     TYP     (CAN BE BLANK)
    GLICN5     4     251       1     TYP     (CAN BE BLANK)
    GLICN5A    4     252       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE5      4     256       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
    GNAME6     4     257      20     TYP     (CAN BE BLANK)
    GNICK6     4     277      20     TYP     (CAN BE BLANK)
    BEACH6     4     297       3     TYP     (CAN BE BLANK)
    GLICN6     4     300       1     TYP     (CAN BE BLANK)
    GLICN6A    4     301       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE6      4     305       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
    GNAME7     4     306      20     TYP     (CAN BE BLANK)
    GNICK7     4     326      20     TYP     (CAN BE BLANK)
    BEACH7     4     346       3     TYP     (CAN BE BLANK)
    GLICN7     4     349       1     TYP     (CAN BE BLANK)
    GLICN7A    4     350       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE7      4     354       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
    GNAME8     4     355      20     TYP     (CAN BE BLANK)
    GNICK8     4     375      20     TYP     (CAN BE BLANK)
    BEACH8     4     395       3     TYP     (CAN BE BLANK)
    GLICN8     4     398       1     TYP     (CAN BE BLANK)
    GLICN8A    4     399       4     QNT     VALUES RANGE FROM 1 TO 9999
                                             (CAN BE BLANK)
    ROLE8      4     403       1     QLN     SAME ENCODEMENT AS `ROLE1'
                                             (CAN BE BLANK)
```

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```
        ------------------------------------------------------------------
          °QUESTIONNAIRE NO.: °°°°°°                                 SECTION 3  °
          °                                                                     °
          °3.1  NAME OF VESSEL:          °°°°°°°°°°°°°°°°°°°°°°°°°°°             °
          °3.2 IS VESSEL REGISTERED ?:    °°°°°°   REGISTRATION NO:  °°°-°°°     °
          °                                                                     °
          °3.3 WHICH BEACH BOAT REGISTERED?: °°°  PARISH: °°                     °
          °                                                                     °
          °3.4 SIZE OF THIS BOAT?         LENGTH: °°°°    WIDTH:°°°°    DEPTH:°°°°  °
          °3.5 WHAT IS BOAT MADE OF?:     °°°°°°°°°°°°°°                          °
          °3.6 COLOUR BOAT?     OUTSIDE:°°°°°°°°°°° INSIDE:°°°°°°°°°°° DECK: °°°°°°°°°°° °
          °3.7 HOW IS THIS BOAT POWERED?:  °°°°°°°°°°°°                          °
          °3.8 BRAND & HORSEPOWER OF ENGINES                                    °
          °ENGINE        BRAND              HORSEPOWER                          °
          °1         °°°°°°°°°°°°°           °°°                                 °
          °2         °°°°°°°°°°°°°           °°°                                 °
          °3         °°°°°°°°°°°°°           °°°                                 °
          °4         °°°°°°°°°°°°°           °°°                                 °
          °3.9 WHEN WAS BOAT LAST USED?:   °°°°°°°°°°°°°°                        °
          °3.10 WHY IS BOAT NOT IN USE? :   °°                                  °
          °3.11 WHERE IS BOAT MOORED?:      °°°  PARISH: °°                      °
          °3.12 WHICH BEACH DO YOU SELL?:   °°°  PARISH: °°                      °
          °                                                                     °
          °                                                                     °
          °                                                                     °
          °    CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: VESSEL INFORMATION    °
        ------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------------------

VARIABLE                        CODE   RT    FROM   LENGTH  TYPE  REMARKS
--------------------------------------------------------------------------------------------
QUESTIONNAIRE NO                       %5.000   4      6
--------------------------------------------------------------------------------------------
3.1  NAME OF VESSEL             Q3_1    5     10      25     TYP
3.2 IS VESSEL REGISTERED ?      Q3_2    5     35       1     QLN    ENCODEMENT:
                                                                    YES..1
                                                                    NO...2 (Q3_4L)
REGISTRATION NO                 VREGNO1 5     36       3     TYP
                                VREGNO2 5     39       3     QNT    VALUES RANGE FROM 1 TO 999
3.3 WHICH BEACH BOAT REGISTERED?  Q3_3  5     42       3     TYP
PARISH                          Q3_3P   5     45       2     QNT    VALUES RANGE FROM 1 TO 14
3.4 SIZE OF THIS BOAT?          Q3_4L   5     47       4     QNT    VALUES RANGE FROM 10 TO 75.9
WIDTH                           Q3_4W   5     51       4     QNT    VALUES RANGE FROM 2 TO 25.9
DEPTH                           Q3_4D   5     55       4     QNT    VALUES RANGE FROM 2 TO 25.9

3.5 WHAT IS BOAT MADE OF?       Q3_5    5     59       2     QLN    ENCODEMENT:
                                                                    DUGOUT......01
                                                                    PLYWOOD.....02
                                                                    STEEL.......03
                                                                    FIBREGLASS..04
                                                                    OTHER.......05

3.6 COLOUR BOAT?     OUTSIDE    Q3_6O   5     61       2     QLN    ENCODEMENT:
                                                                    BROWN....01
```

```
                                                           BLUE.....02
                                                           RED......03
                                                           YELLOW...04
                                                           GREEN....05
                                                           GREY.....06
                                                           WHITE....07
                                                           BLACK....08
                                                           ORANGE...09
                                                           PURPLE...10
                                                           PINK.....11
                                                           NATURAL..98
                                                           N/S......99

INSIDE                        Q3_6I   5   63   2   QLN   SAME ENCODEMENT AS `Q3_6O'

DECK                          Q3_6D   5   65   2   QLN   SAME ENCODEMENT AS `Q3_6O'

3.7 HOW IS THIS BOAT POWERED? Q3_7    5   67   1   QLN   ENCODEMENT:
                                                        OARS......1 (Q3_9)
                                                        SAILS.....2 (Q3_9)
                                                        OTHER.....3 (Q3_9)
                                                        OUTBOARD..4
                                                        INBOARD...5
                                                        OTHER.....6

                              Q3_8B1  5   68   2   QLN   ENCODEMENT:
                                                        YAMAHA....01
                                                        MARINER...02
                                                        JOHNSON...03
                                                        GM........04
                                                        EVAROO....05
                                                        MARATHON..06

                              Q3_8H1  5   70   3   QNT   VALUES RANGE FROM 4 TO 250
                              Q3_8B2  5   73   2   QLN   SAME ENCODEMENT AS `Q3_8B1'
                              Q3_8H2  5   75   3   QNT   VALUES RANGE FROM 4 TO 250
                              Q3_8B3  5   78   2   QLN   SAME ENCODEMENT AS `Q3_8B1'
                              Q3_8H3  5   80   3   QNT   VALUES RANGE FROM 4 TO 250
                              Q3_8B4  5   83   2   QLN   SAME ENCODEMENT AS `Q3_8B1'
                              Q3_8H4  5   85   3   QNT   VALUES RANGE FROM 4 TO 250

3.9 WHEN WAS BOAT LAST USED?  Q3_9    5   88   1   QLN   ENCODEMENT:
                                                        THIS WEEK...1 ( Q3_11)
                                                        LAST MONTH..2 ( Q3_11)
                                                        THIS YEAR...3
                                                        LONG TIME...4

3.10 WHY IS BOAT NOT IN USE?  Q3_10   5   89   2   QNT   VALUES RANGE FROM 1 TO 65

3.11 WHERE IS BOAT MOORED?    Q3_11   5   91   3   TYP
PARISH                        Q3_11P  5   94   2   QNT   VALUES RANGE FROM 1 TO 14

3.12 WHICH BEACH DO YOU SELL? Q3_12   5   96   3   TYP
PARISH                        Q3_12P  5   99   2   QNT   VALUES RANGE FROM 1 TO 14
```

```
    -------------------------------------------------------------------------------
       °QUESTIONNAIRE NO.: °°°°°°                                   SECTION 4  °
       °                                                                       °
       °                                                                       °
       °REGULAR CREW SIZE?            :°°                                       °
       °                                                                       °
       °HOW MANY ADDITIONAL WORKERS? :°°                                       °
       °                                                                       °
       °HOW OFTEN DO YOU CHANGE CREW?:°°       PERIOD:°°°°°°°°°°°°              °
       °                                                                       °
       °NAME OF CAPTAIN?          :  °°°°°°°°°                                  °
       °                                                                       °
       °                          °°°°°°°°°°°°°°°°°°°°°°°LICENCE NO:°-°°°°       °
       °                                                                       °
       °                                                                       °
       °                                                                       °
       °                                                                       °
       °                                                                       °
       °      CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: CREW INFORMATION      °
        --------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS

| QUESTIONNAIRE NO | | %6.000 | 4 | 6 | | |

REGULAR CREW SIZE?	Q4_1	6	10	2	QNT	VALUES RANGE FROM 1 TO 15
HOW MANY ADDITIONAL WORKERS?	Q4_2	6	12	2	QNT	VALUES RANGE FROM 0 TO 10
HOW OFTEN DO YOU CHANGE CREW?	Q4_3	6	14	2	QNT	VALUES RANGE FROM 0 TO 10
PERIOD	Q4_3P	6	16	1	QLN	ENCODEMENT:

```
                                                           DAYS.......1
                                                           WEEKS......2
                                                           FORTNIGHT..3
                                                           MONTH......4
                                                           YEAR.......5
                                                           SELDOM.....6
                                                           NEVER......7
```

| NAME OF CAPTAIN? | Q4_4 | 6 | 17 | 1 | QLN | ENCODEMENT: |

```
                                                           SELF...1 (EOV)
                                                           OTHER..2
```

| | Q4_4N | 6 | 18 | 25 | TYP | |

| LICENCE NO | Q4_4L1 | 6 | 43 | 1 | TYP | |
| | Q4_4L2 | 6 | 44 | 4 | QNT | VALUES RANGE FROM 1 TO 9999 |

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          °QUESTIONNAIRE NO.: °°°°°°   SECTION 4(CONT.)   °
          °   °
          °   °
          °   CREW NUMBER: °°   °
          °   °
          °   NAME   NICKNAME   FISHING   LICENCE   ROLE   °
          °   BEACH   #   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   °
          °   CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: CREW INFORMATION   °
          --   --------------------------------------

VARIABLE   CODE   RT   FROM   LENGTH TYPE REMARKS

QUESTIONNAIRE NO   %7.000   4   6
CREW NUMBER   CREW   7   10   2   QNT VALUES RANGE FROM 1 TO 20

                                CNAME   7   12   20   TYP
                                CNICK   7   32   20   TYP
                                BEACH   7   52   3   TYP
                                CLICA   7   55   1   TYP
                                CLICB   7   56   4   QNT VALUES RANGE FROM 1 TO 9999
                                 ROLE   7   60   1   QLN ENCODEMENT:

                                                               OWNER..........1
                                                               OWNER/CAPTAIN..2
                                                               CAPTAIN........3
                                                               CREW(REG)......4
                                                               NO BOAT/LAND...5
                                                               NO BOAT/SEA....6
                                                               OTHER..........9

```
         ---------------------------------------------------------------------------
              °QUESTIONNAIRE NO.: °°°°°°                                SECTION 5  °
              °                                                                    °
              °                                                                    °
              °5.1  OPERATIONS INVOLVED IN?:  °°°°°°°°°°°°°°°                       °
              °                                                                    °
              °5.2  HOW IS BOAT USED?:         °°°°°°°°°°°°°°                       °
              °                                                                    °
              °5.3  FISH IN LOCAL WATERS? :   °°°°°°°°                             °
              °                                                                    °
              °5.4  FISH OUTSIDE LOCAL WATERS?:°°°°°°°°                            °
              °                                                                    °
              °5.5  WHERE DO YOU FISH?   1:   °°°                                  °
              °                          2:   °°°                                  °
              °                          3:   °°°                                  °
              °                          4:   °°°                                  °
              °                                                                    °
              °                                                                    °
              °                                                                    °
              °     CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: FISHING OPERATIONS  °
              ---------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO	%8.000		4	6		

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
5.1 OPERATIONS INVOLVED IN?	Q5_1	8	10	2	QLN	ENCODEMENT: SMALL SCALE..01 LARGE SCALE..02 FOR FUN......03 FOR FAMILY...04 BUY TO SELL..05
5.2 HOW IS BOAT USED?	Q5_2	8	12	2	QLN	ENCODEMENT: CARRIER...01 PACKER....02 BIG HEAD..03 FISHING...04 CHARTER...05 TAXI......06 OTHER.....07
5.3 FISH IN LOCAL WATERS?	Q5_3	8	14	1	QLN	ENCODEMENT: YES..1 NO...2
5.4 FISH OUTSIDE LOCAL WATERS?	Q5_4	8	15	1	QLN	ENCODEMENT: YES..1 NO...2
5.5 WHERE DO YOU FISH? 1	Q5_51	8	16	3	QNT	VALUES RANGE FROM 1 TO 200
2	Q5_52	8	19	3	QNT	VALUES RANGE FROM 1 TO 200 (CAN BE BLANK)

```
3      Q5_53   8     22        3    QNT   VALUES RANGE FROM 1 TO 200
                                         (CAN BE BLANK)
4      Q5_54   8     25        3    QNT   VALUES RANGE FROM 1 TO 200
                                         (CAN BE BLANK)
```

```
              --------------------------------------------------------------------------------
              °QUESTIONNAIRE NO.: °°°°°°                                    SECTION 6  °
              °                                                                        °
              °                                                                        °
              °6.1 FISH ON WEEKENDS?            : °°°°°°    HOLIDAYS? °°°°°             °
              °                                                                        °
              °6.2 WHAT TIME DO YOU LAND CATCH?: °°°°                                   °
              °   WHY?                   CODE: °°                                       °
              °                                                                        °
              °6.3 HOW FAR IS MAIN FISHING ...?: °°°°°°                                 °
              °                      MEASURE: °                                        °
              °                                                                        °
              °6.4 AVERAGE GAS USED PER TRIP?  : °°°                                    °
              °                      MEASURE: °                                        °
              °                                                                        °
              °                                                                        °
              °6.6 HOW LONG HAS BOAT BEEN.....?: °°°                                    °
              °                       PERIOD: °                                        °
              °                                                                        °
              °6.8 HOW FISH KEPT FROM SPOILING?: °°                                     °
              °                                                                        °
              °                                                                        °
              °     CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: FISHING PRACTICES        °
               --------------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO	%9.000		4	6		
6.1 FISH ON WEEKENDS?	Q6_1A	9	10	1	QLN	ENCODEMENT: YES..1 NO...2
HOLIDAYS?	Q6_1B	9	11	1	QLN	ENCODEMENT: YES..1 NO...2
6.2 WHAT TIME DO YOU LAND CATCH?	Q6_2A	9	12	4	QNT	VALUES RANGE FROM 0 TO 2400
WHY? CODE	Q6_2B	9	16	2	QNT	VALUES RANGE FROM 1 TO 20
6.3 HOW FAR IS MAIN FISHING ...?	Q6_3A	9	18	6	QNT	VALUES RANGE FROM .25 TO 100.99
MEASURE	Q6_3B	9	24	1	QLN	ENCODEMENT: MILES...........1 KM.............2 NAUTICAL MILES..3
6.4 AVERAGE GAS USED PER TRIP?	Q6_4A	9	25	3	QNT	VALUES RANGE FROM 0 TO 100
MEASURE	Q6_4B	9	28	1	QLN	ENCODEMENT:

```
                                                        NO GAS...0
                                                        GALLONS..1
                                                        LITRES...2

6.6 HOW LONG HAS BOAT BEEN.....?   Q6_6A    9    29    3    QNT    VALUES RANGE FROM 1 TO 100
                        PERIOD     Q6_6B    9    32    1    QLN    ENCODEMENT:

                                                        DAYS....1
                                                        WEEKS...2
                                                        MONTHS..3
                                                        YEARS...4

6.8 HOW FISH KEPT FROM SPOILING?   Q6_8    9    33    2    QLN    ENCODEMENT:
                                                        BANANA LEAF..01
                                                        CROCUS BAG...02
                                                        ICE.........03
                                                        GUTTED.......04
```

```
 ------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                                SECTION 6(CONT'D)      °
°                                                                               °
°                                                                               °
° TYPE           DURATION       PURPOSE              TRIPS    GEAR TYPE          °
° OF TRIP                                                                        °
°                                                                               °
° °°°°°°°°°°°°°° °°°°°°°°°°    °°°°°°°°°°°°°°°°°°°    °°°°°°°° °°°°°°° °°°°°°°       °
°                                                                               °
°                                                                               °
°                     FOR PURCHASERS ONLY                                       °
°                  TRIPS    # BOATS   AVERAGE WT.   CODE                         °
°                                                                               °
°                   °°        °°       °°°°°         °°°°°°                       °
°                                                                               °
°                                                                               °
°                                                                               °
°                                                                               °
°                                                                               °
°                                                                               °
°        CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: CREW INFORMATION            °
 ------------------------------------------------------------------------------
```

```
---------------------------------------------------------------------------------
VARIABLE                         CODE   RT    FROM   LENGTH  TYPE   REMARKS
---------------------------------------------------------------------------------
QUESTIONNAIRE NO                 %10.000       4       6

                        TYPE   10    10      1     QLN    ENCODEMENT:
                                                         DAY........1
                                                         NIGHT......2
                                                         DAY/NIGHT..3
                                                         OTHER......4

                        DUR    10    11      1     QLN    ENCODEMENT:
                                                         2 PER DAY..1
                                                         1 PER DAY..2
                                                         2-3 DAYS...3
                                                         4+ DAYS....4
                                                         OTHER......5

                        PURPOSE 10   12      1     QLN    ENCODEMENT:
                                                         FISHING ONLY......1
                                                         PURCHASE FISH.....2
                                                         PURCHASE/FISHING..3
                                                         TAXI..............4
                                                         OTHER.............5

                        TRIPW  10    13      2     QNT    VALUES RANGE FROM 1 TO 10

                        GEAR1  10    15      1     QLN    ENCODEMENT:
                                                         NETS...1
                                                         LINES..2
                                                         DIVE...3
```

A7-17

```
                                    POT....4
                                    OTHER..5

GEAR2    10    16       1     QLN    SAME ENCODEMENT AS `GEAR1'
                                     (CAN BE BLANK)


GEAR3    10    17       1     QLN    SAME ENCODEMENT AS `GEAR1'
                                     (CAN BE BLANK)


TRIPM    10    18       2     QNT    VALUES RANGE FROM 1 TO 40
                                     (CAN BE BLANK)


BOATS    10    20       2     QNT    VALUES RANGE FROM 1 TO 40
                                      (CAN BE BLANK)


 WGT     10    22       5     QNT    VALUES RANGE FROM 1 TO 5000
                                     (CAN BE BLANK)


WGTCD    10    27       1     QLN    ENCODEMENT:
                                    LBS..1
                                    KG...2
                                    (CAN BE BLANK)
```

```
      --------------------------------------------------------------------------------
      °QUESTIONNAIRE NO.: °°°°°°                                 SECTION 6(CONT'D)    °
      °                                                                               °
      °                                                                               °
      °          IN WHAT CONTAINER DO YOU STORE FISH WHILE AT SEA?                    °
      °          --------------------------------------------------------------       °
      °          ³    TYPE        ³  NUMBER ³STORAGE CAPACITY³  MEASURE CODE  ³        °
      °          --------------------------------------------------------------       °
      °          ³°°°°°°°°°°°°°°°° ³    °    ³  °°°°°        ³ °°°°°°         ³         °
      °          ³                ³       ³    ³                ³            ³         °
      °          --------------------------------------------------------------       °
      °                                                                               °
      °                                                                               °
      °                                                                               °
      °                                                                               °
      °                                                                               °
      °     CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY: FISHING PRACTICES              °
      --------------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO	%11.000		4	6		
	STYPE	11	10	2	QLN	ENCODEMENT: BASKET.......01 ICE BOX......02 FREEZER......03 IGLOO........04 BOAT BOTTOM..05 OTHER........06 BOX..........07 BAG..........08 KEG..........09 FRIDGEPAN....10 ON NET.......11 STRING.......12
	NUMBER	11	12	1	QNT	VALUES RANGE FROM 1 TO 9
	CAP	11	13	5	QNT	VALUES RANGE FROM 1 TO 10000
	MCODE	11	18	1	QLN	ENCODEMENT: LBS..1 KG...2

```
        --------------------------------------------------------------------------------
        °QUESTIONNAIRE NO.: °°°°°°                                       SECTION 7  °
        °                                                                           °
        °                                                                           °
        °7.1 WHAT IS MAIN FISH TYPE?      : °°°°                                     °
        °                                                                           °
        °7.2 WHAT IS THE MAIN GEAR TYPE..?:°°°°°°°°° °°°°°°°°°                        °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °                                                                           °
        °       CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY: GEAR SPECIFICATIONS       °
        --------------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO		%12.000	4	6		
7.1 WHAT IS MAIN FISH TYPE?	Q7_1	12	10	4	QNT	VALUES RANGE FROM 101 TO 7099
7.2 WHAT IS THE MAIN GEAR TYPE..	Q7_2A	12	14	1	QLN	ENCODEMENT: NETS....1 LINES...2 DIVING..3 POTS....4
	Q7_2B	12	15	1	QLN	SAME ENCODEMENT AS `Q7_2A' (CAN BE BLANK)

A7-20

```
          °QUESTIONNAIRE NO.: °°°°°°                        SECTION 7(CONT'D)    °
        °                                                                        °
        °                                                                        °
        °          NETS                                                          °
        °    ------------------------------------------------------------        °
        °    ³ TYPE          ³# OF³MESH³# OF  ³WEIGHT³CODE  ³HOURS  ³AVERAGE ³MAIN    ³        °
        °    ³               ³NETS³SIZE³SHOOTS³      ³      ³SPENT  ³CATCH   ³FISHING ³        °
        °    ³        ³   ³   ³      ³      ³      ³FISHING³        ³GROUND  ³        °
        °    ------------------------------------------------------------        °
        °    ³        ³   ³   ³   ³   ³   ³   ³   ³   ³   ³        °
        °    ³      ³°  ³°°°°³ °°  ³°°°° ³°  ³  °°  ³ °°°° ³ °°°  ³    °        °
        °    ------------------------------------------------------------        °
        °                                                                        °
        °                                                                        °
        °                                                                        °
        °                                                                        °
```

VARIABLE   CODE   RT   FROM   LENGTH TYPE   REMARKS

QUESTIONNAIRE NO   %13.000   4   6

                                NTYPE 13   10   2   QLN   ENCODEMENT:

                                                                 CHINA....01
                                                                 SEINE....02
                                                                 SPRAT....03
                                                                 TRAMMEL..04
                                                                 CAST.....05
                                                                 LOBSTER..06
                                                                 SHOVE....07
                                                                 TRAWL....08
                                                                 BAIT.....09
                                                                 OTHER....10

                                NUMBER 13   12   1   QNT   VALUES RANGE FROM 1 TO 9
                                MESH   13   13   4   QNT   VALUES RANGE FROM 1.25 TO 5
                                SHOOTS 13   17   2   QNT   VALUES RANGE FROM 1 TO 99
                                NWGT   13   19   4   QNT   VALUES RANGE FROM 1 TO 5000
                                CODE   13   23   1   QLN   ENCODEMENT:
                                                                 KG...1
                                                                 LBS..2

                                NHOURS 13   24   2   QNT   VALUES RANGE FROM 1 TO 30
                                NCATCH 13   26   4   QNT   VALUES RANGE FROM 20 TO 6000
                                NGRND 13   30   3   QNT   VALUES RANGE FROM 1 TO 300

                                        A7-21

```
     ------------------------------------------------------------------------
     °QUESTIONNAIRE NO.: °°°°°°                              SECTION 7(CONT.)    °
     °                                                                          °
     °                                                                          °
     °        LINES                                                             °
     °     -----------------------------------------------------------------    °
     °     ³ TYPE        ³# OF  ³ HOOKS ³ LINE ³HOURS  ³AVERAGE ³MAIN     ³      °
     °     ³             ³LINES ³ PER   ³ TEST ³SPENT  ³CATCH   ³FISHING ³       °
     °     ³             ³USED  ³ LINE  ³      ³FISHING³        ³GROUND  ³       °
     °     -----------------------------------------------------------------    °
     °     ³             ³      ³       ³      ³       ³        ³        ³        °
     °     ³° ##########  ³°°    3 °°   3 °°°  3 °°    3 °°°°   3 °°°    3        °
     °     -----------------------------------------------------------------    °
     °                                                                          °
     °                                                                          °
     °                                                                          °
     °                                                                          °
     °     CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY:  GEAR SPECIFICATION        °
     -------------------------------------------------------------------------°
```

```
------------------------------------------------------------------------------------------
VARIABLE                      CODE   RT    FROM   LENGTH  TYPE   REMARKS
------------------------------------------------------------------------------------------
QUESTIONNAIRE NO                     %14.000     4       6

                              LTYPE  14    10      1      QLN    ENCODEMENT:

                                                                 TROLL......1
                                                                 HAND.......2
                                                                 PALANCA....3
                                                                 DROP LINE..4
                                                                 ROD&REEL...5
                                                                 LONG LINE..6

                              LINES  14    11      2      QNT    VALUES RANGE FROM 1 TO 50
                              HOOKS  14    13      2      QNT    VALUES RANGE FROM 1 TO 80
                               TEST  14    15      3      QNT    VALUES RANGE FROM 1 TO 750
                             LHOURS  14    18      2      QNT    VALUES RANGE FROM 1 TO 30
                             LCATCH  14    20      4      QNT    VALUES RANGE FROM 20 TO 6000
                              LGRND  14    24      3      QNT    VALUES RANGE FROM 1 TO 300
```

```
--------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                                    SECTION 7(CONT.)    °
°                                                                                 °
°                                                                                 °
°   DIVING                                                                        °
° --------------------------------------------------------------------------------°
° ³ TYPE          |SPEAR|HAWAIIAN|HAND|# OF | # OF ³TIME ³       ³AVERAGE ³MAIN    ³ °
° ³               |GUNS |SLING   |GRAB|DIVES|DIVERS³UNDER³       ³CATCH   ³FISHING ³ °
° ³               |     ³        |    |     |      ³WATER³CODE ³        ³GROUND  ³ °
° --------------------------------------------------------------------------------°
° ³              |     ³       ³   °   ³     ³     ³     ³      ³      ³      ³ °
° ³ ########### |     ³       ³   °   ³     ³ °° ³°°°°°³ °°°° ³      ³ °°°° ³ °
° --------------------------------------------------------------------------------°
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°                                                                                 °
°        CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY:  GEAR SPECIFICATION            °
--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------------------
VARIABLE                          CODE    RT    FROM   LENGTH  TYPE   REMARKS
--------------------------------------------------------------------------------------------
QUESTIONNAIRE NO                  %15.000       4        6

                                  DTYPE   15    10       1      QLN   ENCODEMENT:

                                                                     SCUBA......1
                                                                     HOOKA......2
                                                                     FREE LUNG..3

                                  SPEAR   15    11       2      QNT   VALUES RANGE FROM 0 TO 15
                                  SLING   15    13       2      QNT   VALUES RANGE FROM 0 TO 15
                                  HAND    15    15       2      QNT   VALUES RANGE FROM 0 TO 25
                                  DIVES   15    17       2      QNT   VALUES RANGE FROM 1 TO 50
                                  DIVERS  15    19       2      QNT   VALUES RANGE FROM 1 TO 25
                                  DTIME   15    21       2      QNT   VALUES RANGE FROM 1 TO 30
                                  TCODE   15    23       1      QLN   ENCODEMENT:
                                                                     SE..1
                                                                     MN..2
                                                                     HR..3

                                  DCATCH  15    24       4      QNT   VALUES RANGE FROM 20 TO 6000
                                  DGRND   15    28       4      QNT   VALUES RANGE FROM 1 TO 300
```

A7-23

```
--------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                                SECTION 7(CONT.)    °
°                                                                             °
°        POTS:    TYPE                        °                               °
°               ------------------------------------                          °
°               ° AVERAGE SIZE            ³ °°  °°      °                      °
°               ------------------------------------                          °
°               ° # OF POTS SOAKING       ³ °°°°        °                      °
°               ------------------------------------                          °
°               ° # OF POTS ON LAND       ³ °°°°        °                      °
°               ------------------------------------                          °
°               ° # OF POTS BEING BUILT   ³ °°°°        °                      °
°               ------------------------------------                          °
°               ° MESH SIZE               ³ °°°°        °                      °
°               ------------------------------------                          °
°               ° SOAK TIME(DAYS)         ³ °°          °                      °
°               ------------------------------------                          °
°               ° AVERAGE CATCH/TRIP      ³ °°°°        ° CODE:° ####          °
°               ------------------------------------                          °
°               ° LIFE EXPECTANCY         ³ °°          °                      °
°               ------------------------------------                          °
°               ° MAIN FISHING GROUND     ³ °°°         °                      °
°               ------------------------------------                          °
°                                                                             °
°                                                                             °
°      CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY:  GEAR SPECIFICATION         °
--------------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO	%16.000		4	6		
	PTYPE	16	10	1	QLN	ENCODEMENT:
						Z-TRAPS.....1
						JACK POTS...2
						CRAB TRAPS..3
						DIAMOND.....4
	SIZE1	16	11	2	QNT	VALUES RANGE FROM 1 TO 10
	SIZE2	16	13	2	QNT	VALUES RANGE FROM 1 TO 10
						(CAN BE BLANK)
	NUMSK	16	15	4	QNT	VALUES RANGE FROM 0 TO 1000
	NUMLD	16	19	4	QNT	VALUES RANGE FROM 0 TO 1000
	NUMBT	16	23	4	QNT	VALUES RANGE FROM 0 TO 1000
	PMESH	16	27	4	QNT	VALUES RANGE FROM 1.25 TO 5
	SKTIME	16	31	2	QNT	VALUES RANGE FROM 1 TO 25
	PCATCH	16	33	4	QNT	VALUES RANGE FROM 10 TO 6000
CODE	CODE	16	37	1	QLN	ENCODEMENT:
						KG...1
						LBS..2

A7-24

```
LIFE    16    38        2    QNT    VALUES RANGE FROM 1 TO 60
PGRND   16    40        3    QNT    VALUES RANGE FROM 1 TO 300
```

```
--------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                              SECTION 8(CONT.)     °
°                                                                           °
°                                                                           °
°      8.1  PLEASE INDICATE THE TYPES OF FISH LANDED OR PURCHSED?           °
°          --------------------------------------                           °
°          ³TYPE OF FISH ³ PERCENTAGE  ³BOAT PRICE ³                         °
°          ³  (CODE)     ³   OF CATCH  ³ PER LB    ³                         °
°          ³             ³             ³   (J$)    ³                         °
°          --------------------------------------                           °
°          ³             ³             ³           ³                         °
°          ³ °°°°        ³   °°°       ³           ³                         °
°          --------------------------------------                           °
°                                                                           °
°                                                                           °
°                                                                           °
°                                                                           °
°                                                                           °
°                                                                           °
°      CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY: CATCH CHARACTERISTICS      °
--------------------------------------------------------------------------------
```

```
----------------------------------------------------------------------------------------
VARIABLE                       CODE   RT    FROM   LENGTH  TYPE   REMARKS
----------------------------------------------------------------------------------------
QUESTIONNAIRE NO               %17.000       4       6

                               FTYPE  17     10      4      QNT   VALUES RANGE FROM 101 TO 7099


                                 PER  17     14      3      QNT   VALUES RANGE FROM 1 TO 100

                               PRICE  17     17      6      QNT   VALUES RANGE FROM 30 TO 250
```

A7-26

```
--------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                             SECTION 8(CONT'D)    °
°                                                                           °
°                                                                           °
°        8.2  WHICH MONTHS ARE HIGH/LOW SEASON, BAD/GOOD WEATHER?           °
°     ----------------------------------------------------------------      °
°     ³TYPE OF FISH   ³ J ³ F ³ M ³ A ³ M ³ J ³ J ³ A ³ S ³ O ³ N ³ D ³     °
°     ³  (CODE)       ³   ³   ³   ³   ³   ³   ³   ³   ³   ³   ³   ³   ³       °
°     ----------------------------------------------------------------      °
°     ³             ³ S ³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³               °
°     ³ °°°°          ---------------------------------------------------   °
°     ³             ³ W ³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³ °³               °
°     -----------------------------------------------------------------     °
°                                                                           °
°                                                                           °
°                                                                           °
°                                                                           °
°     CENSUS OF BOATS-JAMAICAN FISHING INDUSTRY: CATCH CHARACTERISTICS       °
      --------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------------
VARIABLE                      CODE   RT    FROM   LENGTH  TYPE   REMARKS
-------------------------------------------------------------------------------------
QUESTIONNAIRE NO                     %18.000     4       6
                              FTYPE  18    10      4      QNT   VALUES RANGE FROM 101 TO 7099
                              JANS   18    14      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              FEBS   18    15      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              MARS   18    16      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              APRS   18    17      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              MAYS   18    18      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              JUNS   18    19      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              JULS   18    20      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              AUGS   18    21      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              SEPS   18    22      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              OCTS   18    23      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              NOVS   18    24      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              DECS   18    25      1      QNT   VALUES RANGE FROM 1 TO 2
                                                                 (CAN BE BLANK)
                              JANW   18    26      1      QNT   VALUES RANGE FROM 3 TO 4
                                                                 (CAN BE BLANK)
                              FEBW   18    27      1      QNT   VALUES RANGE FROM 3 TO 4
                                                                 (CAN BE BLANK)
```

A7-27

```
MARW   18   28        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
APRW   18   29        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
MAYW   18   30        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
JUNW   18   31        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
JULW   18   32        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
AUGW   18   33        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
SEPW   18   34        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
OCTW   18   35        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
NOVW   18   36        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
DECW   18   37        1    QNT    VALUES RANGE FROM 3 TO 4
                                  (CAN BE BLANK)
```

```
--------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                                          SECTION 9  °
°                                                                              °
°           9.1 WHAT PERCENTAGE OF YOUR STOCK IS SOLD TO:                      °
°              FISH TYPE: °°°°                                                 °
°           ---------------------------------------------                      °
°           ° RETAINED BY FISHER              ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° GIVEN TO FAMILY AND FRIENDS     ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO CARRIER BOATS           ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO WHOLESALE               ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO RETAIL VENDORS          ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO HOTELS AND RESTAURANTS ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO PROCESSING PLANTS       ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° SOLD TO CONSUMER                ³  °°°       °                    °
°           ---------------------------------------------                      °
°           ° OTHER                           ³  °°°       °                    °
°           ---------------------------------------------                      °
°                                                                              °
°      CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY:  MARKETING ARRANGEMENTS       °
--------------------------------------------------------------------------------


--------------------------------------------------------------------------------------------
VARIABLE                         CODE   RT    FROM   LENGTH  TYPE   REMARKS
--------------------------------------------------------------------------------------------
QUESTIONNAIRE NO                %19.000       4       6

FISH TYPE                       FTYPE  19    10       4      QNT   VALUES RANGE FROM 101 TO 7099
                                RETN   19    14       3      QNT   VALUES RANGE FROM 0 TO 100
                                GIV    19    17       3      QNT   VALUES RANGE FROM 0 TO 100
                                CARR   19    20       3      QNT   VALUES RANGE FROM 0 TO 100
                                WSALE  19    23       3      QNT   VALUES RANGE FROM 0 TO 100
                                RETL   19    26       3      QNT   VALUES RANGE FROM 0 TO 100
                                HOTEL  19    29       3      QNT   VALUES RANGE FROM 0 TO 100
                                PLANTS 19    32       3      QNT   VALUES RANGE FROM 0 TO 100
                                CONS   19    35       3      QNT   VALUES RANGE FROM 0 TO 100
                                OTHER  19    38       3      QNT   VALUES RANGE FROM 0 TO 100
```

A7-29

```
        --------------------------------------------------------------------------------
        °QUESTIONNAIRE NO.: °°°°°°                                      COMMENTS   °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °    CODES:°°  °°  °°                                                      °
        °                                                                         °
        °    COMMENTS: °°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°            °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °                                                                         °
        °     CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY: COMMENTS                 °
        --------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------------------
VARIABLE                          CODE   RT     FROM    LENGTH  TYPE   REMARKS
--------------------------------------------------------------------------------------------
QUESTIONNAIRE NO                         %20.000        4         6
--------------------------------------------------------------------------------------------
CODES                             COD1   20     10       2       QNT    VALUES RANGE FROM 0 TO 45
                                  COD2   20     12       2       QNT    VALUES RANGE FROM 1 TO 45
                                                                        (CAN BE BLANK)
                                  COD3   20     14       2       QNT    VALUES RANGE FROM 1 TO 45
                                                                        (CAN BE BLANK)
COMMENTS                          COMM   20     16      45       TYP
```

A7-30

```
   ----------------------------------------------------------------------------------
      °QUESTIONNAIRE NO.: °°°°°°                                      SECTION 10 °
      °                                                                          °
      °10.1 ENGINE DAMAGED BY MITCH?  :  ######   EXTENT?:           NATURE?:°° °
      °10.2 VESSEL DAMAGED BY MITCH?  :  ######   EXTENT?:           NATURE?:°° °
      °10.3 VESSEL USED SINCE MITCH?  :  ######                                 °
      °     WHICH DATE FIRST USED?    :  ######                                 °
      °     WHERE DO YOU NOW OPERATE? :  ######                                 °
      °     FISHING THE SAME AREA?    :                    NAME :              °
      °     IS THE SAME GEAR IN USE?  :                    NAME :              °
      °                                                                          °
      °10.3 INTEND TO RESUME FISHING? :                                         °
      °     WHEN DO YOU PLAN TO RESUME?:                                        °
      °     WHAT DETERMINES HOW SOON?                                           °
      °     FROM WHERE WILL YOU OPERATE?                                        °
      °     FISHING THE SAME AREA?    :                    NAME : °°°           °
      °     IS THE SAME GEAR IN USE?  :                    NAME : °             °
      °                                                                          °
      °10.4 HAVE YOU BEEN ABLE TO RENT/LEASE? :                                 °
      °     HAVE YOU RENTED/LEASED SINCE MITCH? :                              °
      °10.5  IS THE NUMBER OF YOUR CREW THE SAME?:                             °
      °10.6 FISH ON WEEKENDS-SINCE MITCH?:                                     °
      °10.9 HOW HAVE YOU FINANCED REPAIRS?     :                              °
      °10.10 HOW INTEND TO FINANCE REPAIRS?    :                              °
      °        COMMENTS...........             :                              °
   -----------------------------------------------------------------------------
```

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
QUESTIONNAIRE NO		%21.000	4	6		

VARIABLE	CODE	RT	FROM	LENGTH	TYPE	REMARKS
10.1 ENGINE DAMAGED BY MITCH?	Q10_1A	21	10	1	QLN	ENCODEMENT: YES..1 NO...2 (Q10_2A)
EXTENT?	Q10_1B	21	11	1	QLN	ENCODEMENT: SLIGHT.......1 SIGNIFICANT..2 MODERATE.....3 SEVERE.......4 DESTROYED....5
NATURE?	Q10_1C	21	12	2	QNT	VALUES RANGE FROM 1 TO 25
10.2 VESSEL DAMAGED BY MITCH?	Q10_2A	21	14	1	QLN	ENCODEMENT: YES..1 NO...2 (Q10_3A)
EXTENT?	Q10_2B	21	15	1	QLN	ENCODEMENT: SLIGHT.......1 SIGNIFICANT..2 MODERATE.....3

```
                                                            SEVERE.......4
                                                            DESTROYED....5

NATURE?                           Q10_2C   21    16     2    QNT    VALUES RANGE FROM 1 TO 25

10.3 VESSEL USED SINCE MITCH?     Q10_3A   21    18     1    QLN    ENCODEMENT:
                                                                   YES..1
                                                                   NO...2 (Q10_3B)

     WHICH DATE FIRST USED?       Q10_3A1  21    19     6    CHR
     WHERE DO YOU NOW OPERATE?    Q10_3A2  21    25     3    TYP

     FISHING THE SAME AREA?       Q10_3A3  21    28     1    QLN    ENCODEMENT:
                                                                   SAME AREA.......1 (Q10_3A5)
                                                                   DIFFERENT AREA..2

NAME                              Q10_3A4  21    29     3    QNT    VALUES RANGE FROM 1 TO 300
     IS THE SAME GEAR IN USE?     Q10_3A5  21    32     1    QLN    ENCODEMENT:
                                                                   SAME GEAR.......1 (Q10_4)
                                                                   DIFFERENT GEAR..2

NAME                              Q10_3A6  21    33     1    QNT    VALUES RANGE FROM 1 TO 9
                                                                    (Q10_4)

10.3 INTEND TO RESUME FISHING?    Q10_3B   21    34     1    QLN    ENCODEMENT:
                                                                    YES..1
                                                                    NO...2 (Q10_4)

     WHEN DO YOU PLAN TO RESUM    Q10_3B1  21    35     6    CHR

     WHAT DETERMINES HOW SOON?    Q10_3B2  21    41     3    QNT    VALUES RANGE FROM 1 TO 20

     FROM WHERE WILL YOU OPERA    Q10_3B3  21    44     3    TYP

     FISHING THE SAME AREA?       Q10_3B4  21    47     1    QLN    ENCODEMENT:
                                                                   SAME AREA.......1 (Q10_3B6)
                                                                   DIFFERENT AREA..2

NAME                              Q10_3B5  21    48     3    QNT    VALUES RANGE FROM 1 TO 350

     IS THE SAME GEAR IN USE?     Q10_3B6  21    51     1    QLN    ENCODEMENT:
                                                                   SAME GEAR.......1 (Q10_9)
                                                                   DIFFERENT GEAR..2

NAME                              Q10_3B7  21    52     1    QNT    VALUES RANGE FROM 1 TO 9
                                                                   ( Q10_9)

10.4 HAVE YOU BEEN ABLE TO RENT/  Q10_4    21    53     1    QLN    ENCODEMENT:
                                                                   YES..1
                                                                   NO...2 (Q10_5)

     HOW MANY GROUPS OF USERS?    Q10_4A   21    54     2    QNT    VALUES RANGE FROM 1 TO 20

     HAVE YOU RENTED/LEASED SIN   Q10_4B   21    56     1    QLN    ENCODEMENT:
                                                                   YES..1
                                                                   NO...2
```

```
10.5  IS THE NUMBER OF YOUR CREW    Q10_5   21      57         1      QLN    ENCODEMENT:
                                                                             REDUCED.............1
                                                                             NO CHANGE..........2
                                                                             INCREASED NUMBERS..3

10.6 FISH ON WEEKENDS-SINCE MIT     Q10_6A  21      58         1      QLN    ENCODEMENT:
                                                                             YES..1
                                                                             NO...2

ON HOLIDAYS?                        Q10_6B  21      59         1      QLN    ENCODEMENT:
                                                                             YES..1
                                                                             NO...2

10.9 HOW HAVE YOU FINANCED REPAI    Q10_9   21      60         1      QLN    ENCODEMENT:
                                                                             NO REPAIRS.......1
                                                                             SELF.............2
                                                                             LOCAL LOAN.......3
                                                                             FOREIGN LOAN.....4
                                                                             INSTITUTION......5
                                                                             LOCAL GIFT.......6
                                                                             FOREIGN GIFT.....7
                                                                             POLITICIAN GIFT..8
                                                                             OTHER...........9

10.10 HOW INTEND TO FINANCE REP     Q10_10  21      61         1      QLN    ENCODEMENT:
                                                                             SELF.............1
                                                                             LOCAL LOAN.......2
                                                                             FOREIGN LOAN.....3
                                                                             INSTITUTION......4
                                                                             LOCAL GIFT.......5
                                                                             FOREIGN GIFT.....6
                                                                             POLITICIAN GIFT..7
                                                                             GOVERNMENT GIFT..8
                                                                             OTHER...........9

COMMENTS...........                 Q10_11  21      62         2      QNT    VALUES RANGE FROM 1 TO 99
                                                                             (CAN BE BLANK)
```

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```
        --------------------------------------------------------------------------------
        °QUESTIONNAIRE NO.: °°°°°°                        SECTION 10  — TYPE OF TRIP     °
        °                                                                               °
        °                                                                               °
        °                                                                               °
        °                                                                               °
        ° TYPE          DURATION      PURPOSE           TRIPS     GEAR TYPE             °
        ° OF TRIP                                                                        °
        °                                                                               °
        ° ##########  ##########    ##########      ##########  #### #####             °
        °                                                                               °
        °                      FOR PURCHASERS ONLY                                       °
        °                 TRIPS     # BOATS   AVERAGE WT.    CODE                        °
        °                                                                               °
        °                  °°         °°        °°°°°         °  °°°°                     °
        °                                                                               °
        °                                                                               °
        °     CENSUS OF BOATS: JAMAICAN FISHING INDUSTRY— SUPPLEMENTAL FORM—            °
        --------------------------------------------------------------------------------
```

```
---------------------------------------------------------------------------------------
VARIABLE                       CODE   RT    FROM   LENGTH  TYPE   REMARKS
---------------------------------------------------------------------------------------
QUESTIONNAIRE NO                      %22.000      4        6

                               TYPE   22    10     1        QLN   ENCODEMENT:
                                                                  DAY........1
                                                                  NIGHT......2
                                                                  DAY/NIGHT..3
                                                                  OTHER......4

                               DUR    22    11     1        QLN   ENCODEMENT:
                                                                  2 PER DAY..1
                                                                  1 PER DAY..2
                                                                  2-3 DAYS...3
                                                                  4+ DAYS....4
                                                                  OTHER......5

                               PURPOSE 22   12     1        QLN   ENCODEMENT:
                                                                  FISHING ONLY......1
                                                                  PURCHASE FISH.....2
                                                                  PURCHASE/FISHING..3
                                                                  TAXI..............4
                                                                  OTHER.............5

                               TRIPW  22    13     2        QNT   VALUES RANGE FROM 1 TO 10
                               GEAR1  22    15     1        QLN   ENCODEMENT:
                                                                  NETS...1
                                                                  LINES..2
                                                                  DIVE...3
                                                                  POT....4
```

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```
                              OTHER..5

GEAR2   22    16      1    QLN   SAME ENCODEMENT AS `GEAR1'
                                 (CAN BE BLANK)

GEAR3   22    17      1    QLN   SAME ENCODEMENT AS `GEAR1'
                                 (CAN BE BLANK)

TRIPM   22    18      2    QNT   VALUES RANGE FROM 1 TO 40
                                 (CAN BE BLANK)

BOATS   22    20      2    QNT   VALUES RANGE FROM 1 TO 40
                                 (CAN BE BLANK)

  WGT   22    22      5    QNT   VALUES RANGE FROM 1 TO 5000
                                 (CAN BE BLANK)

WGTCD   22    27      1    QLN   ENCODEMENT:
                                 LBS..1
                                 KG...2
                                 (CAN BE BLANK)
```

```
 --------------------------------------------------------------------------------
°QUESTIONNAIRE NO.: °°°°°°                                  SECTION 10            °
°        POTS:                                                                    °
°         TYPE:                                                                   °
° -------------------------------------------------------------------------------- °
°° AVERAGE SIZE            ³  °°   °°   ° # OF POTS ON LAND      ³   °°°°    ° °
° -------------------------------------------------------------------------------- °
°° # OF POTS BEFORE MITCH ³  °°°°    ° # OF POTS BEING BUILT  ³   °°°°    ° °
° -------------------------------------------------------------------------------- °
°° # OF POTS DAMAGED & FIX³  °°°°    ° MESH SIZE              ³   °°°°    ° ³
° -------------------------------------------------------------------------------- °
°° # POTS DESTROYED/LOST  ³  °°°°    ° SOAK TIME(DAYS)        ³   °°      ° °
° -------------------------------------------------------------------------------- °
°° # OF POTS – NO DAMAGE  ³  °°°°    ° AVERAGE CATCH/TRIP     °°°° CODE:°°°°°°° °
° -------------------------------------------------------------------------------- °
°° # POTS BUILT/REPAIRED  ³  °°°°    °                        ³            ° °
° -------------------------------------------------------------------------------- °
°° # OF POTS SOAKING       ³  °°°°    ° MAIN FISHING GROUND    ³   °°°     ° °
° --------------------------------------------------------------------------------°
°                                                                        °
°                                                                        °
°                                                                        °
°                                                                        °
°                                                                        °
°                                                                        °
°                                                                        °
°      CENSUS OF BOATS–JAMAICAN FISHING INDUSTRY:  GEAR SPECIFICATION     °
 --------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------------
VARIABLE                        CODE   RT    FROM   LENGTH  TYPE   REMARKS
--------------------------------------------------------------------------------------
QUESTIONNAIRE NO                       %23.000      4       6
                                PTYPE  23    10      1      QLN    ENCODEMENT:
                                                                   Z-TRAPS.....1
                                                                   JACK POTS...2
                                                                   CRAB TRAPS..3
                                                                   DIAMOND.....4
                                                                   BAMBOO......5

                                SIZE1  23    11      2      QNT    VALUES RANGE FROM 1 TO 10
                                SIZE2  23    13      2      QNT    VALUES RANGE FROM 1 TO 10
                                                                   (CAN BE BLANK)

                                NUMBM  23    15      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMDF  23    19      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMDL  23    23      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMND  23    27      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMBR  23    31      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMSK  23    35      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMLD  23    39      4      QNT    VALUES RANGE FROM 0 TO 1000
                                NUMBT  23    43      4      QNT    VALUES RANGE FROM 0 TO 1000
                                PMESH  23    47      4      QNT    VALUES RANGE FROM 1.25 TO 5
```

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```
                   SKTIME   23    51        2    QNT   VALUES RANGE FROM 1 TO 25
                   PCATCH   23    53        4    QNT   VALUES RANGE FROM 10 TO 6000
CODE                 CODE   23    57        1    QLN   ENCODEMENT:
                                                      KG...1
                                                      LBS..2
                   PGRND    23    58        3    QNT   VALUES RANGE FROM 1 TO 300
```

7.4 Appendix 8: Accessing the data

Background

As described in the main report (Section 2.5) the census data are available in digital form for analysis. They are stored in SPSS (Statistical Package for the Social Sciences) data files. There are 15 SPSS data files that contain the census data itself, and one file that includes a combination of the census data and the data from the listing record survey.

The 15 files include a main file (**Jamfishcen98 main.sav**) in which there is one record per vessel surveyed, and 14 sub-files (**Jamfish98 recxx xxx.sav**) in which recxx refers to record xx and the xxx is a short description of the contents that relates to the questionnaire.(Appendix 5). Sub-files were created to accommodate information when there are several records that relate to each vessel, e.g. each crew member, gear type or species type. A listing of the variables that are included in each file is provided in Appendix 6. These are cross referenced to the sections of the questionnaire (Appendices 1 2 and 3). Details of the values that each variable may assume are provided in Appendix 7.

In many instances, there has been the need to group entities with variables (e.g. species into species groups, vessels into vessel categories), or to recode variables that may have been measured in both kilograms and pounds. Where existing variables have been grouped or recoded, or new variables have been created, they are indicated in Appendix 6. Details of the criteria for grouping and recoding are provided in Appendix 8. Most of the procedures for preparing the SPSS files have been saved as SPSS syntax files.

As shown in section 3.1 of the main report, there were vessels in the Listing Record Survey that were not included in the census. In order for the data file to include all the vessels that were found, the 549 vessels from the Listing Survey that were not included in the census have been added to the data from the census, one record per vessel in SPSS file "**Jamfishcen98 census and LR.sav**". This is the file that will be required for most analyses.

All these files, as well as numerous SPSS syntax files for recoding, converting and labelling are stored in a zip file called "**Jamaica fishery census data May 2001.zip**", referred to below as the combined file. Before undertaking analysis be sure that you are using the most recent version. If the file is labelled later than May 2001, determine from the provider what subsequent changes may have been made to the data.

7.5 Analysis

SPSS is a relatively user friendly, menu driven statistical analysis package. It can be easily self-taught by persons who are familiar with Microsoft Windows-based software. However, some familiarity with statistical analysis and data handling will be required. For those who are familiar with other packages, SPSS can export in a variety of formats.

A caveat is that the survey and thus the data are complex, and that meaningful use of them will require a considerable investment in understanding the survey procedures and the way that the data have been handled and stored.

Following are some notes on how to proceed and what to be aware of in approaching this data set.

For many analyses it will be necessary to merge the main census file or the combined file with any of the sub files that contains multiple records (note however that there can only be sub file data for vessels that were actually censused). Merging puts the variables from the main file into each record of the sub file. Thus data from the main file will be repeated for each corresponding record of the sub file. Merging depends on a common 'Key variable" with unique values in the main file. This is the variable "qnum". Thus any vessels with missing values for "qnum" should be deleted prior to merging, otherwise an error message will be received. To merge do the following:

Open the sub file and sort it by the key variable
Open the main file and sort it by the key variable
Select DATA > MERGE FILES > ADD VARIABLES then select the sub file that will be merged
In the merge files dialogue check the "Match cases on key variables in sorted file" box and select the "Working data file is keyed table" option.
Highlight the key variables and pres the arrow to transfer them to the key variables box
Press okay

The merged file will replace the Working file and will have to be saved under a new name if it is to be kept.

In general it should be remembered that there will be the need to select data for most analyses to exclude unwanted records. For example:

- To analyse boats only there is the need to exclude no-boat fishers (select variable btnb = 1)
- To analyse active boats only there is the need to exclude inactive boats and no-boat fishers (select vesinuse = 1 or 2). Failure to select the right data will lead to erroneous results.