

Census of Lebanese Fishing Vessels and Fishing Facilities



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November 2005

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Executive Summary

The first ever census of fishing vessels, conducted by the Department of Fisheries & Wildlife of Ministry of Agriculture, showed that the Lebanese fishing fleet is composed of 2,680 vessels that were predominantly (2,662) operating along the coast from 44 fishing ports and landing sites. About 92% of the boats were operational, but only 58% had a valid fishing license. Almost all (98%) were less than 12m in length (33% less than 6m and 52% were 6-9m LOA). Most (78%) vessels were made of wood. Same number was undecked. Seventy five percent were constructed after 1980 (54% after 1990) with an average GRT of less than 5 tons. Around 92% were motorized mainly (75%) with inboard diesel engines. Half the engines were manufactured after 1990 and 71% were less than 30-hp. Japan supplied half the engines while the UK supplied about 30% of them.

Navigation equipment were practically absent from the fleet except for few with GPS. Many vessel owners (40%) carried cellphones and about 20% of vessels were equipped with sonar.

All gear was manually activated. Some 575 vessels had winches that were primarily mechanically activated.

All boats were individually owned; mostly (79%) by one person. About 80% of the owners operated there own vessels. Almost all were Lebanese, half of whom was born after 1960. Only 86% had a valid Fishermen Passport. The fishing fleet was usually operated by 6,500 persons, who were predominantly Lebanese (90%). Fishermen belonged to 30 cooperatives and 5 syndicates whose membership did not exceed 43% of vessel owners/operators.

Almost all operated from there respective homeports all year long. More than half used trammel nets and 17% used handlines. About 70% fished at least daily. The fishing grounds were typically (90%) within 6 miles from there homeports. More than 55% targeted the inshore demersal species while 21% targeted the large pelagic species. Only 21% had a cold storage for fresh fish. Half the boats had fishing lights that were mainly (82%) 500 watts or less.

Safety equipment were practically absent from most vessels. About 42% had oars and 24% had buoys.

More than half the fishermen requested social/medical welfare, rehabilitation of ports, and enforcing/updating Fisheries Law. One third of them requested aid/grants.

The fishing ports/landing sites were characterized by small size and necessity for breakwater that needed rehabilitation/extension/construction at almost all sites. Only three pots had a maintenance basin. Eight sites had lifting equipment and seven had winches at the slipways. Most ports were shallow; 32 had solid quays and four had jetties.

No port had navigation equipment except for five having landfall/position lights. Wastes and waste oils, at most sites, are thrown directly into the sea, but there were facilities to collect those, for eventual disposal, at twenty ports/landing sites.

There was fish auction at three ports and 16 had fish stalls. A third had storage facilities. Civil Defense posts were at or near 17 sites. Almost all official ports had army post on site.

Acknowledgments

Special thanks to FAO-Medfesis staff in Rome and Beirut for their support, cooperation, and patience.

Thanks to Mr. Ghattas Akl, Director of Rural Development & Natural Resources, for preparing the venue and his continuance guidance and support.

Thanks to the Lebanese project staff namely Dr. Dahij Mukdad, Dr. Chadi Muhanna, Mr. Ibrahim Hawi, Mr. Jean Stephan, Mr. Marwan Ghosh, Mr. Ghazi Kassar, and Mr. Wafic Kombargi for their professionalism and the teamwork they demonstrated.

Further thanks are given to Mr. Wafic Kombargi for his kind assistance in developing this document.

Background

The General Fishery Commission for the Mediterranean (GFCM) of FAO, at its 26th (Ischia, September 2001) (the meeting was attended by Mr. Ghattas Akl, Director of Rural Development & Natural Resources–Ministry of Agriculture and Mr. Ibrahim Hawi, Head of Rural Development Department–Beqaa), endorsed a project proposal to develop a Mediterranean Fishery Statistics and Information System (MedFiSis) and emphasized the importance and urgency of setting-up an integrated statistical system. FAO and the European Union jointly financed the three-year project MedFiSis. Such a regional system was recognized to be necessary to complement other fisheries management means and serve as the basic vital tool for international bodies to monitor the state of the Mediterranean fisheries and the well-being of the whole ecosystem in the basin. For the system to be of effective regional use, all countries around the Mediterranean should have a national system that collects, processes, stores and disseminates an agreed common set of data; i.e., same data standards and definitions. A standardized methodology was already introduced in countries in Western Mediterranean and the Adriatic Sea, through the activities of two donor-supported FAO projects (CopeMed and AdriaMed).

The countries of the Eastern Mediterranean (Cyprus, Egypt, Lebanon, Syria and Turkey), which did not benefit from the aforementioned assistance, participated in the TCP-project ‘Enabling Participation in the Fishery Statistics and Information System in the Mediterranean’ (TCP/INT/2904) in order to be in a position to upgrade their national systems and enable their affiliation in the regional network.

MedFisis and the TCP

During the First Coordination Meeting, for the TCP, in Beirut, Lebanon 19–24 January 2004, Mr. Rino Coppola, Programme Coordinator, introduced the project, the rationale, and the MedFiSis framework in which this TCP Project was going to operate.

TCP Objectives

Its main objectives were highlighted as: a) “the improvement and consolidation of national fishery statistics and information systems, with a view to meeting the relevant national needs and the requirements of the regional institutions for reliable fishery statistics and the related information for sustainable management of Mediterranean living marine resources and aquaculture”, and b) “the establishment of a Mediterranean regional fishery statistics and information system using national fishery statistics and information systems as the source, with a specific space–time coverage, with a view to providing the GFCM with the data bases, the methodology, the network and the know-how needed to monitor and manage the fisheries sector”. The position of the TCP Project vis-à-vis MedFiSis was clarified: The TCP project would prepare countries in the Eastern part of the Mediterranean to set-up and harmonize their fishery statistics systems, and participate in full in the MedFiSis regional activities. It was also made clear that the Project did not want to interfere with national programmes.

Information management

Regarding the spectrum of data and information to be treated, it was anticipated that the project activities should target statistical data collection and processing issues related to all kinds of types and classes of marine fishing units (vessels, gear, fishermen) operating in the Mediterranean areas (subsistence, traditional, commercial). The oceanic fishery (distant water), sport, and recreational fishing were not to be covered by the project.

Primary Project Expectations and Outputs

The project activities will be carried out in three phases. It was agreed that the third phase would be conceived after completion of the present period and taking into account results achieved and consolidated. The following are the expected outputs from the project:

- **A preliminary national assessment report.** Before any intervention will take place, national staff is to prepare a detailed technical report to describe the present situation of the data collection and information system and the organizational structure of the fishery and the fishery.
- **An operational National Statistical System** able to provide detailed and accurate information on the size, structure, and spatial distribution of the primary fishing industry (marine capture).
- **A Computerized Fishing Vessel Register** and fleet analysis for key fleet segments.
- **Availability of Periodic Statistical National and International Reports.**
- **A Post-Project national assessment report:**
- **Increased Staff Capability.** Considerably enhanced skills and ability in fisheries statistics and information systems and methodologies, and awareness of the importance of data and information reliability for sound research and application of optimum fisheries management options.

It was agreed that the data collected would remain the property of the country concerned and that the level of aggregation and the exchange protocols of the data and information to be shared would be agreed upon according to the GFCM and FAO mandates.

Introduction

Lebanon Overview

Lebanon is a predominantly mountainous country, with an area of 10,452 km². Nearly half of the country's population lives in the Greater Beirut area. The Lebanese coastline is 220 km long. The land rises steeply from the coast in the North, while in the South it forms a very narrow coastal plain. The continental shelf is narrow, especially in the South. Bottom grounds are mainly rough with intensive rocky patches, good for stationary demersal gear.

Lebanon has an estimated population of 4 million. Lebanese are historically ocean-origin people, consuming lots of fish in their diet. Local demand for fish is considerably higher than in the neighboring Middle Eastern countries. Due to the low local fish production, the Lebanese have been depending on imported fish.

It was estimated that in mid 1990s there was around 4,000 traditional small-scale fishermen distributed all over the Lebanese coast. The active fishing fleet consists of around 1,600 small fishing boats (less than 6 meters) and 400 motorized boats (less than 8 meters), but precise figures were not available. The average annual income of the fishermen, in 1998, was equivalent to US \$800. These fishermen have no access to institutional lending.

The demand for fish in Lebanon is high (15,000 tons per year in 2000). Imports of fresh, chilled, and frozen fish were reported to be 9,383 tons in 2002. The per caput consumption of fish is estimated to be 4 kg per year.

The fisheries of Lebanon are classified as small-scale, artisanal, and are traditionally based on bottom stationary gear (trammel nets and longlines), purse seine nets (lampara), and beach seines. Fishing operations, with the exception of longlines, are mostly carried out at depths of up to 50 meters. Most of the fishing nets (purse seines, gillnets and beach seines) have small mesh sizes (less than 2x2 cm). Because of the strict control by the military, the extensive fishing with explosives has been significantly reduced during the past few years.

Most landing sites have at least one local cooperative of fishermen, which, among other things, takes care, in part, of the marketing of the fish. At major landing sites fish is being marketed through an auction. These sales are recorded by the cooperative (species, price, quantity).

Fisheries administration

The Directorate of Rural Development and Natural Resources deals with fisheries in the Ministry of Agriculture (MOA) in Beirut. The Service of Forests and Natural Resources is part of this directorate, and controls the Fisheries and Wildlife Department (DFW). The department (one chief, one agricultural engineer, and one ranger) manages and supports four designated centers. The administrative structure of entities dealing with fisheries within the Ministry of Agriculture is given in Appendix 1.

Fisheries Data

The importance of the Lebanese fisheries sector was realized for a while now as well as the need for accurate and reliable statistical data. This information is indispensable to identify the needs of the fisheries sector, set priorities to consequently plan to satisfy those needs, and for legislative/policy purposes. Furthermore, statistical data supplied by Lebanon, to international organizations and stakeholders, is merely estimates based on experience and/or educated guessing. This practice should discontinue and accurate data should be supplied. The availability of such data is valuable for all kinds of stakeholders and interested parties whereby the only available accurate data are the trade statistics issued by the Ministry of Finance-Customs Service. The opportunity to design and implement a modern and effective Fisheries Statistical system that will generate standardized data comes through the GFCM Medfesis program.

Situation before

No general census was ever done. Although Lebanon has realized the importance of accurate and timely statistics; however, it lacked most of the physical requisites and competent human resources to establish and sustainably & autonomously manage a fisheries statistical system

The only available data were for Fishing Licenses, Number of licensed fishing vessels, Licensed Fishermen, Fishermen Cooperatives, Fishermen Syndicates, Fishing ports (official), and Fish Trade data.

Several ministries have jurisdiction over the fisheries sector:

- Ministry of Public Works & Transportation: Property Notebook (Deed), seaworthiness and navigation license.
- Ministry of Agriculture: fishing licenses and enforcing the law.
- Security Force (Ministry of Interior & Lebanese Army): enforcing the law.

System design

Data structure development

- **Reference system:** due to lack of historical involvement in such tasks, there was no Lebanese reference system/standards, thus the GFCM/FAO Standards were adopted with minor modifications (Appendix 1) to adapt to the Lebanese situation. Medfesis staff in Rome developed all references.

- **Adapting to Lebanese situation:**

- Totally local references:
 - Table 0.0 National Recorders
 - Table 0.2 Stratum/Region
 - Table 0.3 Substratum/Province/District
 - Table 1.2 Property Notebook Port & Navigation License Port
 - Table 1.8 Base Port and Port Period
 - Table 10.5 Fishing Zones
- Partially modified references:
 - Table 1.3: Flag, Construction Country of Vessel, Construction Country of engine, Company Country and Owner's Country of Residence: Palestine was added to the list
 - Table 1.6: Vessel Type: Flouka was added to the list.

Flouka: is a small fishing craft of varied sizes ranging from 3 to 15 m; they are made of wood, wood covered with fiberglass or fiberglass. Shapes are diverse but generally with no deck; powered by outboard engines. For wooden crafts and outboard engines for fiberglass boats that might be also called Zahhafeh. They are multipurpose crafts.

Interaction of Lebanon and the Project team

First Coordination Meeting for the TCP was held in Beirut during January 2004 and was attended by representatives of the participating countries, invited lecturers, and Medfesis staff. The "Working Strategy of the Medfesis-TCP Component" was the report of this meeting. Lebanon's country report titled "The Present Status of the Fishery and Information System in Lebanon" was completed in February 2004. The Project staff (Mr. R. Coppola and Mr. F. Marttin) visited Lebanon in March 2004 to discuss Lebanon country report, the means to facilitate the implementation of the Vessel Census, and upcoming training efforts. DFW was supplied with an English version of Fishing Vessels Census Questionnaire, Data Field Description, References, and software for Vessel Register. The questionnaire, data field descriptions, and references were translated into Arabic. A regional training course about vessels census for agriculturists from Syria and Lebanon. A work team, within the MOA, to implement the vessels census was formed in April 2004. Based on DFW comments a new version of software was released in May 2004. A pilot census, covering 50 vessels at several sites, was carried out in June 2004. Problems encountered in questionnaire filling and data entry necessitated further changes and/or amendments to both the questionnaire and software. After finalizing the Arabic/English Questionnaire (Appendix 2), a local training course for the local data recorders and field supervisors was conducted in August 2004. Census operations ensued. Official census launch was on August 23, 2004. Data collection took about two months. Preliminary data entry showed the need for further modifications to the software that was finalized in November 2004. Data entry ensued and was completed in January 2005. Several computers and data entry personnel were involved, thus there was a need to merge the data into one database. Only MedFiSis project staff could do this task. This was planned for February 2005, whereby a field mission would visit Lebanon to do so. This became prohibitive due to the security situation that developed in Lebanon in February 2005 and the subsequent events that prevented FAO staff from visiting Lebanon. Furthermore, due to administrative and financial reasons, it was not possible for anyone from Lebanon to Travel to FAO HQ to assist in database merger until July 2005. Database merger was done in Rome and a new version of the software (MedStat-LebanonStat Vessel Register Version 2005.0) was issued. The software proved to be more manageable than the older version. Furthermore, some changes were incorporated into the system. MOA staff also assisted Medfesis in there efforts with Syria (during August 2005), whereby important amendments were incorporated particularly in localization (Arabic) of many of the references to facilitate data entry.

Implementation

▪ **Costing:** The project implementation was financed by UTF/Leb/016. FAO Lebanon approved a \$39,500 budget to conduct the census operations (Table 1).

Table 1 Approved Budget for Lebanon Fishing Vessels Census

Item	Total Cost (\$)
Design, translation & questionnaire & related data preparation	1,000
Pilot testing (50 vessels)	350
Preparation of final questionnaire for printing	250
Printing of questionnaire	500
Census Launch (Seminar & lunch for fishermen cooperatives, syndicates & concerned stakeholders) (75 persons)	1,500
Stationary	1,104
Interviewers & Data Entry Training & Briefing	5,540
Field Work:	
– Questionnaire Filling (3,000 fishing vessels)	9,000
– Data entry (3,000 fishing vessels)	2,000
– Field Supervision	3,667
– Re-interviewing {10% of population; 300 fishing vessels}	900
Telecommunications	1,000
Survey of fishing ports	1,000
Central Control & Coordination	5,189
Processing & Analysis	1,500
Typing of final project report	1,000
Printing of project final report (5000 booklets)	2,000
Presentation of Project results (seminar & lunch)	1,500
Miscellaneous	500
Total	\$39,500

▪ **Materials:** TCP/INT/2904 financed the purchase of one workstation, printer, and antivirus software (Table 2). Furthermore, DFW was supplied (through UTF/Leb/016) with two PCs, one GPS, and three rangefinders (Table 3). OMSAR (Office of Minister For Administrative Reform) installed the necessary Windows XP and MS Office 2003 software on all the PCs. Stationary items and other requisites were also procured through FAO Lebanon (Table 4).

Table 2 Specifications of Workstation & Accessories Procured by TCP/INT/2904

Item	Description	Qty
A.	DELL OPTIPLEX GX270SD Processor: Intel Pentium 4 Processor 3.06GHz with 800Mhz Chipset: Intel 865G Chipset with 800MHz front side bus and 512KB at full processor speed Memory: 4 DIMM slots, 512MB DDR SDRAM expandable to 4GB Hard Drive: 80GB / 7200 RPM IDE S.M.A.R.T II ATA/100 Storage Device: FDD, DVD-ROM, CD-RW Network Card: Integrated Intel Pro Gigabit with Alert Standards Format 56K Modem Speakers DELL 2-Button PS/2 Mouse Microsoft Windows XP Pro	1
B.	Dell 17" CRT Screen	1
C.	All in One Printer OfficeJet 7130	1
D.	UPS Infosec 500 XP	1
E.	Norton Antivirus 2004	1

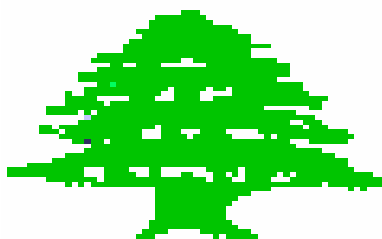
Table 3 List of Further Electronic equipment procured for the Census.

Item	Description	Qty
A.	DELL OPTIPLEX GX280 SMT (same specifications for workstation in Table A1, item A.)	2
C.	Dell 17" CRT Screen	2
F.	UPS Infosec 500 XP	2
G.	Magellan Meridian Platinum GPS	1
F.	Yardage Pro 1000 Rangefinder	3

Table 4 List of Procured Required Stationary & Related Items

Item	Quantity
Box Files (large)	10
Ring Binders (large)	60
HP black print head for HP Office Jet 7130 all-in-one printer	2
HP cyan print head for HP Office Jet 7130 all-in-one printer	1
HP magenta print head for HP Office Jet 7130 all-in-one printer	1
HP yellow print head for HP Office Jet 7130 all-in-one printer	1
HP black ink cartridge for HP Office Jet 7130 all-in-one printer	4
HP color ink cartridge for HP Office Jet 7130 all-in-one printer	1
HP black inkjet cartridge # 45	1
HP C1823D inkjet color cartridge	1
Paper (A4) for printer (box of 500 each)	15
Pens (blue)	25
Bookcase/closet	1
Board (magnetic) 2x1 m	1
Marker pens (assorted colors) for the magnetic board	10
Erasers for the magnetic board	2
Marker pens (black)	10
Paper for flip chart (set)	5
CD-R (recordable CDs)	100
1.44 MB 3.5" diskettes	40
Fluorescent spray paint (yellow) cans	30
Census logo*: Plastic plate (20 x 20 cm) perforated with Lebanese Cedar (10 x10 cm)	30
Numbering Machine (Reiner)	1
Black color-box reservoir ink pad (Type 2) for Reiner B6 numbering machine	1
Red color-box reservoir ink pad (Type 2) for Reiner B6 numbering machine	2
Black Reiner Metal Stamp Ink bottle	2
Red Reiner Metal Stamp Ink bottle	2
6-outlet extension cord (minimum 15 amp) with ground	2
Gloves, disposable (box of 100 each)	2
Toner for Xerox photocopier (work Center Pro 420)	2
Red light pointer for lecturing	2
Magnets for magnetic board	12
Name Tags (plastic) and Blank visiting cards for the name tags	50
Hi8; 8 mm videocassette (120 minutes)	7

*
















وزارة الزراعة

- **Training**

- **Regional Training for Lebanon and Syria-March 22-27, 2004:** A one-week training course was conducted at the Oceanographic & Fisheries Institute at Batroun. The lecturers were Mr. Felix Marttin and Michele Scalizi. Local agricultural engineers from Syria (9) and Lebanon (9) were introduced to the principles of statistics and census operations. The census questionnaire was discussed in detail. Trainees filled several questionnaires at local Lebanese fishing ports. The software for data entry was discussed and data entry was practiced. Participants had a chance to comment on the forms and software
- **Local Training for Census Staff:** a three-day training course, August 11-13, 2004 was conducted at the Oceanographic & Fisheries Institute at Batroun. Thirty agricultural engineers and rangers from MOA received training on fishing vessels census operations. The lecturers were Dr. Dahij Mukdad, Dr. Chadi Muhanna, and Samir Majdalani. The trainees were introduced to census operations and methods of approaching. Lectures on fishing vessels, fishing gear and all pertaining equipment were given. The questionnaire was discussed in depth. On-the-job training on questionnaire filling was conducted at local fishing ports. Each census staff was provided with a standard kit (Table 5). They were instructed to contact there immediate supervisors and/or the Focal Point whenever the need arises. They were also instructed to spray each surveyed vessel with the Census Logo (Table 3) to minimize double interviewing.

Table 5 Standard Interviewers Kit – Fishing Vessels Census Application

	Brief case
	Letter of Instructions to local authorities
	Fishery Census Recorder’s Manual
	Set of Survey Questionnaires
	Survey Codification System
	Data Definition manual
	Clip board
	Writing pad
	Measuring tape
	Pencils and eraser
	Map of Lebanon
	Contact phone numbers
	Census Logo Cliché & green spray canisters

- **Fieldwork:** data collection started on August 13, 2004. The bulk of the work was done in two months; however, data collection continued during data entry for some vessels. Field supervisors were either accompanying the interviewers or doing spot-checking. Each questionnaire was checked, by the respective field supervisor, for thoroughness and quality of information. Gaps and mistakes were accordingly corrected. Re-interviewing was done for about 300 vessels.
- **Data entry:** After the finalization of the software, data entry commenced in December 2004 and continued through January 2005. It was conducted by two persons and supervised/assisted by one agricultural engineer.

Results

A. Fishing Vessels Census

1.0 Recorders

Twenty-one recorders, from MOA- Directorate of Rural Development & Natural Resources were involved in the census. Table 6 shows that Sam Durnaiqah was the lead recorder followed by Hussein Nassar and Charbel Nammour. Some supervisors also assisted in data collection. The Director of Rural Development & Natural Resources, Mr. Ghattas Akl, and the Project's Focal Point (Samir Majdalani) performed coordination and facilitation.

Table 6 List of Supervisors and Recorders

Field Supervisors	Recorders	Number of Fishing Vessels Surveyed by Recorders
Dahij Mukdad	Abdulqader Yahya	55
Chadi Muhanna	Akeel Khuraizat	112
Ghazi Kassar	Ali Awadah	73
Ibrahim Hawi	Bahij Mezher	122
Jean Stephan	Bassam Jummayyel	165
Marwan Ghosh	Chadi Saikaly	133
Wafic Kombargi	Charbel Abi Nader	61
	Charbel Nammour	200
	Hassan Haj Shehadeh	167
	Husni Shalhoub	143
	Hussein Nassar	205
	Ibrahim Younes	97
	Imad Dabbous	18
	Laurent Rahmeh	105
	Marwan Ghosh	153
	Naoum Maalouf	66
	Qasem Agha	178
	Sam Durnaiqah	239
	Samer Jawhar	136
	Walid Bawwab	78
	Wissam Wazneh	174
	Grand Total	2,680

I- Marine Fishing Vessels: 2,662 Vessels were surveyed along the Lebanese coast.

1.0 Vessel Characteristics

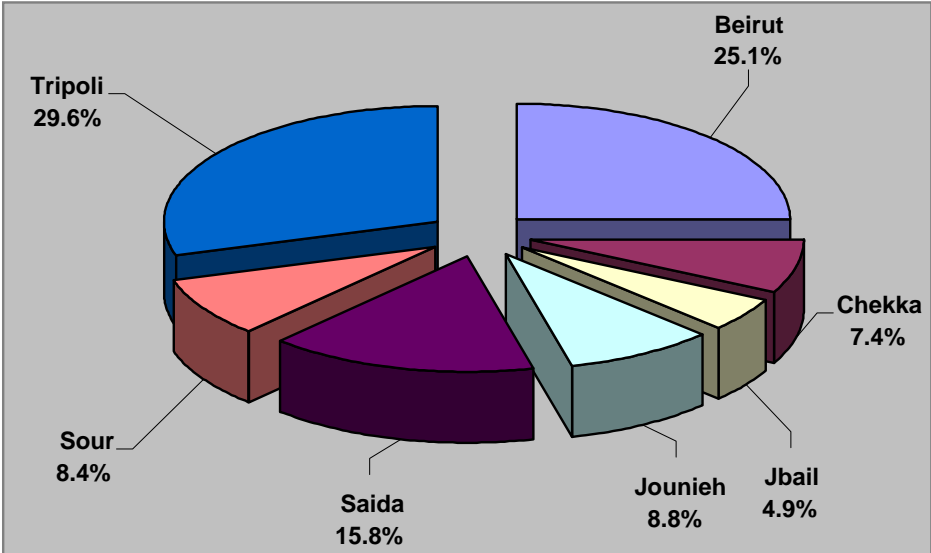
1.1 Distribution of Vessels Property Notebook by Harbor Master: Table 7 indicates that Tripoli and Beirut Harbor Masters issued about 63% of 2,662 Fishing Vessels Property Notebooks.

Table 7 Distribution of Vessels Property Notebook by Harbor Master

Property Notebook Port	Number of Vessels	Percentage
Tripoli	957	36.0
Beirut	715	26.9
Saida	417	15.7
Sour	231	8.7
Jounieh	184	6.9
Jbail	125	4.7
Chekka	33	1.2
Grand Total	2,662	

1.2 Distribution of Navigation License by Harbor Master: Fig. 1 indicates that Tripoli and Beirut issued about 55% of Navigation Licenses. Table 8 shows the distribution of navigation licenses by Harbor Master.

Fig. 1 Distribution of Navigation License by Harbor Master



1.3 Flag: Only 24 fishing vessels (<1%) were not Lebanese. Those vessels were carrying the Syrian flag and operating at the port of Aarida (a town at the Lebanese northern borders with the Syrian Arab Republic).

Table 8 Distribution of Navigation Licenses by Home Port

Home Port	Navigation License Port							Grand Total
	Beirut	Chekka	Jbail	Jounieh	Saida	Sour	Tripoli	
Aabde					1		141	142
Aamchit	1		35	3				39
Aaqeibe	1		12	41			3	57
Aarida					1		31	32
Ain Qantara					23			23
Barbara		1	4					5
Batroun		52	2				8	62
Beddaoui				1				1
Beirut-Ain el Mraisseh	16			1				17
Beirut-Dalieh	52				6			58
Beirut-Jal el Baher	14							14
Beirut-Manarah	105			1				106
Bouar	16	1	2	24	1		5	49
Cheikh Zennad							1	1
Chekka	1	26					1	28
Dbaiye	11	1	5	58		2	3	80
Dora	271	1	3	19	9		4	307
Enfe		53					2	55
Halat			1	1				2
Hamat-Roca Marina		4						4
Hay el Bahr							2	2
Heri		16					1	17
Jamil Gemayyel	2		1				1	4
Jbail	1		55	2				58
Jiye	3				6			9
Jnah-Cote D'Azour	27							27
Jounieh-Kaslik	11		6	59	4	3		83
Kfar Aabida-Fadous		6						6
Mounis					15			15
Naqoura	1				3	11		15
Ouzaii	131		2	2	83		3	221
Qalamoun							51	51
Saida					188			188
Selaata		14					3	17
Sour				1	17	203		221
Sour-Rest House						3		3
Tabarja	4		2	22			3	31
Tripoli-Al Mina		21					451	472
Tripoli-Huqran							75	75
Zeereh					64	1		65
Grand Total	668	196	130	235	421	223	789	2,662

1.4 Fishing Vessels Types: Fig 2 indicates that about 92% of the vessels were motorized floukas. There were two trawlers (at Al Mina-Tripoli Port) and two Purse Seiners (At Dora Port). The rest of fishing vessels were categorized as oars operated. Fig. 3 indicates the distribution of vessel types at each fishing port.

Fig. 2 Distribution of Fishing Fleet by Vessel Type

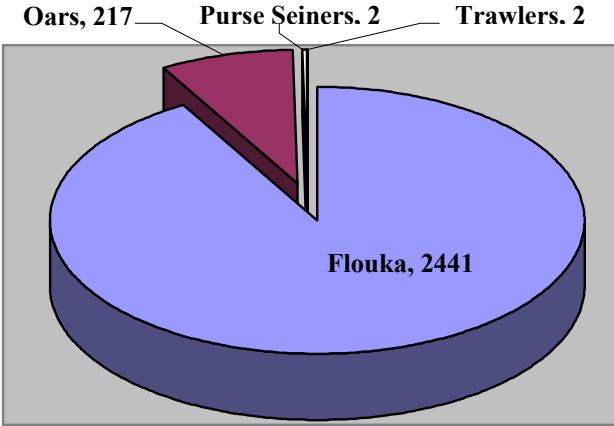
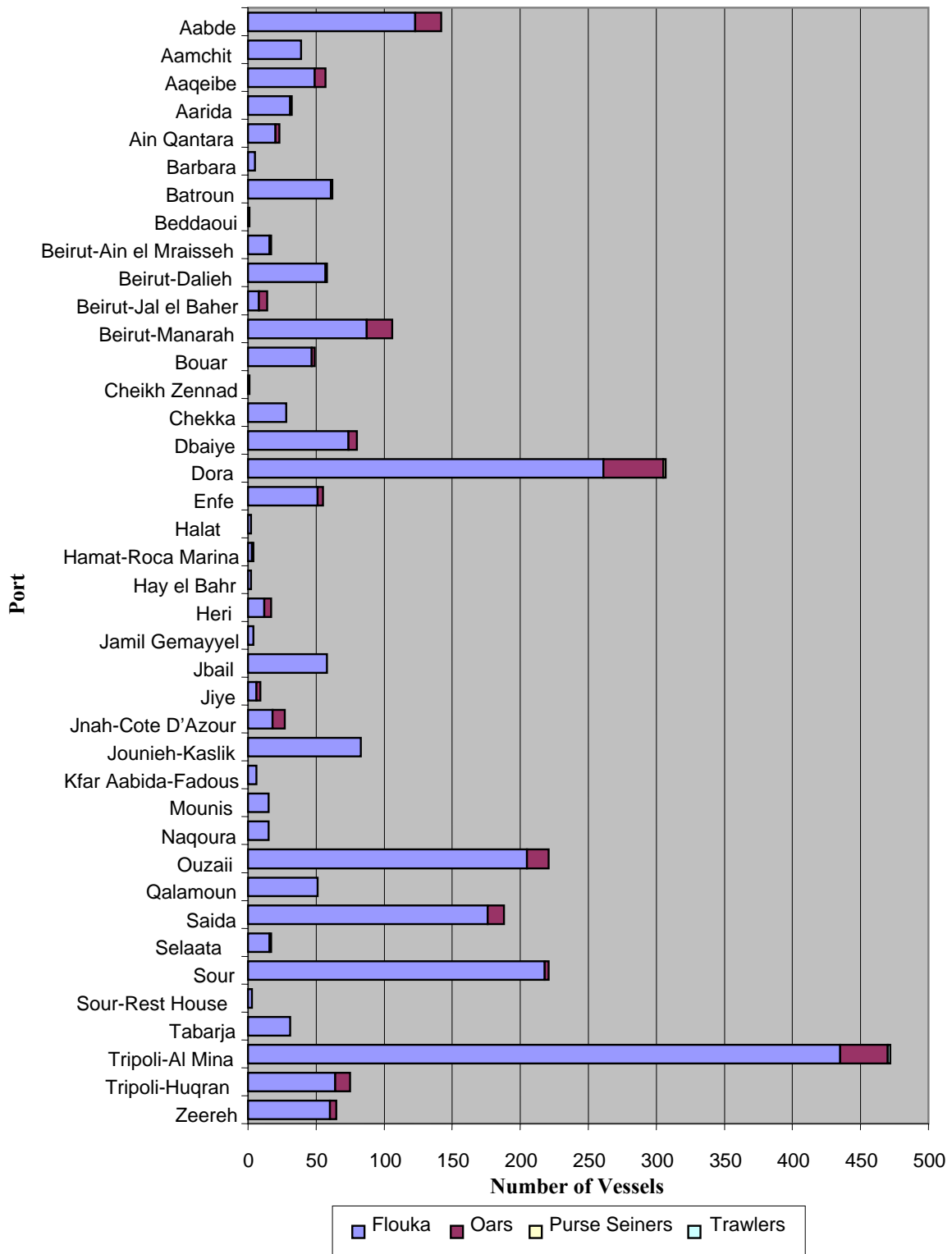


Fig. 3 Distribution of Vessel Types by Homeport



1.5 Operational Status of the Fishing Vessels: 2,428 vessels (91.2%) of the vessels were operational at the time of the census. The remaining 234 vessels were non-operational. Fig. 4 shows the distribution of operational status by vessels type. Eight percent of the floukas were non-operational while the figure was 18.4% for the oar driven vessels. The two trawlers were non-operational due to legal problems.

Fig. 4 Operational Status by Vessel Type

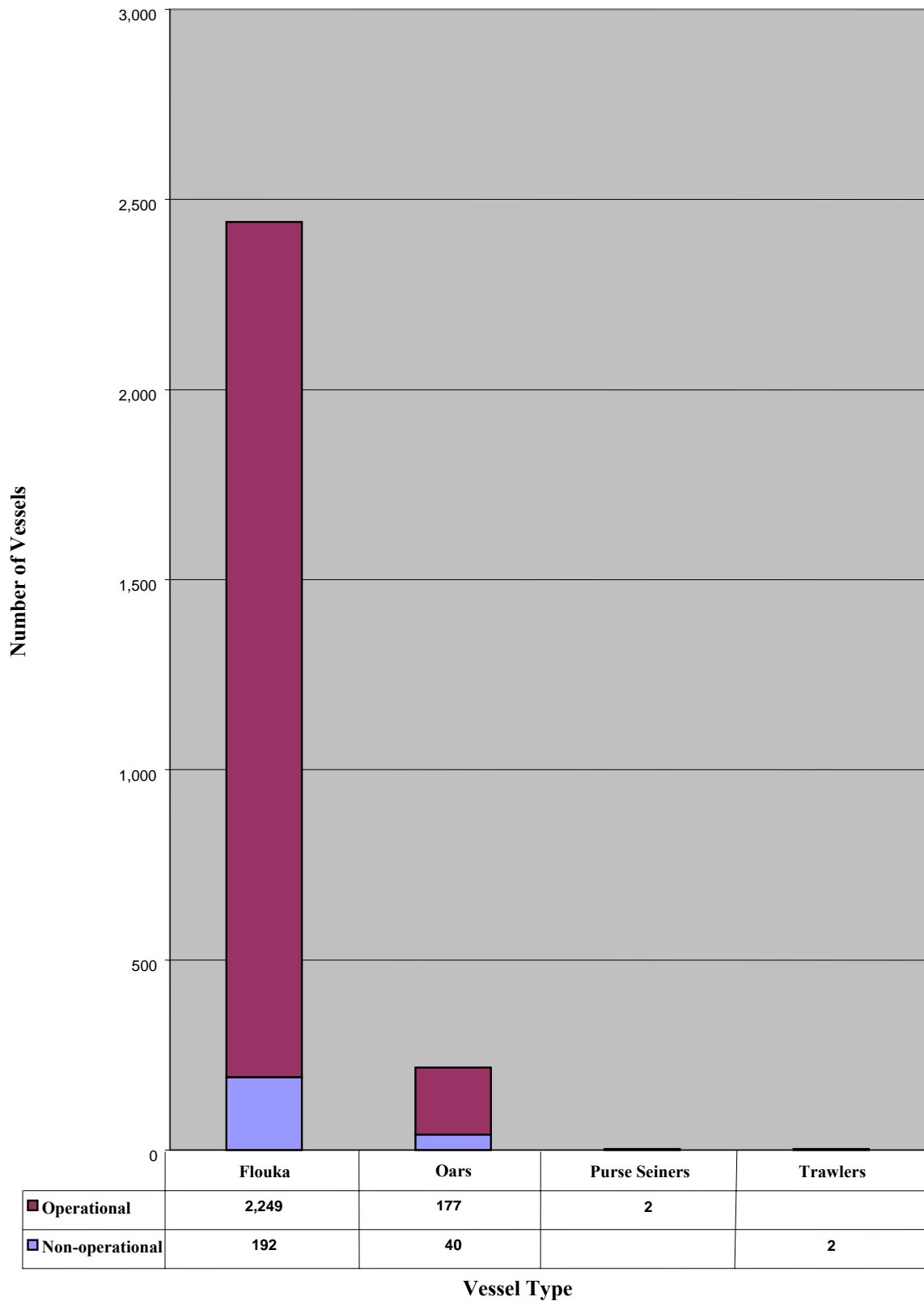


Fig. 5 indicates the operational status of vessels at each fishing port. This varied from 0-25.5% for the major ports (>50 vessels) with the Northern ports showing 9.9% for Aabde and 13.1% for Tripoli-Al Mina. Mount Lebanon ports showing 3.5% non-operational for Aaqaiibe and 12.1% for Jbail. The ports of Greater Beirut showed the least figures with 0% for

Manara and 3.6% for Ouzaii Port. The major ports of the South, namely Saida and Sour showed 14.4 and 6.3% non-operational status respectively. More than half of the vessels (Fig. 6) reported vessel or engine repair as the reason for there inactivity. Temporary fishing inactivity was the second most important reason cited for inactivity. The distribution of inactivity reason per port can be seen in Fig. 7.

Fig. 5 Operational Status of Vessels at Each Fishing Port

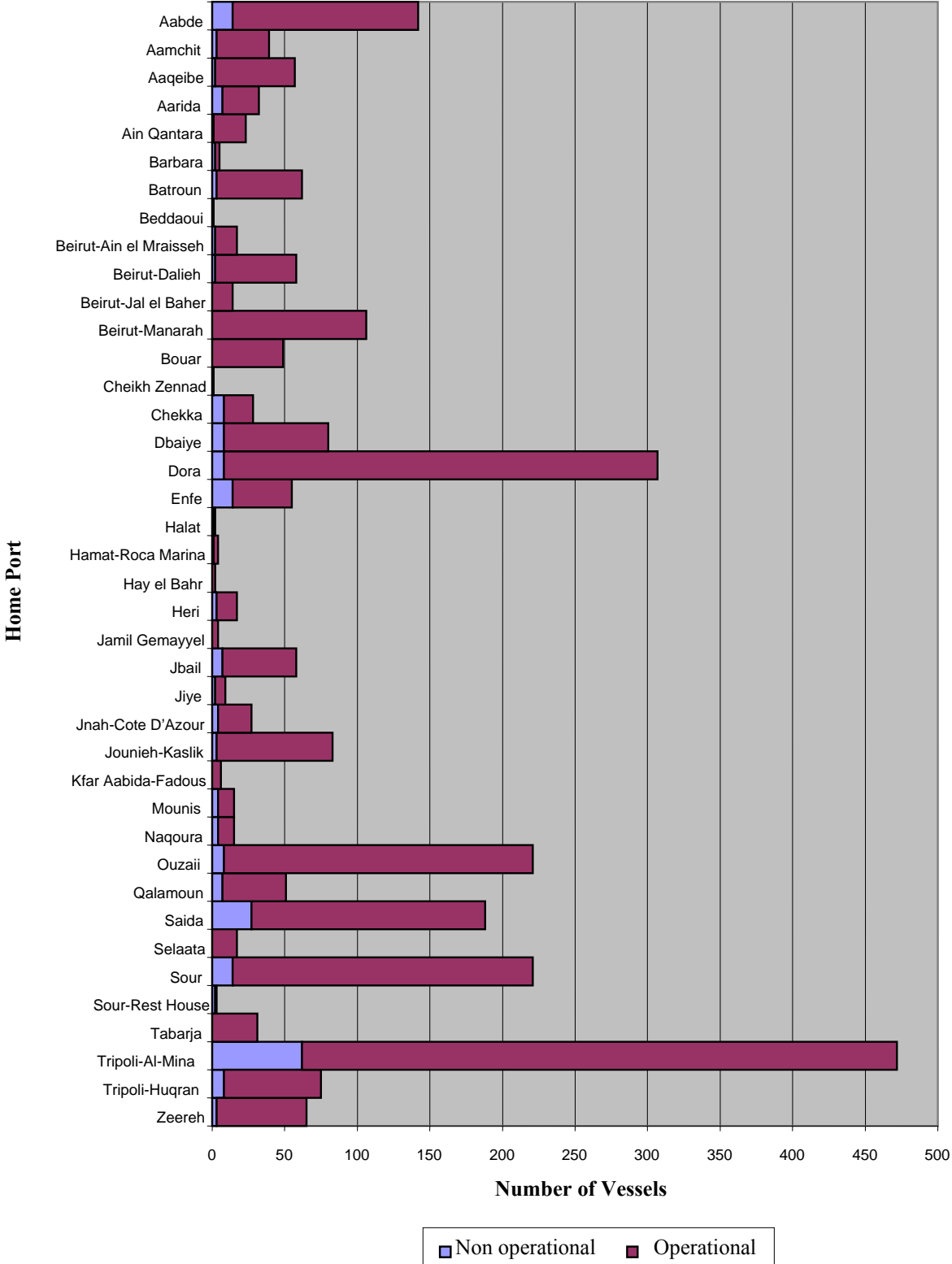


Fig. 6 Reason for Fishing Vessels Inactivity

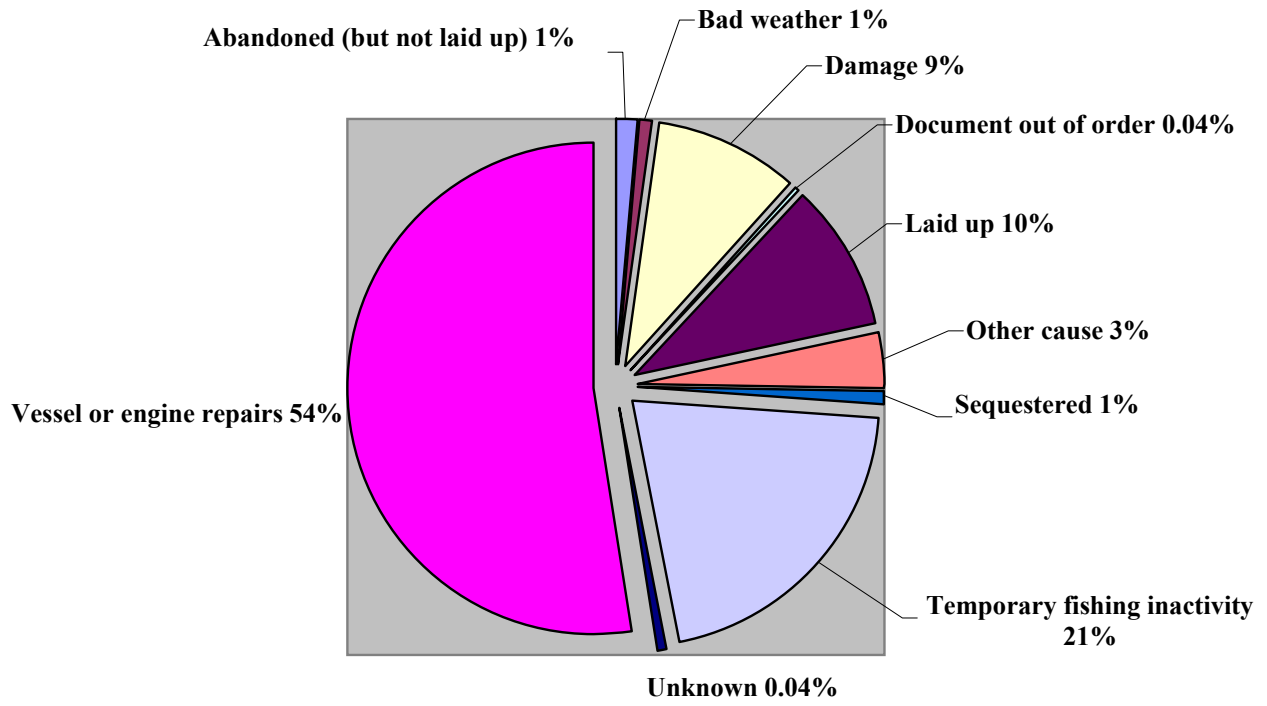
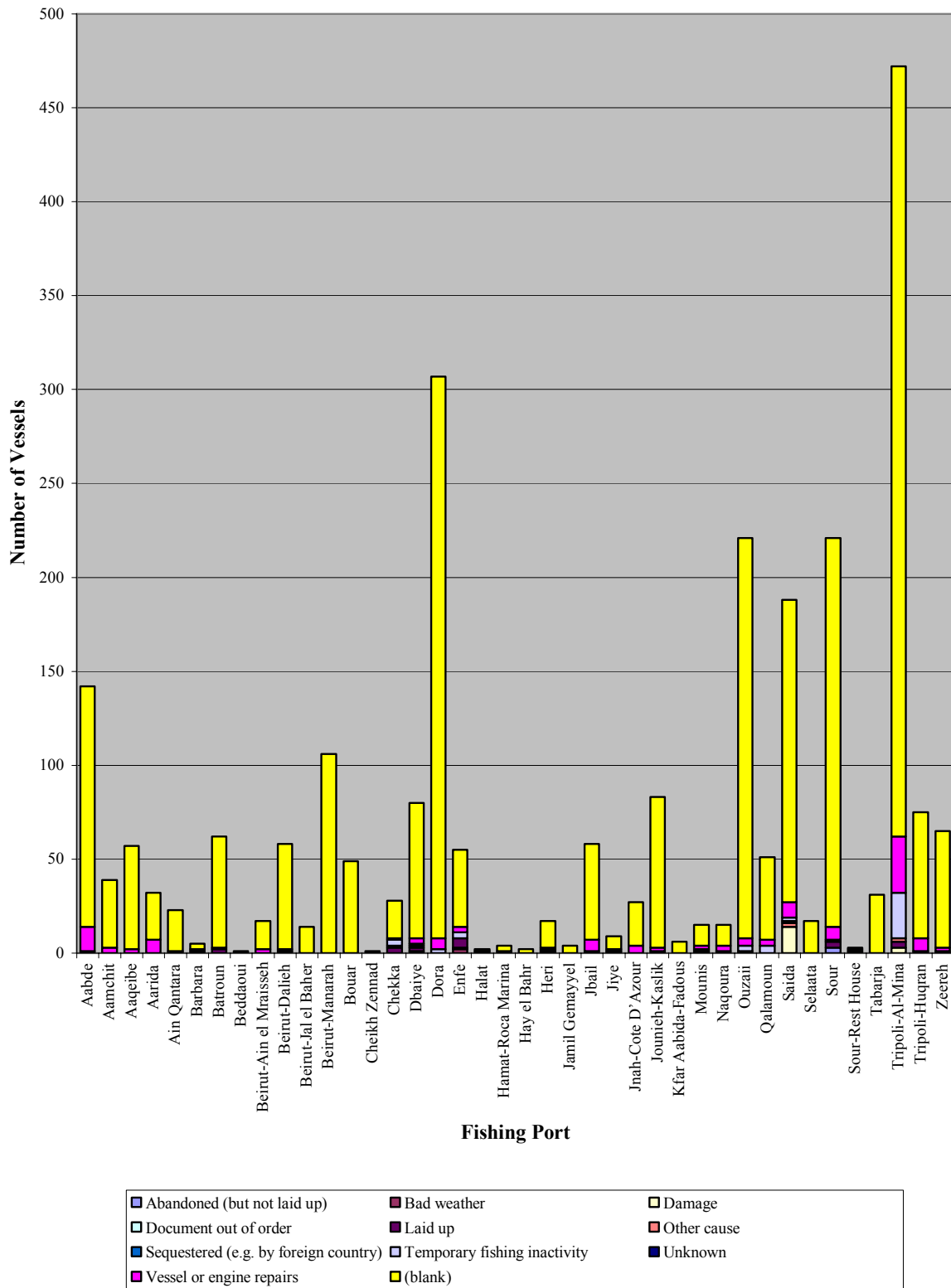


Fig. 7 Non-Operation Reason Per Port



2.0 Fishing Authorization

Table 9 indicates that only 58.9% of the vessels were carrying valid fishing licenses for the year 2004. The remaining were either carrying licenses from earlier years or non-whatsoever (17.3%). This indicates that a large percentage of fisherman are not really worried about abiding by the law regarding MOA as compared to navigation licenses which, practically all, had a valid one. Moreover, the security forces seem not to enforce the law in this regard.

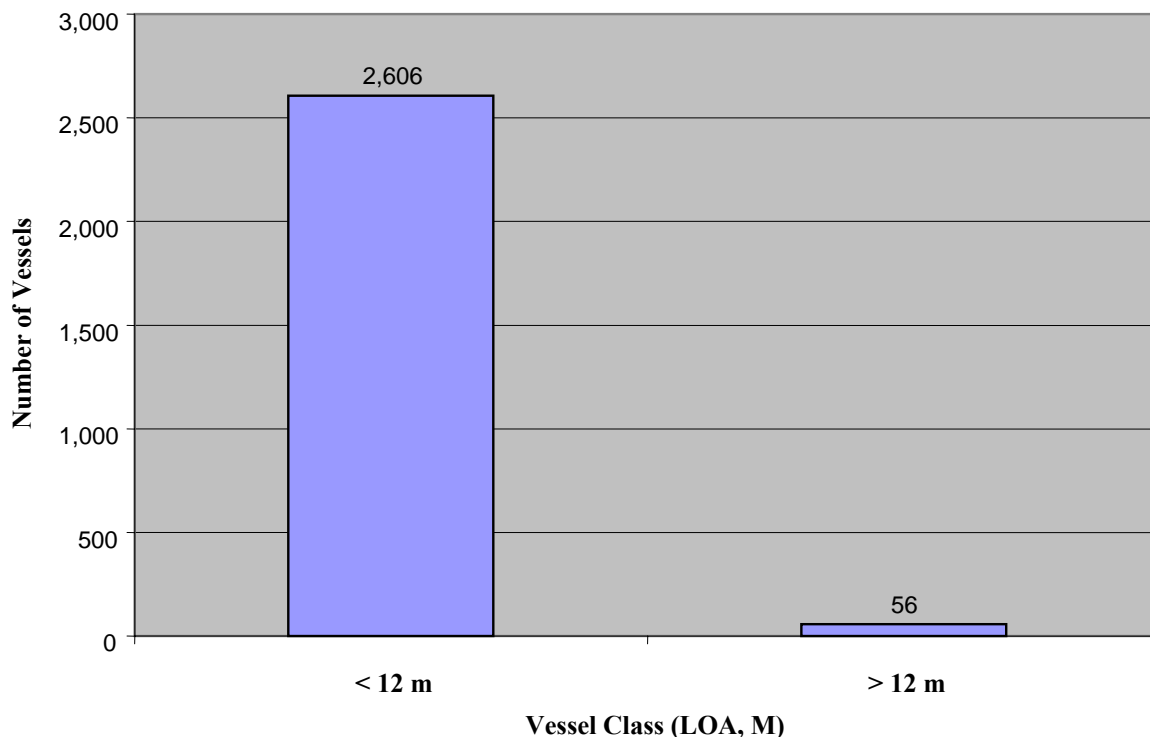
Table 9 Fishing Authorization Year

Fishing License Year	Number of Vessels	Percentage
1995	8	0.3
1996	10	0.4
1997	15	0.6
1998	19	0.7
1999	29	1.1
2000	46	1.7
2001	68	2.6
2002	112	4.2
2003	327	12.3
2004	1,568	58.9
(blank)	460	17.3
Grand Total	2,662	

3.0 Structural Characteristics

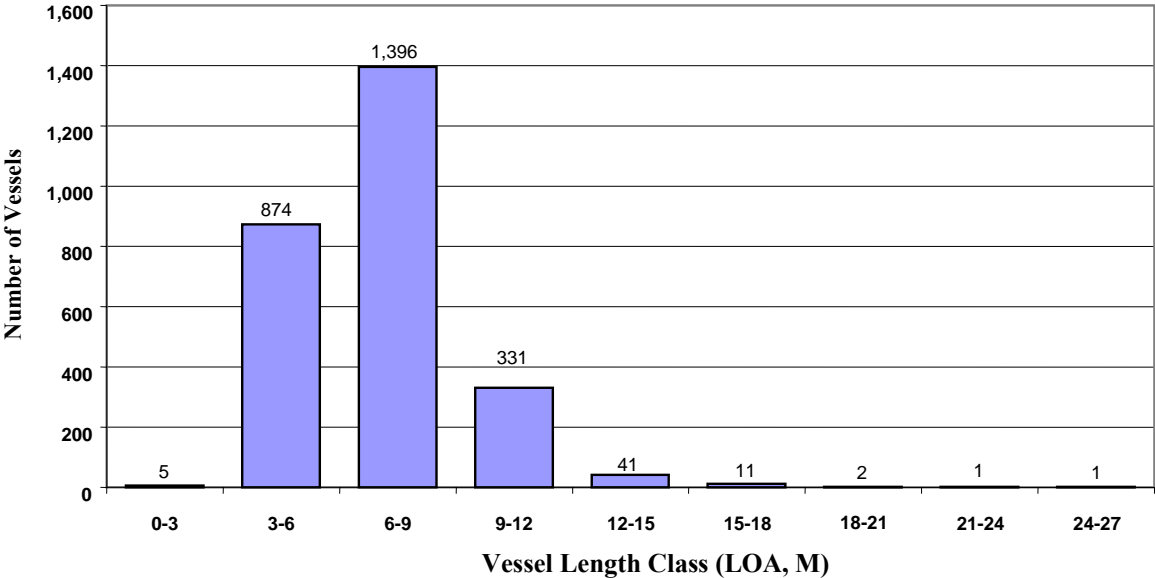
3.1 Vessel Size: Fig. 8 shows that 98% of the vessels were less than 12 m (LOA).

Fig. 8 Vessel Length Distribution



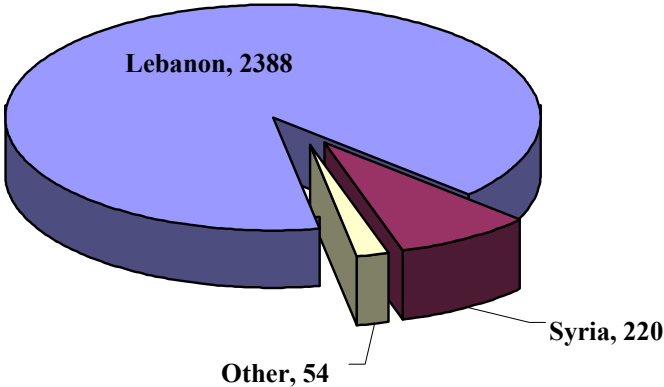
Length Class distribution (Fig 9) indicated that 52 % of Lebanese fishing vessels were 6-9 m long, while 33 % were 3-6 m long. Twelve percent of the vessels were 9-12 long.

Fig. 9 Vessel Length Distribution



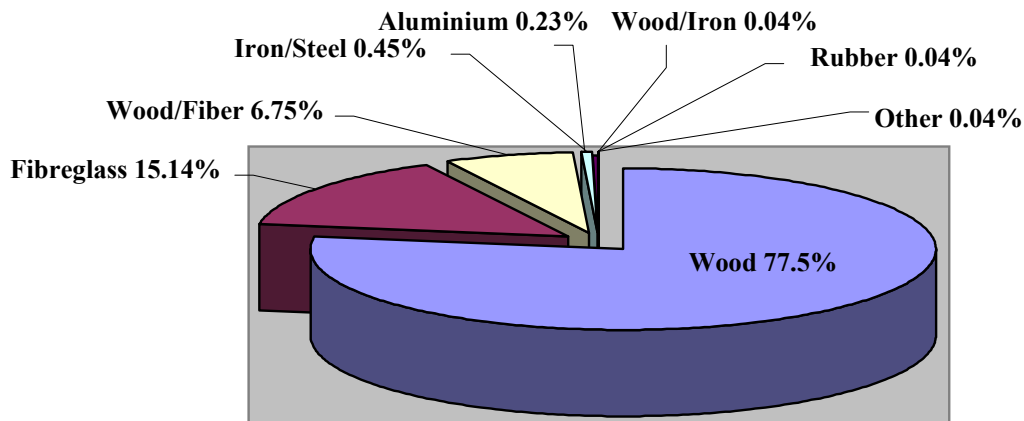
3.2 Vessels Construction Country: Fig. 10 shows that 90% of the boats were manufactured in Lebanon while 8% were made in the Syrian Arab Republic. About 2% of the vessels were made in other countries that included Bahrain, Belgium, Bulgaria, Cyprus, Denmark, Egypt, France, Germany, Greece, Italy, Japan, Jordan, Kuwait, Netherlands, Palestine, Russian Federation, Spain, Turkey, United Arab Emirates, United Kingdom, and the United States of America.

Fig. 10 Fishing Vessels Construction Countries



3.3 Hull Material: Fig 11 indicated that 77.5% of Lebanese fishing vessels were made of wood while 15% were made of fiberglass, about 7% were made of wood/fiberglass, and less than 1% were made of iron/steel, aluminum, rubber, and wood/iron.

Fig. 11 Distribution of Hull Material of Lebanese Fishing Vessels



The distribution of vessels hull material in relationship to vessel length indicated that the 48% of the vessels ranging from 3-6 m were made from wood while 42% were made of fibreglass. Regarding the other vessels length categories, the hull is predominantly made of wood as per Fig. 12.

3.4 Construction Year of Lebanese Fishing Vessels: Fig. 13 shows that 75% were constructed after 1980 with 40% of the vessels being constructed in 1990-1999 and 14% were made after the year 2000.

3.5 Decked Vessels: Fig. 14 indicated that 81% of the vessels were undecked. Fig. 15 shows the distribution of decked vessels according to hull material. Only 6% of the fibreglasses fishing vessels were decked, while about 22% of the wooden and wooden/fiberglass vessels were decked. Table 10 indicates that 63% of the vessels longer than 9m were decked while the percentage drops to 12% for the vessels, which were less than 9m (LOA).

3.6 Gross Registered Tonnage (GRT) of the Lebanese fishing vessels: Only 1,385 vessels had GRT recorded on there Property Notebook, while the figure drops to 608 for Gross Tonnage (GT). Fig. 16 shows the distribution of GRT. About 70% of the recorded vessels had GRT less than 5 tons while 24% had 5-10 tons GRT.

3.7 Vessel Builders: There were 321 Lebanese vessel builders. Table 11 lists the most important ones. Walid & Riad Koleilat Company, Toufiq Barbour, and Moustafa Hafez Qounnilli had constructed more than 100 vessels each.

Fig. 12 Distribution of Vessel Length and Hull Material

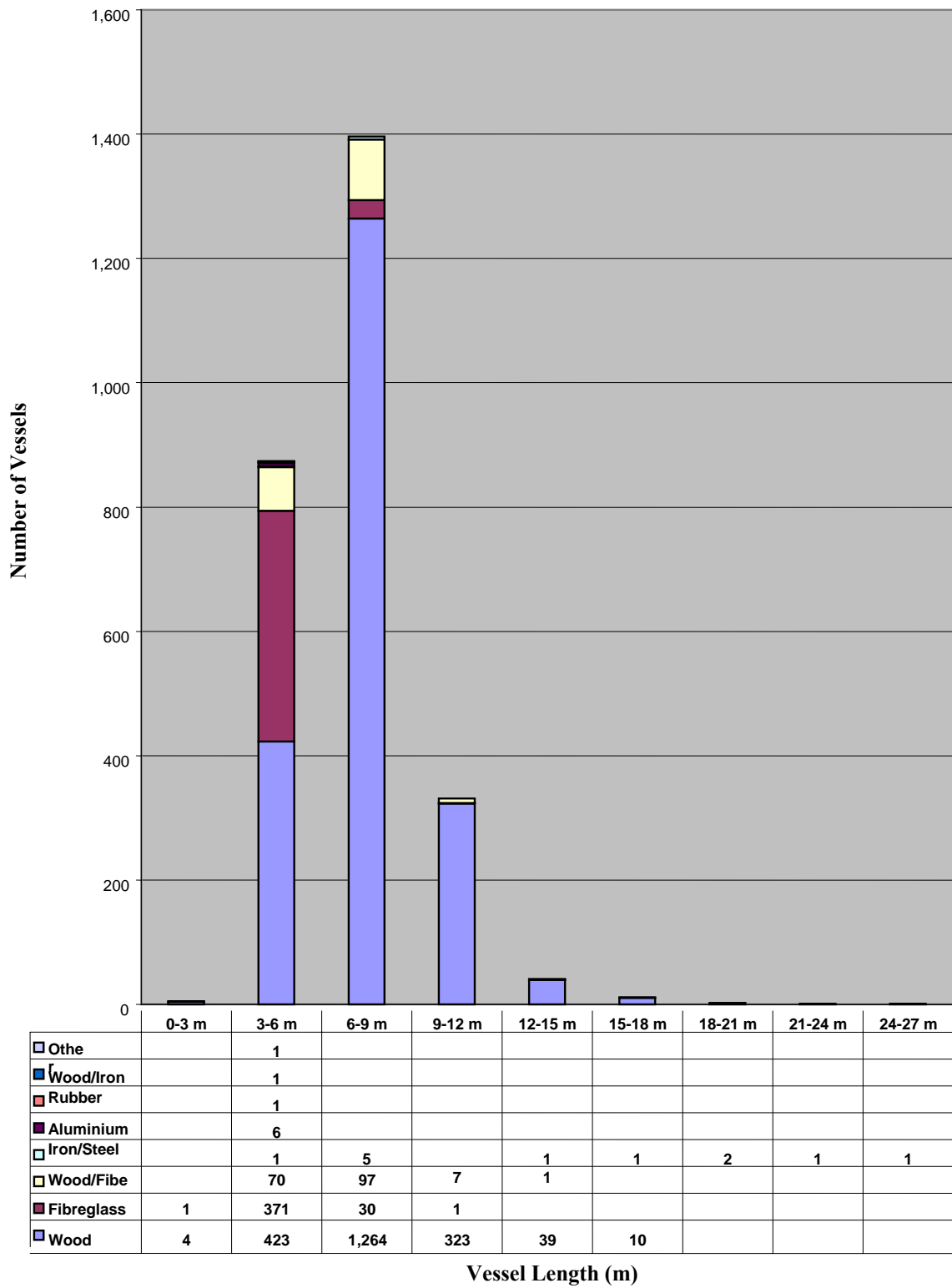


Fig. 13 Construction Year of Lebanese Fishing Vessels

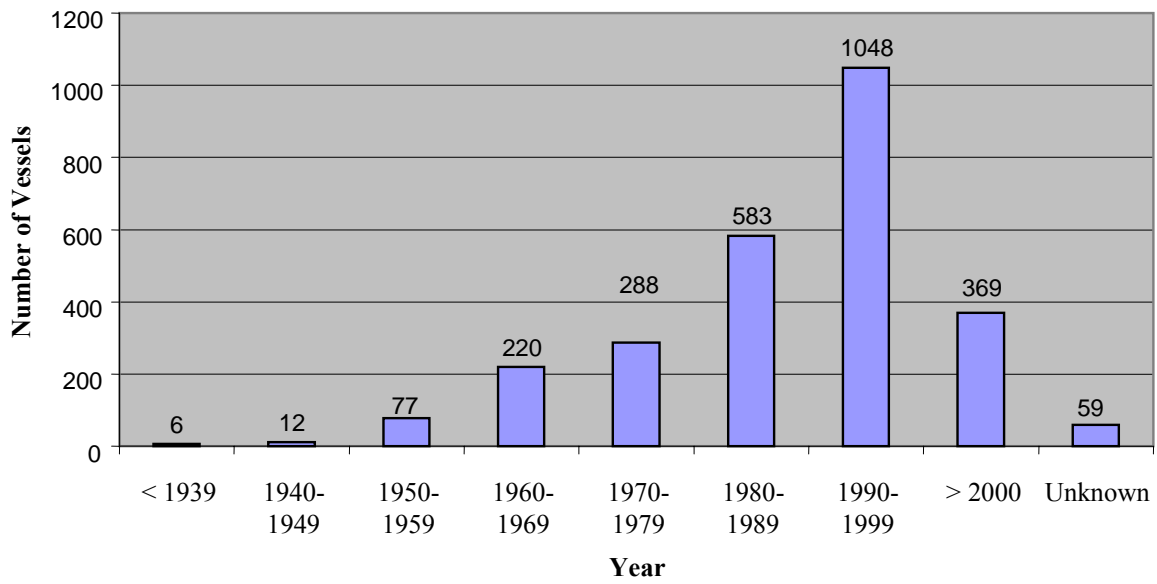


Fig. 14 Total Number of Decked & Undecked Fishing Vessels

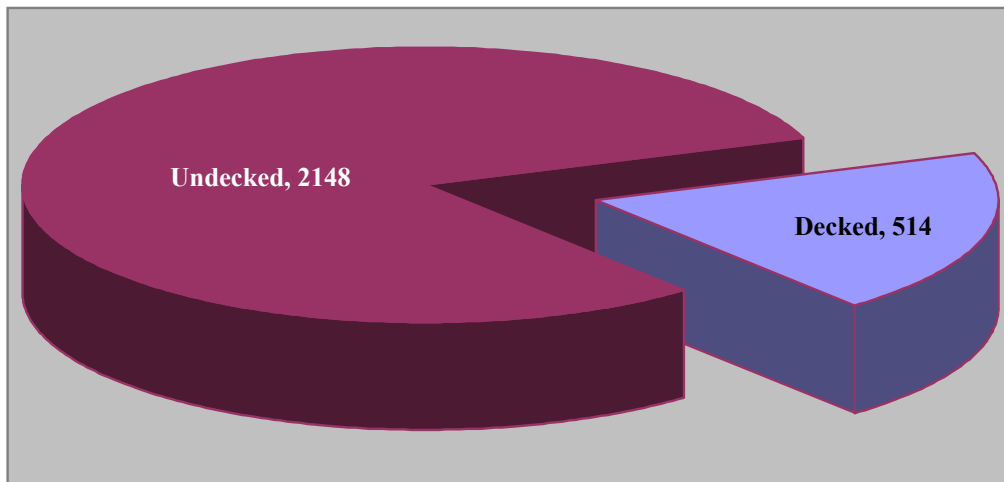


Fig. 15 Hull Material of Decked & Undecked Vessels

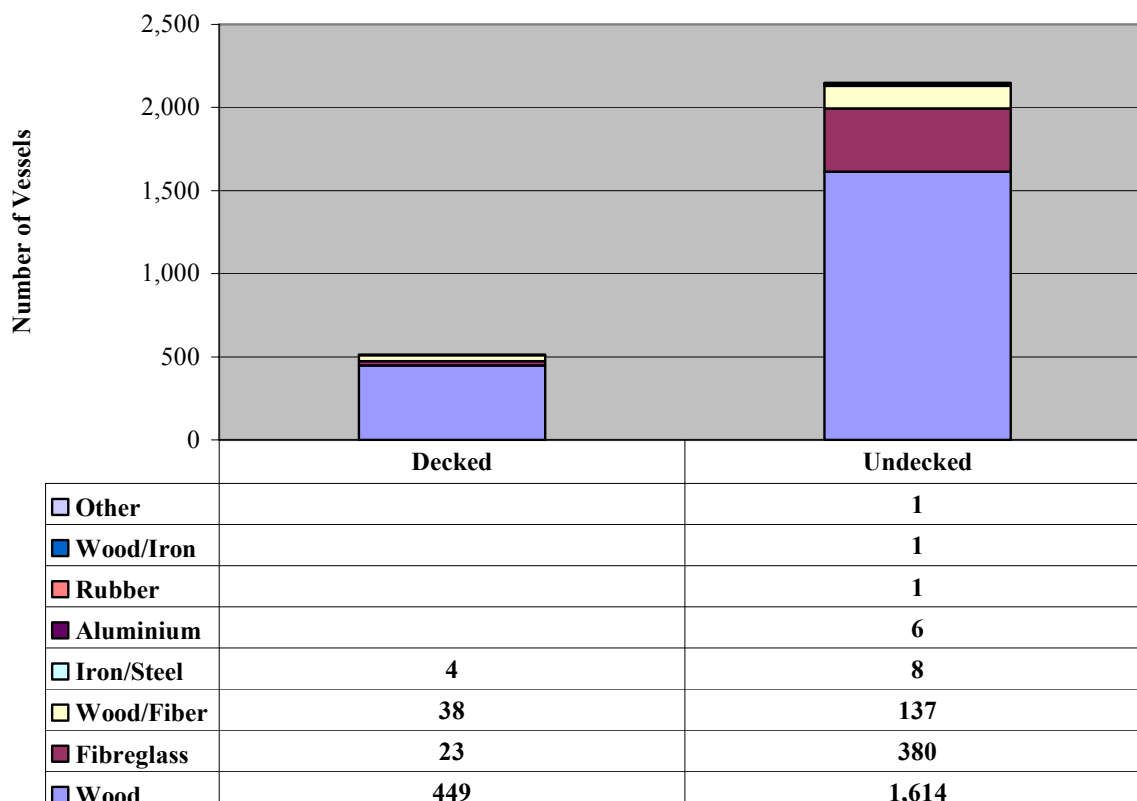


Table 10 Distribution of Decked and Undecked Vessels according to Vessel Length.

Length (LOA, m)	Decked	Undecked	Grand Total
0-3		5	5
3-6	48	826	874
6-9	222	1,174	1,396
9-12	200	131	331
12-15	33	8	41
15-18	8	3	11
18-21	1	1	2
21-24	1		1
24-27	1		1
Grand Total	514	2,148	2,662

Fig. 16 Distribution of GRT

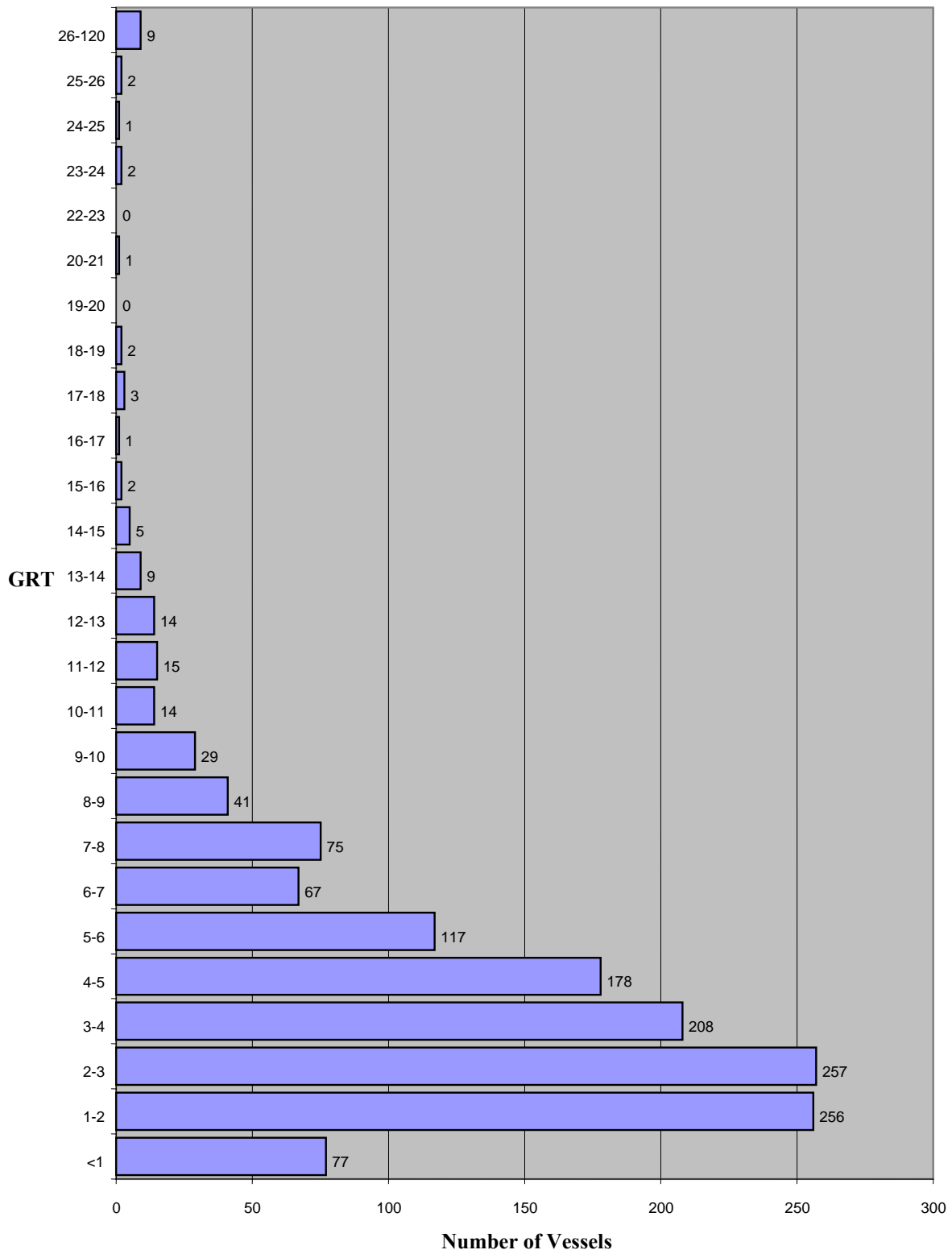


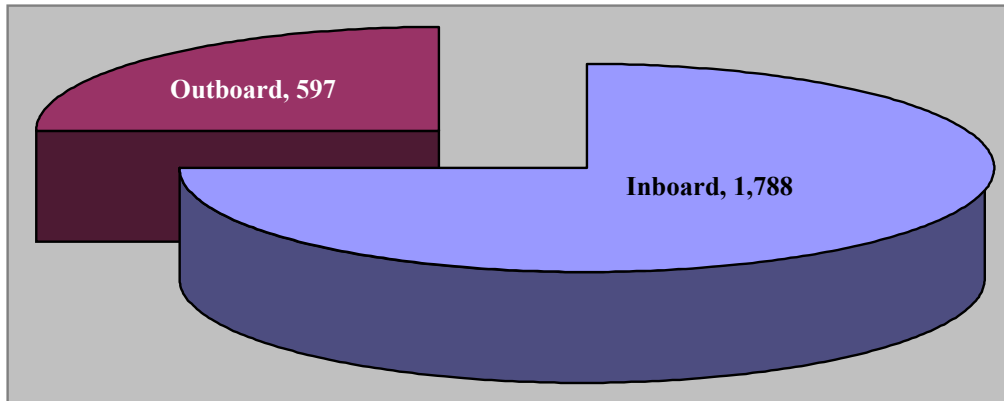
Table 11 List of the Most Important Lebanese Vessel Builders

Name of Ship Builder	Number of Vessels Constructed
Walid & Riad Koleilat Company	130
Toufiq Barbour	112
Moustafa Hafez Qounnilli	103
Ismail Ousaily	97
Bassam Chehab Est.	86
Khaled Abdullah Kayyillo	84
Amin Aknan	83
Kamel Touma Atiyeh	77
Jamal Mohammed Kayyillo	71
Salim Kayyillo	64
Ahmad Ousaily	60
Mohammed Kayyillo	52
Ahmad Khabbaz	51
Ahmad Al Akkad	46
Mohammed Ahmad Al Akkad	46
Abdullah Mohammed Kayyillo	43
Ahmad Kayyillo	34
Mohammed Salim Kayyillo	29
Ali Ahmad Khabbaz	27
Salim Annous	27
Nassir Moustafa Yassine	26
Ahmad Riad Massoud	21
Khalil Sonbol	21
Abdul Rahman Dabbous Est.	20
Nassir Al Akkad	20
Abdul Hamid Dabbagh	19
Eliyya Barbour	19
Ahmad Salameh	18
Ahmad Abdul Kader Khabbaz	17
Salim Mohammed Kayyillo	17
Comtek Industry Company	16
Hassan Salim Kayyillo	16
Abdullah Moustafa Idriss	15
Al Maha Factory	15
Garbis Karvalian	15
Hassan Omar Mikkawi	15
Mahmoud Al Akkad	15
Salim Al Rahmouni	15
Hassan Rida Haffouza	14
Salim Aayda	14
Abdul Haq Ousaily	13
Al Akkad	13
Mohammed Khaled Hamra	13
Odio Marine Company	13
Rached Barbour	13
Yousef Salim Al Khoury	12
Agrotec	11
Estefan Nakhle Moubarak	11
Saadedine Itani & Sons	11
Anis Kayyillo	10
Unknown	58

4.0 Engines: the census revealed that 90% of coastal fishing vessels (2,385) were motorized.

4.1 Engine location: Fig. 17 indicates that 75% of the engines were inboard, while 597 vessels had outboard engines.

Fig. 17 Engines Type



4.2 Engines Energy Source: Fig. 18 shows that 76% of the engines were diesel operated while the rest were either gasoline or gasoline mixed with oil operated. Table 12 indicates that most inboard engines were diesel operated while the outboard engines were predominantly gasoline operated. Furthermore, it was observed that two vessels had two inboard engines on them.

Fig. 18 Engines Energy Source

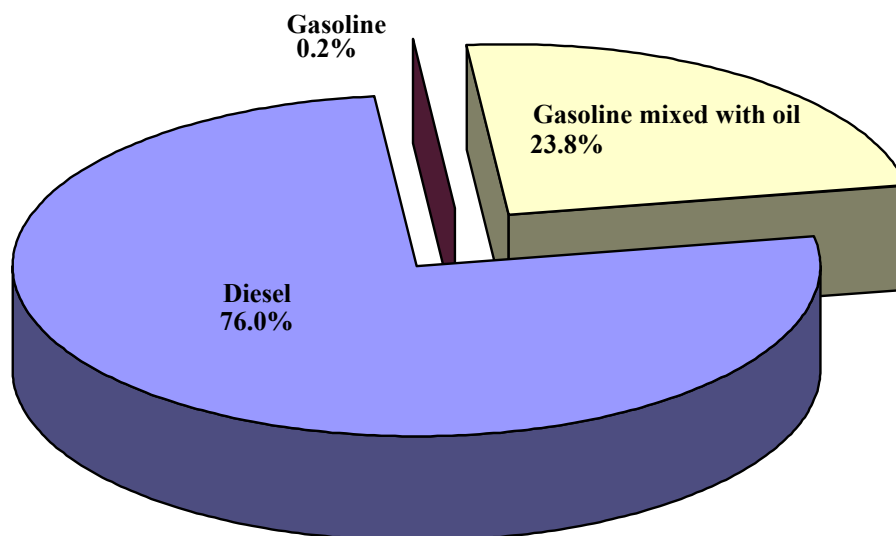


Table 11 Distribution of Energy Source According to Engine Location.

Energy Source	Inboard	Outboard	Grand Total
Diesel	1,780	31	1,811
Gasoline		4	4
Gasoline mixed with oil	5	562	567
(blank)	3		3
Grand Total	1,788	597	2,385

4.3 Engines Construction Year: Only 1,054 engines had record of year of construction. Fig. 19 shows that about half of those engines were constructed after the year 1990 while 38% of them were constructed in 1975-1989. Some 13% of the engines were manufactured prior to 1975.

4.4 Engines Power: Fig. 20 shows that the horsepower of 71% of the vessels was below 30 while for 22% it was between 30 and 50 hp. The remaining 7% had horsepower above 50.

4.5 Engines Construction Country: About half of the engines were manufactured in Japan (Fig. 21), while nearly 30% of the engines were constructed in the United Kingdom. Each of the United States of America and Germany supplied 7% of the engines.

4.6 Engines Manufacturers: Table 12 shows that Yanmar and Petter supplied about half of the engines used by Lebanese fishing vessels. Yamaha and Mercedes supplied 16 and 7% of the engines respectively. Each of Perkins, Mazda, and Mariner supplied about 5% of the engines.

5.0 Electronic Equipment

5.1 Navigation Equipment: Only 3% of Lebanese fishing vessels i.e. 85 vessels had navigation equipment onboard. GPS represented 79% of the of navigation equipment (Fig. 22). Fig. 23 indicated that most of the navigation equipment was purchased in 1999 and onwards. The data also showed that there were eight vessels that possessed two navigation equipments and three vessels that had three navigation equipment onboard.

5.2 Communication Equipment: The census (Fig. 24) showed that operators of 1,082 vessels (40%) had communication equipment. Cellular phones constitute the bulk (99%) of communication equipment. These were mainly purchased in 1996 and onwards (Fig. 25).

5.3 Fish Finders: There were 524 fish finders with Lebanese fishermen (Fig. 26) which were all sonar, except for one. Data showed that about 75% of fish finders were acquired in 1999-2004.

There were 65 vessels that carried both communication and navigation equipment (Table 13). Table 14 shows that there were 282 fishing vessels that possessed both fish finders and communication equipments. It was also noted that there were 85 fishing vessels with both fish finders and navigation equipment (Table 15).

Fig. 19 Engines Construction Year

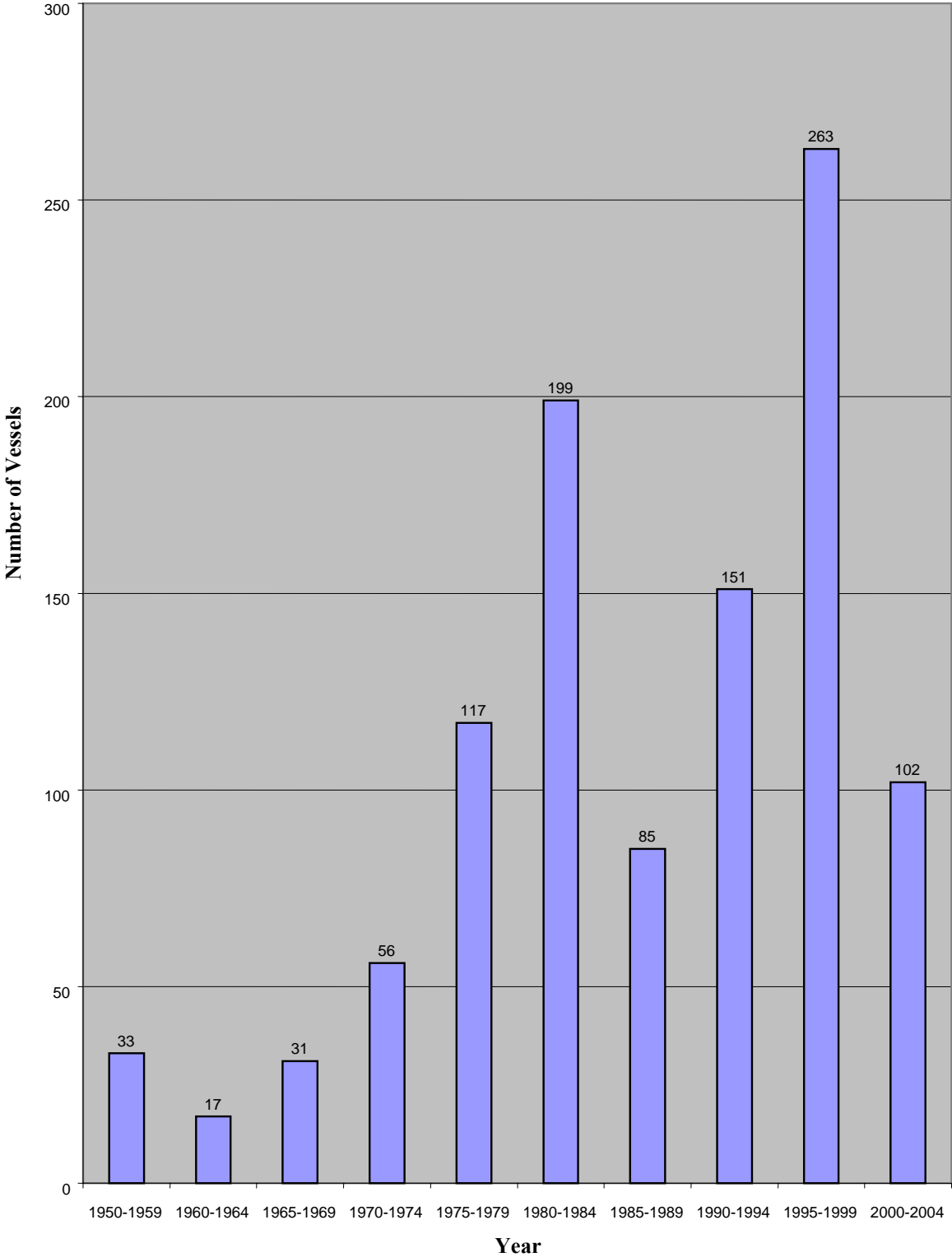


Fig. 20 Engine Horse Power

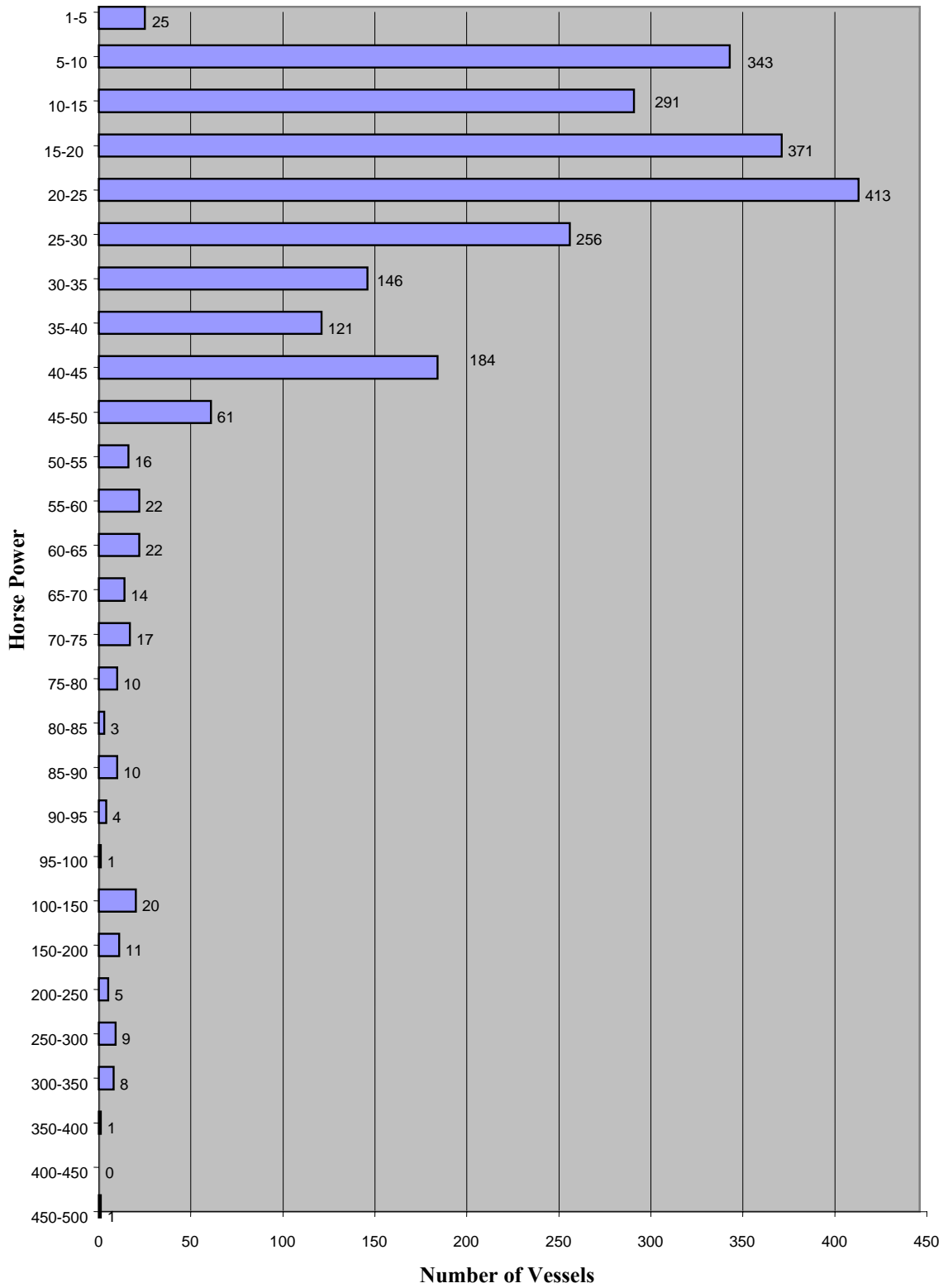


Fig. 21 Engines Construction Country

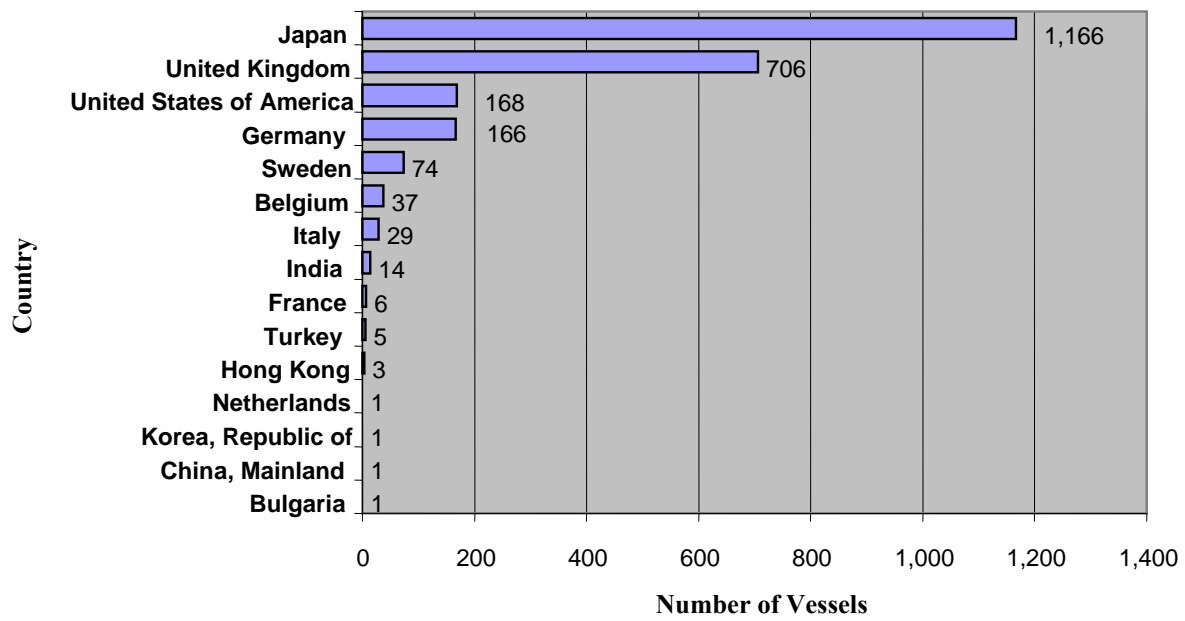


Table 12: Manufacturers of Engines.

Manufacturer	Grand Total	Percentage
Yanmar	578	24
Petter	537	23
Yamaha	375	16
Mercedes	157	7
Perkins	126	5
Mazda	116	5
Mariner	99	4
Volvo	59	2
Mercury	53	2
Lister	33	1
Suzuki	24	1
Johnson	20	1
Daya/Mitsubishi	17	1
Ford	16	1
Mitsubishi	16	1
Ruggerini	16	1
Tohatsu	13	1
Other	123	5
Grand Total	2,378	

Fig. 22 Distribution of Navigation Equipment

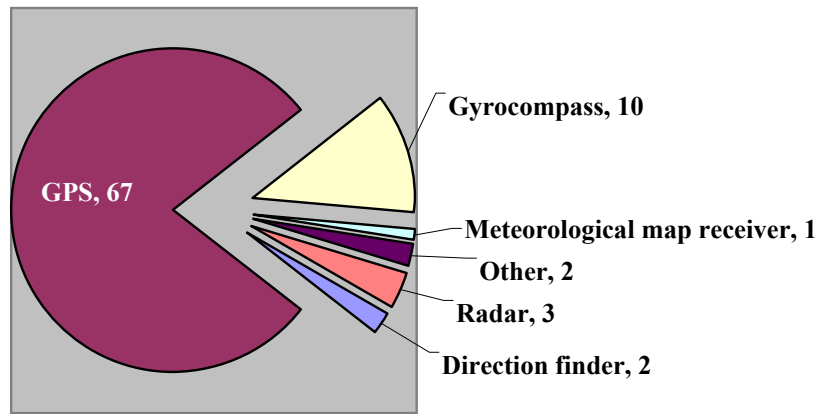


Fig. 23 Purchase Year of Navigation Equipment

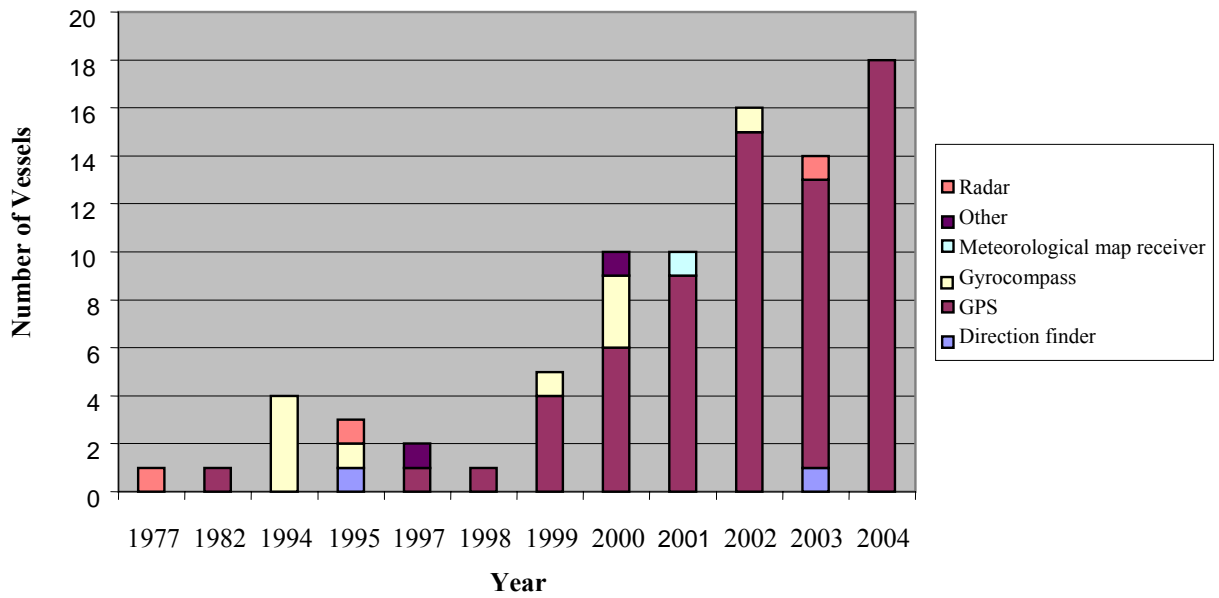


Fig. 24 Distribution of Communication Equipment

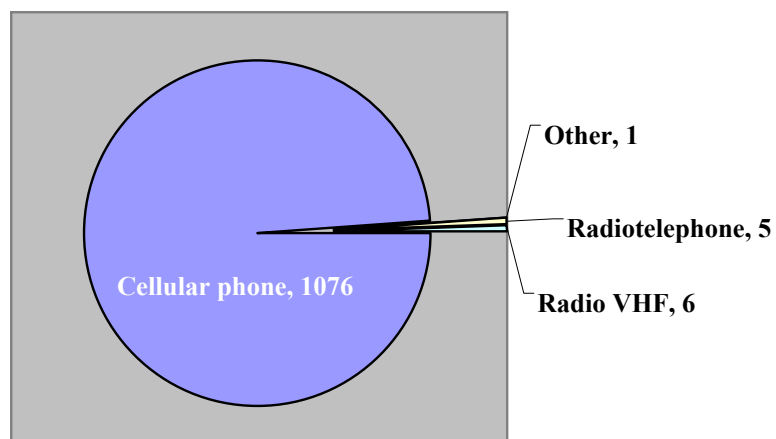


Fig. 25 Communication Equipment Purchase Year

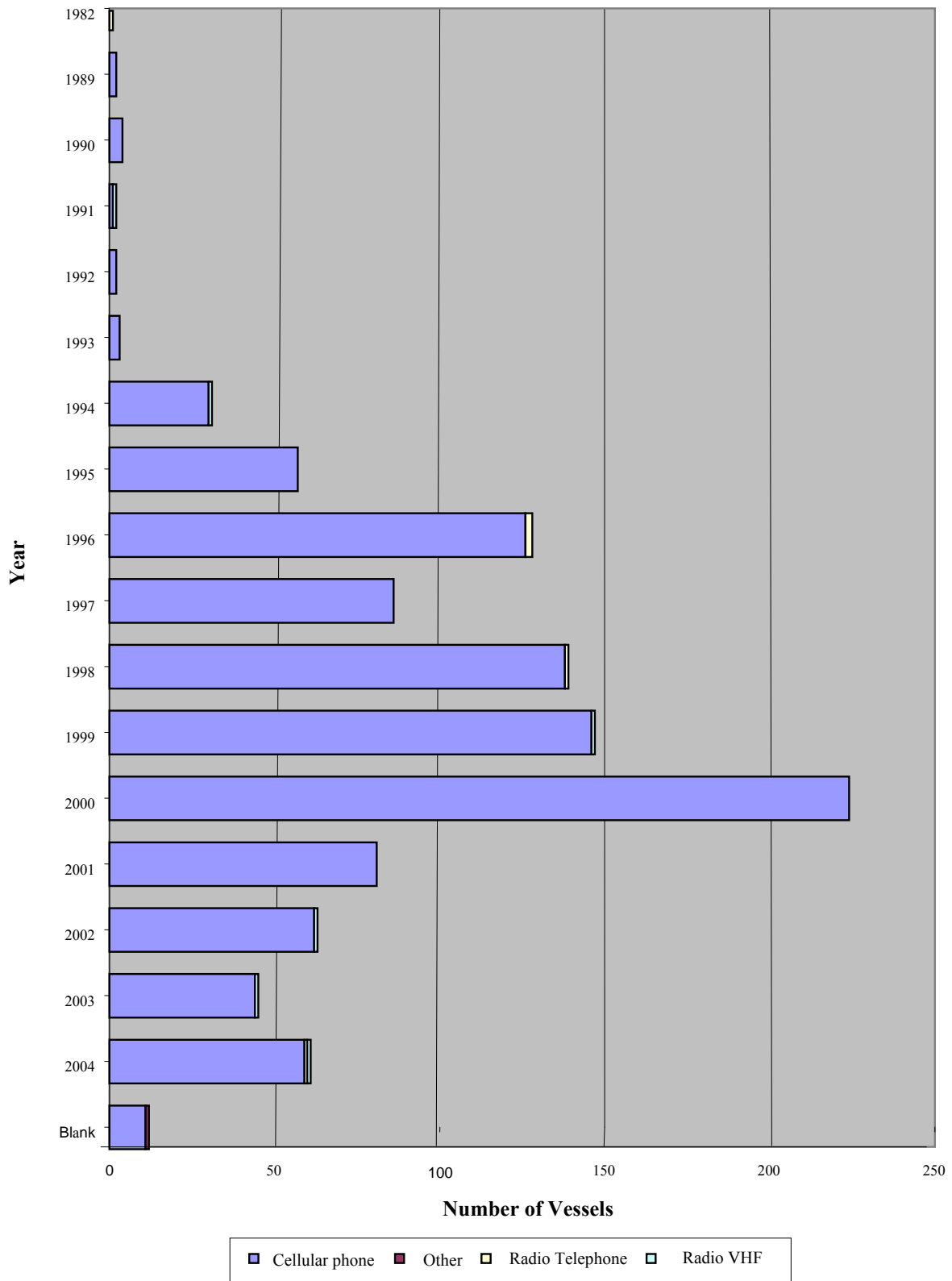


Fig. 26 Distribution of Fish Finders

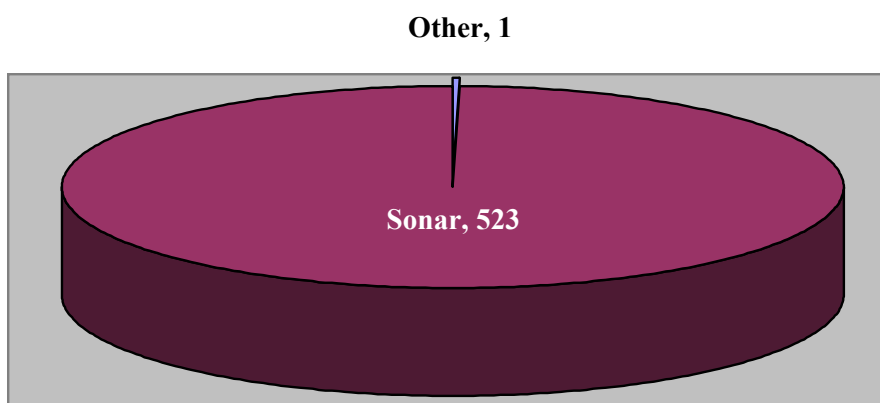


Table 13 Distribution of Vessels with both Navigation & Communication Equipment

Equipment	Cellular phone	Radio telephone	Radio VHF	Grand Total
Direction finder	1			1
GPS (Satellite navigation)	49	1	4	54
Gyrocompass	4			4
Meteorological map receiver	1			1
Other	2			2
Radar	3			3
Grand Total	60	1	4	65

Table 14 Distribution of Vessels with both Fish Finders & Communication Equipment

Equipment	Sonar	Other	Grand Total
Cellular phone	274	1	275
Radio telephone	2		2
Radio VHF	5		5
Grand Total	281	1	282

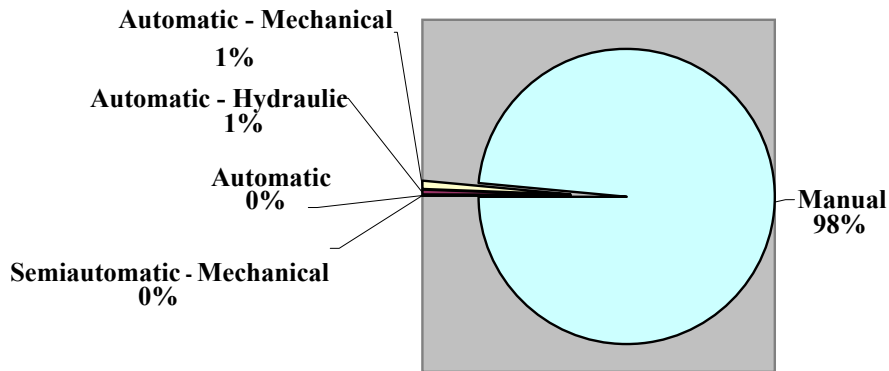
Table 15 Distribution of Vessels with both Fish Finders & Navigation Equipment

Equipment	Sonar	Other	(blank)	Grand Total
Direction finder	1		1	2
GPS	59		8	67
Gyrocompass	8	1	1	10
Meteorological map receiver	1			1
Other			2	2
Radar	3			3
Grand Total	72	1	12	85

6.0 Deck Machinery

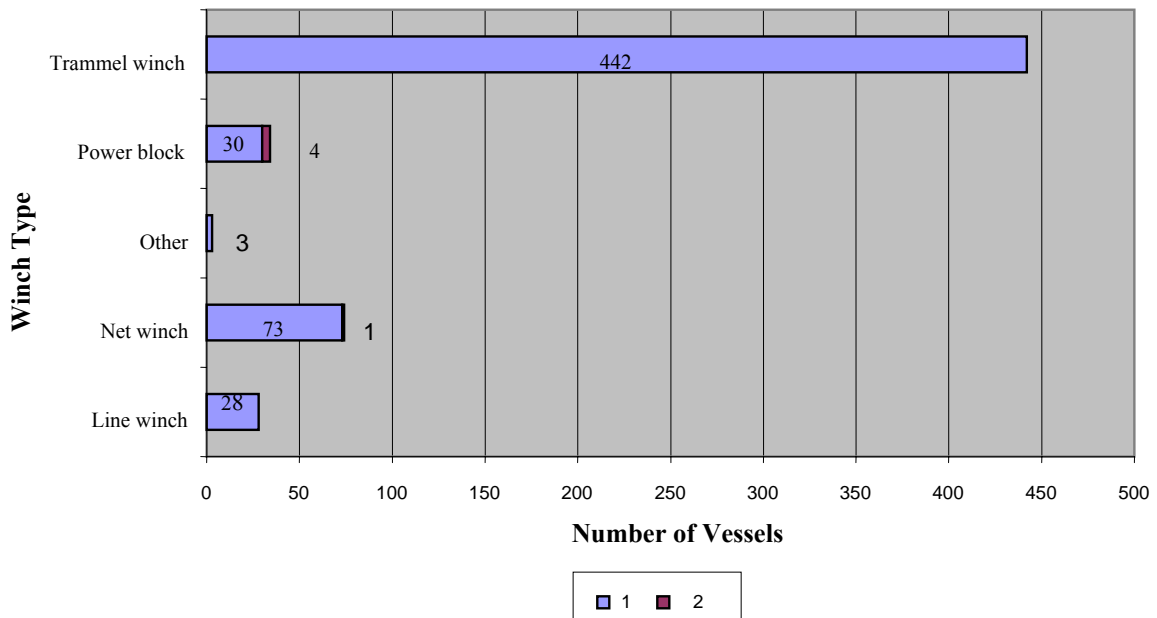
6.1 Gear Activation Method: Fig 27 shows that 98% of the fishing gears were manually activated.

Fig. 27 Fishing Gear Activation Method



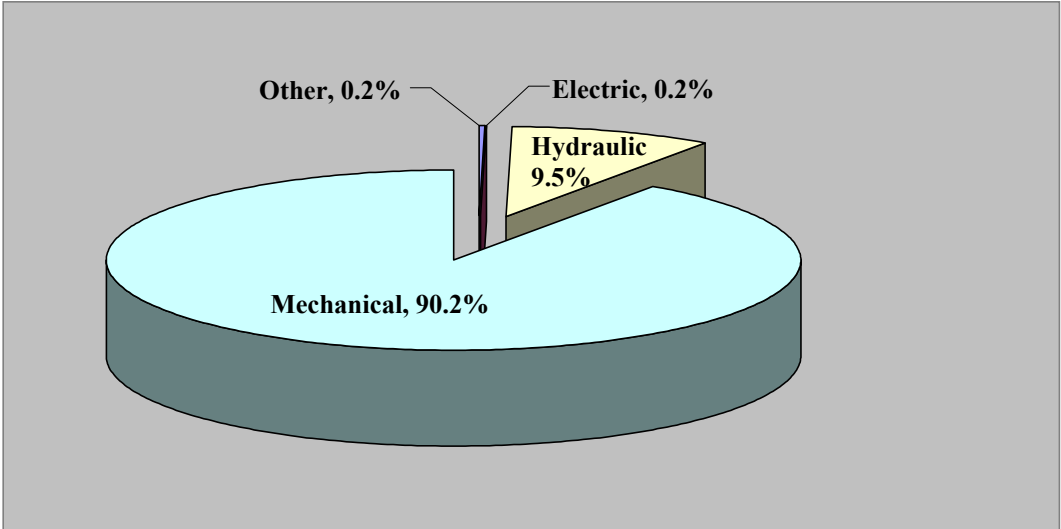
6.2 Winch Quantity and Type per vessel: 576 vessels (22% of fishing fleet) carried one winch aboard, while five vessels had two winches on board (Fig. 28). The winches were mainly the simple trammel/net winch type with single or double reels.

Fig. 28 Type of Winches



6.3 Winch Activation Method: Fig. 29 shows that 90% of the winches were mechanically activated.

Fig. 29 Winch Activation Method



7.0 Fishing Vessels Ownership

7.1 Type of Ownership: Individuals owned all vessels, except for two vessels. About 79% of the vessels were owned by one person and 20% were owned by two individuals (Fig. 30). Fig. 31 shows that around 80% of the vessels were operated by their owners. Nearly 99.9% of the vessels were owned and/or operated by Lebanese.

Fig. 30 Number of Owners of Vessels

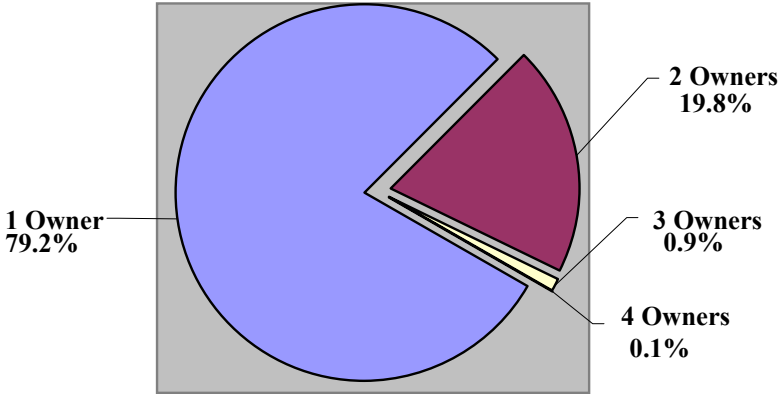
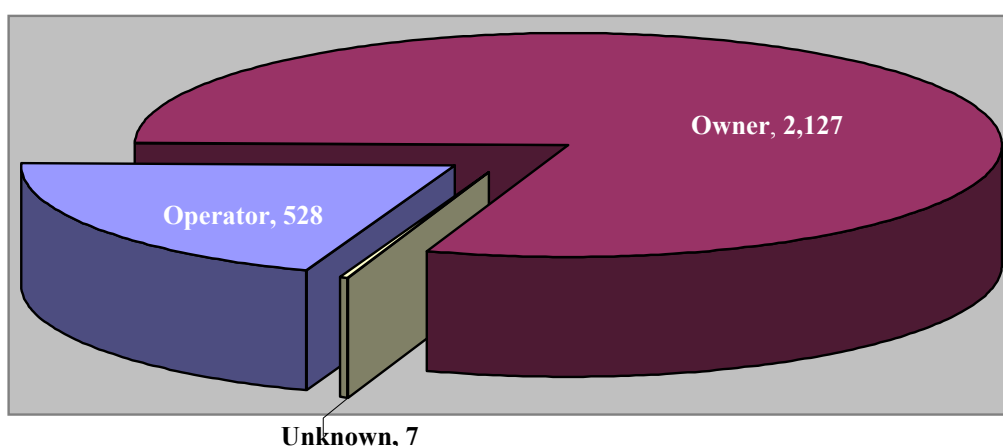


Fig 31 Operators of Fishing Vessels

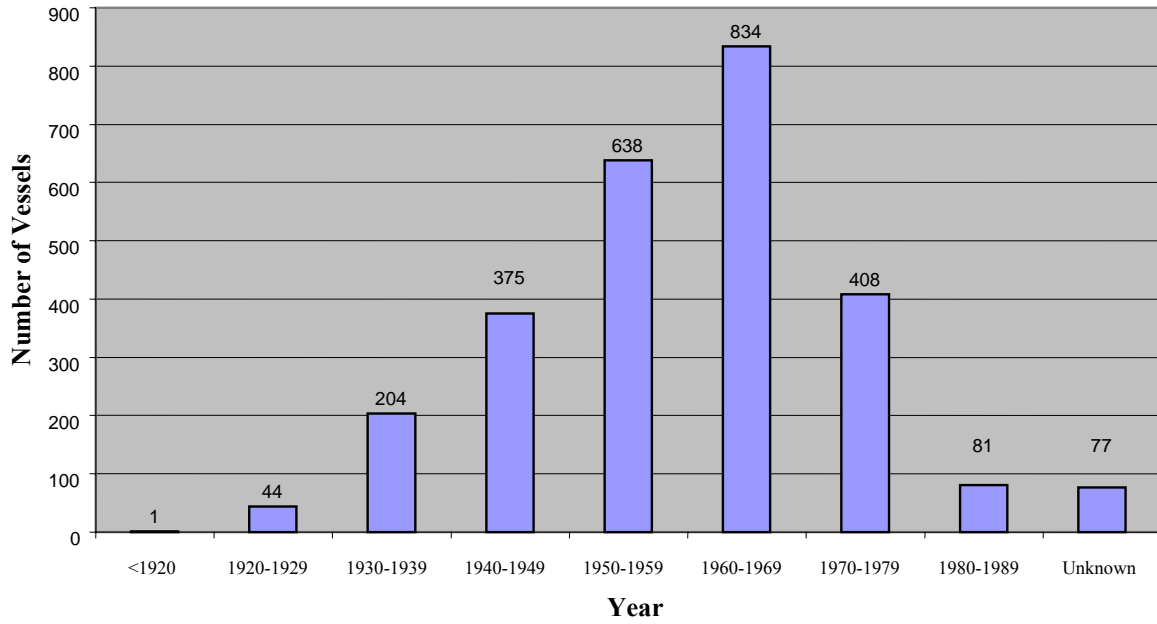


7.2 Profile of Fishermen: Table 16 shows that the majority of fishermen lived in or in the vicinity of their homeports. The table lists the cities and towns where more than 20 fishermen lived. Fig. 32 indicates the birth year of the Lebanese fishermen. This chart shows that the age of half the fishermen was below 45 years. There is a peak (about one third of fishermen) for those born in 1960-1969.

Table 16 Town of Residence of Vessel owners and/Operators

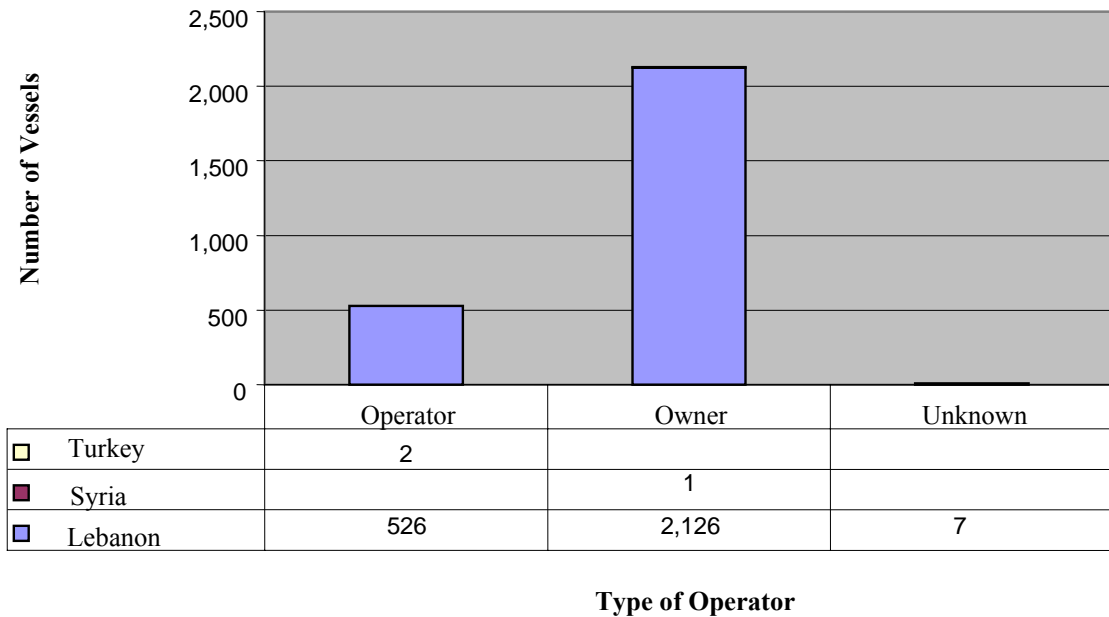
Owner town	Operator	Owner	Unknown	Grand Total
El Mina	120	287	1	408
Beirut	8	254		262
Sour	67	131	1	199
Bebnine	44	113		157
Said	25	126	2	153
(blank)	28	93	2	123
Sarafand	36	78		114
Ouzaii	9	99		108
Enfe	16	54		70
Borj Hammoud	6	59		65
Batroun	10	52		62
Tripoli	13	46		59
Jbail	12	45		57
El Qalamoun	18	33		51
Aaqaibe	8	37		45
Bouar	15	23		38
Dbaiye	4	32		36
Chekka	6	24		30
Aamchit	4	22		26
Tabarja	4	22		26
Dora	7	18		25
Aarida	12	12		24
El Heri	4	20		24
Sad el Baouchriye		24		24
Zalqa	1	22		23
Naqoura	3	18		21

Fig. 32 Birth Year of Vessels Owners and/or Skippers



7.3 Country of Vessel Owners: Fig. 33 indicates the 99.9% of owners/operators were Lebanese. Two Palestinian and ten Syrian nationals were partners in Lebanese fishing vessels. It should be noted that many (figures unknown) of Palestinians and probably Syrians own/co-own vessels that they register in the names of there Lebanese wives or friends.

Fig. 33 Country of Fishing Vessels Owners/Operators



7.4 Fishermen Passport: Table 17 indicates that 86% of interviewed fishermen declared that they had valid Fishermen Passport.

Table 17 Holders of Valid Fishermen Passport

Fishermen Passport	Total	Percentage
Yes	2,279	86%
No	383	14%
Grand Total	2,662	

8.0 Crew

8.1 Crew Number: Fig. 34 indicates that the minimum number of crew was 4,575; the maximum number was 9,575, while the usual number was 6,480 aboard Lebanese fishing fleet.

Fig. 34 Number of Crew aboard Vessels

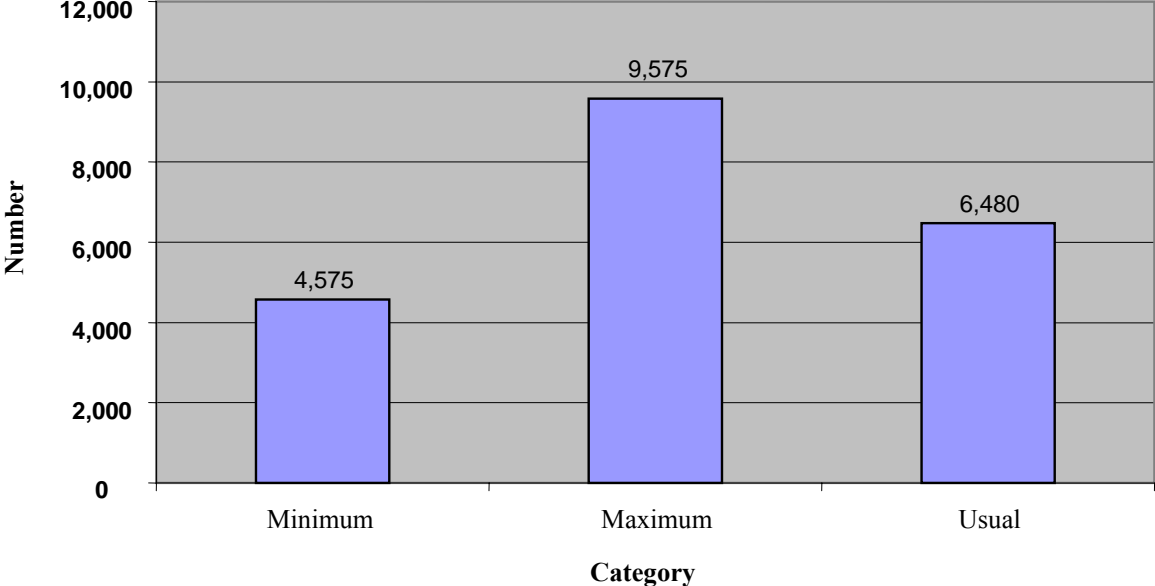
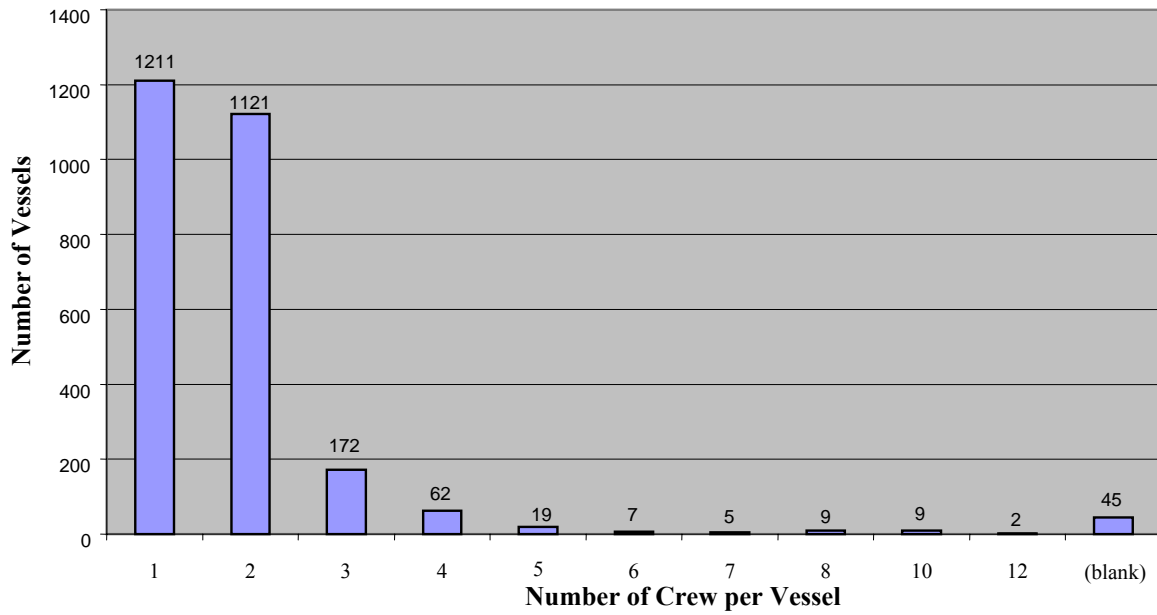


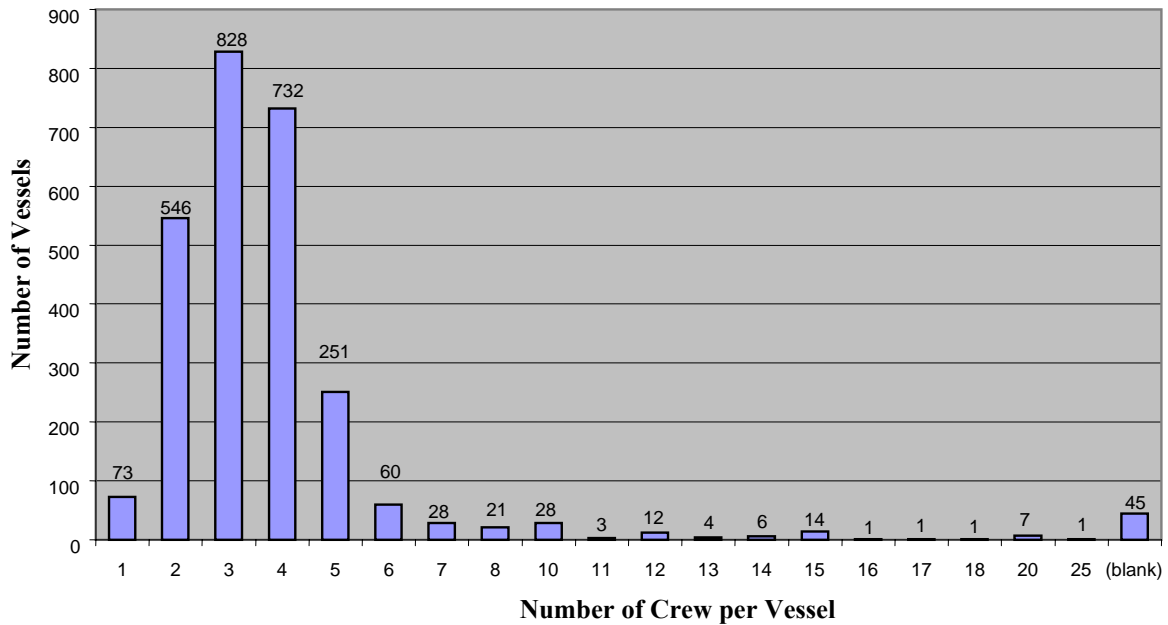
Fig. 35 shows the distribution of the minimum number of crew aboard Lebanese fishing fleet. It indicates that about 46% of the vessels were minimally operated with only one person while 42% are operated with two persons.

Fig. 35 Distribution of Minimum Number of Crew aboard Vessels



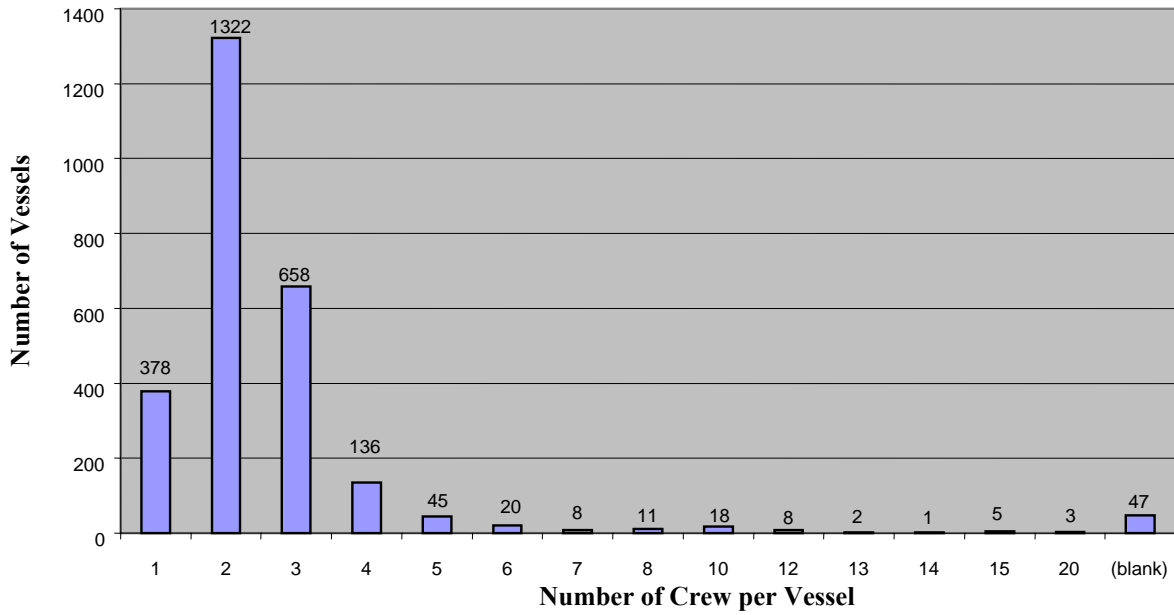
The distribution of the maximum number of crew (Fig. 36) indicates that about 80% of the vessels had a maximum of 2-4 crew members per vessel with 21%, 31 and 27% of the vessels were operated by 2, 3 and 4 crewmembers per vessels simultaneously.

Fig. 36 Distribution of Maximum Number of Crew aboard Vessels



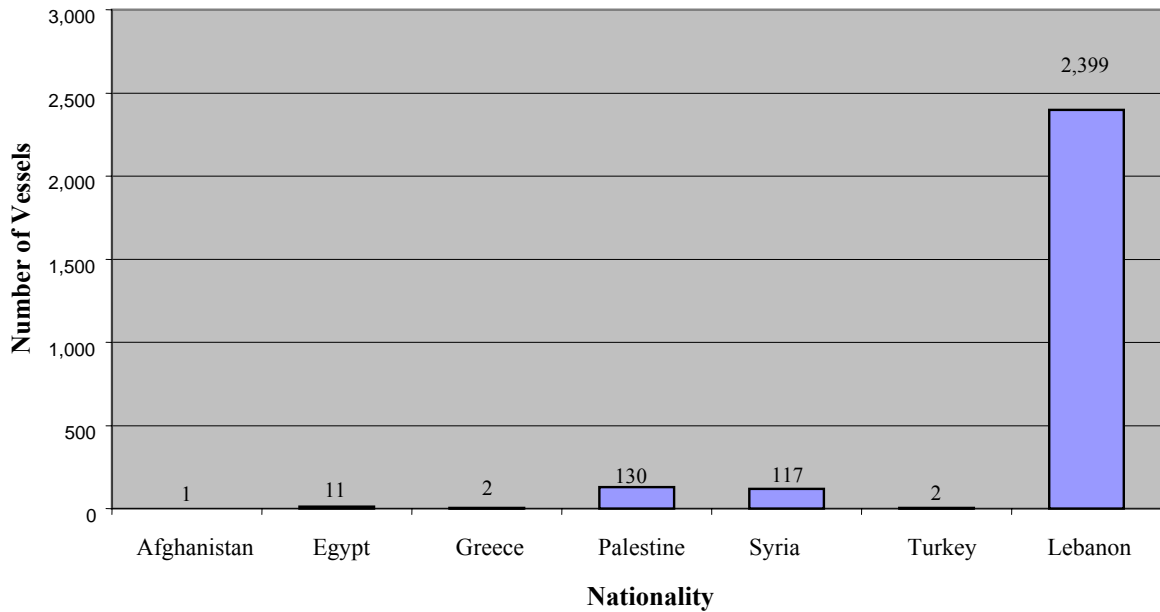
For the usual number of crew per vessel (Fig. 37), the data shows that half the vessels were usually operated by two people while 14% and 25% of the vessels were usually operated by 1 and 3 crewmembers simultaneously.

Fig. 37 Distribution of Usual Number of Crew aboard Fishing Vessels



8.2 Crew Nationality: 90% of vessels were reported to have Lebanese crew only (Fig. 38), while 5% of the vessels were declared to hire Palestinians and 4 % to have Syrian crewmembers. It is thought that the number of foreign labor is much higher, since it was noticed that many crewmembers e.g. Egyptians at Dora Port, but vessel owners declined to provide such information, maybe due to the fact that Egyptians were banned to have a work permit in the fisheries sector.

Fig. 38 Declared Nationality of Crew



8.3 Fishermen Cooperative membership: Fig. 39 indicates that there was 30 fishermen's cooperative along the Lebanese coast. Only 1,152 vessel owners/operators (43%) declared that they belonged to a cooperative while 1,510 were not members. Cooperatives in Greater Beirut (Dora, Beirut, and Ouzaii) showed highest membership with 591 members representing 51% of vessel owners/operators. There was usually one cooperative in each officially recognized fishing port except for Dora Port that had two cooperatives; namely, Cooperative of Vessel Owners & Professional Fishermen in Mount Lebanon and North Matn & Karantina Fishermen Cooperative. This was thought to be due to power struggle and political affiliations.

8.4 Fishermen Syndicates Membership: There were five fishermen syndicates (Fig. 40) along Lebanese coast. Only 1,017 vessel owners/operators (38%) declared that they belonged to a syndicate while the rest (1,645) were not members. North Lebanon Fishermen Syndicate showed highest membership of 388 fishermen.

Table 18 indicates that only 382 vessel owners/operators belonged to both a syndicate and a fishermen cooperative. Greater Beirut region showed that 96% (248) of its syndicated fishermen belonged to cooperatives too. This was not the case for other regions of the country.

Fig. 39 Cooperative Membership

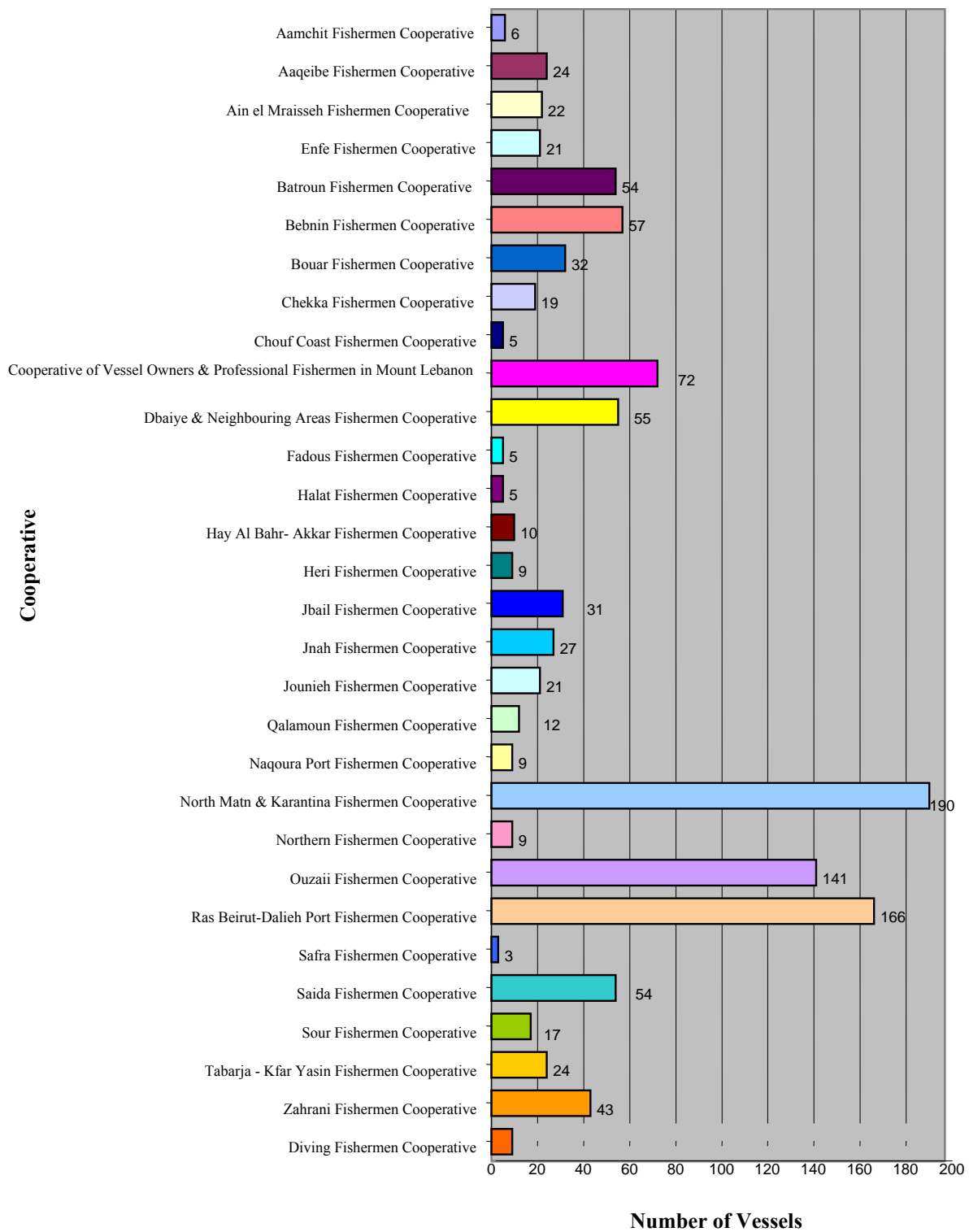


Fig. 40 Fishermen Syndicates Membership

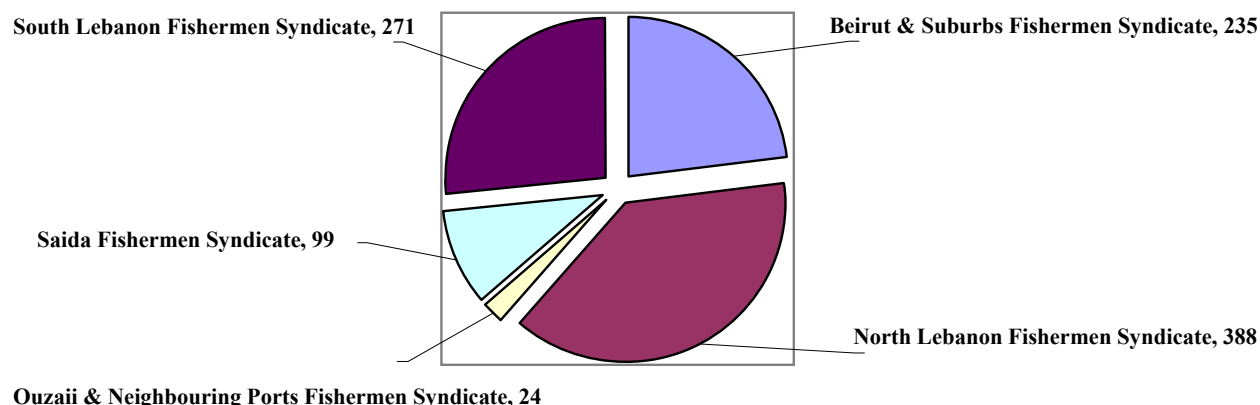


Table 18 Membership in both Fishermen Syndicates & Cooperatives

Syndicate	Cooperative	Total
Beirut & Suburbs Fishermen Syndicate	Aaqeibe Fishermen Cooperative	19
	Ain el Mraisseh Fishermen Cooperative	3
	Bouar Fishermen Cooperative	7
	Cooperative of Vessel Owners & Professional Fishermen in Mount Lebanon	43
	Dbaiye & Neighboring Areas Fishermen Cooperative	36
	North Matn & Karantina Fishermen Cooperative	61
	Ouzaii Fishermen Cooperative	8
	Ras Beirut-Dalieh Port Fishermen Cooperative	47
Beirut & Suburbs Fishermen Syndicate Total		224
North Lebanon Fishermen Syndicate	Enfe Fishermen Cooperative	6
	Batroun Fishermen Cooperative	1
	Bebnin Fishermen Cooperative	8
	Chekka Fishermen Cooperative	6
	Hay Al Bahr- Akkar Fishermen Cooperative	2
	Qalamoun Fishermen Cooperative	1
	Northern Fishermen Cooperative	5
	Diving Fishermen Cooperative	8
North Lebanon Fishermen Syndicate Total		37
Ouzaii & Neighboring Ports Fishermen Syndicate	Ouzaii Fishermen Cooperative	24
Ouzaii & Neighboring Ports Fishermen Syndicate Total		24
Saida Fishermen Syndicate	Ouzaii Fishermen Cooperative	1
	Saida Fishermen Cooperative	52
Saida Fishermen Syndicate Total		53
South Lebanon Fishermen Syndicate	Sour Fishermen Cooperative	10
	Zahrani Fishermen Cooperative	34
South Lebanon Fishermen Syndicate Total		44
Grand Total		382

9.0 Ports of Fishing Operations

9.1 Ports: When vessel owners/operators were asked about their ports of fishing operations, the ports declared (Fig. 41) were, in general, similar to the results obtained by physical inspection by the DFW recorders (Fig. 3). Owners/operators of 54 vessels reported operating in two ports (Table 19). No vessel was recorded to operate in three or more ports. Nevertheless, vessels are allowed to enter ports other than homeports in cases of emergency

Fig. 41 Fishing Operations Ports

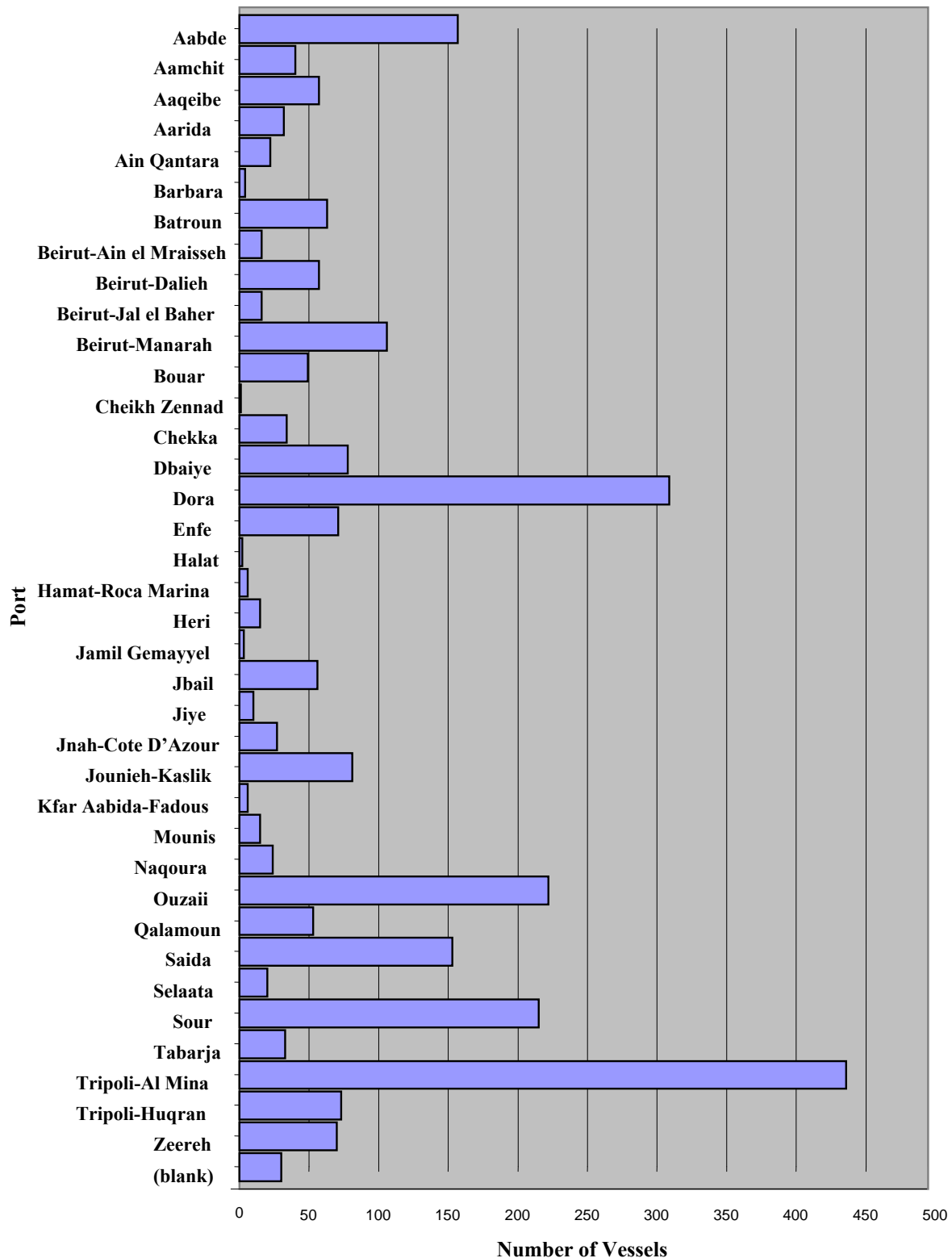


Table 19 Ports of operation for multiple ports of fishing operations

Port (1)	Port (2)	Total
Aabde	Hay el Bahr	2
	Tripoli-Al Mina	17
Aarida	Cheikh Zennad	2
Ain Qantara	Zeereh	1
Batroun	Selaata	6
Dbaiye	Dora	1
	Ouzaii	1
Dora	Jamil Gemayyel	2
Enfe	Batroun	1
	Selaata	1
	Tripoli-Al Mina	2
Heri	Qalamoun	1
Naqoura	Sour	2
Qalamoun	Tripoli-Al Mina	1
Saida	Ain Qantara	1
Selaata	Zeereh	2
Sour	Mounis	2
	Saida	2
	Zeereh	6
Zeereh	Saida	1
Grand Total		54

9.2 Fishing Season: Table 20 shows that the almost all vessels (96%) operate all year long. 98% of vessels start operations in January and 97% work in December. The same trend applies at all fishing ports (Fig. 42 & Fig. 43).

Table 20 Fishing Season

Month Begin	Month End												Grand Total
	2	3	4	5	6	7	8	9	10	11	12	(blank)	
1	6	4	6	3	5	1	3	5	1	2	2,561		2,597
2									3	1			4
3								1	3	1	2		7
4										3	2		5
5							1		3	1	2		7
6								1	3		1		5
8										1			1
9											2		2
11											2		2
12											2		2
(blank)												30	30
Grand Total	6	4	6	3	5	1	4	7	13	9	2,574	30	2,662

Fig. 42 Fishing Season Onset

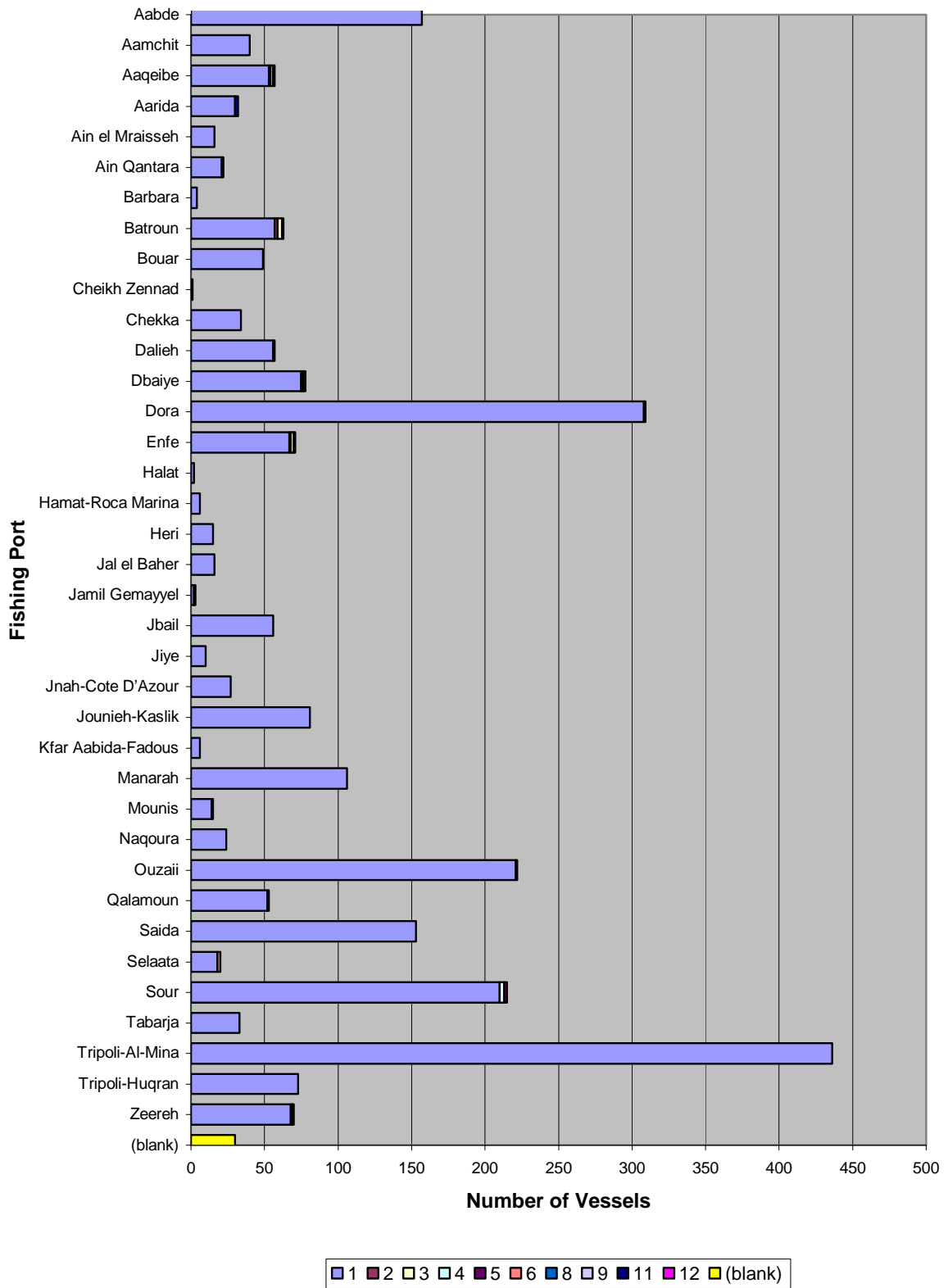
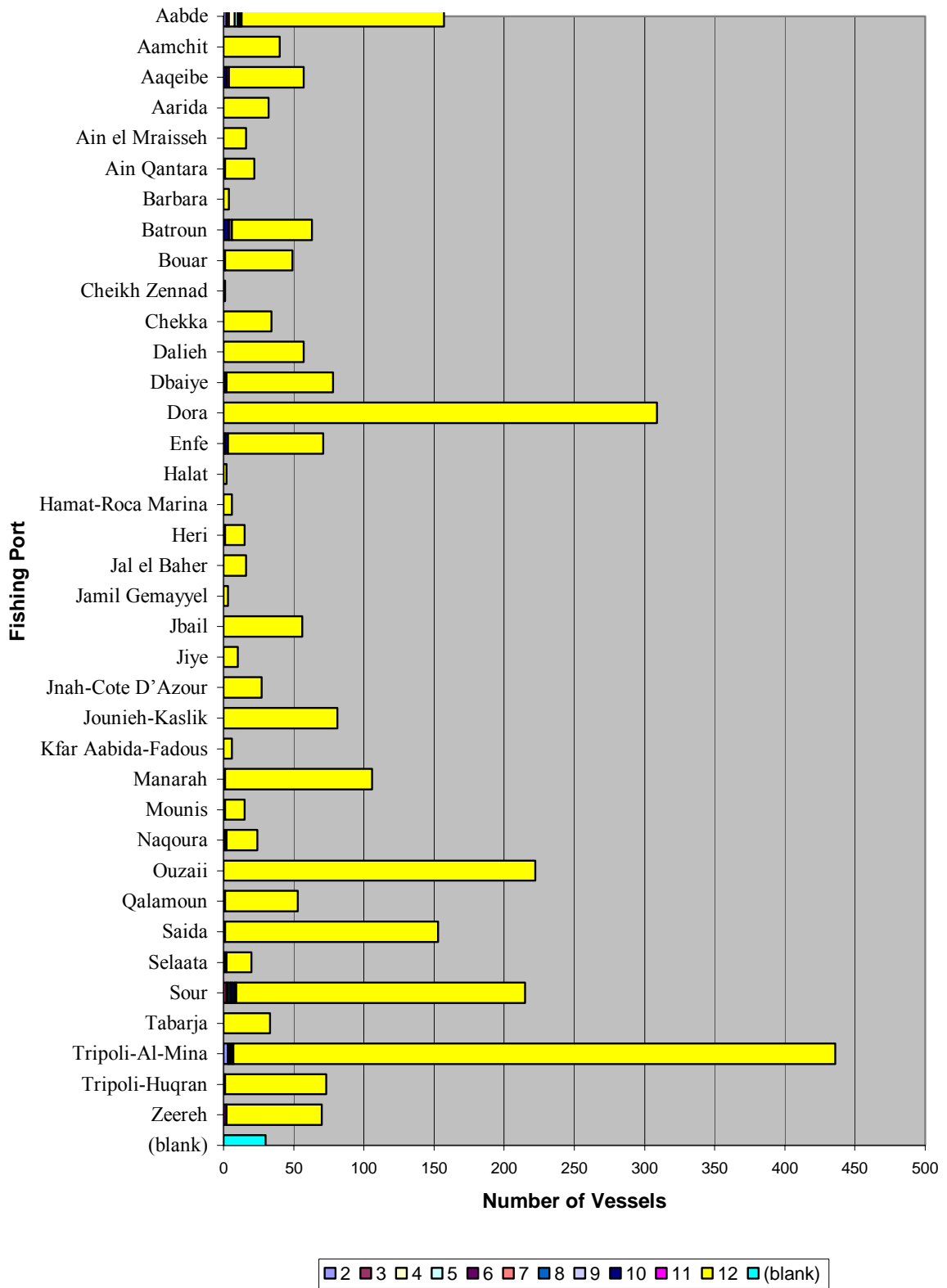


Fig. 43 Fishing Season Ending



10.0 Fishing Operations: the software used does not allow data entry of multiple fishing periods, there overlap, and multiple gears during the same period. Thus, the results obtained do not reflect the real picture of the fishing operations. However, some indications could be obtained from the results.

10.1 Fishing Operations Gear: Table 21 indicates that about 53% of the vessels used Trammel nets as there primary fishing gear. Hand operated Handlines/Pole-lines and Set Longlines were used by 17% and 12% of fishermen respectively. The same trend applied during a successive period when fishermen use a gear different from the one used in a previous period.

Table 21 Gears Used in Fishing Operations

Fishing Gear	Gear 1	Gear 2	Gear 3
Beach seines	28	21	1
Drifting longlines	134	19	2
Driftnets	1	1	0
Encircling gillnets	1	1	0
Gillnets (not specified)	1	0	0
Handlines and pole-lines (hand operated)	451	10	2
Handlines and pole-lines (mechanized)	21	1	0
Pots	81	6	0
Set gillnets (anchored)	46	12	1
Set longlines	320	18	3
Spear Gun	8	0	0
Trammel nets	1,362	92	3
With purse lines (purse seines)	134	6	3
Without purse lines (lampara)	3	1	
Grand Total	2,591	188	15

10.2 Fishing Gear Season: Table 20 shows that practically most vessels fish all year long. About 64% of the vessels fish for 12 months when using there primary fishing gear (Table 22). When looking into fishing gear specific fishing season, the same trends apply with some gear-specific seasonal variations (Table 23 and Table 24) whereby e.g. 40% of vessels using trammel nets start fishing in January and a similar percentage end in December.

Table 22 Fishing Season for Primary Fishing Gear

Month begin	Month end													Grand Total
	1	2	3	4	5	6	7	8	9	10	11	12	(blank)	
1	16	41	37	56	10	7		3	3	11	37	1,693		1,914
2		1	1	3	1	3	1	1	1	3	12	4		31
3			2	1	2	3	2		7	17	39	8		81
4				1	2	4		5	22	60	75	22		191
5							1	1	5	19	37	37	9	109
6								1		7	10	12	12	63
7									2	10	4	15	8	39
8									1	5	18	26	16	66
9											8	50	11	69
10												11	15	26
11													2	2
(blank)													71	71
Grand Total	16	42	40	61	15	19	4	24	77	170	323	1,800	71	2,662

Table 23 Fishing Season Onset for the Various Primary Fishing Gear

Primary Fishing Gear	Month begin												Grand Total	
	1	2	3	4	5	6	7	8	9	10	11	(blank)		
Beach seines	22		1	2		1			2					28
Drifting longlines	53	4	3	12	4	3	5	16	28	6				134
Driftnets	1													1
Encircling gillnets	1													1
Gillnets (not specified)						1								1
Handlines & pole-lines (hand operated)	242		16	79	47	25	15	14	8	5				451
Handlines & pole-lines (mechanized)	14		1	2	2	1			1					21
Pots	21	2	8	26	17	4	1	1	1					81
Set gillnets (anchored)	36	2	2	1	1	1	1		2					46
Set longlines	258	3	12	10	5	11	4	6	9	2				320
Spear Gun	6				1			1						8
Trammel nets	1,192	15	29	36	18	9	9	24	16	12	2			1,362
With purse lines (purse seines)	68	3	8	23	14	7	4	4	2	1				134
Without purse lines (lampara)		2	1											3
(blank)												71		71
Grand Total	1,914	31	81	191	109	63	39	66	69	26	2	71		2,662

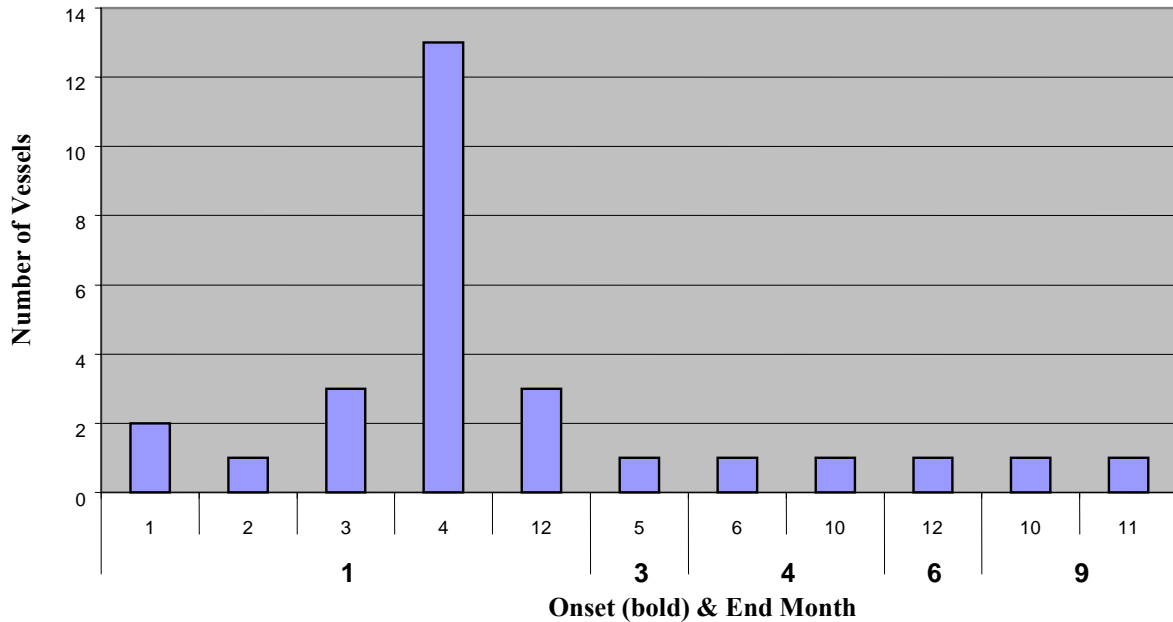
Table 24 Fishing Season End for the Various Primary Fishing Gear

Primary Fishing Gear	Month end												Grand Total	
	1	2	3	4	5	6	7	8	9	10	11	12		(blank)
Beach seines	2	1	3	13	1	1				2	1	4		28
Drifting longlines	3	7	2	1		2		3	6	14	47	49		134
Driftnets				1										1
Encircling gillnets				1										1
Gillnets (not specified)												1		1
Handlines & pole-lines (hand operated)	2	3		1			1	6	23	62	101	252		451
Handlines & pole-lines (mechanized)								1	3	1	2	14		21
Pots		1		1		1		6	9	20	20	23		81
Set gillnets (anchored)	1	2	3	4	1	2			2	3	4	24		46
Set longlines	2	6	3	3	1	1		1	3	10	34	256		320
Spear Gun									1	1		6		8
Trammel nets	6	18	28	35	11	7	3	6	20	34	85	1,109		1,362
With purse lines (purse seines)		4	1	1	1	3		1	10	22	29	62		134
Without purse lines (lampara)						2				1				3
(blank)													71	71
Grand Total	16	42	40	61	15	19	4	24	77	170	323	1,800	71	2,662

The schematic fishing season for the most important primary fishing gear is as follows:

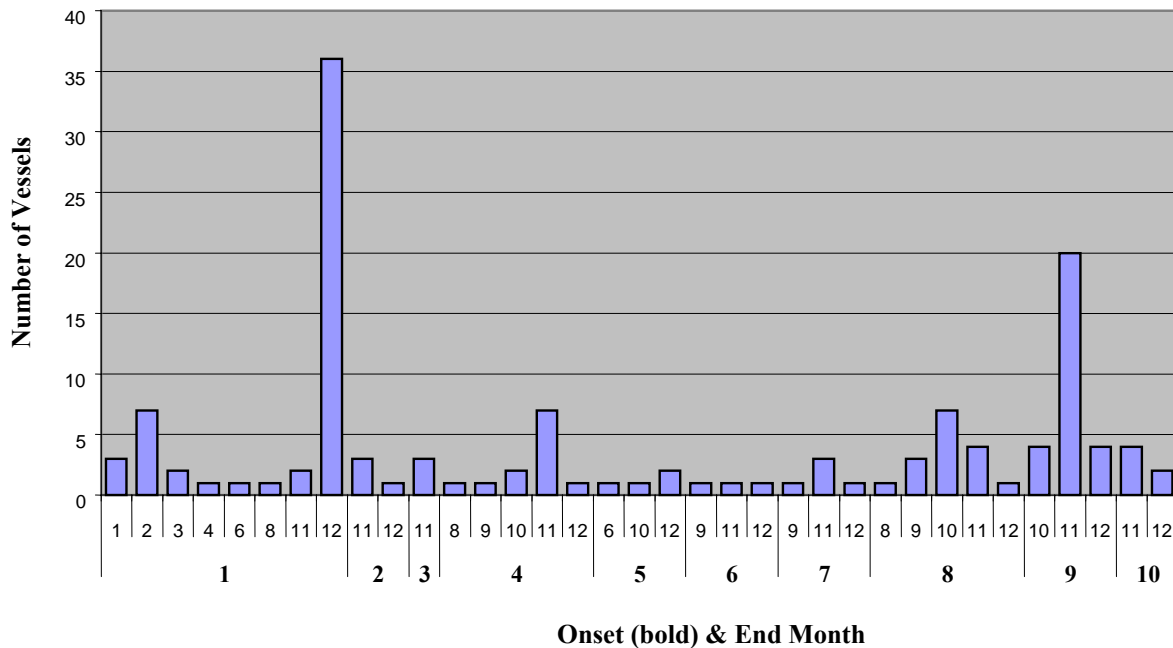
10.2.1 Beach Seines: Fig. 44 shows the fishing season for beach seines. Fishermen using this gear indicated that they mostly fish during the first third of the year.

Fig. 44 Beach Seines Fishing Season



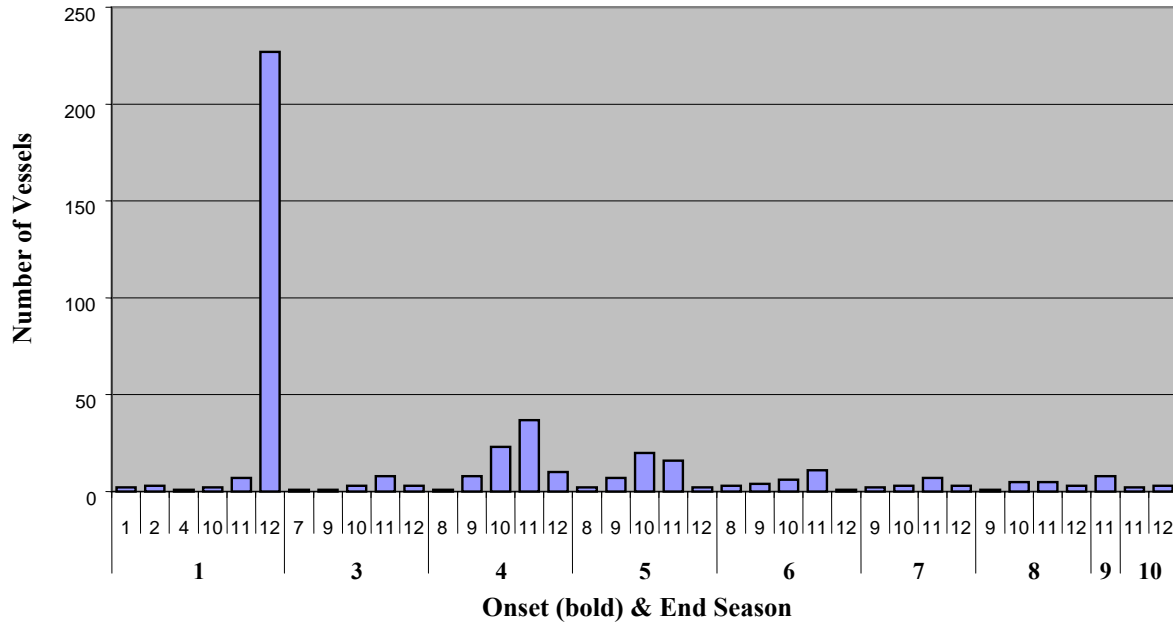
10.2.2 Drifting Longlines: 134 vessel owners/operators said that they use this gear as their primary fishing gear. Fig. 45 shows that 27% of them use it all year long while 25% use it during the last quarter of the year.

Fig. 45 Drifting Longlines Fishing Season



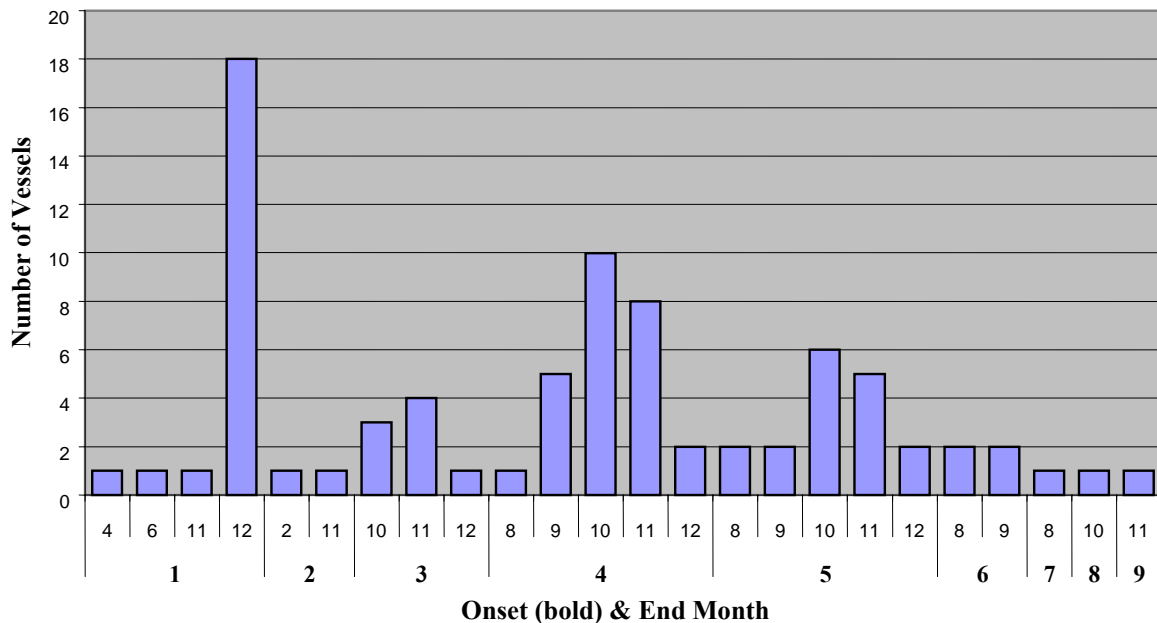
10.2.3 Hand operated Handlines and Pole-lines: Fig. 46 indicates that more than half (54%) of the 451 fishermen using this fishing gear use it all year long. While the season for the rest is practically evenly distributed all through the year.

Fig. 46 Handlines & Pole-lines (hand operated) Fishing Season



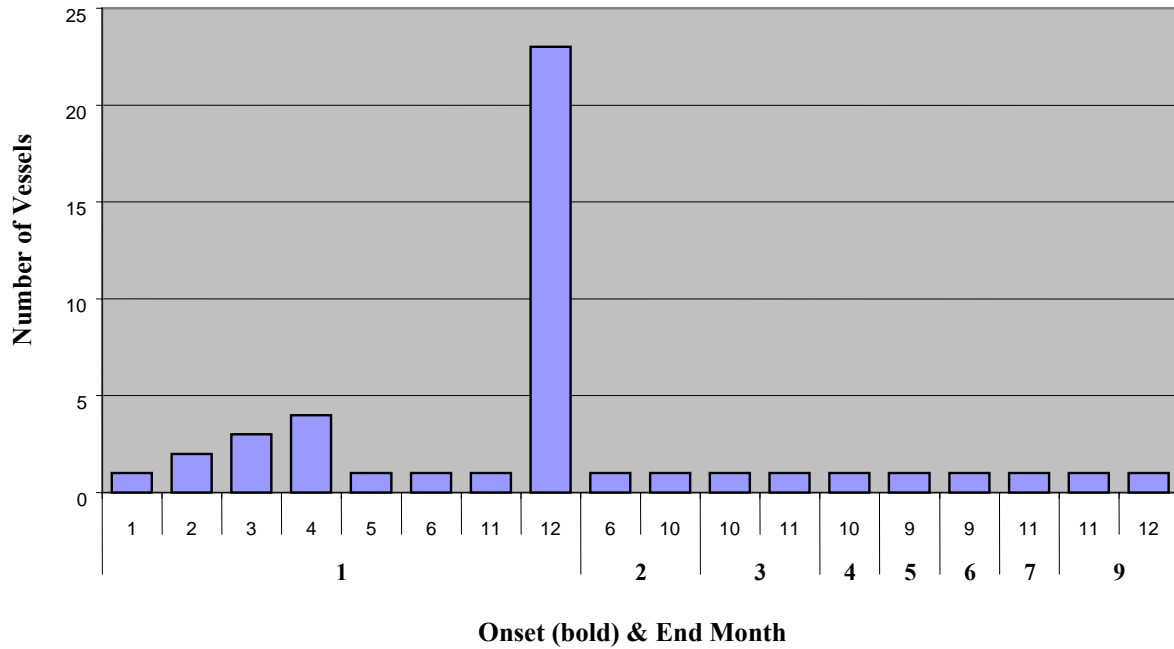
10.2.4 Pots: one quarter of vessels employed pots, as there primary gear, all year long (Fig. 47). About 58% of vessels start using them during the second quarter of the year and continue so until the last quarter.

Fig. 47 Pots Fishing Season



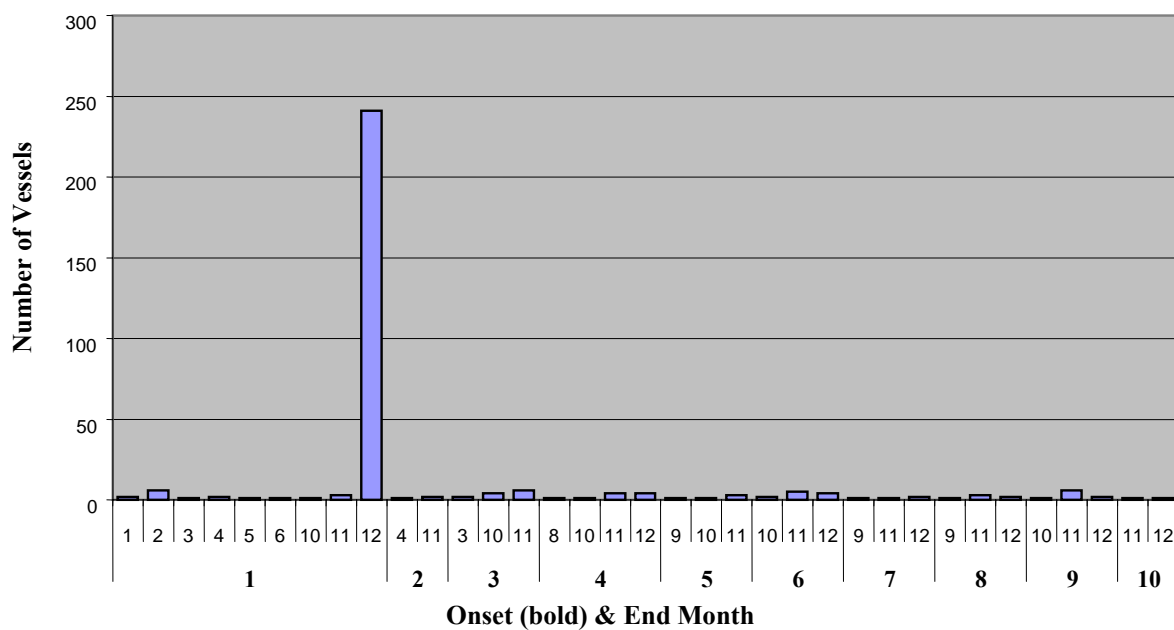
10.2.5 Set Gillnets: Fig. 48 shows that half the vessels owners/operators set there gillnets (as primary fishing gear) all through the year, while the season varies for the rest.

Fig. 48 Set Gillnets (anchored) Fishing Season



10.2.6 Set Longlines: 320 vessel owners/operators indicated that they use set longlines as there primary fishing gear. The use of this gear follows the same trend as for the other fishing gear. Fig. 49 shows that 75% of fishermen use it all year long with varying season for the rest of fishermen.

Fig. 49 Set Longlines Fishing Season



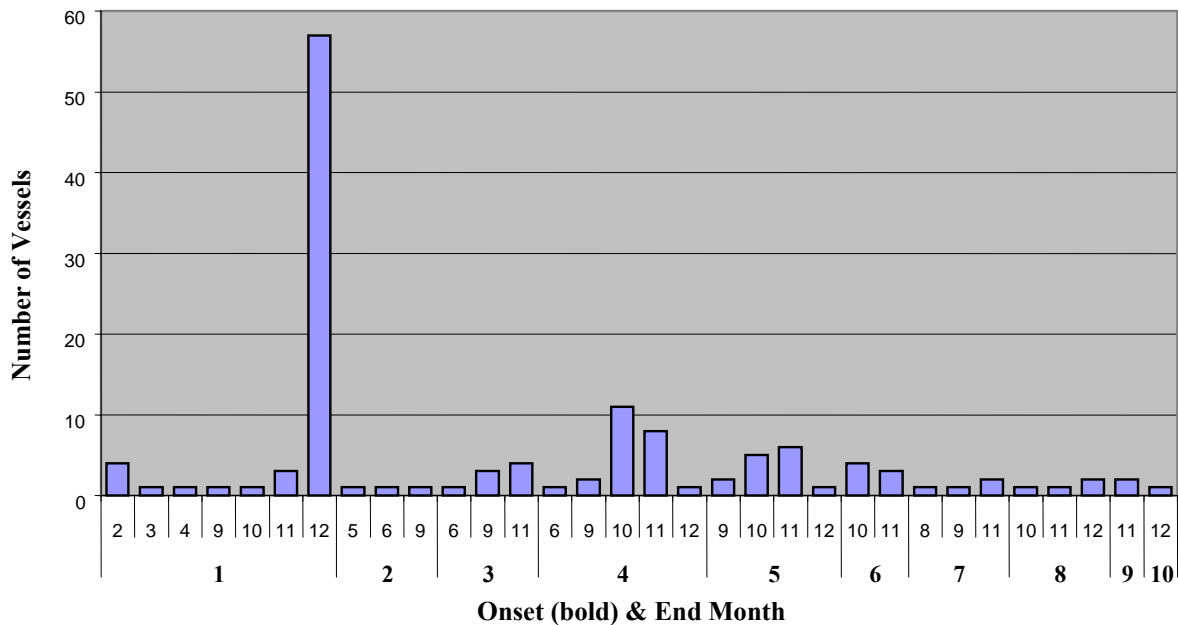
10.2.7 Trammel Nets: about 78% of the 1,392 fishermen who use trammel nets as primary fishing gear employ them all year round (Table 24).

Table 24 Fishing Season for Trammel Nets as Primary Fishing Gear

Month Begin	Month End												Grand Total
	1	2	3	4	5	6	7	8	9	10	11	12	
1	6	18	27	31	8	3		2	2	7	20	1,068	1192
2			1	2			1	1		1	6	3	15
3				1	1	1	1		3	6	12	4	29
4				1	2	2		1	5	10	11	4	36
5							1	1	3	4	7	2	18
6						1		1	2		1	4	9
7									5	1	1	2	9
8										3	13	8	24
9										2	10	4	16
10											4	8	12
11												2	2
Grand Total	7	20	31	39	16	13	10	14	29	44	96	1,121	1,362

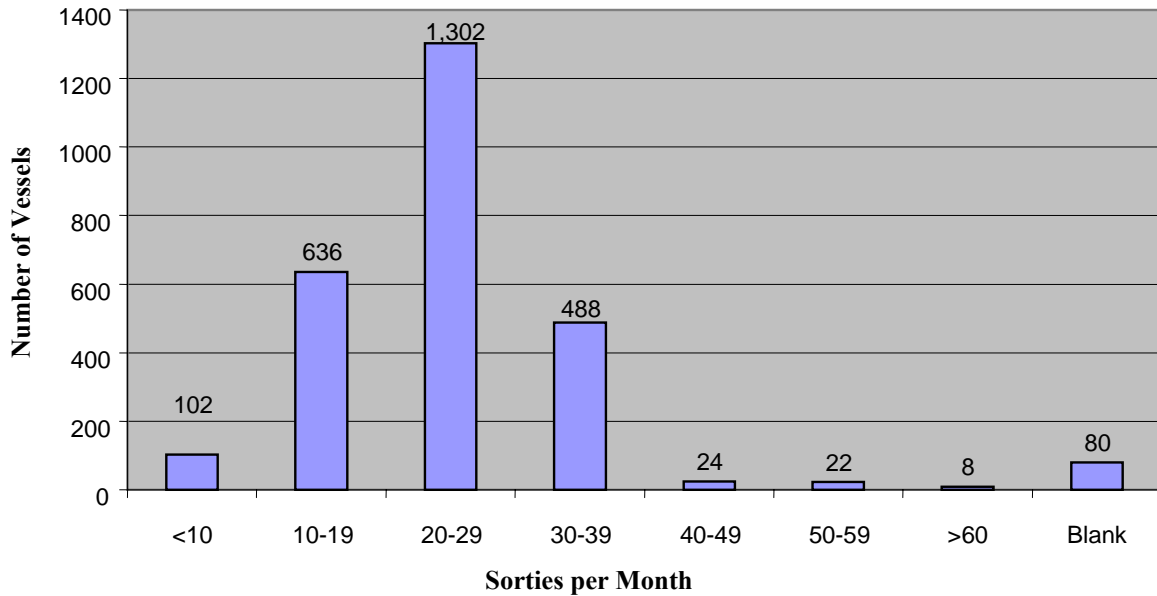
10.2.8 Purse Seines: 43% of purse seine fishermen use them all year round (Fig. 50).

Fig. 50 Purse Seines Fishing Season



10.3 Number of Sorties per Month: Fig. 51 shows that about half the fishermen go out to the sea practically every day of the month when they use their primary fishing gear. About 20% claimed that they even go out more than once a day. About one quarter of fishermen conceded that they do not fish daily but rather every 2-3 days.

Fig. 51 Number of Sorties per Month for Primary Fishing Gear



When a second fishing gear was used in a different period, about 43% of vessel owners/operators indicated that they fish about once every two days Fig. 52 while a third of them fished daily. Table 25 shows the number of sorties/month for each fishing gear employed by fishermen. It indicates that for the major fishing gear, the most of vessel owners/operators go out fishing practically daily.

Fig. 52 Number of Sorties per Month for Second Fishing Gear

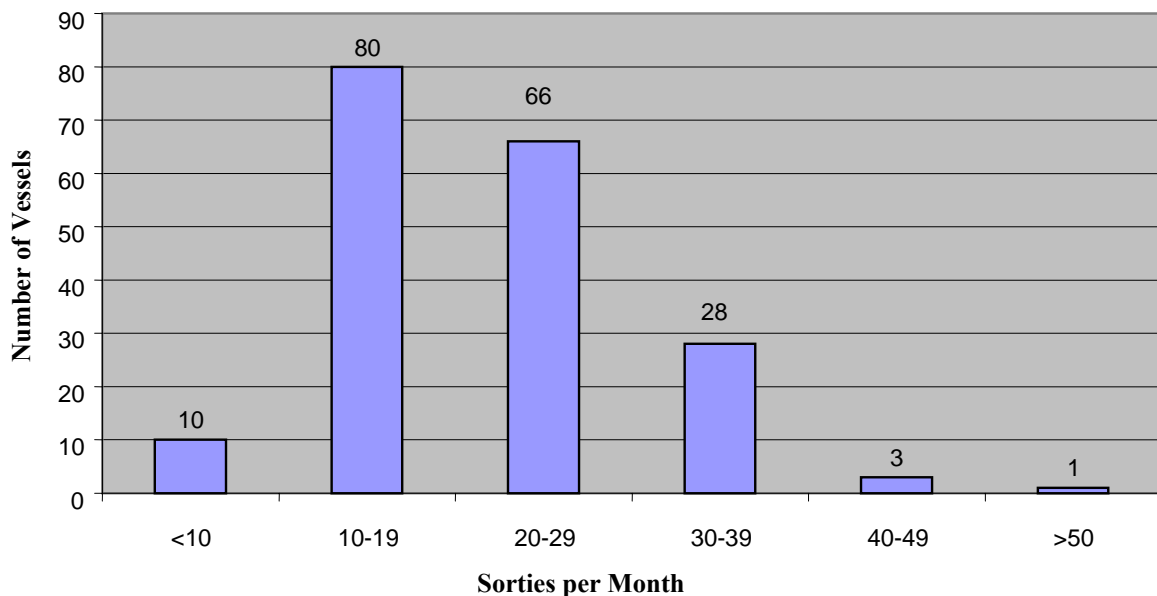


Table 25 Number of Sorties per Month for Fishing Gears

Fishing Gear	Number of Sorties per Month							Grand Total
	<10	10-19	20-29	30-39	40-49	>50	(blank)	
Beach seines	1	7	11	6	3	0		28
Drifting longlines	11	61	57	4	0	0	1	134
Driftnets	0	1	0	0	0	0		1
Encircling gillnets	0	1	0	0	0	0		1
Gillnets (not specified)	0	0	1	0	0	0		1
Handlines & Pole-lines (hand operated)	31	127	166	123	1	1	2	451
Handlines & Pole-lines (mechanized)	8	8	4	1	0	0		21
Pots	2	21	44	12	1	0	1	81
Set gillnets (anchored)	3	8	22	10	1	2		46
Set longlines	11	86	175	41	4	1	2	320
Spear Gun	1	3	3	1	0	0		8
Trammel nets	32	273	750	265	13	26	3	1,362
With purse lines (purse seines)	2	40	66	25	1	0		134
Without purse lines (lampara)	0	0	3	0	0	0		3
(blank)	0	0	0	0	0	0	71	71
Total	102	636	1,302	488	24	30	80	2,662

10.4 Fishing Zones: Fig. 53 indicates that the majority (91%) of operational fishermen fish within 6 miles radius from there respective home ports when using there primary fishing gear. About 53% of vessels operated in 3 miles or less fishing zone, while 38% reach the 6 miles limit. Some 131 vessel owners (14% of vessels in North Lebanon) in North Lebanon claimed to be fishing in a 12 miles radius. This percentage was much less for other geographic regions. Some 25 vessels were fishing in the 9 miles radius, while 30 vessels owners/operators claimed to be going for more than 12 miles.

Fig. 53 Fishing Zones for Primary Fishing Gear

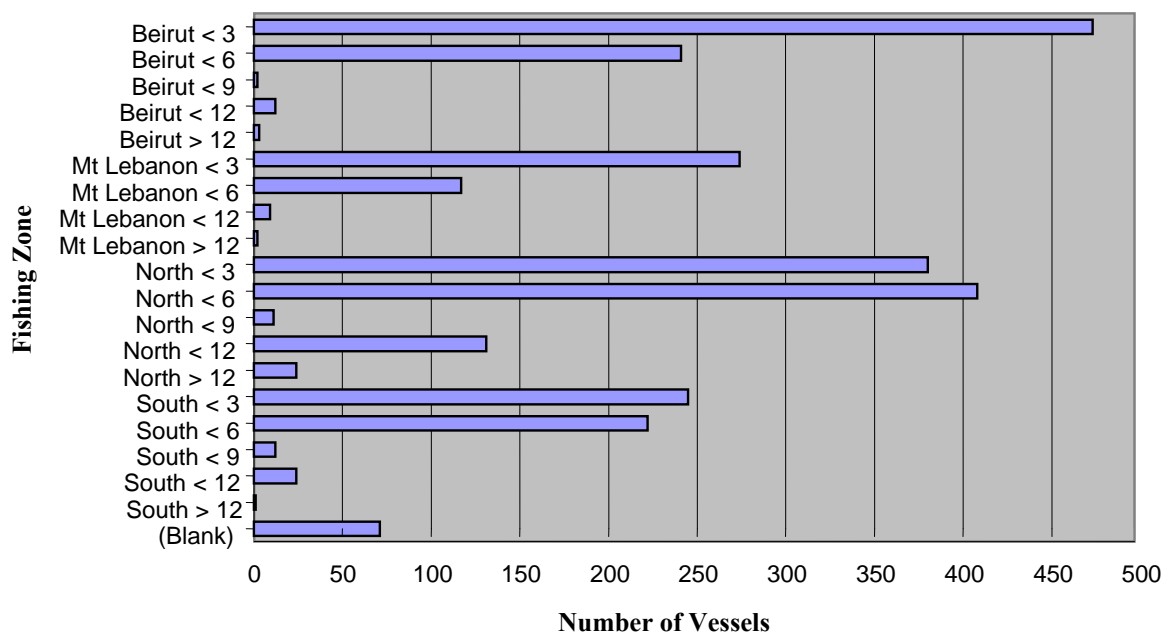


Fig. 54 indicates a similar trend for fishing zones for the second period/gear used by vessel owners/operators.

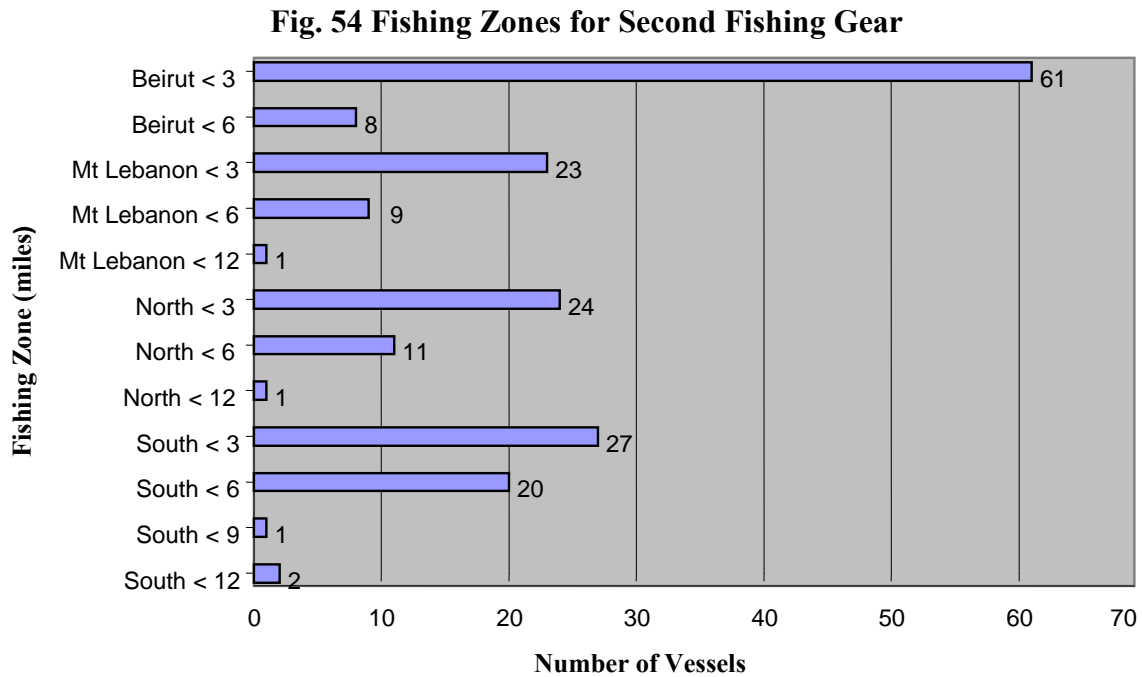


Fig. 55 and Fig. 56 show the fishing gears employed in each fishing zone as a primary gear or during a second fishing period. It shows that most gear are being used in the coastal fisheries i.e. less than 6 miles

Fig. 55 Distribution of Primary Fishing Gear within Fishing Zones

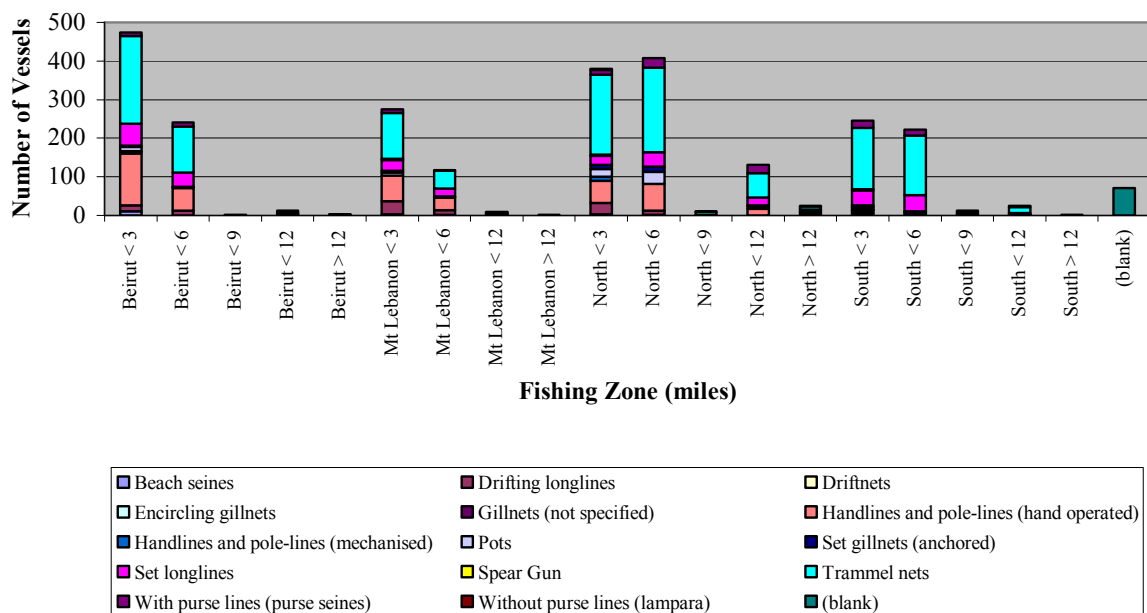
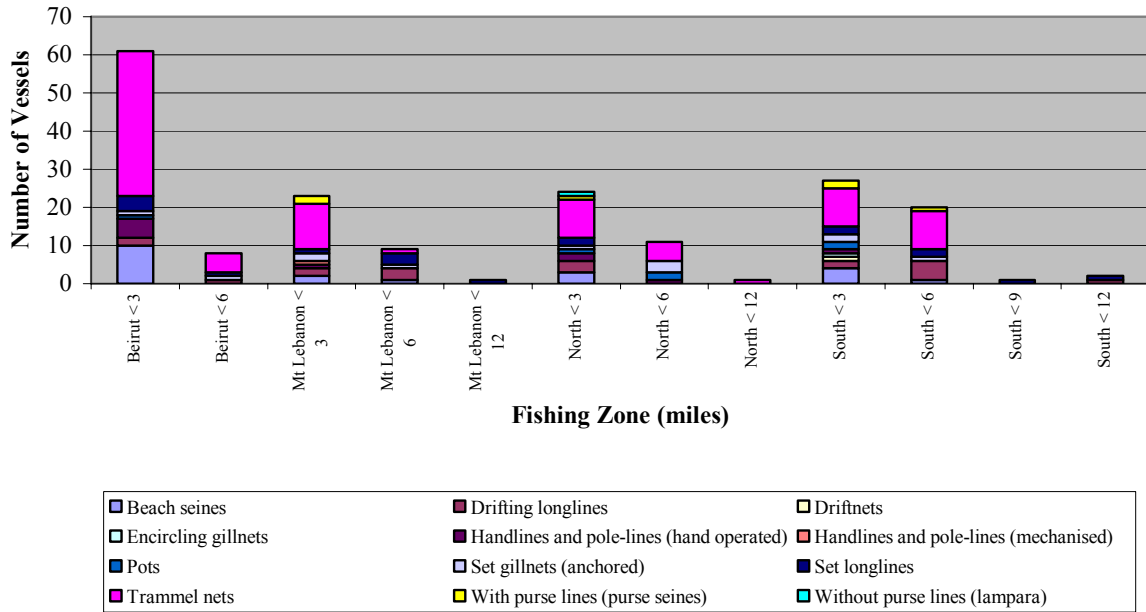
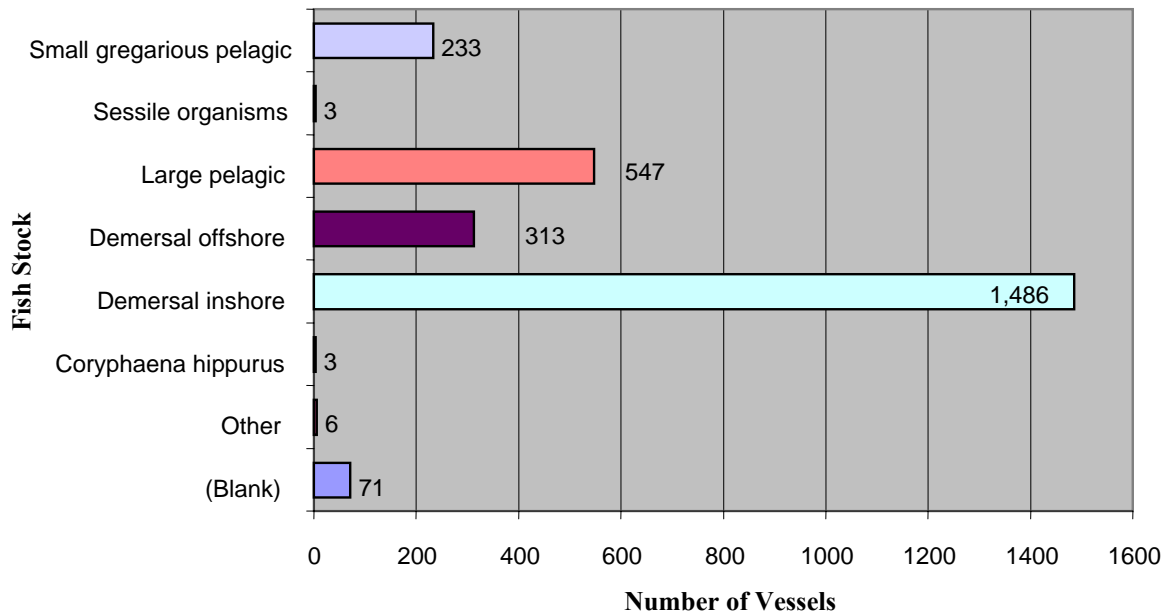


Fig. 56 Distribution of Second Fishing Gear within Fishing Zones



10.5 Targeted Stock: Fig. 57 indicates that more than half (56%) the vessels targeted Demersal Inshore species, mainly of hard sub-stratum (e.g., sea-bream) while 21% of them targeted Large Pelagic (e.g. tunas, amberjacks). Demersal Offshore species, mainly of soft sub-stratum (e.g., codfish) and Small Gregarious Pelagic (e.g., anchovies, sardines, and mackerel) were targeted by 12% and 9% of the vessels simultaneously.

Fig. 57 Targeted Fish Stock



10.5.1 Fishing Zones: most of Lebanese fishing vessels catch their fish within 6 miles radius of their respective home ports (Table 26). The table shows that about 90% of the vessels targeting the main fish stocks (particularly the demersal inshore species) will do that in coastal waters (< 6 miles). This is the case even for the large pelagic fish. 5-10% of the vessels were targeting the main stocks outside the 6 miles radius from home ports.

Table 26 Targeted Fish Stocks within Fishing Zones (miles)

Fishing zone	Targeted Stock by Primary Fishing								Grand Total
	Demersal inshore	Large pelagic	Demersal offshore	Small gregarious pelagic	Other	Sessile organisms	<i>Coryphaena hippurus</i>	(blank)	
Beirut < 3	197	173	32	70		1			473
Beirut < 6	111	100	12	18					241
Beirut < 9	2								2
Beirut < 12	4	2	1	5					12
Beirut > 12	1			2					3
Mt Lebanon < 3	155	64	31	23	1				274
Mt Lebanon < 6	66	29	14	8					117
Mt Lebanon < 12	6		3						9
Mt Lebanon > 12	1		1						2
North < 3	271	55	21	26	3	1	3		380
North < 6	260	45	77	24	2				408
North < 9	10			1					11
North < 12	86	16	16	12		1			131
North > 12	14	5	4	1					24
South < 3	166	34	19	26					245
South < 6	120	18	70	14					222
South < 9	5	4	2	1					12
South < 12	10	2	10	2					24
South > 12	1								1
(blank)								71	71
Grand Total	1,486	547	313	233	6	3	3	71	2,662

Figures 58-64 schematically show the fishing zones for the different groups of targeted stocks.

Fig. 58 *Coryphaena hippurus* Fishing Zone

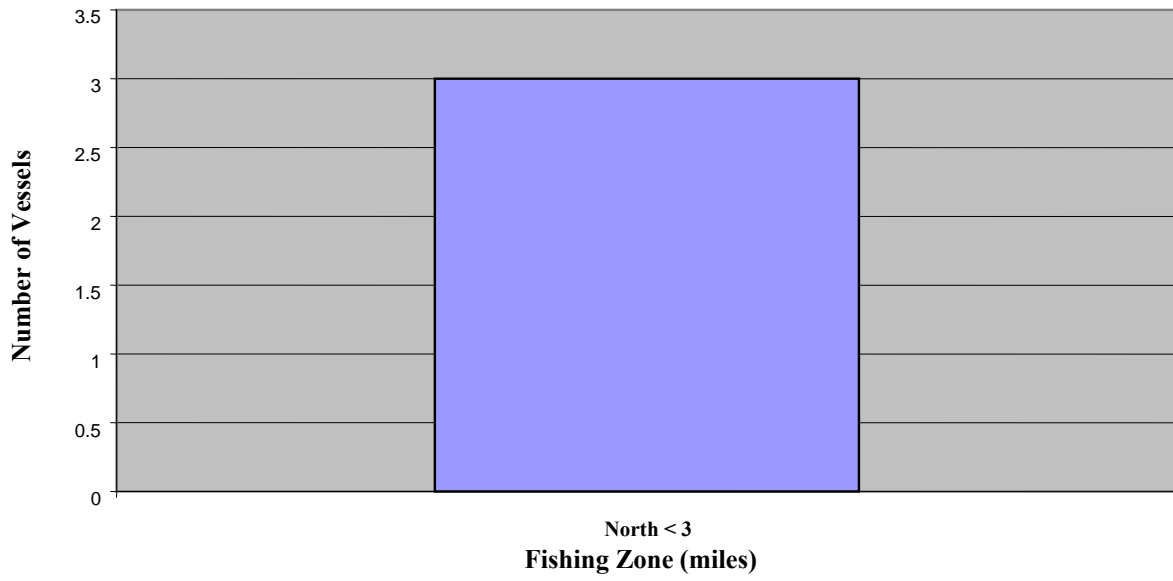


Fig. 59 Demersal inshore Species Fishing Zone

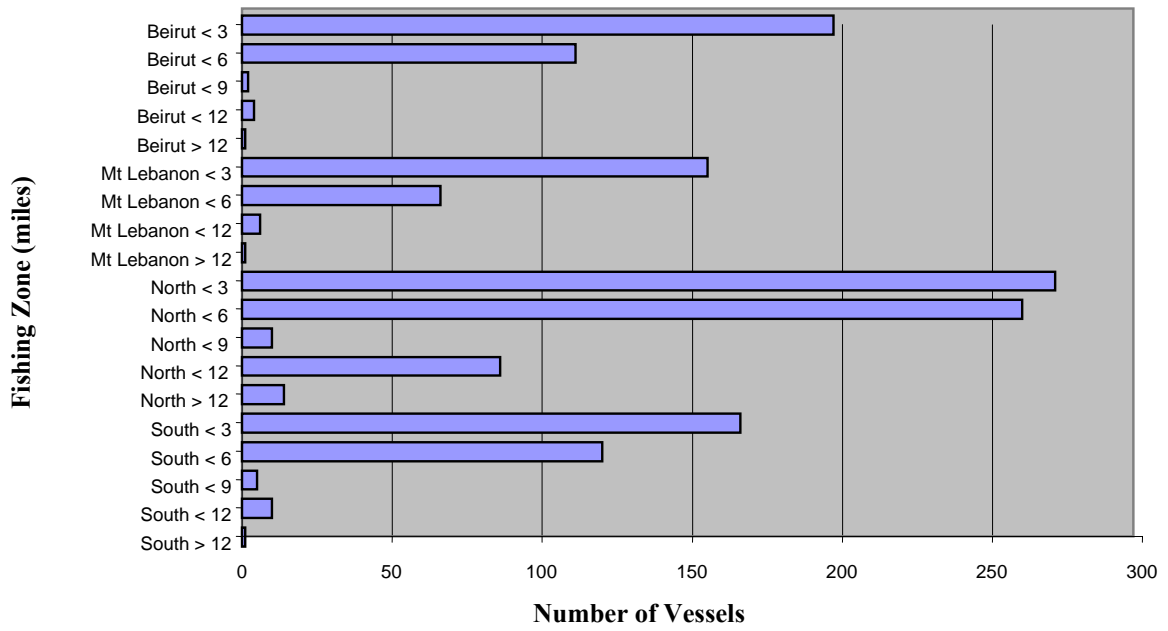


Fig. 60 Demersal offshore species Fishing Season

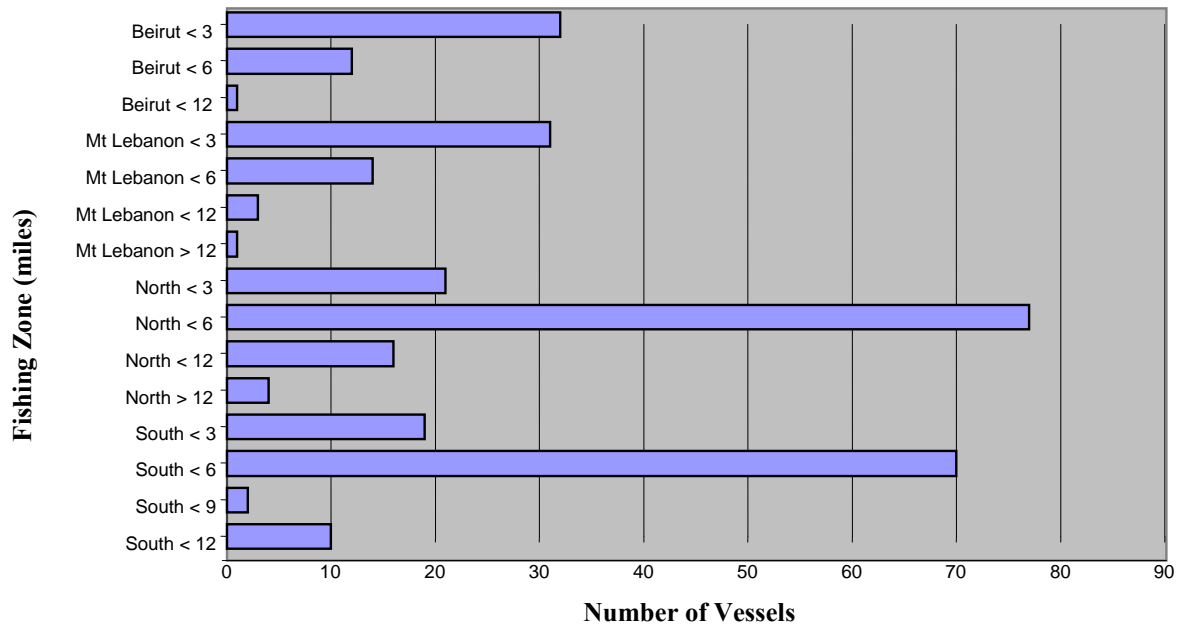


Fig. 61 Large pelagic Fishing Zone

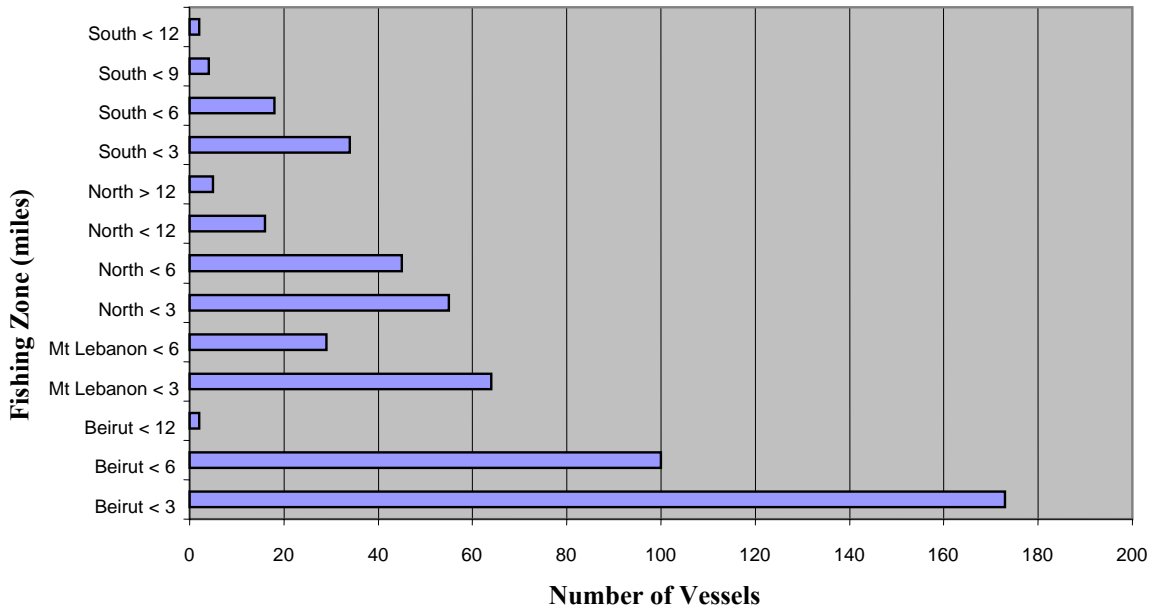


Fig. 62 Other Species Fishing Zone

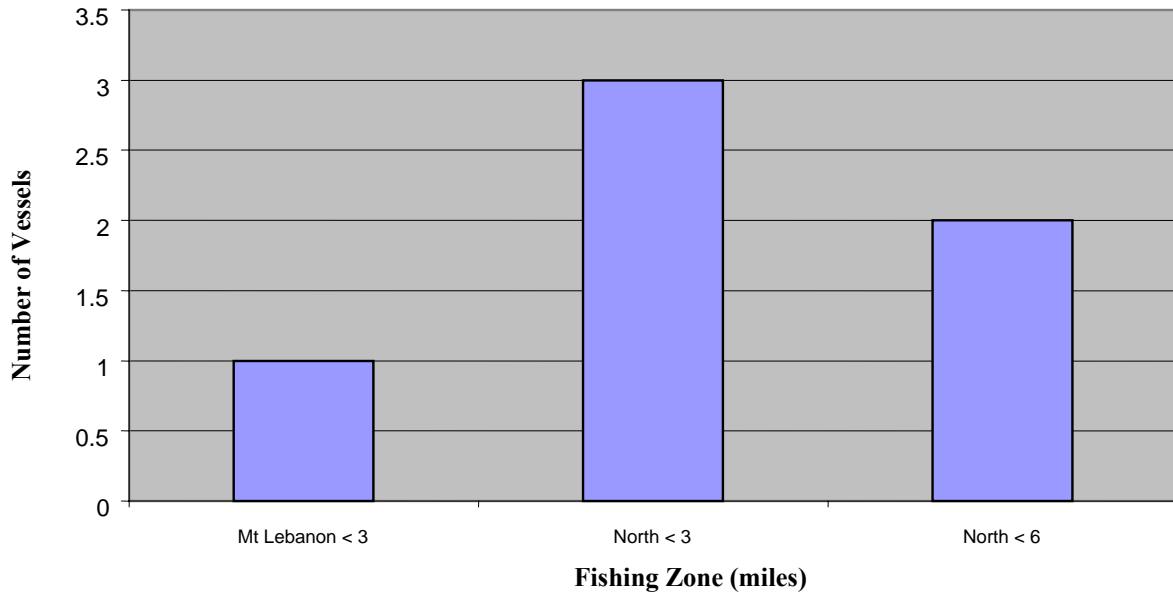


Fig. 63 Sessile organisms Fishing Zone

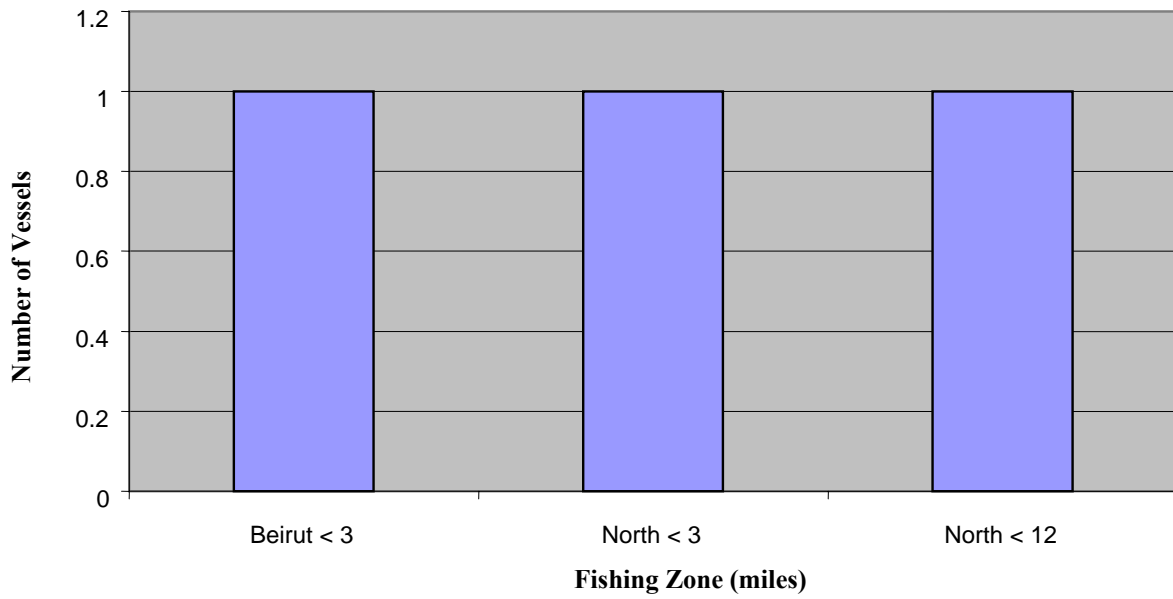
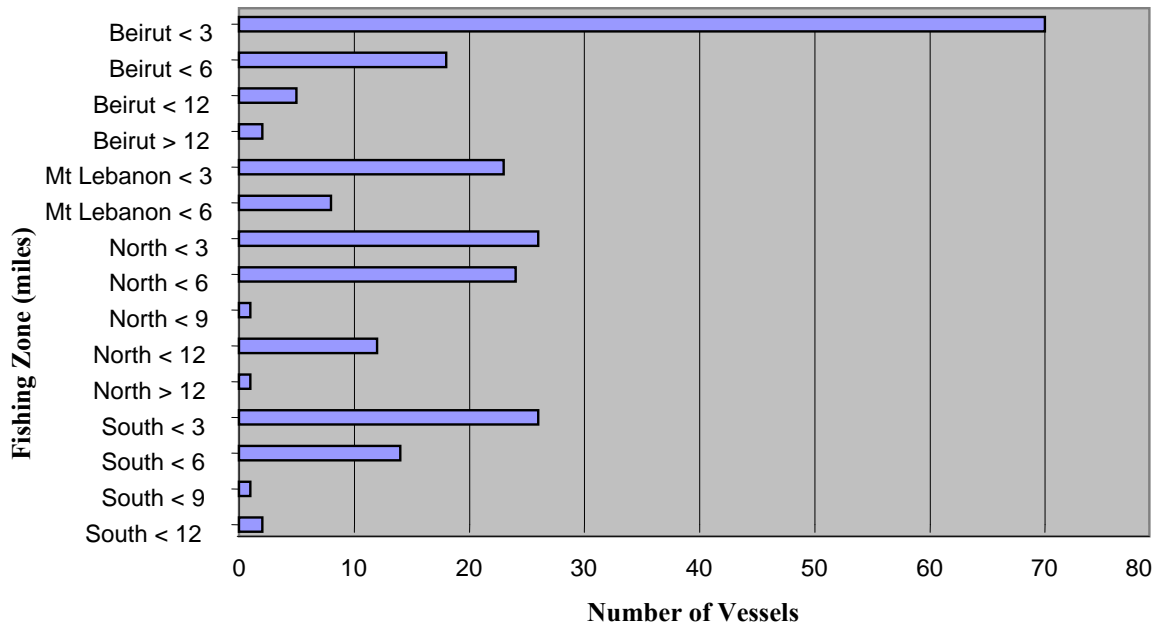


Fig. 64 Small Gregarious Pelagic Fishing Zone



10.5.2 Fishing Season: a large number of vessels fish all year long. The percentage varies depending on the group of targeted stock e.g. the fishing season for *Coryphaena hippurus* is from September until November (Fig. 65), while 74% of the vessels targeting the Demersal Inshore species do this all through the year Table 27 This percentage was 68% for the Demersal Offshore species (Table 28), 51% for the Large Pelagic species (Table 29), and 42% for the Small Gregarious Pelagic species (Table 30). Fig. 66 shows the fishing season for the other species, while Fig 67 shows the fishing season for the sessile Organisms as reported by fishermen.

Fig. 65 *Coryphaena hippurus* Fishing Season

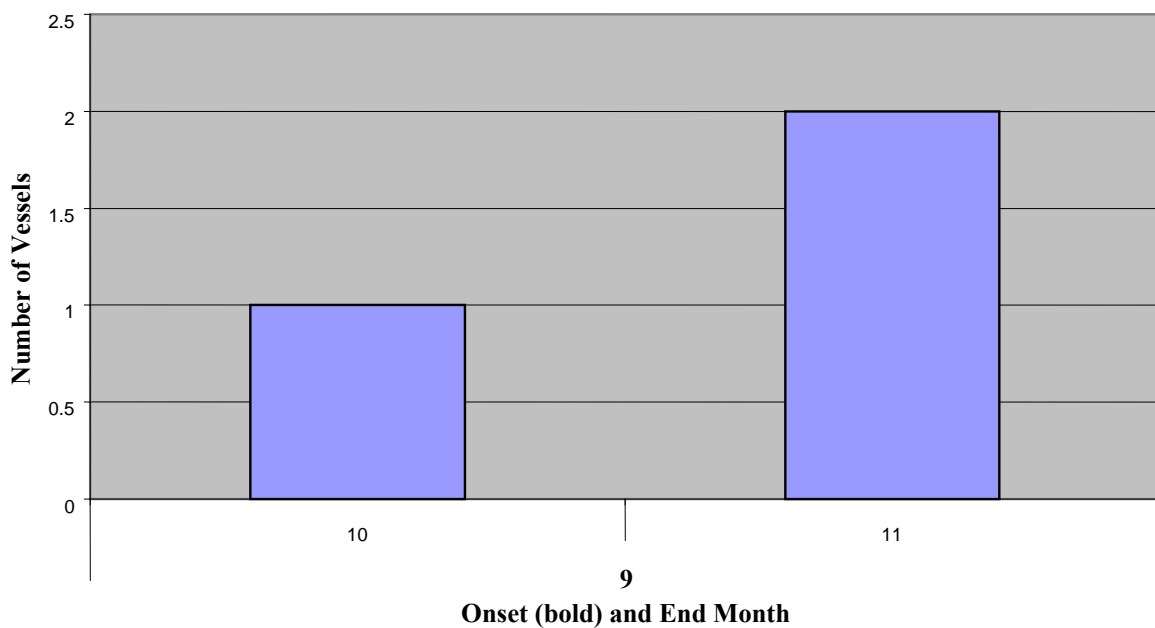


Table 27 Fishing Season for Demersal Inshore Species (mainly of hard sub-stratum)

Month Begin	Month End												Total Vessels
	1	2	3	4	5	6	7	8	9	10	11	12	
1	6	13	13	16	7	6		2	2	8	18	1,101	1,192
2	1			3			1			1	6	1	13
3			2		2	1	1		3	12	15	4	40
4					1	1		3	10	28	25	9	77
5								4	8	23	14	6	55
6								4	6	4	8	3	25
8								1	7	1	8	2	19
9									1	7	11	5	24
10										2	20	4	26
11											5	8	13
12												2	2
Total Vessels	7	13	15	19	10	8	2	14	37	86	130	1,145	1,486

Table 28 Demersal Offshore Species (mainly of soft sub-stratum)

Month Begin	Month End												Total Vessels
	1	2	3	4	5	6	7	8	9	10	11	12	
1	3	4	6	1	1			1		1	4	212	233
2										1			1
3				1					1	3	8	1	14
4					1				4	6	5	1	17
5								1	4	4	8		17
6								2	1	2	2	2	9
7									2	2		1	5
8									1	3	1		5
9											4	2	6
10											3	3	6
11													0
12													0
Total Vessels	4	6	9	6	7	6	7	12	22	32	46	234	313

Table 29 Fishing Season for Large Pelagic Species (e.g. tunas, amberjacks)

Month Begin	Month End												Total Vessels
	1	2	3	4	5	6	7	8	9	10	11	12	
1	5	16	4	8		1					12	277	323
2			1			1			1	1	3	2	9
3						1	1			2	11	3	18
4								1	4	17	39	9	70
5						1	1		4	6	12	2	26
6									3	3	10	6	22
7									1	1	6	5	13
8								1	3	8	11	5	28
9										4	24	4	32
10											3	3	6
11													0
12													0
Total Vessels	5	16	5	8	0	4	2	2	16	42	131	316	547

Table 30 Fishing Season for Small Gregarious Pelagic Species

Month Begin	Month End												Total Vessels
	1	2	3	4	5	6	7	8	9	10	11	12	
1	2	8	14	31	2				1	2	2	98	160
2					1	2		1			2	1	7
3						1			3		5		9
4				1		3		1	4	9	6	3	27
5									3	3	3	1	10
6						1		1		2	1	1	6
7								1			1		2
8											3	6	9
9										1		1	2
10												1	1
11													0
12													0
Total Vessels	2	8	14	32	3	7	0	4	11	17	23	112	233

Fig. 66 Other Species Fishing Season

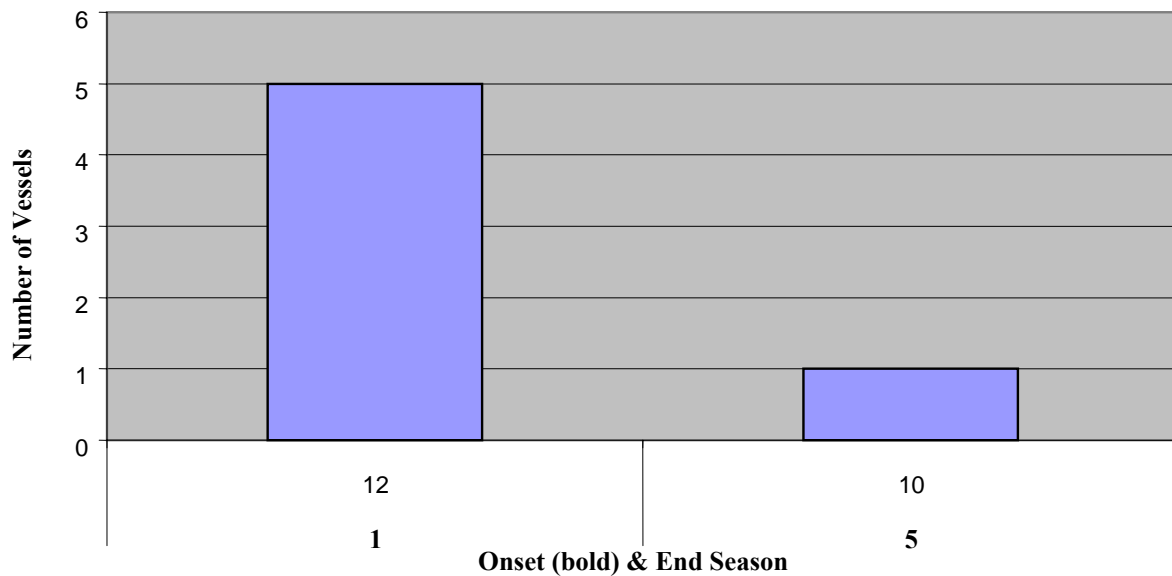
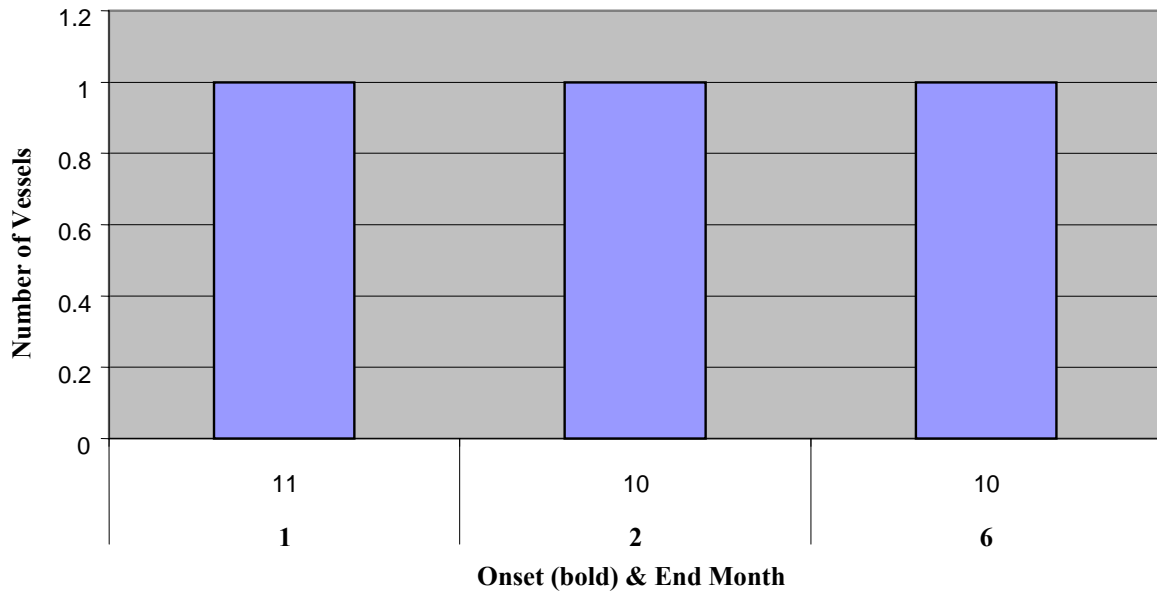


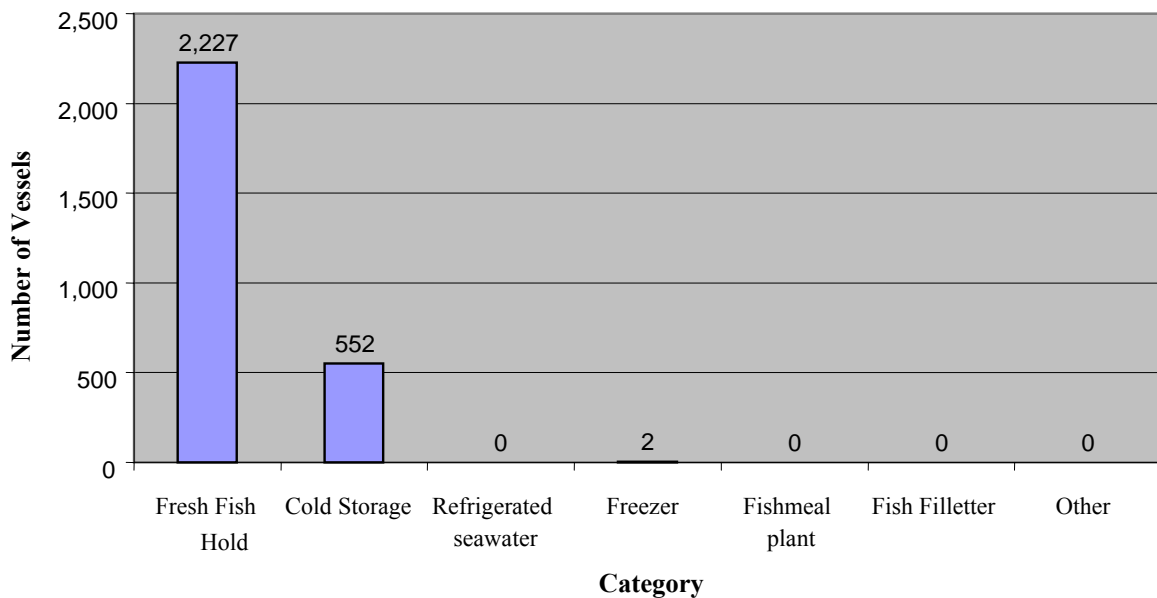
Fig. 67 Sessile Organisms Fishing Season



11.0 Fish Processing and Preservation Equipment

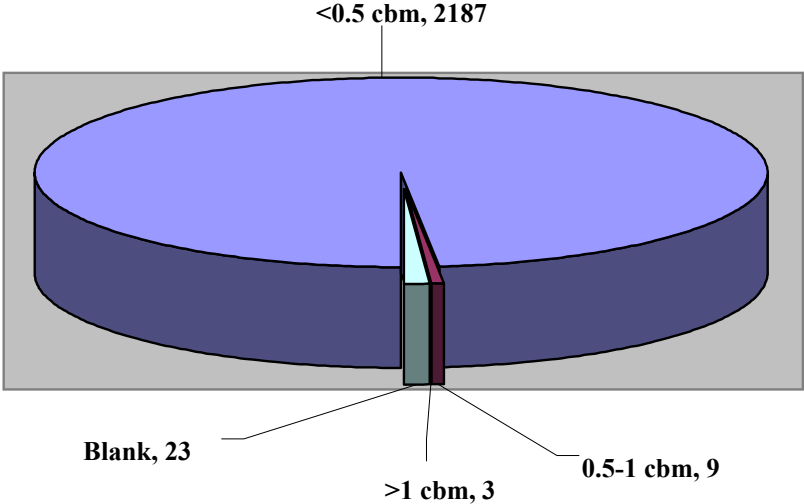
Fig 68 indicates that 84% of the fishing vessels had a fish hold aboard there vessels. About 21% of the vessels had cold storage (basically the Igloo-Type) while only two vessels had freezers. No other fish preservation and processing equipment were present aboard the Lebanese fishing fleet.

Fig. 68 Fish Preservation & Processing Equipment



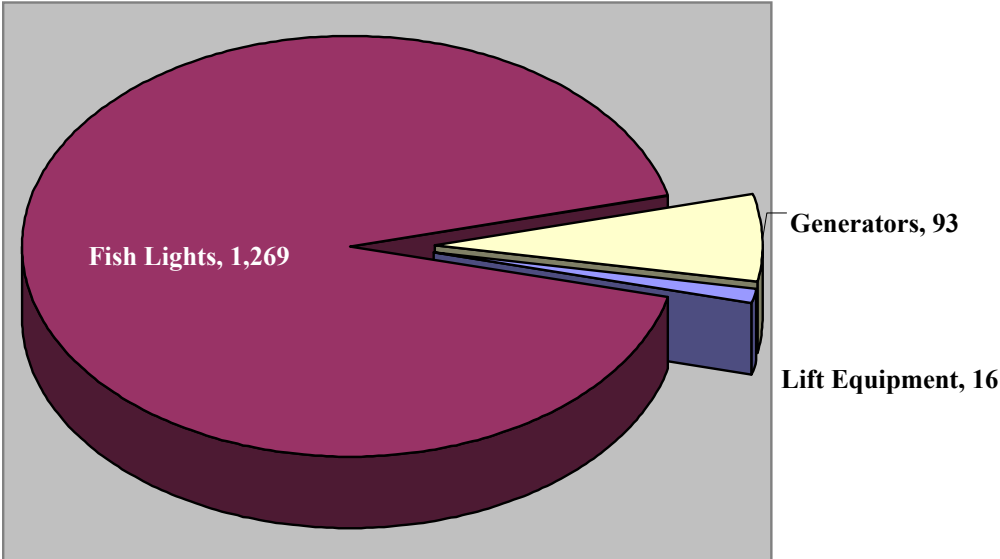
Fresh Fish Hold: Fig 69 indicates that 98% of the vessels had < 0.5 cubic meter (cbm) containers for holding fresh fish. The size of such containers ranged between 0.001 and 0.048 cbm with 35% of them being about 0.02 cbm.

Fig. 69 Hold For Fresh Fish



12.0 Other Equipment: Fig 70 indicates that about half the vessels of the Lebanese fishing fleet have fish lights. Some 93 vessels were equipped with electricity generators; while 16 vessels had lift equipment.

Fig. 70 Other Equipment aboard Vessels



12.1 Fish Lights: Fig 71 shows that 52% of the fishing vessels possessed fishing lights. About 75% of those vessels carried only one light, while 17% carried two lights.

Fig. 71 Number of Fishing Lights aboard Fishing Vessels

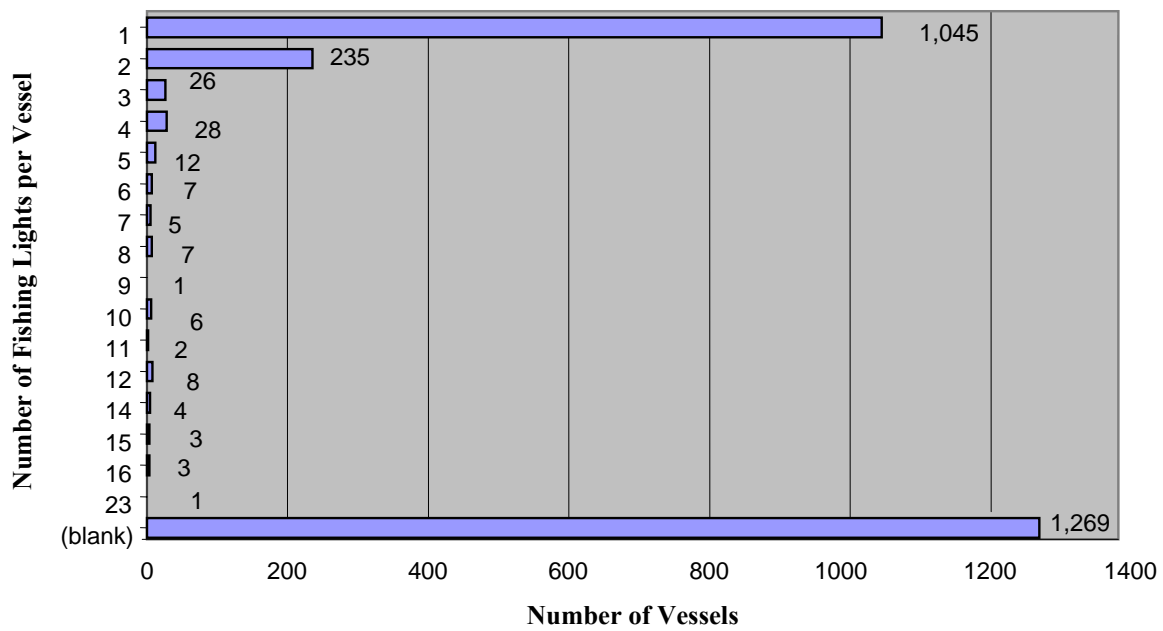


Table 31 indicates the distribution of power of fishing lights among fishing vessels in relation to number of lights per vessel. About 65% of the vessels carry 500 watts lights, 17% of the vessels carry lights < 500 watts, and 16% carry 600-1000 watts lights.

Table 31 Distribution of Power of Fishing Lights among Fishing Vessels

Power of each light (W)	Number of Lights per Vessel																Total		
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	23		(blank)	
50	6	5	2																13
60	2		1																3
80		1																	1
100	82	11	4	2	1							1							101
120	1																		1
125	4			1															5
200	25	9					1	2										1	38
250	3	1																	4
300	22	2		1															25
400	23	5	2	2	1	1	2	3	1		1		2						43
500	675	166	11	21	8	5	1	1		4	1	6	2	3	3	1	2		910
600	55	6	1				1	1											64
700	3																		3
750	2	1																	3
800	63	5								1									69
850	2	1																	3
900	2																		2
1000	57	17	3	1	1	1				1									81
1200		2																	2
1500	12	3	2		1							1							19
2000	3																		3
5000	1																		1
(blank)	2																	1,266	1,268
Total	1,045	235	26	28	12	7	5	7	1	6	2	8	4	3	3	1	1,269	2,662	

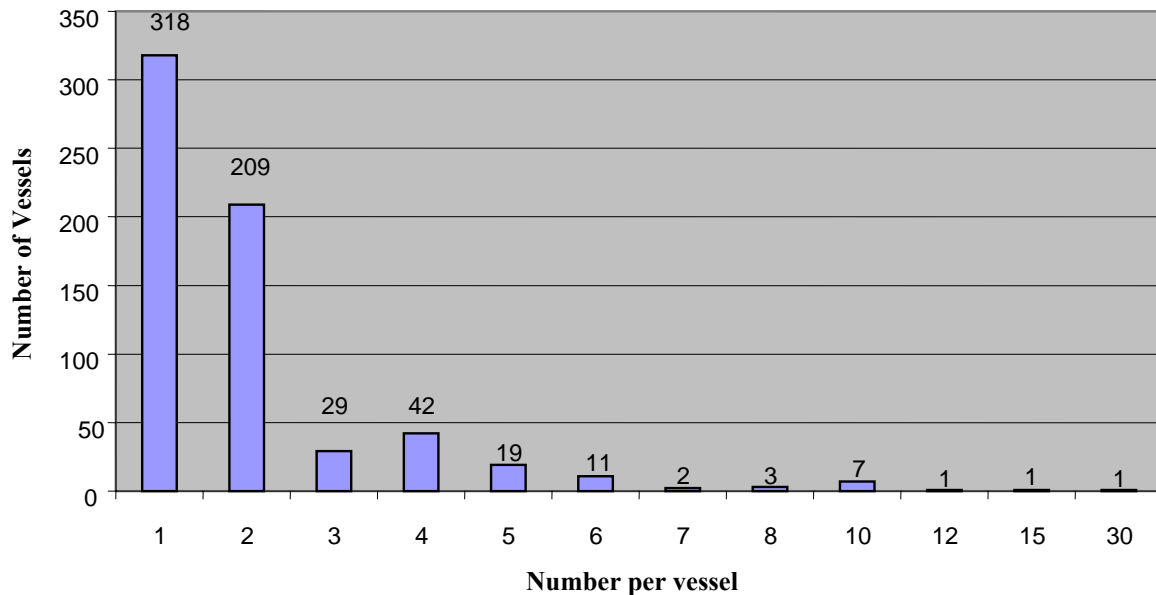
13.0 Safety Equipment: Table 32 shows that about 42% of the vessels carried a set of oars, while 24% possessed buoys (tyres) and about 9% carried fire equipment aboard. There were 606 vessels with no safety equipment whatsoever.

Table 32 Distribution of Safety Equipment aboard Fishing Vessels

Safety Equipment	Number of Vessels	Percentage
Oars	1,109	41.7%
Buoys/Tyres/Lifebelts	643	24.2%
Fire Equipment	225	8.5%
Flares	35	1.3%
Ropes	11	0.4%
Lifeboats	9	0.3%
Belts	2	0.1%

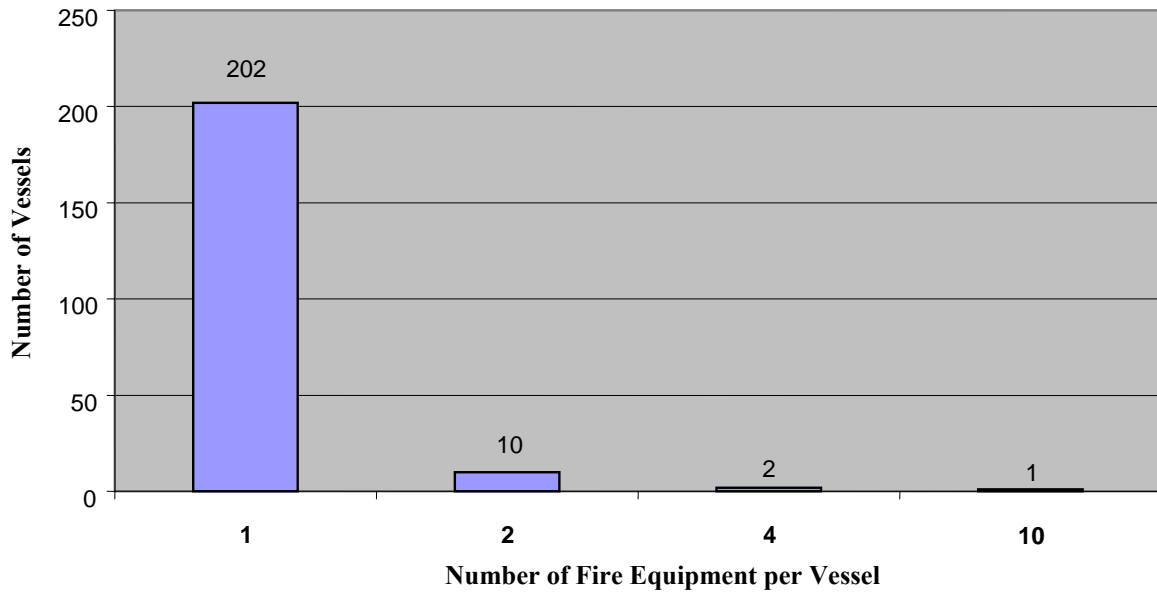
13.1 Buoys/Tires/Lifebelts: Fig. 72 shows that half the vessels (with Buoys/Tires/Lifebelts) carried one per vessel while one third of them carried two.

Fig. 72 Distribution of Buoys/Tires/Lifebelts



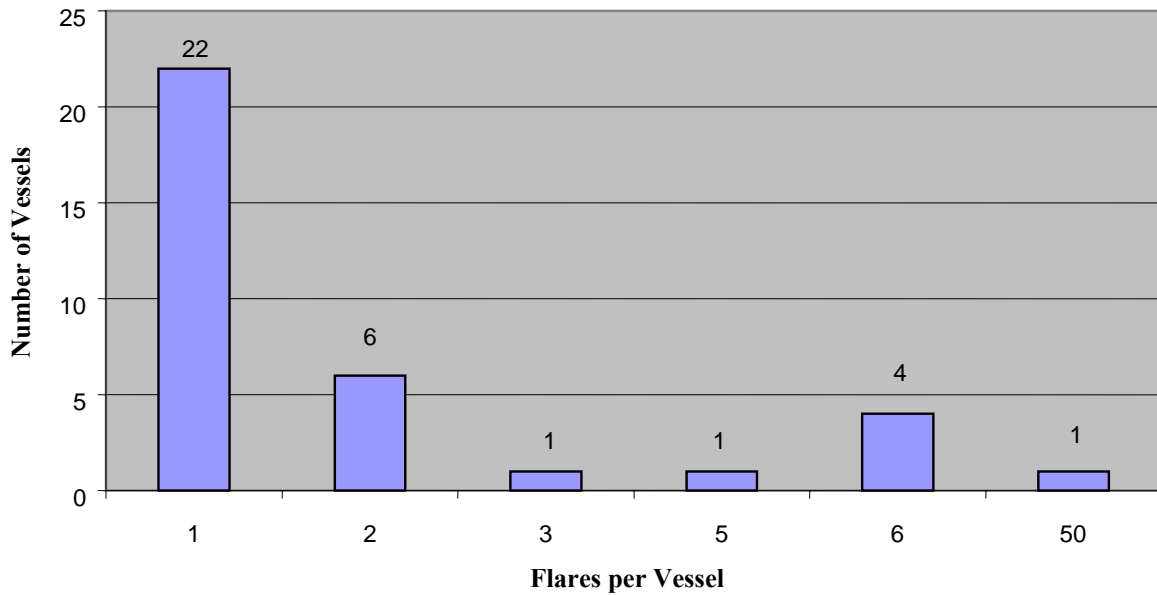
13.2 Fire Equipment: 94% of the 212 vessels that carry fire equipment possess only one fire extinguisher aboard the vessel while 10 vessels carry two extinguishers (Fig. 73).

Fig. 73 Fire Equipment aboard Vessels



13.3 Flares: 22 vessels (63%), out of the 35 fishing vessels that carry flares, possess only one flare per while one vessel owner reported carrying 50 flares (Fig. 74).

Fig. 74 Number of Flares per Vessel



14.0 Remarks by Fishermen

Only 1980 fishermen gave at least one remark. Some fishermen gave more than one remark; and even couple of them talked for a considerable time; even about issues not directly related to the fisheries sector e.g. domestic issues. Lack of response could be attributed to:

- Some thought that it is in futile or a waste of time to give any comment.
- Some thought that filling the questionnaire already took a considerable amount of time and thus did not want to continue any further.
- There were a number of abandoned vessels whose owners could not be directly contacted; or the owners of some operational vessels could not be located at the time of survey; thus, the information was relayed to our personnel by means of a third party or by phone.
- Probably some recorders, for one reason or another, did not ask some of the vessel owners/operators to give any comment.

Nevertheless, the comments were recorded, edited, and tabulated. Although few gave lengthy comments, yet not more than seven comments per fisherman was entered. The comments were divided into 9 categories as per Table 33. The most important categories were Social & Medical Security, Ports Facilities, Fisheries Law, and Aid to Fishermen to which 56, 53, 49, and 31 percent of fishermen gave comments about.

Table 33 Distribution of Fishermen's Remarks by Categories

Category	Number of Respondents	Percentage
Social & Medical Security	1490	56.0 %
Ports Facilities	1403	52.7 %
Fisheries Law	1306	49.1 %
Aid to Fishermen	816	30.7 %
Environment	129	4.8 %
Fishing Operations	47	1.8 %
Sea Rescue	15	0.6 %
Palestinians	9	0.3 %
Miscellaneous	49	1.8 %

Table 34 gives the details of the remarks per category:

- **Social & Medical Security:** this was the most important issue that 56% of fishermen remarked about. One quarter of them demanded medical security. About 17% demanded both social and medical security, while 12% asked for Social security only. Very few fishermen (2%) asked for a pension plan.
- **Ports facilities:** About 20% of fishermen were concerned with port rehabilitation and cleaning; while about 6% were interested in each of port equipping, lighting or quay. The other criteria were of lesser importance to responding vessel owners/operators.

- **Fisheries Law:** about 40% of vessel owners/operators asked for stopping of Illegal Fishing Operations and enforcement of fisheries law. Only 65 fishermen (2.4%) wanted the Fisheries Law to be modernized. The other remarks were of lesser importance and were primarily concerned with banning/halting a certain fishing gear.
- **Aid to Fishermen:** more than a quarter of vessel owners/operators demanded direct aid/grants from the government.
- **Environment:** only 129 fishermen (4.8%) were concerned with this matter with 3% asking for a halt on the pollution of the sea.
- **Sea Rescue:** only 15 fishermen (0.6%) showed concern regarding this matter.
- **Palestinians:** nine fishermen remarked on permitting Palestinians to own fishing vessels and Work Permits to be given to Palestinians.
- **Miscellaneous:** this lists a variety of personal remarks like establishing a port (1%) for those vessel owners/operators who operate from a location where no port facilities are available like at the northern borders and Halat town in Mount Lebanon. The other remarks are of minor importance.

Table 34 List of Remarks given by vessel owners/operators

Remarks	1	2	3	4	5	6	7	Total	%
1- Social & Medical Security									
• Medical Security	463	153	42	14	2			674	25.32
• Social & Medical Security	219	176	39	6	5			445	16.72
• Social Security	217	62	23	9	1	2		314	11.80
• Pension Plan	31	18	8					57	2.14
2- Ports Facilities									
• Port Rehabilitation	118	89	74	12	5			298	11.19
• Port Cleaning	63	24	150	3	1	8	1	250	9.39
• Port Equipping	58	59	43	10	2	1		173	6.50
• Port Lighting	6	9	7	145	1			168	6.31
• Quay	79	49	24	9	1			162	6.09
• Lighthouse	10	15	3	43	1			72	2.70
• Port Enlargement	26	18	10	4				58	2.18
• Fish Auction	14	15	17	1	2		2	51	1.92
• Port Deeping	30	9	8	1				48	1.80
• Boat Maintenance Facility	6	19	11	1	1			38	1.43
• Communication Equipment	1	2	19	3	1			26	0.98
• Port Maintenance	7	5	7	3	1			23	0.86
• Control Tower	4	5	8	1	1			19	0.71
• Road to Port	5	2	1					8	0.30
• Crane		1	1	1	2			5	0.19
• Breakwater			3					3	0.11
• Port Organization			1					1	0.04
3- Fisheries Law									
• Stopping Illegal Fishing Operations	124	281	85	17	3	133		643	24.15
• Enforcing Fisheries Law	173	116	104	3	8	2		406	15.25
• Modernizing Fisheries Law	16	21	21	6	1			65	2.44
• Banning Beach Seines	24	9	10	21	1			65	2.44
• Banning Fishing Lights	32	13	7	6				58	2.18
• Banning Purse Seines	11	13					1	25	0.94
• Monitoring of Syndicates & Cooperatives	5	1	6		1			13	0.49

Table 34 (continued) List of Remarks given by vessel owners/operators

Remarks	1	2	3	4	5	6	7	Total	%
3- Fisheries Law (continued)									
• Banning Speargun	1	3	6					10	0.38
• Surveillance of Coastal areas	2	1	4					7	0.26
• Stop monopolization of fishing grounds		1	1	4				6	0.23
• Enforcing Fisheries Law (Purse Seines)	4							4	0.15
• Regulation of Fisheries Sector	1		1					2	0.08
• Prevent non-fishermen from joining Cooperatives		1						1	0.04
• Regulation of beach seines			1					1	0.04
4- Aid To Fishermen									
• Aid	159	295	112	12	138	1	1	718	26.97
• Fish Import Calendar	5	23	20	17				65	2.44
• Banning Fish Imports	1	4	9	5				19	0.71
• Compensation for Natural Disasters		3	3	1				7	0.26
• Regulating Fish Auction Yards	1	1	3					5	0.19
• Establishing Agriculture Credit Bank		1						1	0.04
• Poverty		1						1	0.04
5- Environment									
• Stop Sea Pollution	16	29	30	3	1		1	80	3.01
• Cleaning polluted Sea	16	19	11	2	1			49	1.84
6- Palestinians									
• Permit Palestinians to own Fishing Vessels	2	2	1	1				6	0.23
• Work Permits for Palestinians	3							3	0.11
7- Sea Rescue									
• Sea Rescue Equipment	1	4	4	5			1	15	0.56
8- Fishing Operations									
• Modernizing Fishing Methods	8	4	5					17	0.64
• Lack of Abundance of Fish	9	2	3	1	2			17	0.64
• Training of fishermen		8	2					10	0.38
• Control of Dolphins		1	1	1				3	0.11
9- Miscellaneous									
• Establishing a Port					18	3		21	0.79
• Establishing a Port at Halat	4	3	1					8	0.30
• Lowering Taxes	1		1	3				5	0.19
• Allowing Vessel to operate for Recreation	1	1	2					4	0.15
• Protecting Fish Prices			3					3	0.11
• Joining Cooperative	1			1				2	0.08
• Permitting Vessel to Fish	2							2	0.08
• Activation Cooperatives & Syndicates Role		2						2	0.08
• Help Developing Fisheries Sector	1							1	0.04
• Construct a cooperative facility at the Port		1						1	0.04
Total Respondents	1980	1593	956	375	201	150	7	5262	197.67

II- Inland Fishing Vessels: These were found around the inner lake of Qaraoun in Bekaa Valley. There were only 18 vessels fishing there i.e. <1% of fishing fleet. There could be more vessels in other areas, but could not be located by the MOA personnel.

1.0 Vessels Characteristics: Table 35 shows that half of the 18 fishing vessels had no official registration number. Fifteen vessels were flouka type while the remaining were oars. Seven vessels were not operational when surveyed due to engine/vessel repair. None was decked.

Table 35 Distribution of Registration and Operational Status for Inland Fishing Vessels

Registration Status	Operational Status	Vessel type		Grand Total
		Flouka	Oars	
No Registration	Non operational	4	1	5
	Operational	2	2	4
Registered	Operational	7		1
	Non operational	2		1
Grand Total		15	3	18

2.0 Fishing Authorization: Table 36 indicates that 14 vessels had a valid license for 2004.

Table 36 Distribution of Fishing Authorization for Inland Fishing Vessels

Fishing Authorization Year	Total
2000	1
2001	1
2003	1
2004	14
(blank)	1
Grand Total	18

3.0 Structural Characteristics: the range of length of vessels was 3.5-6.6 m (Table 37). GRT range was 1.25-2.0 tons.

Table 37 Distribution of Length (LOA) & GRT for Inland Fishing Vessels

Length LOA, m	GRT									Grand Total
	1.25	1.25	1.3	1.46	1.65	1.72	1.84	2.01	(blank)	
3.5									1	1
3.51									1	1
3.63									1	1
3.85									1	1
3.9									1	1
4		1							1	2
4.5									1	1
4.95	1									1
5.35			1							1
5.4					1					1
5.5				1						1
5.65						1				1
6.12									1	1
6.2							1		1	2
6.3								1		1
6.63									1	1
Grand Total	1	1	1	1	1	1	1	1	10	18

Table 38 indicates that all vessels, except for one, were constructed in Lebanon. The vessel that was constructed abroad was a wooden boat made in Palestine in 1945. The wooden and/or wooden/fiberglass fishing vessels were constructed before 1975. The remaining nine iron/steel vessels were locally made at and after 1993.

Table 38 Hull material and Construction Year & Country of Inland Fishing Vessels

Construction country	Construction year	Hull material			Grand Total
		Iron/Steel	Wood	Wood/Fiber	
Lebanon	1951		1		1
	1952		1		1
	1961		1		1
	1968		1		1
	1970			1	1
	1973		1		1
	1975		1		1
	1993	1			1
	1994	1			1
	1995	1			1
	1997	1			1
	1998	1			1
	1999	1			1
	2000	2			2
	2004	1			1
	(blank)			1	1
Palestine	1945		1		1
Grand Total		9	8	1	18

4.0 Engines: Half the vessels had inboard engines that were manufactured by Daya, Lister, and Petter (Table 39). These were diesel-fired engines (Table 40). The engine horsepower ranged from 4.5 to 9.5 hp.

Table 39 Engine Manufacturers and Type for Inland Fishing Vessels

Manufacturer	Type		Grand Total
	Outboard	Inboard	
Daya		1	1
Lister		3	3
Petter		5	5
Yamaha	4		4
(blank)	5		5
Grand Total	9	9	18

Table 40 Energy Source and Horsepower of Inland Fishing Vessels

Engine (hp)	Energy source			Grand Total
	Diesel	Petrol/gasoline mixed with oil	(blank)	
4.5	1			1
5	5			5
5.5	1			1
7	1			1
8		4		4
9		1		1
9.5	1			1
(blank)			4	4
Grand Total	9	5	4	18

5.0 Electronic Equipment: Only five vessel owners possessed a cellular phone while no one owned and/used navigation equipment, fish finders or any other type of electronic equipment.

6.0 Deck Machinery: gear activation was manual while no vessel carried any type of winches.

7.0 Ownership: Data indicated that one person owned each of 15 vessels, while three vessels were owned by two persons each. All owners were Lebanese. More than half the fishermen are in there 40s (Table 41), while 22% are in there 20s and 30s. The remaining fishermen were in there 50s, 60s, and 70s. Data showed that they were mainly from the village of Qaraoun (61%) and Lala (33%). One fisherman was from the village of Saghbine. All three villages are around Qaraoun Lake.

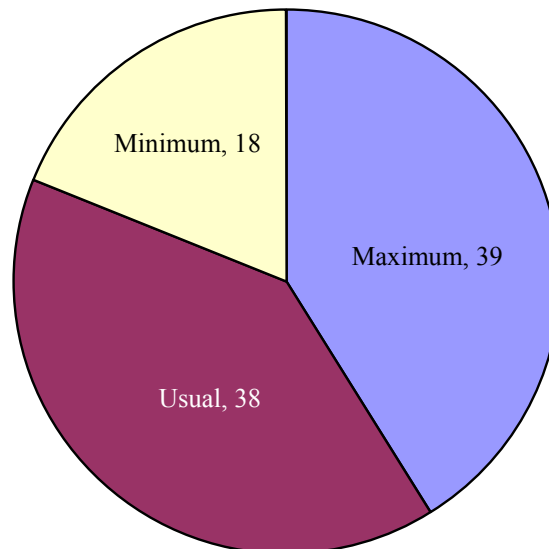
Table 41 Age distribution of Inland Fishermen

Owner birth year	Operator		Grand Total
	Operator	Owner	
1929		1	1
1940		1	1
1941		1	1
1948		1	1
1957		1	1
1959		3	3
1961		1	1
1962	1	1	2
1963		1	1
1965		2	2
1969		1	1
1976		1	1
1980	1	1	2
Grand Total	2	16	18

8.0 Crew

8.1 Crew Number: Fig. 75 shows that the minimum number of crew was 18, while the maximum and usual number of crew was practically the same (39).

Fig. 75 Number of Crew aboard Inland Fisheries Vessels



8.2 Crew Nationality: all vessel owners/operators reported that their crews were Lebanese.

8.3 Cooperative and Syndicate membership: 15 fishermen belonged to one syndicate namely the Qaraoun Lake Fishermen Syndicate. There is no fishermen cooperative in the region.

9.0 Ports of operation: there are no officially recognized ports in the region. The landing or tie-up sites are along the lakeshore near their respective villages. During winter, the vessels are towed for protection inside the villages.

10.0 Fishing Operations: All vessel owners reported that they use trammel nets and that they fish during the whole year. The number of sorties was between 15 and 25 sorties per month with half of fishing being at the rate of 20 sorties per month. All were targeting the species available in the lake i.e. carp and catfish.

11.0 Fish Processing and Preservation Equipment: this was limited to a hold for fresh fish that did not exceed 20 liters capacity.

12.0 Other Equipment: no other equipment was available aboard the inland fisheries vessels.

13.0 Safety Equipment: 16 vessels had life vests aboard and four carried buoys (Table 42).

Table 42 Distribution of Safety equipment aboard Inland Fisheries Vessels

Number of Safety Equipment/Vessel	Life vests (No of vessels)	Buoys (No of vessels)
1	10	1
2	6	2
4	0	1
(blank)	2	14
Grand Total	18	18

14.0 Fishermen's Remarks: all fishermen requested aid, alleviation of the pollution of the lake and that the MOA put fish fingerlings in the lake. Establishing a port, social security and health security were requested by one each.

B- Fishing Ports Survey

Dr. Dahij Mukdad, Marwan Ghosh, and Samir Majdalani conducted the survey. There were 44 ports and landing sites along the Lebanese coast in the 5 coastal governorates (Table 43). The largest number (17) was located in Mount Lebanon. It was followed by North Lebanon with 12 of ports/landing sites. All the facilities in administrative Beirut were official recognized, while only one out of four was so in Akkar. Appendix 4 shows the ports survey questionnaire.

Table 43 Distribution of Ports/Landing Sites in Coastal Governorates

Governorate	Official Port / Landing site		Grand Total
	No	Yes	
Akkar	3	1	4
Beirut		4	4
Mount Lebanon	7	10	17
North	3	9	12
South	1	6	7
Grand Total	14	30	44

1.0 Official Status & Coordinates: the Ministry of Transportation & Public Works officially recognized thirty ports/landing sites, while 14 were not (Table 44). Fig. 76 shows the location of the pots/landing sites on the map of Lebanon.

Table 45 lists the liaison port or Harbor Master, which has jurisdiction over those facilities. This jurisdiction is only regarding registering the new fishing vessels and renewing navigation licenses. Each official fishing port/landing is under the direct supervision of the Department of Maritime Navigation of the Ministry of Transportation & Public Works that oversees the construction and maintenance of new and existing facilities.

Table 44 List of Official Status of Lebanese Coastal Ports/Landing Sites

Name of Port / Landing site	Coordinates (Lambert)	Official Port /Landing site	
		No	Yes
Aarida	0173962 0298915		X
Cheikh Zennad	0174803 0296095		X
Hay el Bahr	0175333 0291813	X	
Aabde	0173824 0286487		X
Tripoli - Al Mina	0159101 0279474		X
Tripoli - Huqran	0158200 0279417		X
Qalamoun	0156291 0272323		X
Enfe - Nuhairy	0151588 0269607		X
Enfe - Dabbaghah	0150817 0269142		X
Enfe - Rmeilet	0150983 0268287		X
Chekka	0150209 0265464		X
Heri	0148036 0263231		X
Hamat-Roca Marina	0147917 0263398	X	
Selaata	0144024 0260430		X
Batroun	0144068 0257739		X
Fadous	0143747 0254445		X
Barbara	0141657 0250573	X	
Aamchit	0141206 0246101		X
Jbail	0142482 0242783	X	
Halat - Al Fidar	0143120 0240098	X	
Halat	0142863 0238295	X	
Aaqaibe	0142235 0235606	X	
Bouar	0141620 0234872	X	
Safra	0140909 0233699		X
Tabarja	0141447 0230955	X	
Jounieh - Kaslik	0140658 0227448		X
Dbaiye	0137229 0223094	X	
Jamil Gemayyel	0148897 0218461	X	
Dora	0133549 0218011		X
Beirut- Ain Mraisseh	0127678 0218548		X
Beirut - Jal el Bahr	0126496 0218620		X
Beirut- Manara	0126073 0218413	X	
Beirut- Dalieh	0126238 0216994		X
Jnah - Cote D'Azour	0127055 0214444		X
Ouzaii	0127060 0211727		X
Naame	0123887 0201579	X	
Jiye	0120160 0190871		X
Saida	0115923 0181344		X
Zeereh	0109999 0171103		X
Ain Qantara	0109120 0170414	X	
Mounis	0107206 0168380		X
Sour	0099284 0149472		X
Sour- Rest House	0100061 0148368		X
Naqoura	0094165 0133267		X
Grand Total		14	30

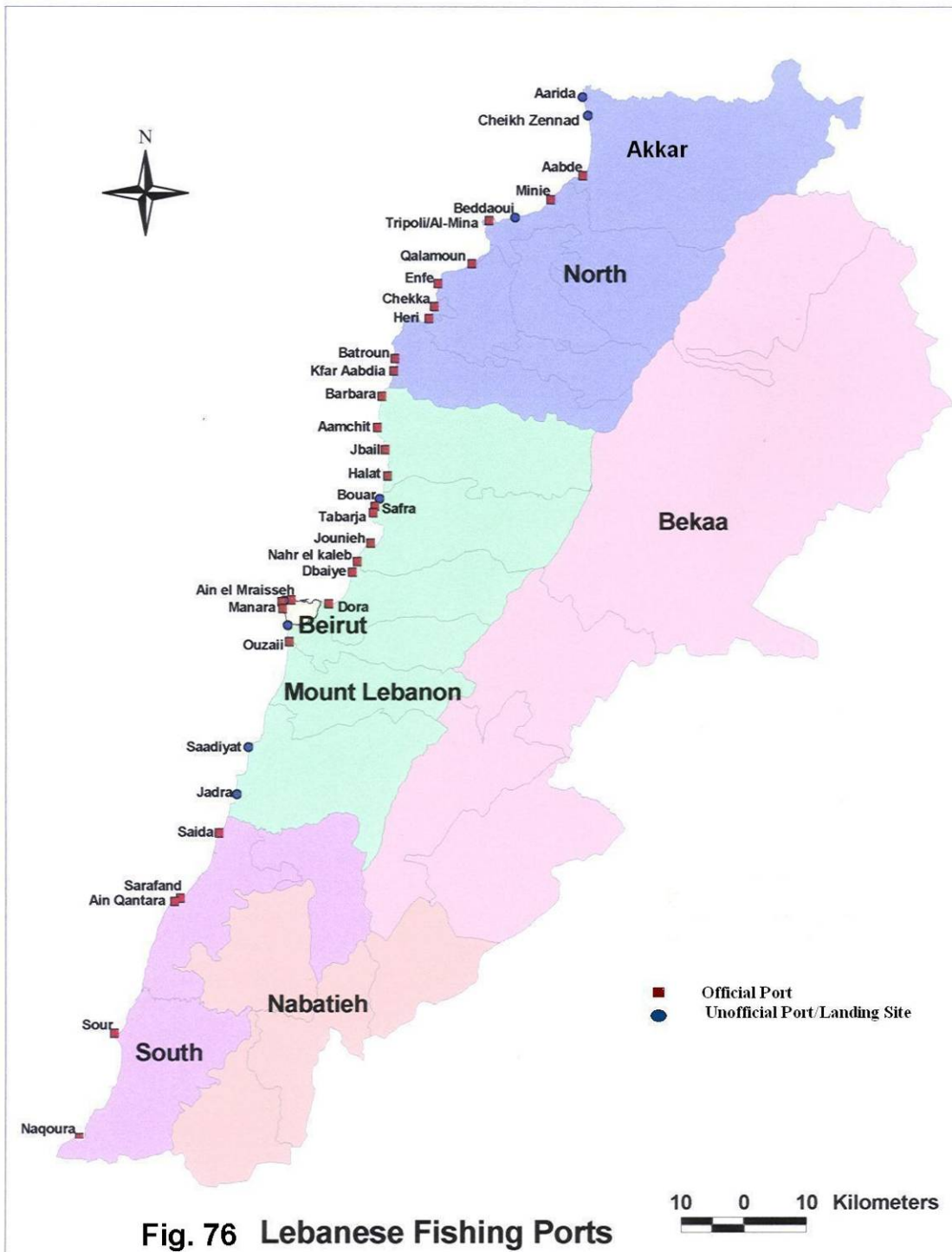


Fig. 76 Lebanese Fishing Ports

Table 45 List of Liaison Ports for Lebanese Coastal Ports / Landing Sites

Name of Port / Landing site	Liaison Port (Harbor Master)						
	Beirut	Chekka	Jbail	Jounieh	Saida	Sour	Tripoli
Aamchit			X				
Aaqeibe				X			
Aarida							X
Aabde							X
Ain Qantara					X		
Barbara			X				
Batroun		X					
Beirut - Ain el Mraisseh	X						
Beirut - Dalieh	X						
Beirut - Jal el Baher	X						
Beirut - Manarah	X						
Bouar				X			
Cheikh Zennad							X
Chekka		X					
Dbaiye	X						
Dora	X						
Enfe - Dabbaghah		X					
Enfe - Nuhairy		X					
Enfe - Rmeilet		X					
Halat			X				
Halat - Al Fidar			X				
Hamat - Roca Marina		X					
Hay el Bahr							X
Heri		X					
Jamil Gemayyel	X						
Jbail			X				
Jiye					X		
Jnah - Cote D'Azour	X						
Jounieh - Kaslik				X			
Kfar Aabida -Fadous		X					
Mounis					X		
Naame	X						
Naqoura						X	
Ouzaii	X						
Qalamoun							X
Safra				X			
Saida					X		
Selaata		X					
Sour						X	
Sour - Rest House						X	
Tabarja				X			
Tripoli - Al Mina							X
Tripoli - Huqran							X
Zeereh					X		
Grand Total	10	9	5	5	5	3	7

2.0 Physical Characteristics

2.1 Breakwater

2.1.1 Necessity: it was necessary for all ports/landing sites, except for Aarida, Enfe-Nuhairy, and Enfe-Rmeilet, which were naturally protected.

2.1.2 Types: Table 46 shows that 15 ports/landing sites had rubble breakwaters, three reinforced walls breakwaters and two had other precast concrete structures (cubes) breakwaters. Ten ports had a rubble & reinforced concrete breakwater, while only one had rubble and precast concrete cubes breakwaters. The length of the breakwaters varied from 20m for Beirut-Manara Port to 503m for Ouzaii Port.

2.2 Port Basins

2.2.1 Fish handling basin for offloading: there was 36 ports/landing sites with fish handling basin for offloading (Table 47). There were eight sites with no such facility. The size of fish offloading basin ranged from 32m for Enfe-Dabbaghah Port up to 1,306m for Tripoli-Al Mina Port. The distribution of the size of fish offloading basin can be seen in Fig. 77. The figure indicates that the size of the fish-offloading basin for 24 ports/landing sites was less than 300m; however, the basins for the major ports e.g. Dora were larger than 500 m.

2.2.2 Boat Servicing Basin for Maintenance: only three ports had such a facility. They were namely Tripoli-Al Mina, Zeereh, and Chekka. The size of those basins was 30, 90, and 64m simultaneously.

2.2.3 Lifting Equipment: Table 48 indicates that most ports (36) resort to contractors to lift the vessels from the basins. Only eight ports/landing sites had manual/electrical/hydraulic lift winches.

2.3 Quay/Jetty Wall

2.3.1 Quay: Table 49 shows that 32 ports/landing sites had solid construction (reinforced concrete) quays while four had quays on piles. No ports had a floating quay. The length of quay varied between 20m for Halat-Al Fidar Landing Site and 920m for Dora Port. The width varied between <1m for Aaqaiibe Port to about 6m for Tabarja Port. All basins were shallow and the depth was between 1 and 2 m.

2.3.2 Jetty: only four ports had this structure (Table 50) namely Beirut-Manarah, Ouzaii, Saida and Sour ports. The types were either Timber/Precast concrete with timber/steel/reinforced concrete piles or Floating: timber over treated empty oil drums or plastic drums.

Table 46 Type & Length of breakwaters of Coastal Ports & Landing Sites

Name of Port/ Landing Site	Type of Breakwater			Length of Breakwater (m)
	Rubble	Reinforced Concrete Wall	Other Precast Concrete structures	
Aabde	X			220
Aamchit	X	X		246
Aaqeibe	X			220
Aarida				
Ain Qantara	X	X		27
Barbara	X	X		45
Batroun	X	X		140
Beirut - Ain el Mraisseh			X	20
Beirut - Dalieh			X	20
Beirut - Jal el Baher				
Beirut - Manarah	X			57
Bouar	X			201
Cheikh Zennad				
Chekka	X	X		223
Dbaiye	X		X	300 ¹
Dora				360
Enfe - Dabbaghah	X			89
Enfe -Nuhairy	X			
Enfe - Rmeilet				
Halat				
Halat - Al Fidar				
Hamat - Roca Marina	X			
Hay el Bahr				
Heri	X			164
Jamil Gemayyel				
Jbail		X		49
Jiye	X			
Jnah - Cote D'Azour				
Jounieh - Kaslik	X	X		102
Kfar Aabida -Fadous	X	X		33
Mounis				
Naame				
Naqoura		X		194
Ouzaii	X			503
Qalamoun	X			50
Safra				40
Saida		X		160
Selaata	X			200
Sour	X	X		315
Sour - Rest House	X			45
Tabarja	X	X		75
Tripoli - Al Mina	X			346 ²
Tripoli - Huqran	X			114
Zeereh	X	X		253
Grand Total	26	13	3	

1: under extension

2: 175m were recently added; there is an External Breakwater: 1 km long

Table 47 List of Coastal Ports/Landing Sites with Fish handling basin for offloading

Name of Port/Landing site	Fish handling basin for offloading	Length (m)
Aabde	X	540
Aamchit	X	209
Aaqeibe	X	512
Aarida		(blank)
Ain Qantara	X	150
Barbara	X	60
Batroun	X	250
Beirut - Ain el Mraisseh	X	120
Beirut - Dalieh	X	140
Beirut - Jal el Baher		(blank)
Beirut - Manarah	X	266
Bouar	X	330
Cheikh Zennad		(blank)
Chekka	X	250
Dbaiye	X	480
Dora	X	920
Enfe - Dabbaghah	X	32
Enfe -Nuhairy	X	270
Enfe - Rmeilet	X	65
Halat		(blank)
Halat - Al Fidar	X	70
Hamat - Roca Marina	X	(blank)
Hay el Bahr		(blank)
Heri	X	164
Jamil Gemayyel	X	(blank)
Jbail	X	230
Jiye	X	30
Jnah - Cote D'Azour		(blank)
Jounieh - Kaslik	X	302
Kfar Aabida - Fadous	X	102
Mounis	X	96
Naame		(blank)
Naqoura	X	200
Ouzaii	X	620
Qalamoun	X	250
Safra		(blank)
Saida	X	425
Selaata	X	267
Sour	X	618
Sour - Rest House	X	50
Tabarja	X	250
Tripoli - Al Mina	X	1,306
Tripoli - Huqran	X	150
Zeereh	X	245
Grand Total	36	

Fig. 77 Size of Fish Handling Basin for Offloading

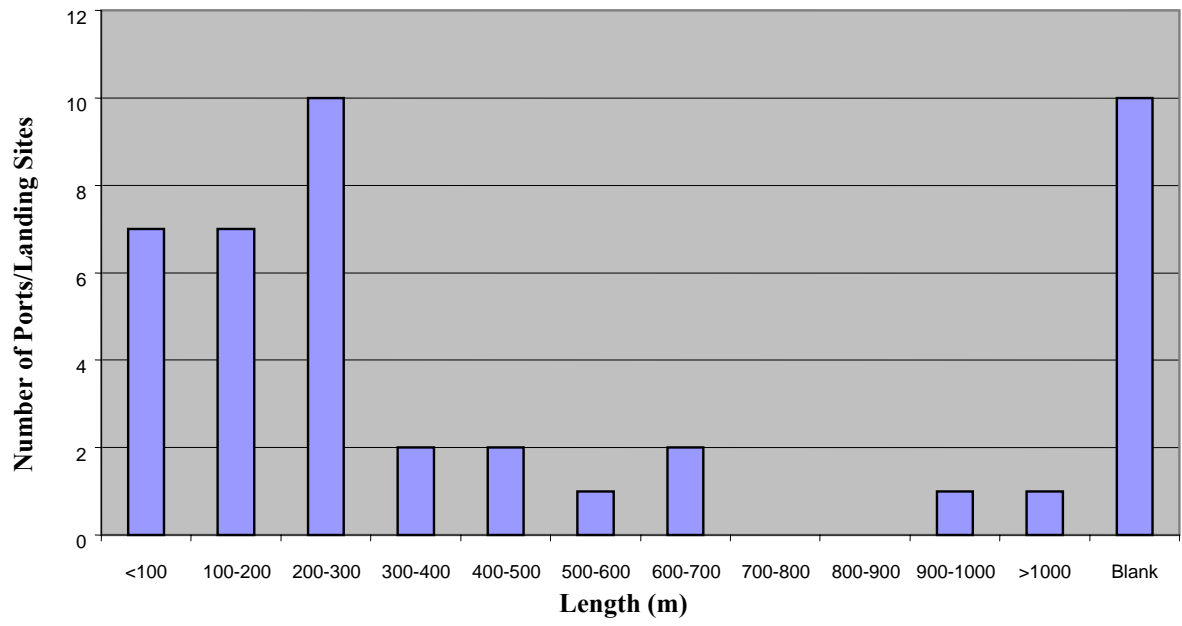


Table 48 List of Lifting Equipment at the Coastal Ports/Landing Sites

Name of Port / Landing site	Hand operated	Electrical	Hydraulic	Other
Aarida				Contractor
Cheikh Zennad				Contractor
Hay el Bahr				Contractor
Aabde				Contractor
Tripoli - Al Mina				Contractor
Tripoli - Huqran				Contractor
Qalamoun				Contractor
Enfe - Nuhairy			X	
Enfe - Dabbaghah				Contractor
Enfe - Rmeilet				Contractor
Chekka			X	
Heri				Contractor
Hamat - Roca Marina				Contractor
Selaata				Contractor
Batroun				Contractor
Kfar Aabida -Fadous				Contractor
Barbara				Contractor
Aamchit				Contractor
Jbail				Contractor
Halat - Al Fidar				Contractor
Halat				Contractor
Aaqeibe				Contractor
Bouar				Contractor
Safra				Contractor
Tabarja				Contractor
Jounieh - Kaslik				Contractor
Dbaiye				Contractor
Jamil Gemayyel				Contractor
Dora				Contractor
Beirut - Ain el Mraisseh	X			
Beirut - Jal el Baher				Contractor
Beirut - Manarah		X		
Beirut - Dalieh	X	X		
Jnah - Cote D'Azour				Contractor
Ouzaii				Contractor
Naame				Contractor
Jiye				Contractor
Saida			X	
Zeereh				Contractor
Ain Qantara				Contractor
Mounis				Contractor
Sour		X	X	
Sour - Rest House				Contractor
Naqoura	X			
Grand Total	3	3	4	36

Table 49 Type and Dimensions of Quays of Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Type		Length (m)	Width (m)	Depth (m)
	Solid Construction	Piles Floating (timber/drums)			
Aarida					
Cheikh Zennad					
Hay el Bahr					
Aabde	X		150	3.5	0.5 - 1
Tripoli - Al Mina	X	X	340	1.5	1 - 2
Tripoli - Huqran	X		100	0.5	1 - 2
Qalamoun	X		240	2 / 4 (new)	0.8 - 0.9 / 3 (new)
Enfe -Nuhairy	X		280	2	1 - 1.5
Enfe - Dabbaghah	X		32	2	2
Enfe - Rmeilet	X		40	2	1
Chekka	X		250	1 - 8	0.5 - 4
Heri					
Hamat - Roca Marina	X		N/A*	4	N/A*
Selaata		X	110	6	3
Batroun	X		250	4	1
Kfar Aabida -Fadous	X		102	1 - 1.5	1 - 3
Barbara	X		60	1.5	1.5
Aamchit	X		209	4	1.25 - 2
Jbail	X		235	6	3
Halat - Al Fidar	X		20	10	N/A**
Halat					
Aaqeibe	X		238	4	<1 - 2
Bouar	X		71	1 - 6	1.5 - 3
Safra					
Tabarja	X		126	10	2 - 6
Jounieh - Kaslik	X		302	8	2.5 - 3
Dbaiye	X		480	4.5	1 - 2
Jamil Gemayyel	X		N/A*	N/A*	N/A*
Dora		X	920	1.25	1 - 1.5
Beirut - Ain el Mraisseh	X		120	1.25 - 3	1.5
Beirut - Jal el Baher					
Beirut - Manarah	X		266	5	1.5 - 2
Beirut - Dalieh	X		40	7	1
Jnah - Cote D'Azour					
Ouzaii	X		154	10	5
Naame					
Jiye					
Saida	X		425	2	1 - 2
Zeereh	X		245	2	1 - 2
Ain Qantara	X		57	5	1
Mounis	X	X	96	6	1 - 2
Sour	X		618	4	2
Sour - Rest House	X		50	4	1
Naqoura	X		200	N/A**	1
Grand Total	32	4			

* Custodians did not allow MOA personnel to take measurements.

** Could not measure the item

Table 50 Type and Dimensions of Jetties of Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Type		Length (m)	Width (m)	Depth (m)
	Timber/Precast concrete	Floating: timber over drums			
Beirut - Manarah		X	37	1.25	1.5
Ouzaii		X	54	2	
Saida	X		76	1.5	1
Sour	X		45 + 48	4	2

2.4 Slipway

2.4.1 Type: Twenty-two fishing ports were equipped with at least one slipway (Table 51). They were all concrete except for Tripoli-Al Mina Port (concrete & timber) and Zeereh Port (sand/Rubble). The width of the slipway varied between 3m for Enfe-Rmeilet landing site and 40m for Tripoli-Al Mina Port.

2.4.2 Winch: only seven ports with slipways were equipped with 1-2 winches to tow vessels. These were manually, electrically, or hydraulically operated.

2.5 Tie-up Area for Boats: 22 fishing ports/landing sites had a tie-up area for vessels. This was primarily for anchorage (Table 52). This area was also used for vessels waiting for maintenance and/or spare parts and for other reasons.

2.6 Mooring Fittings

2.6.1 Bollards: Table 53 shows that 19 ports/landing sites had steel bollards while three had other types e.g. concrete.

2.6.2 Mooring Rings: 25 ports had mooring rings (Table 53). This indicates that nine ports/landing sites have both bollards and mooring rings for vessels anchorage.

2.6.3 Fenders: Individual fenders (used car tyres as fenders) were the only type found in 37 ports/landing sites (Table 53). No continuous timber fenders or vertical timber strips were found at any facility.

2.6.4 Mooring Lines and sinkers:

2.6.4.1 Galvanized Chain/Rope: this was found at almost all (38) ports/landing sites (Table 53). They were mostly ropes, but three ports had galvanized chains.

2.6.4.2 Shackle: Only one port, namely Beirut-Ain el Mraisseh had a “D” shackle (Table 53).

2.6.4.3 Buoys: were found at 16 ports/landing sites (Table 53).

2.6.4.4 Vessel’s own anchor: was used at all facilities except at the ports at Kfar Aabida-Fadous and Beirut-Dalieh (Table 53).

Table 51 Type of Slipways & Winches at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Slipway				Winch		
	Number	Type	Width (m)	Length (m)	Number	Type	Capacity (ton)
Aarida							
Cheikh Zennad							
Hay el Bahr							
Aabde	1	Concrete	20	25			
Tripoli - Al Mina	1	Concrete & Timber	40	30	2	Electrical	90/30
Tripoli - Huqran	1	Concrete	5	15	1	Electrical	
Qalamoun	1		5	10			
Enfe -Nuhairy	2	Concrete	5/12	20	1	Hand Operated Electrical	
Enfe - Dabbaghah							
Enfe - Rmeilet	1	Concrete	3	6			
Chekka	1	Concrete	24	20		Hand Operated	
Heri							
Hamat - Roca Marina	2	Concrete	2/4	6/6			
Selaata							
Batroun	3	Concrete	13/5/4	9/8/8	1	Electrical	2
Kfar Aabida -Fadous	1	Concrete	4	30	1	Electrical	2
Barbara	1	Concrete	4	20			
Aamchit	1	Concrete	5	6			
Jbail	1	Concrete	10	10			
Halat - Al Fidar	1	Concrete	3	6			
Halat							
Aaqeibe	1	Concrete	9	20			
Bouar							
Safra							
Tabarja	1	Concrete	4	15			
Jounieh - Kaslik							
Dbaiye							
Jamil Gemayyel							
Dora							
Beirut - Ain el Mraisseh	1	Concrete	4	8			
Beirut - Jal el Baher							
Beirut - Manarah	1	Concrete	6	15			
Beirut - Dalieh	1	Concrete	4	10			
Jnah - Cote D'Azour							
Ouzaii							
Naame							
Jiye							
Saida	2	Concrete	10/4	40/8	1	Hydraulic	
Zeereh	1	Sand/Rubble		30			
Ain Qantara							
Mounis							
Sour	2	Concrete	4	40/50	2	Electrical	
Sour - Rest House							
Naqoura							

Table 52 Availability of Tie-up area for boats at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Reason		
	For anchorage	Awaiting maintenance/spares	Other
Aarida	X		
Cheikh Zennad	X		
Hay el Bahr	X		
Aabde	X	X	
Tripoli - Al Mina	X	X	
Tripoli - Huqran	X		
Qalamoun			
Enfe -Nuhairy			
Enfe - Dabbaghah			
Enfe - Rmeilet			
Chekka			
Heri			
Hamat - Roca Marina			
Selaata			
Batroun			
Kfar Aabida -Fadous			
Barbara			
Aamchit			
Jbail			
Halat - Al Fidar	X		
Halat	X		
Aaqeibe			
Bouar			
Safra	X		
Tabarja			
Jounieh - Kaslik			
Dbaiye			
Jamil Gemayyel	X		
Dora	X	X	
Beirut - Ain el Mraisseh			
Beirut - Jal el Baher	X		
Beirut - Manarah	X	X	
Beirut - Dalieh	X		
Jnah - Cote D'Azour	X		
Ouzaii	X		
Naame			
Jiye	X	X	X
Saida	X	X	X
Zeereh			
Ain Qantara			
Mounis			
Sour	X		no place shallow port
Sour - Rest House			
Naqoura			

Table 53 List of Mooring Fittings at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Bollards	Mooring ring	Fenders	Mooring lines and sinkers						
				Galvanized chain		Rope		Shackle "D"	Buoys	Vessel's own anchor
				LOA m	Dia cm	LOA m	Dia cm			
Aarida	Other			20	2				X	X
Cheikh Zennad	Other		X	20	2					X
Hay el Bahr				20	2				X	X
Aabde	Steel		X			5	2		X	X
Tripoli - Al Mina	Steel		X			10	1		X	X
Tripoli - Huqran	Steel		X			10	1		X	X
Qalamoun	Steel (new)	X (old)	X			10	2			X
Enfe -Nuhairy		X	X			15	1			X
Enfe - Dabbaghah		X	X			20	1			X
Enfe - Rmeilet		X	X			20	1			X
Chekka		X	X			20	2			X
Heri		X	X			20	1			X
Hamat - Roca Marina	Steel		X			10	1			X
Selaata		X	X			10	2			X
Batroun	Steel	X	X			10	1			X
Kfar Aabida -Fadous		X	X			25	2			
Barbara		X	X			15	1.5			X
Aamchit		X	X			10	1			X
Jbail	Steel	X	X			5	1			X
Halat - Al Fidar		X	X							X
Halat		X	X							X
Aaqeibe	Steel		X			10	1		X	X
Bouar	Steel	X	X			15	1		X	X
Safra		X	X							X
Tabarja		X	X			6	1		X	X
Jounieh - Kaslik	Steel	X	X			10	1		X	X
Dbaiye	Steel	X	X			10	1		X	X
Jamil Gemayyel		X	X			20	1		X	X
Dora	Steel	X	X			15	< 1		X	X
Beirut - Ain el Mraisseh	Steel		X			10	1	X	X	X
Beirut - Jal el Baher		X	X			10	1		X	X
Beirut - Manarah	Steel		X			10	1		X	X
Beirut - Dalieh		X	X			30	1			
Jnah - Cote D'Azour						10	1		X	X
Ouzaii		X	X			10	1			X
Naame										X
Jiye										X
Saida	Steel		X			6	1			X
Zeereh	Steel		X			10	1			X
Ain Qantara	Steel	X	X			4	1			X
Mounis	Other (concrete)		X			30	1			X
Sour	Steel	X	X			15	1			X
Sour - Rest House	Steel					30	2.5			X
Naqoura	Steel					25	2.5			X

3.0 Navigation/Aids to Navigation Equipment

3.1 Navigation Equipment: no port was equipped with any navigation equipment.

3.2 Aids to Navigation: only five fishing ports had any aid to navigation. These were Landfall and Position Lights (Table 54). There were no lighted aids to navigation like lantern mounted on anchored floating buoy or fixed marker. Those lights can be distinguishable from each other by being their character (fixed, flashing or occulting) and color being white or red and white.

Table 54 Characteristics of Available Aids to Navigation at Coastal Fishing Ports

Name of Port / Landing site	Class		Distinguishing Characteristics					Period (sec)
	Landfall lights	Position lights	Character			Color		
			Fixed	Flashing	Occulting	White	Red/green	
Tripoli - Al Mina		X		X		X		20
Selaata	X						X	
Tabarja	X	X	X	X				
Jounieh - Kaslik		X	X				X	
Beirut - Manarah		X			X	X	X	

4.0 Refueling Point: only four ports had refueling facilities (Table 55). At the remaining ports/landing sites and, in part, at those ports mentioned in Table 55, fishermen resort to bringing along fuel (from local petrol stations) in personal containers.

Table 55 Refueling Points available at Lebanese Coastal Fishing Ports

Name of Port / Landing site	Location	Type	Fuel Type	Fuel Tank	
				Size (m3)	Type
Tripoli-Al Mina	Central	Simple	Diesel	13	Galvanized steel
Qalamoun	Central	Simple	Diesel	2	Galvanized steel
Dbaiye	Central	Professional	Diesel Gasoline	N/A	Galvanized steel
Zeereh	Small tanker belonging to coop	Professional	Diesel	N/A	Galvanized steel
Sour	2 location	Simple	Diesel	10	Galvanized steel

5.0 Wastes and Waste oil disposal/separation

5.1 Wastes: fishermen at 33 ports/landing sites conceded that they throw their slops directly into the sea (Table 56). There were garbage boxes at 20 fishing facilities. Collection of wastes at a central location (for eventual burning) was practiced in seven ports. Some sites will practice more than one collection facility. Municipalities were disposing of collected wastes at 20 facilities, while a collective effort (e.g. cooperative intervention) was taking care of this task.

5.2 Waste Oil: similarly, Table 57 indicates that vessel owners/operators at 23 ports/landing sites throw their waste oil directly into the sea. There are collection containers at 13 sites while at 16 fishing facilities waste oil is collected at one location (and, probably, eventually

burnt). Municipalities disposed off collected waste oil at 10 ports/landing sites, while this was done by other means (e.g. cooperatives at nine fishing facilities) at the other sites.

Table 56 Wastes Collection & Disposal at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Collection			Disposal	
	Throw directly into sea	Collect in boxes	Collect in one location (then burn)	Municipality	Other
Aarida	X				
Cheikh Zennad	X				
Hay el Bahr	X				
Aabde	X				
Tripoli - Al Mina	X		X	X	
Tripoli - Huqran	X				
Qalamoun	X		X		
Enfe -Nuhairy			X		
Enfe - Dabbaghah	X				
Enfe - Rmeilet	X				
Chekka	X	X		X	
Heri	X				
Hamat - Roca Marina		X		X	
Selaata	X				
Batroun	X	X		X	
Kfar Aabida -Fadous	X				
Barbara	X		X		
Aamchit	X	X		X	X
Jbail		X		X	
Halat - Al Fidar	X				
Halat	X				
Aaqeibe		X		X	
Bouar		X		X	
Safra	X				
Tabarja		X		X	
Jounieh - Kaslik		X		X	
Dbaiye		X		X	
Jamil Gemayyel	X				
Dora	X		X		
Beirut - Ain el Mraisseh		X		X	
Beirut - Jal el Baher	X	X		X	
Beirut - Manarah		X		X	
Beirut - Dalieh		X		X	
Jnah - Cote D'Azour	X				
Ouzaii	X	X	X		X
Naame	X				
Jiye	X				
Saida	X	X	X	X	
Zeereh	X	X		X	
Ain Qantara	X	X		X	
Mounis	X				
Sour	X	X		X	
Sour - Rest House	X				
Naqoura	X	X		X	

Table 57 Waste Oil Collection & Disposal at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Collection			Disposal	
	Throw directly into sea	Collect in drums	Collect in one location	Municipality	Other
Aarida	X				
Cheikh Zennad	X	X			
Hay el Bahr	X				
Aabde	X	X			
Tripoli - Al Mina	X		X	X	X
Tripoli - Huqran	X				
Qalamoun			X		
Enfe -Nuhairy			X (burn)		
Enfe - Dabbaghah			X		
Enfe - Rmeilet					
Chekka			X	X	
Heri			X		
Hamat - Roca Marina		X			X
Selaata			X	X	
Batroun			X	X	X
Kfar Aabida -Fadous	X		X		
Barbara			X		
Aamchit			X		
Jbail	X	X			
Halat - Al Fidar	X				
Halat	X				
Aaqeibe			X		X
Bouar			X		X
Safra	X				
Tabarja		X		X	
Jounieh - Kaslik		X		X	
Dbaiye		X		X	
Jamil Gemayyel	X				
Dora	X	X			
Beirut - Ain el Mraisseh			X		X
Beirut - Jal el Baher	X	X		X	
Beirut - Manarah		X		X	
Beirut - Dalieh					
Jnah - Cote D'Azour	X				
Ouzaii	X		X		X
Naame	X				
Jiye	X				
Saida		X	X		X
Zeereh	X				
Ain Qantara	X				
Mounis	X				
Sour		X		X	
Sour - Rest House	X				
Naqoura	X	X			X

6.0 Freshwater Supply

6.1 Water Supply Source: Table 58 indicates the local water company supply freshwater to 17 ports/landing sites. Three ports also had boreholes/wells. Two sites had only water boreholes. A contractor supplied water to one port.

6.2 Water Reservoirs: there were elevated fresh water supply tanks at 19 ports/landing sites (Table 58). Fifteen of those were plastic (fiberglass/polyethylene) and five water reservoirs were made of concrete.

6.3 Pumps & accessories: three ports/landing sites were equipped with electrical water pumps (Table 58). The accessories were mainly steel (9) and PVC (8). Four ports/landing sites had water filters.

7.0 Sewage Disposal for Personal Sanitary Facilities & Fish Handling Areas

7.1 Personal Sanitary Facilities (Washrooms/Toilets): Table 59 shows that only 14 ports/landing sites were equipped with such facilities.

7.2 Sewage Disposal: five ports/landing sites were equipped with septic tanks (Table 59) that were being cleaned up either by a contractor or other non-disclosed means. Furthermore, two ports were equipped with soakways. Their proximity to nearby urban centers and to ground water drinking supply, e.g. a shallow borehole or well, could not be determined. Six fishing ports were hooked up to municipal sewer lines. Sewage Effluent Treatment was not available at any location. It is thought that sewage disposal at non-equipped ports/landing sites, if any, is done directly into the sea.

Table 58 Water Source and Reservoirs at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Water Supply	Elevated fresh water supply tanks		Water Pump	Fittings / Accessories
		Type	Water reservoir cu.m.		
Aarida Cheikh Zennad Hay el Bahr Aabde	Well	Plastic	4		PVC
Tripoli - Al Mina Tripoli - Huqran Qalamoun Enfe - Nuhairy Enfe - Dabbaghah Enfe - Rmeilet Chekka Heri	Water Company Water Company	Plastic	0.5		PVC
Hamat - Roca Marina	Water Company Well	Plastic		Electrical	PVC / Filter
Selaata Batroun Kfar Aabida - Fadous Barbara Aamchit	Water Company	Plastic	2		PVC / Filter
Jbail Halat - Al Fidar Halat Aaqeibe	Water Company	Plastic	0.5		PVC
Bouar Safra	Water Company	Galvanized Steel	1		Galvanized Steel
Tabarja Jounieh - Kaslik Dbaiye	Water Company Water Company Water Company	Galvanized Steel Galvanized Steel Plastic	1 2 2		Galvanized Steel Galvanized Steel PVC
Jamil Gemayyel Dora Beirut - Ain el Mraisseh Beirut - Jal el Baher	Contractor Water Company	Plastic Plastic	2 1		PVC
Beirut - Manarah Beirut - Dalieh	Water Company Well	Plastic Plastic	4 2	Electrical	Galvanized Steel Galvanized Steel Filter
Jnah - Cote D'Azour Ouzaii Naame Jiye	Water Company	Plastic	2		PVC
Saida Zeereh	Water Company Water Company Well	Galvanized Steel Plastic	1 3		Galvanized Steel Galvanized Steel
Ain Qantara Mounis Sour Sour - Rest House Naqoura	Water Company Water Company	Galvanized Steel Plastic	1 3		Galvanized Steel Bronze

Table 59 Sewage disposal for Personal sanitary facilities (toilets) & fish handling areas (fish stalls) at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Toilets & washrooms	Septic Tank	Septic Tank Cleanup		Municipal sewer	Soakaway
			Contractor	Other		
Aarida						
Cheikh Zennad						
Hay el Bahr						
Aabde					X	
Tripoli - Al Mina						
Tripoli - Huqran						
Qalamoun						
Enfe -Nuhairy						
Enfe - Dabbaghah						
Enfe - Rmeilet						
Chekka					X	
Heri						
Hamat - Roca Marina	X				X	
Selaata						
Batroun						
Kfar Aabida -Fadous						
Barbara						
Aamchit						
Jbail	X	X		X	X	
Halat - Al Fidar						
Halat						
Aaqeibe	X					
Bouar	X	X		X		X
Safra						
Tabarja	X	X		X		X
Jounieh - Kaslik						
Dbaiye						
Jamil Gemayyel						
Dora						
Beirut - Ain el Mraisseh					X	
Beirut - Jal el Baher						
Beirut - Manarah						
Beirut - Dalieh						
Jnah - Cote D'Azour						
Ouzaii	X					
Naame						
Jiye						
Saida	X	X		X	X	
Zeereh	X					
Ain Qantara						
Mounis						
Sour	X					
Sour - Rest House						
Naqoura	X	X	X			

8.0 Fish hall for sorting, packing/selling and icing fish

8.1 Fish Stall/Auction: Table 60 shows that there were fish halls on-site at 16 ports/landing sites along the Lebanese coast. There were fish auctions at Dora, Ouzaii, and Saida Ports. The Aabde fish hall is not operational yet. There were fish auctions outside the major ports of Tripoli and Sour. Ten fish halls were constructed of concrete, while the rest were made of wood, metal or prefabricated.

8.2 Water Supply and Drainage Fourteen fish halls had freshwater water supply (Table 60). The drainage for five fish halls was through municipal sewers, six by means of soakaways/septic tank, and the rest drained there sewage effluent directly into the sea.

8.3 Cold Storage and Ice: seven fish halls were equipped with chill rooms/refrigerators and twelve with ice (Table 60). The ice format was mainly crushed. The ice source was ready-made crushed/blocks ice from commercial suppliers. No fish hall had iceboxes for sale to fishermen, processors, and households; thus, fishermen had to resort to buying such items from local vendors. Qalamoun, Saida, and Naqoura Ports were equipped with ice crusher.

9.0 Power Supply: Electricite du Liban (EDL) supplied electricity to 23 ports/landing sites (Table 61). Four ports had standby electrical generators, which were enough for the whole port in Jbail and Beirut-Dalieh Ports, for the fish auction at Ouzaii Port, and for the Syndicate building at Dora Port.

10.0 Storage: there were storage facilities at 11 ports/landing sites (Table 61). They were mostly concrete structures. The size of such storage facilities ranged between 16 and 65m². Seventeen ports had individual rooms for fishermen. The size of such rooms ranged between 4m² for Barbara Port and 25m² for Bouar Port.

11.0 Boat building/maintenance facility: some kind of such facilities were available at 22 sites (Table 61).

12.0 Fishermen Cooperative/Syndicates Facilities: there was a cooperative at each officially recognized port. There were syndicate facilities at five ports (Table 62). Only twenty ports/landing sites were equipped with communication equipment being terrestrial or cellular phones. No other type of communication equipment was available.

Table 60 Characteristics of Fish Hall/Auction at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Construction Material		Water source	Drainage	Cold Storage & Ice		Ice Format
	Walls	Roof			Chill Rooms/ Refrigerator	Ice	
Aarida Cheikh Zennad Hay el Bahr Aabde	Concrete	Other (brick)	Freshwater (well)	Sewer	N/A	N/A	N/A
Tripoli - Al Mina Tripoli - Huqran Qalamoun Enfe -Nuhairy Enfe - Dabbaghah Enfe - Rmeilet Chekka Heri Hamat - Roca Marina Selaata Batroun Kfar Aabida -Fadous Barbara Aamchit Jbail	Other	Metal	Freshwater	Into Sea	X	X	Crushed
Halat - Al Fidar Halat Aaqeibe Bouar	Wooden	Wooden	Freshwater	Sewer		X	Crushed
Safra Tabarja	Other	Other	Freshwater	Into Sea	X	X	Crushed
Jounieh - Kaslik Dbaiye	Concrete	Metal	Freshwater	Soakaway/ Septic Tank	X	X	Crushed
Jamil Gemayyel Dora	Concrete	Concrete	Freshwater	Into Sea			Crushed
Beirut - Ain el Mraisseh Beirut - Jal el Baher Beirut - Manarah Beirut - Dalieh	Concrete	Metal	Freshwater	Sewer		X	Crushed
Jnah - Cote D'Azour Ouzaii Naame Jiye	Wooden	Metal	Freshwater	Into Sea		X	Crushed
Saida Zeereh	Concrete	Concrete	Freshwater	Into Sea	X		Crushed
Ain Qantara Mounis Sour Sour - Rest House Naqoura	Metal	Metal	Freshwater	Into Sea		X	Crushed
	Metal	Metal	Freshwater	Into Sea		X	Crushed
	Concrete	Metal	Freshwater	Sewer		X	Crushed
	Metal	Metal	Freshwater	Into Sea		X	Blocks
	Concrete	Metal	Freshwater	Septic Tank	X		Crushed

Table 61 Power supply and storage facilities at Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Power supply		Storage		Individual rooms for fishermen		Boat building / maintenance facility
	EDL	Generator KVA	Size m2	Construction Material	Number	Size m2	
Aarida							
Cheikh Zennad							
Hay el Bahr							
Aabde	X				14	20	X
Tripoli - Al Mina							X
Tripoli - Huqran							
Qalamoun	X						X
Enfe -Nuhairy					17	9	X
Enfe - Dabbaghah							
Enfe - Rmeilet							
Chekka	X				7	10	X
Heri							
Hamat - Roca Marina	X						
Selaata							X
Batroun	X						X
Kfar Aabida -Fadous	X						X
Barbara	X				1	4	
Aamchit	X		18	Concrete			X
Jbail	X	1	48	Other			X
Halat - Al Fidar							
Halat							
Aaqeibe	X				5	4.5	X
Bouar	X				7	25	X
Safra							
Tabarja	X				5	24	X
Jounieh - Kaslik	X		16	Concrete	5	18	X
Dbaiye	X				4	8	X
Jamil Gemayyel							
Dora	X	1	20'	Container	35	4	
Beirut - Ain el Mraisseh	X				14	4	X
Beirut - Jal el Baher					1	4	
Beirut - Manarah	X		24	Concrete	37	6	X
Beirut - Dalieh	X	10	20	Concrete	5	5	X
Jnah - Cote D'Azour							
Ouzaii	X	2.4	20	Concrete			X
Naame							
Jiye							
Saida	X		65	Concrete	20	15	X
Zeereh	X		16	Metal			X
Ain Qantara							
Mounis							
Sour	X		N/A	Concrete	24	5	X
Sour - Rest House							
Naqoura	X		36	Concrete			

Table 62 Fishermen Cooperative and Syndicate Facilities at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Cooperative Facilities	Syndicate Facilities	Communication Equipment
Aarida			
Cheikh Zennad			
Hay el Bahr	X		
Aabde	X		
Tripoli - Al Mina	X	X	
Tripoli - Huqran			
Qalamoun	X		
Enfe - Nuhairy	X		
Enfe - Dabbaghah	X		
Enfe - Rmeilet	X		
Chekka	X		
Heri			
Hamat - Roca Marina			X
Selaata			
Batroun	X		X
Kfar Aabida - Fadous	X		
Barbara			
Aamchit	X		X
Jbail	X		X
Halat - Al Fidar			
Halat			
Aaqeibe	X		X
Bouar	X		X
Safra			
Tabarja	X		X
Jounieh - Kaslik	X		X
Dbaiye	X		X
Jamil Gemayyel			
Dora	X	X	X
Beirut - Ain el Mraisseh	X		X
Beirut - Jal el Baher			
Beirut - Manarah	X		X
Beirut - Dalieh	X		X
Jnah - Cote D'Azour	X		X
Ouzaii	X	X	X
Naame			
Jiye	X		X
Saida	X	X	X
Zeereh	X		X
Ain Qantara			X
Mounis	X		X
Sour	X	X	X
Sour - Rest House			
Naqoura	X		X

13.0 Other Facilities

13.1 Fishermen's net store: six ports/landing sites had such facility on site or in a nearby area (Table 63).

13.2 Engine Spare Parts: only two sites had such a facility (Table 63).

13.3 Recreation/Food facility: five ports/landing sites had such facilities (Table 63).

13.4 Flat Area for Net Repair: many ports/landing sites (25) had such an area (Table 63).

13.5 Parking Area: 24 ports had a parking area. The capacity of such parking area ranged between five vehicles for Enfe-Rmeilet Landing Site to 300 vehicles at Dora Port (Table 63).

13.6 Asphalted/Paved Roads: Twenty-seven ports/landing sites had internal roads while most (34) had direct access to public road network (Table 63).

14.0 Safety

14.1 Civil Defense Post: seventeen ports/landing sites had on-site or close by civil defense posts (Table 64).

14.2 Medical Emergency: no ports/landing sites had a medical emergency facility (Table 64). Such facilities were available outside the ports. Their proximity to those ports/landing sites ranged from 0.5 km for Beirut City ports to more than 15 km for Cheikh Zennad Landing Site or even outside Lebanon such as in Syria for Aarida fishermen.

15.0 Security

15.1 Fence: eight ports had a security fence while 14 ports/landing sites had a gate/entrance (Table 65).

15.2 Posts for security Forces:

15.2.1 Police Station: only two ports/landing sites had a police station in their immediate vicinity (Table 65).

15.2.2 Army Post: there was an army post at 24 ports/landing sites (Table 65).

15.2.3 Army Intelligence Post: 23 ports/landing sites had an army intelligence post on site. These could be in conjunction with the army posts mentioned in 15.2.2 above (Table 65).

15.2.4 General Security Post: there was a General Security post at only two ports (Table 65).

Table 63 Other Facilities available at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Net store	Engine spares	Recreation/ Food facilities	Flat area for net repair	Parking capacity	Asphalted/Paved Roads	
						Internal	Access to Public Road Network
Aarida							X
Cheikh Zennad							
Hay el Bahr							
Aabde				X	100	X	X
Tripoli - Al Mina	X	X		X		X	X
Tripoli - Huqran				X			
Qalamoun					50	X	X
Enfe -Nuhairy				X	10	X	X
Enfe - Dabbaghah							
Enfe - Rmeilet					5		X
Chekka				X		X	X
Heri							
Hamat - Roca Marina		X	X	X	50	X	X
Selaata				X		X	X
Batroun				X	40	X	X
Kfar Aabida -Fadous						X	X
Barbara					40		X
Aamchit				X	15	X	X
Jbail			X	X	50	X	X
Halat - Al Fidar					5		X
Halat							X
Aaqeibe				X	50	X	X
Bouar				X	50	X	X
Safra							
Tabarja				X	20	X	X
Jounieh - Kaslik				X		X	X
Dbaiye				X	100	X	X
Jamil Gemayyel				X		X	X
Dora	X		X	X	300	X	X
Beirut - Ain el Mraisseh				X		X	
Beirut - Jal el Baher							
Beirut - Manarah				X		X	X
Beirut - Dalieh				X	50	X	
Jnah - Cote D'Azour							
Ouzaii			X	X		X	X
Naname							X
Jiye							X
Saida	X			X		X	X
Zeereh	X			X	100	X	X
Ain Qantara	X						X
Mounis				X	30	X	X
Sour	X		X	X	30		X
Sour - Rest House						X	X
Naqoura					40	X	X

Table 64 Civil Defense and Medical Emergency Centers available to Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Civil Defense Post	Medical Emergency Center		
		Availability	Proximity to Port km	Name of Center
Aarida				In Syria
Cheikh Zennad			17	Nahr Bard Palestinian Refugees Camp
Hay el Bahr	X		1	Tal Hayat Medical Center
Aabde			3	Nahr Bard Palestinian Refugees Camp
Tripoli - Al Mina	X	X	4	Islamic Hospital
Tripoli - Huqran	X	X	4	Islamic Hospital
Qalamoun		X	10	Albert Haykal Hospital
Enfe - Nuhairey		X	10	Haykaliyeh Hospital/ Batroun Hospital
Enfe - Dabbaghah		X	10	Haykaliyeh Hospital (Tripoli)
Enfe - Rmeilet		X	10	Haykaliyeh Hospital (Tripoli)
Chekka		X	5	Batroun Hospital
Heri			15	Haykaliyeh Hospital (Tripoli)
Hamat - Roca Marina		X	15	Haykaliyeh Hospital (Tripoli)
Selaata	X	X	3	Batroun Hospital
Batroun	X	X	1	Batroun Hospital
Kfar Aabida - Fadous		X	5	Batroun Hospital
Barbara		X	10	Sayidat Al-Maounat Hospital (Jbail)
Aamchit	X	X	3	Sayidat Al-Maounat Hospital (Jbail)
Jbail	X	X	2	Saint Martin Hospital (Jbail)
Halat - Al Fidar				
Halat				
Aaqeibe	X	X	6	Sayidat Al-Maounat Hospital -Jbail
Bouar	X	X	10	Saiyidet Lubnan Hospital (Jounieh)
Safra				
Tabarja	X	X	3	Saint Louis Hospital (Jounieh)
Jounieh - Kaslik	X	X	0.5	Saiyidet Lubnan Hospital (Jounieh)
Dbaiye		X	5	Abou Jawdeh - Jal El-Dib
Jamil Gemayyel				
Dora	X	X	3	Mar Youssef Hospital
Beirut - Ain el Mraisseh		X	0.5	American University Hospital
Beirut - Jal el Baher		X	2	American University Hospital
Beirut - Manarah		X	3	American University Hospital
Beirut - Dalieh		X	1	Al-Makased Hospital
Jnah - Cote D'Azour		X	5	Rasoul Al-Aazam Hospital
Ouzaii	X	X	4	Rasoul Al-Aazam Hospital Al-Zahra' Hospital
Naame			5	Dispensary in town
Jiye	X	X	2	Jiye Hospital
Saida	X	X	1.5	Hamoud Hospital/ Abou Dahr Hospital
Zeereh		X	4	Aladdin Hospital/ Kharoubi Hospital
Ain Qantara	X	X	2	Aladdin Hospital/ Kharoubi Hospital
Mounis		X	4	Aladdin Hospital/ Kharoubi Hospital
Sour	X	X	3	Governmental Hospital
Sour - Rest House		X	3	Najem Hospital
Naqoura		X	0.75	UNIFIL Medical Center

Table 65 Security facilities available at Lebanese Coastal Fishing Ports/Landing Sites

Name of Port / Landing site	Fencing		Post for Security Forces			
	Fence	Gate/Entrance	Police	Army	Army Intelligence	General Security
Aarida			X	X	X	
Cheikh Zennad				X		
Hay el Bahr				X		
Aabde		X		X	X	
Tripoli - Al Mina			X	X		
Tripoli - Huqran				X		
Qalamoun				X		
Enfe -Nuhairy				X	X	
Enfe - Dabbaghah						
Enfe - Rmeilet						
Chekka	X	X		X	X	
Heri						
Hamat - Roca Marina	X	X				
Selaata	X	X		X	X	
Batroun				X		
Kfar Aabida -Fadous				X		
Barbara				X		
Aamchit					X	
Jbail				X	X	
Halat - Al Fidar						
Halat						
Aaqeibe		X		X	X	
Bouar					X	
Safra						
Tabarja		X		X	X	
Jounieh - Kaslik	X	X		X	X	
Dbaiye					X	
Jamil Gemayyel	X	X		X	X	
Dora		X		X	X	
Beirut - Ain el Mraisseh		X				
Beirut - Jal el Baher						
Beirut - Manarah	X	X		X	X	
Beirut - Dalieh					X	
Jnah - Cote D'Azour						
Ouzaii	X	X		X	X	
Naame						
Jiye						
Saida		X		X	X	X
Zeereh				X	X	
Ain Qantara					X	
Mounis					X	
Sour					X	X
Sour - Rest House	X	X				
Naqoura				X	X	

Problems encountered

- Most recorders were not familiar with fisheries. The three days training was not enough. Many mistakes happened that required lots of time to correct.
- Many recorders had no cellphones, thus if they faced a problem, at a port, they could not get immediate assistance.
- Some recorders/field supervisors were not well motivated; thus filling/checking the questionnaires was not thorough, which eventually required lots of time to contact the vessel owners to do the necessary amendments.
- Some recorders did not promptly spray the surveyed vessels with the Census logo, because it was cumbersome and will dirty there hands, thus they used to do that at the end of the day, after few days, or forget all about it. This could be the reason why several boats were not stamped. Moreover, several vessel owners refused to spray there boats since that was not compulsory.
- For some recorders it was only a quick job or a race for extra income that made them attempt to fill as many questionnaires as possible. Yet, the number of double entries was not high and it did not exceed 50 questionnaires; however, the quality of some filled questionnaire was compromised.
- Despite the clear instructions, several recorders seem to have told fishermen that FAO is conducting a census (probably for eventual distribution of grants!). This explains why many came forward to fill the questionnaires; even they came in person or called the DFW HQ, to the extent that several (about 20) knowingly filled two questionnaires through different recorders.
- Although staff had proper credentials, yet the security forces did not always allow them to carry on there job until they obtained clearances from there superiors. No major problems were recorded.
- The handwriting was not very legible in many instances resulting in undue delays.
- No standard way for writing several items e.g. names of people, engine manufacturers, town names, etc. this resulted in lengthy re-editing of those items.
- Inability to finalize the software delayed data entry, which in turn delayed data merger until after the summer of 2005.
- The local project staff was not very computer (Microsoft Excel, Word packages) competent, which resulted in lengthy delays and mistakes.
- Due to the nature of the software, data extraction was not straightforward and required considerable time to do so particularly the remarks section.

Conclusions & Recommendations

The surveys undertaken were conducted in a professional manner. Results confirmed the nature of the fleet that is artisanal and barely capable of coastal fishing from ports, which lack many of the basic requirements for safe navigation and harbor.

Part of the team that did the job, should become the nucleus for further fisheries statistics. The endeavor should be looked at as a dynamic process rather than an isolated incident that was conducted because the funds were there. Thus, it is recommended that an “official” fisheries statistical entity be established to carry on the work in the future. Furthermore, the system developed and the Vessel Register should also be a dynamic process and be continuously updated; either as part of annual routine check i.e. when fishermen apply for fishing license or through quality checks.

The system should be built on to eventually, after all regional offices become computerized, issue fishing licenses and update the Register.

The data collected could be launching pad for further work namely through conducting socio-economic surveys to form a full picture of this sector. All stakeholders e.g. scientific community, concerned ministries, NGOs, etc. should be welcomed to use and further analyze the data to help in formulating strategies on developing and improving the fisheries sector in Lebanon.

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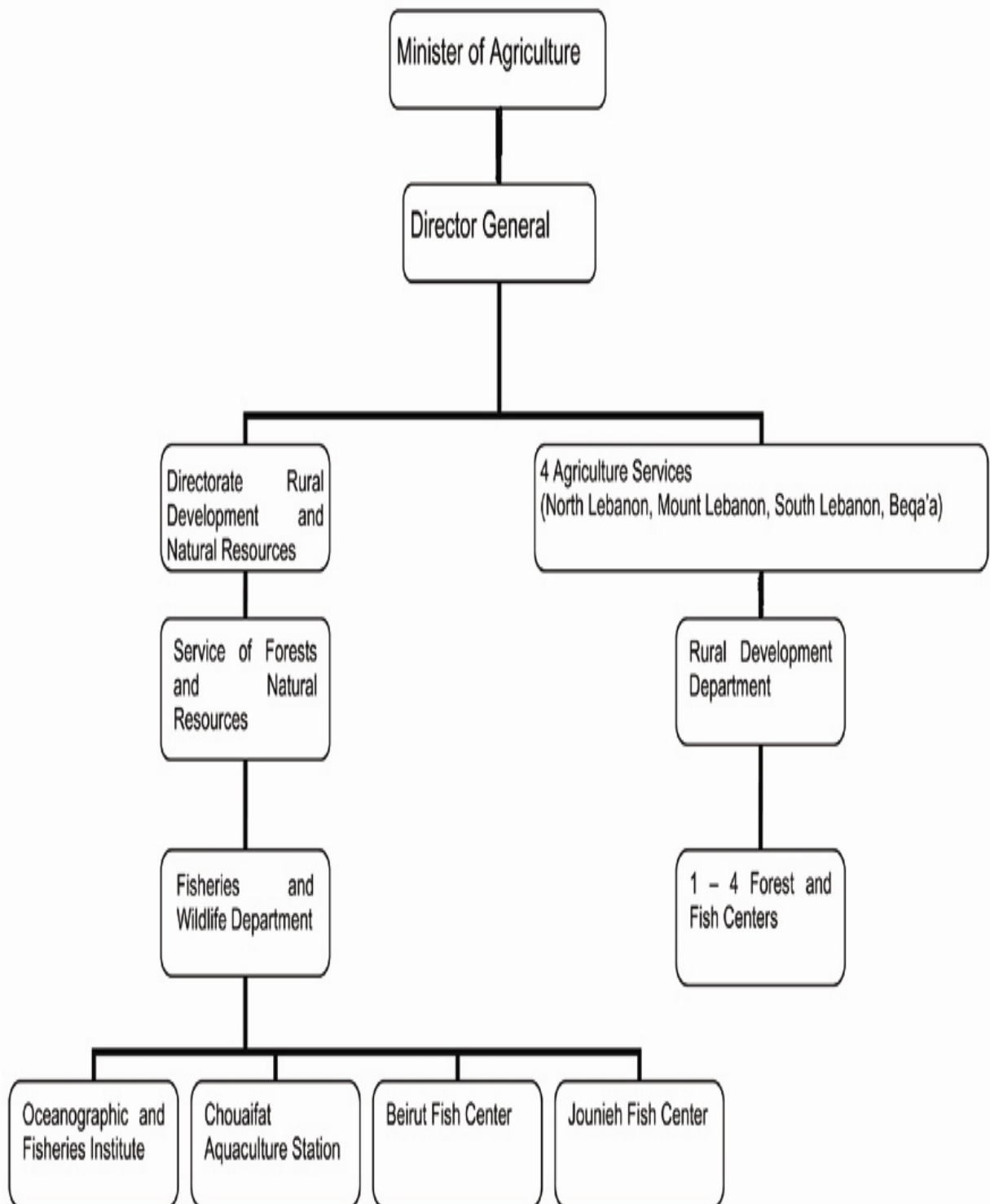
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Appendix 1 Fisheries Administrative Structure within Ministry of Agriculture



Appendix 2 Fishing Vessels Questionnaire



اسم المركب

الجمهورية اللبنانية

THE LEBANESE REPUBLIC



MedFisis
Fishery Statistics and
Information System in
the Mediterranean



The Census Questionnaire

استمارة الإحصاء

وزارة الزراعة
مديرية التنمية الريفية والثروات الطبيعية
مصلحة الاحراج والثروة الطبيعية
دائرة الصيد المائي والبري

MINISTRY OF AGRICULTURE
Directorate of rural Development & Natural Resources
Division of Forests & Natural Resource
Department of Fisheries & Wild Life

Marine Fishing Vessels Census 2004

مسح سفن الصيد البحري

Recorder name: _____ اسم الباحث	Code: _____ الرمز		
Date: ___ / ___ / ___ (dd/MM/yyyy) السنة الشهر اليوم التاريخ			
Recording Serial: _____ رقم التسجيل المتسلسل	Recording place: _____ مكان المقابلة		
Supervisor: _____ المراقب	Approval: _____ الموافقة	Date: ___ / ___ / ___ التاريخ	
Re-Interviewing إعادة المقابلة			
By: _____ بواسطة	Date: ___ / ___ / ___ التاريخ	Approval: _____ الموافقة	Date: ___ / ___ / ___ التاريخ

1. Fishing vessel characteristics

مواصفات زورق الصيد

		TABLE جدول
1.1	Registration (Matriculation) No رقم التسجيل	---
1.2	Registration (Matriculation) port مرفأ الارتباط	1.2
	<input type="checkbox"/> Beirut بيروت <input type="checkbox"/> Chekka شكا <input type="checkbox"/> Jbail جبيل <input type="checkbox"/> Jounieh جونيه <input type="checkbox"/> Saida صيدا <input type="checkbox"/> Sour صور <input type="checkbox"/> Tripoli طرابلس	
1.3	Flag العلم	1.3
	<input type="checkbox"/> Lebanon لبنان <input type="checkbox"/> Other: غيره _____	
1.4	Deed registration date تاريخ تسجيل سند التملك البحري	---
	____/____/____ (dd/mm/yyyy) السنة الشهر اليوم	
1.5	Vessel name اسم الزورق	---
1.6	Vessel type فئة الزورق	1.6
	<input type="checkbox"/> Purse seiners زورق التحويق <input type="checkbox"/> Seiners Other زورق السينية الأخرى <input type="checkbox"/> Trawlers سفن الترول <input type="checkbox"/> Gill netter زورق الشباك المبطنة <input type="checkbox"/> Trap Setters زورق الافخاخ <input type="checkbox"/> Long liners زورق الجرجارة <input type="checkbox"/> Liners other زورق الخيوط الأخرى <input type="checkbox"/> Multipurpose السفن المتعددة الاستعمالات <input type="checkbox"/> Other fishing vessels زورق الصيد الأخرى <input type="checkbox"/> Oars مجاديف <input type="checkbox"/> Unknown مجهول	
1.7	Operational status الوضع العملائي (One only) (واحد فقط)	1.7
	<input type="checkbox"/> Operational يعمل <input type="checkbox"/> Other غيره <input type="checkbox"/> Non operational لا يعمل <input type="checkbox"/> Unknown مجهول	
1.7.1	Non activity reason سبب عدم العمل	1.7.1
	<input type="checkbox"/> Vessel or engine repairs صيانة الزورق أو المحرك <input type="checkbox"/> Damage أضرار <input type="checkbox"/> Laid up مرفوع <input type="checkbox"/> Document out of order مستندات الزورق غير صالحة <input type="checkbox"/> Sequestered (e.g. by foreign country) محجوز <input type="checkbox"/> Strike إضراب <input type="checkbox"/> Temporary fishing inactivity عدم الصيد مؤقتا <input type="checkbox"/> Abandoned (but not laid up) مهجور (لكن غير مرفوع) <input type="checkbox"/> Bad weather طقس سيء <input type="checkbox"/> Temporary holiday inactivity عطلة/عيد <input type="checkbox"/> Gear repair (fishing gears) إصلاح معدات الصيد <input type="checkbox"/> Other cause أسباب أخرى <input type="checkbox"/> Unknown مجهول	
1.8	Home port مرفأ الأساس/الانطلاق/القاعدة	1.8
1.9	Navigation license No. رقم رخصة الملاحة	---
1.9.1	Navigation license port مرفأ رخصة الملاحة	1.2
1.10	REMARKS: ملاحظات:	

2. Fishing authorization

ترخيص الصيد

		TABLE جدول
2.1.1	Marine Fishing License No. رقم رخصة صيد الأسماك البحرية	---
2.1.2	Marine Fishing License date of issue تاريخ إصدار رخصة صيد الأسماك البحرية	---
	____/____/____ (dd/mm/yyyy) السنة الشهر اليوم	
2.1.3	Valid for the year صالحة لسنة	---
2.2.1	Fishing gear شباك الصيد المرخصة	
	Rank Fishing Gear شباك الصيد المرخصة	
	Beach seine جاروفة بر	
	Tarmmel مبطن	
	Purse seine شباك تحويق	
	Gillnet بشلولة	

		افقاص	Trap
		شرك	Set longline
		جرجارة	Drift longline
		بولص	Handline
		بارودة	Speargun
		الرمز	Other: _____ Code: _ _ _ _ _ غيره
		الرمز	Other: _____ Code: _ _ _ _ _ غيره
		الرمز	Other: _____ Code: _ _ _ _ _ غيره
		الرمز	Other: _____ Code: _ _ _ _ _ غيره
2.3	REMARKS:	ملاحظات:	

3. Structural characteristics

الخصائص الإنشائية / البنيوية

			TABLE جدول
3.1	<u>Overall length (m.)</u>	<u>الطول الكلي (م)</u>	---
3.2	Width (m.)	العرض (م)	---
3.3	Depth (<i>creux</i>) (m)	العمق (القعر) (م)	---
3.4.1	Shipyards	اسم حوض بناء السفن	---
3.4.2	Builder's name	اسم الصانع	---
3.4.3	Construction place of the vessel	مكان إنشاء الزورق	---
3.5	Construction country of the vessel	دولة إنشاء الزورق	1.3
		<input type="checkbox"/> Lebanon لبنان <input type="checkbox"/> Other: _____ غيره	
3.6	Construction year of the vessel	سنة إنشاء الزورق	---
3.7	Hull material	مواد صنع بدن الزورق	3,7
		<input type="checkbox"/> Wood خشب <input type="checkbox"/> Rubber مطاط <input type="checkbox"/> Marine plywood معاكس <input type="checkbox"/> Cement اسمنت <input type="checkbox"/> Aluminum ألومنيوم <input type="checkbox"/> Plastic بلاستيك <input type="checkbox"/> Iron/Steel حديد/فولاذ <input type="checkbox"/> Other غيره <input type="checkbox"/> Fiberglass فايبرغلاس <input type="checkbox"/> Unknown مجهول <input type="checkbox"/> Wood/fiber خشب/ فايبرغلاس <input type="checkbox"/> Wood/iron خشب/حديد	
3.8	Year of entry in fishery	عام الدخول إلى الصيد	
3.9	<u>GRT (Gross Registered Tonnage)</u>	<u>الوزن الإجمالي المسجل</u>	---
3.9.1	NRT (Net Registered)	الوزن الصافي المسجل	---
3.10	GT (Gross Tonnage)	الوزن الإجمالي	---
3.11	<u>Decked</u>	<u>ظهر الزورق</u>	---
		<input type="checkbox"/> Yes نعم <input type="checkbox"/> No كلا	
3.12	REMARKS:	ملاحظات:	---

4. Engine المحركات

Engine (1)

المحرك الأول (1)

			TABLE جدول
4.1	Model	الطراز	---
4.2	Manufacturer	اسم الصانع	---
4.3	Inboard/Outboard	داخلي / معلق (شكل)	--
		<input type="checkbox"/> Inboard داخلي <input type="checkbox"/> Outboard خارجي (شكل)	
4.4	<u>Power</u>	<u>القوة</u>	---
		_____ HP حصان	
4.5	Energy Source	مصدر الطاقة (الوقود)	4.4
		<input type="checkbox"/> Diesel ديزل <input type="checkbox"/> Petrol/gasoline بنزين <input type="checkbox"/> Petrol/ gasoline mixed with oil مزيج بنزين وزيت <input type="checkbox"/> Electricity (generated on board) كهرباء (مولدة على الزورق) <input type="checkbox"/> Petrolueum بترول <input type="checkbox"/> Other غيره <input type="checkbox"/> Unknown مجهول	

4.6	Construction country of the engine دولة إنشاء المحرك	<input type="checkbox"/> Japan اليابان <input type="checkbox"/> Germany ألمانيا <input type="checkbox"/> Other غيره : _____	<input type="checkbox"/> UK بريطانيا <input type="checkbox"/> USA الولايات المتحدة الأمريكية	1.3
4.7	Construction year of the engine سنة إنشاء المحرك			
4.8	Number of Helices عدد الرفاصات			---
4.9	Number of Cylinders عدد السلندرات			---
4.10	RPM عدد الدورات			---
4.7	REMARKS: ملاحظات:			

Engine (2) المحرك الثاني (٢)

TABLE
جدول

4.1	Model الطراز			---
4.2	Manufacturer اسم الصانع			---
4.3	Inboard/Outboard داخلي/بعيدا عن وسط المركب	<input type="checkbox"/> Inboard داخلي	<input type="checkbox"/> Outboard (شكل) خارجي	--
4.4	Power القوة	حصان HP _____		---
4.5	Energy Source مصدر الطاقة (الوقود)	<input type="checkbox"/> Diesel ديزل <input type="checkbox"/> Petrol/ gasoline بنزين <input type="checkbox"/> Petrol/ gasoline mixed with oil مزيج بنزين وزيت <input type="checkbox"/> Electricity (generated on board) كهرباء (مولدة على الزورق) <input type="checkbox"/> Petrolueum بترول <input type="checkbox"/> Other غيره _____	<input type="checkbox"/> Unknown مجهول	4.4
4.6	Construction country of the engine دولة إنشاء المحرك	<input type="checkbox"/> Japan اليابان <input type="checkbox"/> Germany ألمانيا <input type="checkbox"/> Other غيره : _____	<input type="checkbox"/> UK بريطانيا <input type="checkbox"/> USA الولايات المتحدة الأمريكية	1.3
4.7	Construction year of the engine سنة إنشاء المحرك			---
4.8	Number of Helices عدد الرفاصات			---
4.9	Number of Cylinders عدد السلندرات			---
4.10	RPM عدد الدورات			---
4.11	REMARKS: ملاحظات:			

5. Electronic equipment الأجهزة الالكترونية

5.1 Navigation equipment أجهزة الملاحة

TABLE
جدول

5.1.1.1	Navigation equipment (1) جهاز الملاحة (١)	<input type="checkbox"/> No navigation equipment	لا يوجد أجهزة ملاحة	5.1.1.1
		<input type="checkbox"/> Loran C	لوران C	
		<input type="checkbox"/> Loran A	لوران A	
		<input type="checkbox"/> Omega	اوميغا	
		<input type="checkbox"/> Decca	ديكا	
		<input type="checkbox"/> GPS (Satellite navigation)	جي بي اس	
		<input type="checkbox"/> Radar	رادار	
		<input type="checkbox"/> Direction finder	محدد الاتجاه	
		<input type="checkbox"/> Automatic pilot	ملاح أوتوماتيكي	
		<input type="checkbox"/> Meteorological map receiver	لاقط لخرائط الطقس	
		<input type="checkbox"/> Gyrocompass	بوصلة دوارة	
<input type="checkbox"/> Other	غيرها			
<input type="checkbox"/> Unknown	مجهول			
5.1.1.2	Year of purchase (1) عام الشراء (١)			---
5.1.2.1	Navigation equipment (2) جهاز الملاحة (٢)	Name اسم الجهاز		5.1.1.1
5.1.2.2	Year of purchase (2) عام الشراء (٢)			---
5.1.3.1	Navigation equipment (3) جهاز الملاحة (٣)	Name اسم الجهاز		5.1.1.1

5.1.3.2	Year of purchase (3)	عام الشراء (٣)		---
5.1.4.1	Navigation equipment (4)	جهاز الملاحة (٤)	Name اسم الجهاز	5.1.1.1
5.1.4.2	Year of purchase (4)	عام الشراء (٤)		---
5.1.5.1	Other equipment	أجهزة أخرى	Name اسم الجهاز	---
5.1.5.2	Year of purchase	عام الشراء		---

5.2 Communication equipment أجهزة الاتصال

				TABLE جدول	
5.2.1.1	Communication apparatus (1)	جهاز الاتصال (1)	<input type="checkbox"/> Radio VHF	جهاز لاسلكي	5.2.1.1
			<input type="checkbox"/> Radio telephone	تلفون لاسلكي	
			<input type="checkbox"/> Cellular phone	تلفون خلوي	
			<input type="checkbox"/> Fax	فاكس	
			<input type="checkbox"/> Satellite radio	جهاز لاسلكي بواسطة الأقمار الاصطناعية	
			<input type="checkbox"/> Telegraph	تلفراف	
			<input type="checkbox"/> Other	غيره	
			<input type="checkbox"/> Unknown	مجهول	
5.2.1.2	Year of purchase (1)	عام الشراء (1)		---	
5.2.2.1	Communication apparatus (2)	جهاز الاتصال (2)		5.2.1.1	
5.2.2.2	Year of purchase (2)	عام الشراء (2)		---	
5.2.3.1	Communication apparatus (3)	جهاز الاتصال (3)		5.2.1.1	
5.2.3.2	Year of purchase (3)	عام الشراء (3)		---	
5.2.4.1	Other equipment	أجهزة أخرى		---	
5.2.4.2	Year of purchase	عام الشراء		---	
5.2.5	Radio call sign	رمز النداء اللاسلكي		---	

5.3 Fish Finder كاشف الأسماك

				TABLE جدول	
5.3.1.1	Finder apparatus (1)	جهاز التحديد (1)	<input type="checkbox"/> Echo Sounder	<input type="checkbox"/> Net Sond	5.3.1.1
			مرجع الصدى (ايكو ساوندر)	نيت سوند	
			<input type="checkbox"/> Sonar	<input type="checkbox"/> Other	<input type="checkbox"/> Unknown
5.3.1.2	Year of purchase (1)	عام الشراء (1)		---	
5.3.2.1	Finder apparatus (2)	جهاز التحديد (2)		5.3.1.1	
5.3.2.2	Year of purchase (2)	عام الشراء (2)		---	
5.3.3.1	Finder apparatus (3)	جهاز التحديد (3)		5.3.1.1	
5.3.3.2	Year of purchase (3)	عام الشراء (3)		---	
5.3.4.1	Other finder	أجهزة تحديد أخرى		---	
5.3.4.2	Year of purchase	عام الشراء		---	
5.4	REMARKS	ملاحظات:			

6. Deck machinery معدات ظهر المركب

				TABLE جدول
6.1	Method of activating the fishing gear <u>طريقة تشغيل معدات الصيد</u>	<input type="checkbox"/> Manual	يدوي	6.1
		<input type="checkbox"/> Automatic	أوتوماتيكي	
		<input type="checkbox"/> Automatic -Mechanical	أوتوماتيكي - ميكانيكي	
		<input type="checkbox"/> Automatic -Hydraulic	أوتوماتيكي - هيدروليكي	
		<input type="checkbox"/> Automatic -Electric	أوتوماتيكي - كهربائي	
		<input type="checkbox"/> Automatic -Belts	أوتوماتيكي - أحزمة	
		<input type="checkbox"/> Semi-Automatic	نصف أوتوماتيكي	
		<input type="checkbox"/> Semiautomatic -Mechanical	نصف أوتوماتيكي - ميكانيكي	
		<input type="checkbox"/> Semiautomatic -Hydraulic	نصف أوتوماتيكي - هيدروليكي	
		<input type="checkbox"/> Semiautomatic -Electric	نصف أوتوماتيكي - كهربائي	
		<input type="checkbox"/> Semiautomatic -Belts	نصف أوتوماتيكي - أحزمة	
		<input type="checkbox"/> Not Present	غير موجود	
		<input type="checkbox"/> Other	غيره	
<input type="checkbox"/> Unknown	مجهول			
6.2.1	Number of line winch عدد ونشات الجرجارة/الشرك			---
6.2.2	Line winch operated by ونش الجرجارة/الشرك يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.3.1	Number of net winch عدد ونشات الشباك			---
6.3.2	Net winch operated by ونش الشباك يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.4.1	Number of trammel winch عدد ونشات الشباك المبطنة			---
6.4.2	Trammel winch operated by ونش الشباك المبطنة يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.5.1	Number of power block عدد ونشات الشنتيلا			---
6.5.2	Power block operated by ونش الشنتيلا يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.6.1	Other (1) غيره (١):			---
6.6.2	Number العدد			---
6.6.3	Other (1): operated by غيره (١) يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.7.1	Other (2) غيره (٢)			---
6.7.2	Number العدد			---
6.7.3	Other (2): operated by غيره (٢) يشغل بواسطة	<input type="checkbox"/> Not present غير موجود <input type="checkbox"/> Mechanical ميكانيكية <input type="checkbox"/> Hydraulic هيدروليكية <input type="checkbox"/> Electric كهربائية	<input type="checkbox"/> Belts أحزمة <input type="checkbox"/> Other غيرها <input type="checkbox"/> Unknown مجهول	6.2
6.8	REMARKS ملاحظات			

7. Ownership الملكية

				TABLE جدول
7.1.1	Company type	نوع الشركة	<input type="checkbox"/> National Private وطنية خاصة <input type="checkbox"/> Others غيرهم	7.1.1
7.1.2	Company name	اسم الشركة		---
7.1.3	Company establishment Year	عام إنشاء الشركة		---
7.1.4	Company address	عنوان الشركة		---
7.1.5	Company postal code	الرمز البريدي للشركة		---
7.1.6	Company town	مدينة الشركة		---
7.1.7	Company country	دولة الشركة	<input type="checkbox"/> Lebanon لبنان <input type="checkbox"/> Other : غيره	1.3
7.2.1	Owner's Name	اسم المالك/المالكون		---
7.2.1.1	Total number of owners	عدد المالكين		---
7.2.2	Operated by	مشغل المركب	<input type="checkbox"/> Owner المالك <input type="checkbox"/> Operator المشغل <input type="checkbox"/> Other غيره <input type="checkbox"/> Unknown مجهول	7.2.2
7.2.2.1	Skipper 's Name	اسم رئيس المركب (الرئيس)		---
7.2.2.1.1	Fisherman passport number	رقم تذكرة صياد بحري		---
7.2.3	Owner's year of birth	عام ميلاد المالك/الرئيس		---
7.2.4	Owner's address	عنوان المالك/الرئيس		---
7.2.5	Owner's address postal code	الرمز البريدي للمالك/الرئيس		---
7.2.6	Owner's town of residence	بلدة سكن المالك/الرئيس		---
7.2.7	Owner's country of residence	دولة سكن المالك/الرئيس	<input type="checkbox"/> Lebanon لبنان <input type="checkbox"/> Other : غيره	1.3
7.2.8	Owner's Telephone	رقم تلفون المالك/الرئيس		---
7.2.9	Owner's Mobile phone	رقم هاتف الخليوي للمالك/الرئيس		---
7.3	REMARKS	ملاحظات		

8. Crew البحارة

				TABLE جدول
8.1	Minimum number	العدد الأدنى		---
8.2	Maximum number	العدد الأكبر		---
8.3	Usual number of crew (all)	العدد المعتاد للبحارة (العدد الكلي)		---
8.4.1	Usual number of crew non-Lebanese	العدد المعتاد للبحارة الغير لبنانيين		---
8.4.2	Nationality	الجنسية (جنسيات)		---
8.4	REMARKS	ملاحظات		

9. Ports of operation مرافئ العمل

				TABLE جدول
9.1.1	Port period 1	مرافئ الفترة ١		1.8
9.1.2	Period 1	الفترة ١	___ / ___ (mm/mm) (شهر/شهر)	---
9.2.1	Port period 2	مرافئ الفترة ٢		1.8
9.2.2	Period 2	فترة ٢	___ / ___ (mm/mm) (شهر/شهر)	---

10. Fishing operations عمليات الصيد

عدة صيد الأسماك المستعملة <i>Gears used</i>	الشهر <i>Months</i> (الرجاء وضع دائرة حول الفترات) (<i>Encircle periods</i>)	منطقة الصيد <i>Fishing Zone</i>				عدد الطلعات في الشهر <i>Number of sorties per month</i>	الأسماك المستهدفة <i>Targeted species</i>
		<3 اميال mile	3-6 اميال mile	6-12 اميال mile	>12 اميال mile		
Beach seine جاروفة بر	1 2 3 4 5 6 7 8 9 10 11 12						
Trammel ميطن	1 2 3 4 5 6 7 8 9 10 11 12						
Purse seine شباك تحويق	1 2 3 4 5 6 7 8 9 10 11 12						
Gillnet بشلولة	1 2 3 4 5 6 7 8 9 10 11 12						
Trap اقفاص	1 2 3 4 5 6 7 8 9 10 11 12						
Set Logline شرك	1 2 3 4 5 6 7 8 9 10 11 12						
Drifting Longline جرجارة	1 2 3 4 5 6 7 8 9 10 11 12						
Handline بولص	1 2 3 4 5 6 7 8 9 10 11 12						
Speargun بارودة	1 2 3 4 5 6 7 8 9 10 11 12						
Other غيرها	1 2 3 4 5 6 7 8 9 10 11 12						
Other غيرها	1 2 3 4 5 6 7 8 9 10 11 12						
Other غيرها	1 2 3 4 5 6 7 8 9 10 11 12						

Targeted Species

الأسماك المستهدفة

- A. Small gregarious pelagic (e.g. anchovies, sardines, mackerel)
 B. Large pelagic (e.g. tunas, amberjacks)
 C. Demersal inshore species, mainly of hard sub-stratum (e.g., sea-bream)
 D. Demersal offshore species, mainly of soft sub-stratum (e.g. codfish)
 E. Sessile organisms (e.g., clams, mussels, warty venus)
 F. Special fish, monospecies and similar (e.g., lobsters, red porgy)
 G. *Coryphaena hippurus* (Lampuki)
 H. Octopus
 I. Other
 J. Unknown

- A. الأسماك البيلاجية (السطحية) الصغيرة التي تعيش في مجموعات (مثل الاتشوا، سردين، ومكاريل، بوريات)
 B. الأسماك البيلاجية (السطحية) الكبيرة (مثل التونا، البلاميدا، غزال، انتياس، كلب بحر، باراكودا)
 C. الأسماك القاعية القريبة من الشاطئ، عادة في الطبقات القاسية (مثل الفريديات، سلطانيات، مبرد)
 D. الأسماك القاعية البعيدة من الشاطئ، عادة في الطبقات الطرية (مثل سمكة القد، لقزيات، بصاص، بحلق)
 E. المخلوقات الثابتة (مثل الصدف، بلح البحر)
 F. اسماك خاصة، الأصناف المنفردة وغيرها (مثل الكركند)
 G. لمبوكا
 H. اخطبوط
 I. غيرها
 J. مجهول

11. Fish processing and preserving Equipment معدات حفظ وتصنيع الأسماك

11.1 Preservation

الحفظ

TABLE
جدول

11.1.1.1	Hold for fresh fish مكان حمل الأسماك الطازجة	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.1.1.2	Fresh fish hold capacity (m ³) سعة مكان حمل الأسماك (م ³)			---
11.1.2.1	Cold storage براد	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.1.2.2	Cold storage capacity (m ³) سعة البراد (م ³)			---
11.1.2.3	Cold storage temperature (°C) درجة حرارة البراد (درجة مئوية)			---
11.1.3.1	Refrigerated seawater Production مصنع لتبريد ماء البحر	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.1.4.1	Hold for live fish مكان لحمل الأسماك الحية	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.1.4.2	Live fish hold capacity (m ³) سعة مكان حمل الأسماك الحية (م ³)			---
11.1.5.1	Ice plant ماكينة لصنع الثلج	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.1.5.2	Ice plant capacity (kg/h) قدرة ماكينة صنع الثلج (كغ/ساعة)			---
11.1.5.3	Ice Format شكل الثلج	<input type="checkbox"/> Bars ألواح <input type="checkbox"/> Grinded مطحون	<input type="checkbox"/> Cubes مكعبات <input type="checkbox"/> Other غيره	<input type="checkbox"/> Scales مبروش <input type="checkbox"/> Unknown مجهول
11.1.6.1	Other equipment معدات أخرى			---
11.1.6.2	Capacity other سعة المعدات الأخرى			---

11.2 Processing

التصنيع

TABLE
جدول

11.2.1.1	Freezer ثلاجة	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.2.1.2	Freezer capacity (m ³) سعة الثلاجة (م ³)			---
11.2.2.1	Fishmeal production إنتاج دقيق السمك	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.2.2.2	Fishmeal production capacity (m ³) قدرة إنتاج دقيق السمك (م ³)			---
11.2.3.1	Fish oil production إنتاج زيت السمك	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.2.3.2	Fish oil production capacity (m ³) قدرة إنتاج زيت السمك (م ³)			---
11.2.4.1	Filleting machine ماكينة عمل فيليه السمك	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.2.4.2	Number of filleting machines عدد ماكينات عمل فيليه السمك			---
11.2.5	Other غيرها	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
11.3	REMARKS ملاحظات			

12. Other equipment

معدات أخرى

				TABLE جدول
12.1	Lift equipment معدات رفع	<input type="checkbox"/> Yes (Quantity: _____) نعم (الكمية)	<input type="checkbox"/> No كلا	---
12.2	Fish pumps مضخات للأسماك	<input type="checkbox"/> Yes (Quantity: _____) نعم (الكمية)	<input type="checkbox"/> No كلا	---
12.3.1	Number of lights عدد أضواء (لوكس)			---
12.3.2	Power of each light (KW) قوة كل ضوء (كيلووات)			---
12.4	Generator مولد كهرباء	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	---
12.4.1	Generator power (kW) قوة مولد الكهرباء (كيلووات)			---
12.4	REMARKS ملاحظات			

13. Safety equipment

معدات السلامة

			TABLE جدول
13.1	Number of belts عدد الأحزمة		---
13.2	Number of lifeboats عدد قوارب النجاة		---
13.3	Number of flares عدد المشاعل		---
13.4	Number of fire equipment عدد معدات الإطفاء		---
13.5	Number of life vests عدد جاكيتات النجاة		---
13.6	Number of Tires/lifebelts/buoys عدد دواليب/أحزمة نجاة/طوافات		---
13.7	Other safety equipment معدات السلامة الأخرى		---
13.8	REMARKS ملاحظات		

14. Membership

العضوية

		Yes نعم	No كلا	Name الاسم
14.1	Cooperative تعاونية			
14.2	Syndicate نقابة			

15. General Remarks

ملاحظات عامة

Appendix 3 References for the Vessel Register

MedStat -LebanonStat

Marine Fishing Vessels Census 2004

إحصاء زوارق الصيد البحري ٢٠٠٤

References

المراجع

(The Codification System)

(نظام التصنيف)

Version 2004.0

إصدار ٢٠٠٤,١

وزارة الزراعة

مديرية التنمية الريفية والثروات الطبيعية

مصلحة الاحراج والثروة الطبيعية

دائرة الصيد المائي والبري

MINISTRY OF AGRICULTURE

Directorate of rural Development & Natural Resources

Division of Forests & Natural Resources

Department of Fisheries & Wild Life

المراجع *References*

-Fishing Vessel Census 2004 -

- إحصاء زوارق الصيد ٢٠٠٤ -

IMPORTANT NOTICES

- If not otherwise specified, the "Code" is intended as MedStat Internal Code: it is not FAO official code.

إذا لم يذكر عكس ذلك، فإن "المدونة" هي للاستعمال الداخلي لمدسات: وهي ليست مدونة الفاو الرسمية

- The "Reference to" express the link to the Data Element in the Questionnaire (*LebanonStat Form Census*).

"المراجع" يجسد الصلة لعنصر المعطيات في الاستمارة (استمارة لبنانونستات)

References – part 1-

المراجع – الجزء ١

Table 0.0 reference to National Recorders

جدول ٠,٠ رمز الباحثون الوطنيون

Table Description: List of the country recorders' names

شرح الجدول: لائحة بأسماء الباحثين اللبنانيين

Code	الرمز	Recorder name	اسم الباحث	Description الوصف
A01		Abdulqader Yahya	عبد القادر يحيى	
A02		Adel Fadel	عادل فاضل	
A03		Akeel Khuraizat	عقيل خريزات	
A04		Ali Awadah	علي عواضة	
A05		Bahij Mezher	بهيج مزهر	
A06		Bassam Jummayyel	بسام جميل	
A07		Chadi Muhanna	شادي مهنا	
A08		Chadi Saikaly	شادي سيقلي	
A09		Charbel Abi Nader	شربل ابي نادر	
A10		Charbel Nammour	شربل نمور	
A11		Charbel Sadiq	شربل صادق	
A12		Dahij Mukdad	داهج مقداد	
A13		David Antoun	ديفيد انطون	
A14		Fadi Husseini	فادي حسيني	
A15		Ghazi Kassar	غازي كسار	
A16		Hassan Haj Shehadeh	حسن حج شحادة	
A17		Husni Shalhoub	حسني شلهوب	
A18		Hussein Nassar	حسين نصار	
A19		Ibrahim Hawi	إبراهيم حاوي	
A20		Ibrahim Younes	إبراهيم يونس	
A21		Imad Dabbous	عماد دبوس	
A22		Jean Stephan	جان اسطفان	
A23		Laurent Rahmeh	لوران رحمة	
A24		Marwan Ghosh	مروان غوش	
A25		Naoum Maalouf	نعوم معلوف	
A26		Qasem Agha	قاسم آغا	
A27		Sam Durnaiqah	سام درنيقة	

Code	الرمز	Recorder name	اسم الباحث	Description الوصف
A28		Samer Jawhar	سامر جوهر	
A29		Samir Majdalani	سمير مجدلاني	
A30		Wafic Kombargi	وفيق قمبرجي	
A31		Walid Bawwab	وليد بواب	
A32		Wissam Wazneh	وسام وزنه	
A98		Other	غيره	
A99		Unknown	مجهول	

Table 0.1 Fishery Sectors (In MedStat Census the sector is fixed =1 by default)

جدول ٠,١ قطاعات الصيد

Table description: list of the fishery sectors.

شرح الجدول: لائحة بقطاعات الصيد

Code	الرمز	Fishery Sector Code	مدونة قطاع الصيد	Description الوصف
1		Marine fishery	الصيد البحري	
2		Inland fishery	الصيد الداخلي	
3		Aquaculture production	إنتاج مزارع تربية الأحياء المائية	
8		Other sector	قطاع آخر	

Table 0.2 Stratum /Region

جدول ٠,٢ المنطقة

Table description: list of the main subdivisions (administrative, statistical, or geographical) of the country.

شرح الجدول: لائحة بأقسام الدولة (الإدارية، الإحصائية أو الجغرافية)

Code	الرمز	Governorate	المحافظة	Description الوصف
1001		North	الشمال	
1002		Mount Lebanon	جبل لبنان	
1003		Beirut	بيروت	
1004		South	الجنوب	
1005		Bekaa	البقاع	
1006		Nabatiyeh	النبطية	
1099		Unknown	مجهول	

Table 0.3 Substratum /Province /District

جدول ٠,٣ القطاعات الصغرى/الإقليم/المنطقة

Table description: list of the secondary subdivisions (administrative, statistical, or geographical) of the country.

شرح الجدول: لائحة بأقسام الدولة الثانوية/الصغرى (الإدارية، الإحصائية أو الجغرافية)

Code	الرمز	Province	الإقليم	Description الوصف
1٠001		North	الشمال	
10٠02		Mount Lebanon	جبل لبنان	
100٠3		Beirut	بيروت	
100٠4		South	الجنوب	
100٠5		Bekaa	البقاع	
100٠6		Nabatiyeh	النبطية	
10٩99		Unknown	مجهول	

Table 0.4 Decked /Undecked Vessel**جدول ٠,٤ مركب بظهر / بدون ظهر****Table description:** decked /undecked vessel

شرح الجدول: مركب بظهر / بدون ظهر

Code	الرمز	Decked/Undecked	مركب بظهر / بدون ظهر	Description الوصف
1		Decked	مركب بظهر	
2		Undecked	مركب بدون ظهر	

Table 0.5 Type of Port /Landing Place**جدول ٠,٥ نوع المرفأ/موقع إنزال****Table description:** list of the port types present in the country.

شرح الجدول: لائحة بأنواع المرفأ الموجودة في الدولة

Code	الرمز	Port Type	نوع المرفأ	Description الوصف
1		Port	مرفأ	
2		Landing place	موقع إنزال	
3		Market only	سوق (فقط)	
13		Port with market	مرفأ مع سوق	
23		Landing place with market	موقع إنزال مع سوق	

Table 0.6 Fleet Segmentation**جدول ٠,٦ تقسيم الأسطول****Table description:** list of the economic segments of the fleet according to GFCM.

شرح الجدول: لائحة بالأقسام الاقتصادية لأسطول الصيد حسب تصنيف هيئة مصايد أسماك البحر المتوسط

Code	الرمز	Segment	القسم	Description الوصف
10		Minor Gear without engine (<6 m)	معدات ثانوية بدون محرك (أقل من ٦ م)	
20		Minor Gear with engine (<6 m)	معدات ثانوية مع محرك (أقل من ٦ م)	
21		Minor Gear with engine (6-12 m)	معدات ثانوية مع محرك (أقل من ٦-١٢ م)	
31		Trawl (6-12 meters)	سفن التروول (٦-١٢ م)	
32		Trawl (12-24 meters)	سفن التروول (١٢-٢٤ م)	
33		Trawl (>24 meters)	سفن التروول (أطول من ٢٤ م)	
41		Purse Seine (6-12 meters)	زوارق التحويق (٦-١٢ م)	
42		Purse Seine (12-24 meters)	زوارق التحويق (١٢-٢٤ م)	
52		Long line (12-24 meters)	زوارق الجرجارة (١٢-٢٤ م)	
62		Pelagic Trawl (12-24 meters)	سفن التروول للأسماك السطحية (١٢-٢٤ م)	
72		Tuna Seine (12-24 meters)	سفن تحويق التونا (١٢-٢٤ م)	
82		Dredge (12-24 meters)	سفن الجرف (١٢-٢٤ م)	
92		Polyvalent (12-24 meters)	السفن المتعددة الاستعمالات (١٢-٢٤ م)	

Table 1.2 reference to Property Notebook Port (item 1.2) and Navigation License Port (item 1.9.1)**جدول ١,٢** يرمز إلى سند التملك البحري (بند ١,٢) ومرفأ رخصة الملاحة البحرية (بند ١,٩,١)**Table description:** list of the minor subdivisions (administrative, statistical or geographical) of the country.

شرح الجدول: لائحة بأقسام الدولة الثانوية/الصغرى (الإدارية، الإحصائية او الجغرافية)

Code	الرمز	Harbor Master	رئاسة المرفأ	Description الوصف
1001		Beirut	بيروت	
1002		Chekka	شكا	
1003		Jbail	جبيل	
1004		Jounieh	جونية	
1005		Saida	صيدا	
1006		Sour	صور	
1007		Tripoli	طرابلس	

Table 1.3 reference to Flag (item 1.3), Construction Country of the Vessel (item 3.5), Construction Country of the Engine (item 4.5), Company Country (item 7.1.7) and Owner's Country of Residence (item 7.2.7)

جدول ١,٣: يرمز إلى العلم (بند ١,٣) دولة صنع الزورق (بند ٣,٥) دولة صنع المحرك (بند ٤,٥) دولة الشركة (بند ٧,١,٧) ودولة سكن المالك (٧,٢,٧)

Table description: list of the countries.

شرح الجدول: لائحة بأسماء الدول

Code	الرمز	Country name	اسم الدولة	UN Code رمز الأمم المتحدة	ISO_3 Code رمز ايزو ٣	Group المجموعة
1		Afghanistan	أفغانستان	AFG	004	...
3		Albania	ألبانيا	ALB	008	GFCM
4		Algeria	الجزائر	DZA	012	GFCM
278		American Samoa	ساموا الأمريكية	ASM	016	...
255		Andorra	أندورا	AND	020	...
7		Angola	أنغولا	AGO	024	...
264		Anguilla	أنغويلا	AIA	660	...
311		Antarctica others	انتاركتيكا مختلف	ATA	010	...
10		Antigua and Barbuda	انتيجا وبربادوس	ATG	028	...
11		Argentina	الأرجنتين	ARG	032	...
12		Armenia	أرمينيا	ARM	051	...
13		Aruba	أروبا	ABW	533	...
15		Australia	أستراليا	AUS	036	...
16		Austria	النمسا	AUT	040	EU
17		Azerbaijan	أذربيجان	AZE	031	...
19		Bahamas	البهاماس	BHS	044	...
20		Bahrain	البحرين	BHR	048	...
21		Bangladesh	بنغلادش	BGD	050	...
22		Barbados	باربادوس	BRB	052	...
23		Belarus	روسيا البيضاء	BLR	112	...
24		Belgium	بلجيكا	BEL	056	EU
300		Belgium-Luxembourg	بلجيكا-لوكسمبورغ	...	058	...
25		Belize	بليز	BLZ	084	...
26		Benin	بنين	BEN	204	...
27		Bermuda	برمودا	BMU	060	...
28		Bhutan	بوتان	BTN	064	...
29		Bolivia	بوليفيا	BOL	068	...
30		Bosnia and Herzegovina	البوسنة والهرسك	BIH	070	...
31		Botswana	بوتسوانا	BWA	072	...
273		Bouvet Island	جزيرة بوفيت	BVT	074	...
34		Brazil	البرازيل	BRA	076	...
260		British Indian Ocean Territory	أراضي المحيط الهندي التابعة لبريطانيا	IOT	086	...
239		British Virgin Islands	الجزر العذراء البريطانية	VGB	092	...
35		Brunei Darussalam	بروناي	BRN	096	...
36		Bulgaria	بلغاريا	BGR	100	GFCM
37		Burkina Faso	بوركينافاسو	BFA	854	...
38		Burundi	بوروندي	BDI	108	...
39		Cambodia	كمبوديا	KHM	116	...
40		Cameroon	الكاميرون	CMR	120	...
41		Canada	كندا	CAN	124	...
299		Canton and Enderbury Island	جزيرة كانتون و اندربيري	...	128	...
43		Cape Verde	الرأس الأخضر	CPV	132	...
44		Cayman Islands	جزر الكايمان	CYM	136	...
45		Central African Republic	جمهورية أفريقيا الوسطى	CAF	140	...
46		Chad	التشاد	TCD	148	...
274		Channel Islands	جزر القناة الإنكليزي	...	830	...
47		Chile	التشيلي	CHL	152	...
101		China, Hong Kong SAR	الصين، هونغ كونغ	HKG	344	...
267		China, Macao SAR	الصين، مكاو	MAC	446	...
48		China, Mainland	الصين	CHN	156	...
213		China, Taiwan Prov of	الصين، تايوان	TWN	158	...
275		Christmas Island	جزيرة كريسماس	CXR	162	...
276		Cocos (Keeling) Islands	جزر كوكوس	CCK	166	...
51		Colombia	كولومبيا	COL	170	...
52		Comoros	جزر القمر	COM	174	...
246		Congo, Dem Republic of	جمهورية الكونغو الديمقراطية	COD	180	...
53		Congo, Republic of	جمهورية الكونغو	COG	178	...
277		Cook Islands	جزر كوك	COK	184	...
55		Costa Rica	كوستاريكا	CRI	188	...

56	Côte d'Ivoire	شاطئ العاج	CIV	384	...
57	Croatia	كرواتيا	HRV	191	GFCM
58	Cuba	كوبا	CUB	192	...
59	Cyprus	قبرص	CYP	196	GFCM
309	Czech Republic	جمهورية تشيكيا	CZE	203	...
60	Czechoslovakia	تشكوسلوفاكيا	...	200	...
61	Denmark	الدانمرك	DNK	208	EU
62	Djibouti	جيبوتي	DJI	262	...
63	Dominica	دومينيكا	DMA	212	...
64	Dominican Republic	جمهورية الدومينيكان	DOM	214	...
279	East Timor	تيمور الشرقية	TMP	626	...
67	Ecuador	الاكوادور	ECU	218	...
68	Egypt	مصر	EGY	818	GFCM
69	El Salvador	السلفادور	SLV	222	...
307	England and Wales	انكلترا و ويلز	...	...	...
70	Equatorial Guinea	غينيا الاستوائية	GNQ	226	...
250	Eritrea	اريتريا	ERI	232	...
71	Estonia	استونيا	EST	233	...
72	Ethiopia	اثيوبيا	ETH	231	...
306	Ethiopia PDR	جمهورية اثيوبيا الديمقراطية الشعبية	...	...	...
254	Faeroe Islands	جزر الفاروا	FRO	234	...
74	Falkland Is (Malvinas)	جزر الفوكلاند	FLK	238	...
75	Fiji Islands	جزر الفيجي	FJI	242	...
76	Finland	فنلندا	FIN	246	EU
80	France	فرنسا	FRA	250	GFCM +EU
77	French Guiana	غينيا الفرنسية	GUF	254	...
78	French Polynesia	بولونيزيا الفرنسية	PYF	258	...
280	French Southern Territory	اراضي فرنسا الجنوبية	ATF	260	...
81	Gabon	غابون	GAB	266	...
83	Gambia	غامبيا	GMB	270	...
281	Gaza Strip (Palestine)	قطاع غزة (فلسطين)	...	274	...
84	Georgia	جورجيا	GEO	268	...
85	Germany	المانيا	DEU	276	EU
86	Ghana	غانا	GHA	288	...
256	Gibraltar	جبل طارق	GIB	292	...
88	Greece	اليونان	GRC	300	GFCM + EU
262	Greenland	جرينلاند	GRL	304	...
90	Grenada	غرينادا	GRD	308	...
91	Guadeloupe	غوادالوب	GLP	312	...
282	Guam	غوام	GUM	316	...
93	Guatemala	غواتيمالا	GTM	320	...
94	Guinea	غينيا	GIN	324	...
95	Guinea-Bissau	غينيا بيساو	GNB	624	...
96	Guyana	غويانا	GUY	328	...
97	Haiti	هايتي	HTI	332	...
283	Heard and McDonald Island	جزيرة هيرد ومكدونالدز	HMD	334	...
257	Holy See	هولي سي	VAT	336	...
100	Honduras	هندوراس	HND	340	...
102	Hungary	هنغاريا	HUN	348	...
103	Iceland	ايسلندا	ISL	352	...
104	India	الهند	IND	356	...
105	Indonesia	اندونيسيا	IDN	360	...
106	Iran, Islamic Rep of	ايران	IRN	364	...
107	Iraq	العراق	IRQ	368	...
108	Ireland	ايرلندا	IRL	372	EU
284	Isle of Man	جزيرة مان	IMY	833	...
109	Israel	اسرائيل	ISR	376	GFCM
110	Italy	ايطاليا	ITA	380	GFCM +EU
111	Jamaica	جاميكا	JAM	388	...
112	Japan	اليابان	JPN	392	GFCM
297	Johnston Island	جزيرة جونستون	JTN	396	...
114	Jordan	الأردن	JOR	400	...
115	Kazakhstan	كازاخستان	KAZ	398	...
116	Kenya	كينيا	KEN	404	...
117	Kiribati	كيرباتي	KIR	296	...
118	Korea, Dem People's Rep	جمهورية كوريا الديمقراطية	PRK	408	...
119	Korea, Republic of	جمهورية كوريا	KOR	410	...
120	Kuwait	الكويت	KWT	414	...
121	Kyrgyzstan	قيرغيزستان	KGZ	417	...
122	Laos	لاوس	LAO	418	...
123	Latvia	لاتفيا	LVA	428	...
124	Lebanon	لبنان	LBN	422	GFCM

125	Lesotho	ليسوتو	LSO	426	...
126	Liberia	ليبيريا	LBR	430	...
127	Libyan Arab Jamahiriya	ليبيا	LBY	434	GFCM
128	Liechtenstein	ليختنشتاين	LIE	438	...
129	Lithuania	ليتوانيا	LTU	440	...
130	Luxembourg	لوكسمبورغ	LUX	442	EU
132	Macedonia, The Fmr Yug Rp	مقدونيا	MKD	807	...
133	Madagascar	مدغشقر	MDG	450	...
135	Malawi	ملاوي	MWI	454	...
136	Malaysia	ماليزيا	MYS	458	...
137	Maldives	مالديف	MDV	462	...
138	Mali	مالي	MLI	466	...
139	Malta	مالطا	MLT	470	GFCM+EU
140	Marshall Islands	جزر مارشال	MHL	584	...
141	Martinique	مارتينيك	MTQ	474	...
142	Mauritania	موريتانيا	MRT	478	...
143	Mauritius	موريشيوس	MUS	480	...
261	Mayotte	مايوت	MYT	175	...
144	Mexico	المكسيك	MEX	484	...
145	Micronesia, Fed States of	ميكرونيزيا	FSM	583	...
298	Midway Islands	جزر ميدواي	MID	488	...
147	Moldova, Republic of	مولدافيا	MDA	498	...
285	Monaco	موناكو	MCO	492	GFCM
149	Mongolia	منغوليا	MNG	496	...
265	Montserrat	مونتسرات	MSR	500	...
151	Morocco	المغرب	MAR	504	GFCM
152	Mozambique	الموزامبيق	MOZ	508	...
153	Myanmar	ميانمار	MMR	104	...
155	Namibia	ناميبيا	NAM	516	...
156	Nauru	ناورو	NRU	520	...
157	Nepal	نيبال	NPL	524	...
159	Netherlands	هولندا	NLD	528	EU
158	Netherlands Antilles	الانثيل الهولندية	ANT	530	...
308	Neutral Zone	المنطقة المحايدة	...	536	...
160	New Caledonia	كاليدونيا الجديدة	NCL	540	...
161	New Zealand	نيوزيلندا	NZL	554	...
162	Nicaragua	نيكاراغوا	NIC	558	...
163	Niger	النيجر	NER	562	...
164	Nigeria	نيجيريا	NGA	566	...
286	Niue	نيو	NIU	570	...
287	Norfolk Island	جزيرة نورفولك	NFK	574	...
304	Northern Ireland	ايرلندا الشمالية	...	...	...
154	Northern Mariana Island	جزيرة ماريانا الشمالية	MNP	580	...
167	Norway	النرويج	NOR	578	...
168	Oman	عمان	OMN	512	...
998	Other	غيرها	...	...	...
305	Pacific Islands Trust Territory	جزر الباسيفيك بالامانة	...	...	...
169	Pakistan	الباكستان	PAK	586	...
170	Palau	بالاو	PLW	585	...
314	Palestine	فلسطين	...	...	...
171	Panama	باتاما	PAN	591	...
172	Papua New Guinea	بابوا غينيا الجديدة	PNG	598	...
173	Paraguay	الباراغواي	PRY	600	...
174	Peru	البيرو	PER	604	...
175	Philippines	الفلبين	PHL	608	...
270	Pitcairn Islands	جزر بيتكيرن	PCN	612	...
177	Poland	بولندا	POL	616	...
178	Portugal	برتغال	PRT	620	EU
288	Puerto Rico	بورتوريكو	PRI	630	...
180	Qatar	قطر	QAT	634	...
181	Réunion	ريونيون	REU	638	...
182	Romania	رومانيا	ROM	642	GFCM
183	Russian Federation	روسيا	RUS	643	...
184	Rwanda	رواندا	RWA	646	...
259	Saint Helena	سانت هيلينا	SHN	654	...
203	Saint Kitts and Nevis	سانت كيتس ونيفيس	KNA	659	...
187	Saint Lucia	سانت لوشيا	LCA	662	...
263	Saint Pierre & Miquelon	سانت بيير وميكلون	SPM	666	...
205	Saint Vincent/Grenadines	سانت فينسنت/غرينادينز	VCT	670	...
188	Samoa	ساموا	WSM	882	...
258	San Marino	سان مارينو	SMR	674	...
190	Sao Tome and Principe	ساو تومي وبرينسيب	STP	678	...

191	Saudi Arabia	المملكة العربية السعودية	SAU	682	...
302	Scotland	اسكتلندا	...	...	...
192	Senegal	سنغال	SEN	686	...
193	Seychelles	سيشيل	SYC	690	...
194	Sierra Leone	سيراليون	SLE	694	...
195	Singapore	سنغافورة	SGP	702	...
249	Slovakia	سلوفاكيا	SVK	703	...
196	Slovenia	سلوفينيا	SVN	705	GFCM
197	Solomon Islands	جزر سلومون	SLB	090	...
198	Somalia	الصومال	SOM	706	...
199	South Africa	افريقيا الجنوبية	ZAF	710	...
289	South Georgia/Sandwich Is	جورجيا الجنوبية/جزر السانديش	SGS	...	...
200	Spain	اسبانيا	ESP	724	GFCM+EU
201	Sri Lanka	سريلانكا	LKA	144	...
206	Sudan	السودان	SDN	736	...
207	Suriname	سورينام	SUR	740	...
253	Svalbard and Jan Mayen	سفالبارد ويان ماين	SJM	744	...
209	Swaziland	سوازيلاند	SWZ	748	...
210	Sweden	السويد	SWE	752	EU
211	Switzerland	سويسرا	CHE	756	...
212	Syrian Arab Republic	سوريا	SYR	760	GFCM
214	Tajikistan	طاجيكستان	TJK	762	...
215	Tanzania, United Rep of	تانزانيا	TZA	834	...
216	Thailand	تايلاند	THA	764	...
217	Togo	توغو	TGO	768	...
291	Tokelau	توكلاوا	TKL	772	...
219	Tonga	تونغا	TON	776	...
220	Trinidad and Tobago	ترينيداد وتوباغو	TTO	780	...
222	Tunisia	تونس	TUN	788	GFCM
223	Turkey	تركيا	TUR	792	GFCM
224	Turkmenistan	تركمستان	TKM	795	...
225	Turks and Caicos Island	جزيرة توركس وكايكس	TCA	796	...
226	Tuvalu	توفالو	TUV	798	...
227	Uganda	اوغندا	UGA	800	...
229	Ukraine	اوكرانيا	UKR	804	...
230	United Arab Emirates	الإمارات العربية المتحدة	ARE	784	...
228	United Kingdom	المملكة المتحدة	GBR	826	EU
233	United States of America	الولايات المتحدة الأمريكية	USA	840	...
999	Unknown	مجهول	...	...	...
231	Uruguay	اوروغواي	URY	858	...
292	US Minor Outlying Island	جزر الولايات المتحدة الصغيرة البعيدة	UMI	581	...
240	US Virgin Islands	الجزر العذراء-الولايات المتحدة	VIR	850	...
293	USSR	الاتحاد السوفيتي	...	...	...
234	Uzbekistan	اوزبكستان	UZB	860	...
235	Vanuatu	فانواتو	VUT	548	...
237	Venezuela, Boliv Rep of	فينيزويلا	VEN	862	...
238	Viet Nam	فيتنام	VNM	704	...
310	Wake Island	جزيرة ويك	WAK	872	...
242	Wallis and Futuna Island	جزيرة واليس وفوتونا	WLF	876	...
312	West Bank	الضفة الغربية (فلسطين)	...	402	...
295	Western Sahara	الصحراء الغربية	ESH	732	...
244	Yemen	اليمن	YEM	887	...
313	Yugoslavia SFR	يوغوسلافيا	...	...	...
245	Yugoslavia, Fed Rep of	يوغوسلافيا الاتحادية	YUG	891	GFCM
247	Zambia	زامبيا	ZMB	894	...
248	Zimbabwe	زيمبابوي	ZWE	716	...

Table 1.6 references to Vessel Type (item 1.6)

جدول ١,٦ يرمز إلى فئة الزورق (بند ١,٦)

Table description: list of the vessel types present in the country

شرح الجدول: لائحة بفئات زوارق الصيد الموجودة في البلد

Code	الرمز	Type of fishing vessel	فئة زورق الصيد	FAO	Description الوصف
02000		Purse Seiners	زوارق التحويق	0200	
02980		Seiners Other	زوارق السينية الأخرى	0298	
03000		Trawlers	سفن التروول	0300	
07000		Gill netter	زوارق الشباك المبطنة	0700	
08000		Trap Setters	زوارق الإفخاخ	0800	
09000		Long liners	زوارق الجرجارة	0900	
09980		Liners other	زوارق الخيوط الأخرى	0998	
88000		Multipurpose	سفن المتعددة الاستعمالات	8800	
98000		Other fishing vessels	زوارق الصيد الأخرى	9800	
98001		Flouka	فلوكا	9800	
98011		Oars	مجاديف (زوارق الصيد الأخرى بدون محركات)	9801	
99000		Unknown	مجهول	9900	

Table 1.7 references to Operational Status (item 1.7)

جدول ١,٧ يرمز إلى الوضع العملائي للزورق (بند ١,٧)

Table description: list of the possible operational statuses of the vessel

شرح الجدول: لائحة بالأوضاع العملائية لزوارق الصيد

Code	الرمز	Operational status	الوضع العملائي	Description الوصف
1		Operational	يعمل	
2		Non Operational	لا يعمل	
8		Other	غيره	
9		Unknown	مجهول	

Table 1.7.1 reference to Non-Activity Reason (item 1.7.1)

جدول ١,٧,١ : يرمز إلى سبب عدم العمل (بند ١,٧,١)

Table description: list of the possible inactivity reasons of the vessel.

شرح الجدول: لائحة بأسباب عدم عمل الزورق

Code	الرمز	Non activity reason	سبب عدم العمل	Description الوصف
01		Vessel or engine repairs	صيانة الزورق أو المحرك	
02		Damage	إضرار	
03		Laid up	مرفوع	
04		Document out of order	مستندات الزورق غير صالحة	
05		Sequestered (e.g. by foreign country)	محجوز	
06		Strike	إضراب	
07		Temporary fishing inactivity	عدم الصيد مؤقتا	
08		Abandoned (but not laid up)	مهجور (لكن غير مرفوع)	
09		Bad weather	طقس سيء	
10		Temporary holiday inactivity	عطلة/عيد	
11		Gear repair (fishing gears)	إصلاح معدات الصيد	
98		Other cause	أسباب أخرى	
99		Unknown	مجهول	

Table 1.8 reference to Base Port (item 1.8) and Port Period 1-5 (item 9.1.1-5)

جدول ١,٨ : يرمز إلى مرفأ الارتباط (بند ١,٨) وفترات المرافئ ١-٥ (بند 9.1.1-5)

Table description: list of the ports present in the country

شرح الجدول : لائحة بالمرافئ الموجودة في لبنان

Code الرمز	Port	المرفأ	Code الرمز	Harbor Master	رئاسة مرفأ	Description الوصف
10001	Aabde	العبيدة	1007	Tripoli	طرابلس	
10002	Aamchit	عمشيت	1003	Jbail	جبيل	
10003	Aaqeibe	عقيبة	1004	Jounieh	جونية	
10004	Aarida	عريضة	1007	Tripoli	طرابلس	
10005	Ain el Mraisseh-Jisr	عين المريسة-الجسر	1008	Beirut	بيروت	
10006	Ain el Mraisseh-Manarah	عين المريسة-منارة	1008	Beirut	طرابلس	
10007	Barbara	البربارة	1003	Jbail	جبيل	
10008	Batroun	بترون	1002	Chekka	شكا	
10009	Beddaoui	البدواوي	1007	Tripoli	طرابلس	
10010	Bouar	البوار	1004	Jounieh	جونية	
10011	Cheikh Zennad	الشيخ زناد	1007	Tripoli	طرابلس	
10012	Chekka	شكا	1002	Chekka	شكا	
10013	Dalieh	الدالية	1008	Beirut	طرابلس	
10014	Dbaiye	ضبية	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10015	Dora	الدورة	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10016	Enfe	انفه	1002	Chekka	شكا	
10017	Halat	حالات	1004	Jounieh	جونية	
10018	Heri	ألهرى	1002	Chekka	شكا	
10019	Jadra	جدرا	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10020	Jal el Baher	جل البحر	1008	Beirut	طرابلس	
10021	Jbail	جبيل	1003	Jbail	جبيل	
10022	Jnah/Cote D'Azour	الجناح/كوت دازور	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10023	Jounieh/Kaslik	جونية/كسليك	1004	Jounieh	جونية	
10024	Kfar Aabida	كفر عبيدا	1002	Chekka	شكا	
10025	Kfar Yaseen/ Adma/Tabarja	كفر ياسين/أدما/طبرجا	1004	Jounieh	جونية	
10026	Minie	منية	1007	Tripoli	طرابلس	
10027	Nahr El Kalb	نهر الكلب	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10028	Naqoura	الناقورة	1006	Sour	صور	
10029	Ouzaii	اوزاعي	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10030	Qalamoun	القلمون	1007	Tripoli	طرابلس	
10031	Saadiyat	السعديات	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10032	Safra	صفرا	1004	Jounieh	جونية	
10033	Saida	صيدا	1005	Saida	صيدا	
10034	Sarafand-Ain Qantara	صرفند-عين قنطرة	1005	Saida	صيدا	
10035	Sarafand-Mounis	صرفند-مونس	1005	Saida	صيدا	
10036	Sarafand-Zeereh	صرفند-زيرة	1005	Saida	صيدا	
10037	Sour	صور	1006	Sour	صور	
10038	Tripoli/Al-Mina	طرابلس/المينا	1007	Tripoli	طرابلس	
10039	Selaata	سلعاتا	1001	Tripoli	طرابلس	
10040	Hay el Bahr	حي البحر	1007	Tripoli	طرابلس	
10041	Tripoli-Huqran	طرابلس/حقران	1007	Tripoli	طرابلس	
10042	Sour-Rest House	صور-الاستراحة	1004	Sour	صور	
10043	Enfe-Nuhairy	انفه-نهييري	1007	Chekka	شكا	
10044	Enfe-Dabbaghah	انفه-دباغة	1007	Chekka	شكا	
10045	Enfe-Rmeilet	انفه-رميلة	1007	Chekka	شكا	
10046	Hamat-Roca Marina	حمامات-روكا مارينا	1007	Chekka	شكا	
10047	Halat-Fidar	حالات-فيدار	1004	Jounieh	جونية	
10048	Jamil Gemayyel	جميل جميل	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	
10049	Naame	ناعمة	1001	Beirut-Mount Lebanon	بيروت-جبيل لبنان	

Table 2.2.1 reference to Fishing Gear (items 2.2.1-6) and Fishing Gear Category (item 10.1)

جدول ٢,٢,١ يرمز إلى شبكات الصيد المرخصة (بنود 2.2.1-6) وفئة معدات الصيد (بند ١٠,١)

Table description: list of the fishing gears which can be present on the vessel.

شرح الجدول: لائحة بمعدات الصيد الممكن وجودها على الزورق

Code الرمز	Fishing Gear	معدات الصيد	Class Code رمز الفئة	FAO Class Code رمز الفاو للفئة
01000	SURROUNDING NETS	شباك الإحاطة / التحويق	01	01
01100)	With purse lines (purse seines)	مع حبال الجزدان (شباك البرسينة/المصيدة)	01	01
01110	One boat operated purse seines	شباك البرسينة المدارة بمركب واحد	01	01
01120	Two boats operated purse seines	شباك البرسينة المدارة بمركبين	01	01
01200	Without purse lines (lampara)	بدون حبال الجزدان (شباك اللمبارا)	01	01
02000	SEINE NETS	شباك السينية/الجرف	02	02
02100	Beach seines	شباك السينية الساحلية/ جاروفة بر	02	02
02200	Boat or vessel seines	شباك الزوارق السينية/جاروفة عمق	02	02
02210	Danish seines	الشباك السينية الدانمركية	02	02
02220	Scottish seines	الشباك السينية الاسكتلندية	02	02
02230	Pair seines	شباك السينية المزدوجة	02	02
02900	Seine nets (not specified)	الشباك السينية (غير محددة)	02	02
03000	TRAWLS	شباك التروول	03	03
03100	Bottom trawls	شباك التروول القاعية	03	03
03110	Bottom beam trawls	شباك التروول ذوات العوارض	03	03
03120	Bottom otter trawls	شباك التروول ذوات ألواح الأوتر	03	03
03130	Bottom pair trawls	شباك التروول المزدوجة	03	03
03140	Bottom nephrops trawls	شباك التروول النفروبس	03	03
03150	Bottom shrimp trawls	شباك التروول للقرديس	03	03
03190	Bottom trawls (not specified)	شباك التروول القاعية (غير محددة)	03	03
03200	Midwater trawls	شباك التروول للاعماق المتوسطة	03	03
03210	Midwater otter trawls	شباك التروول للاعماق المتوسطة ذوات ألواح الأوتر	03	03
03220	Midwater pair trawls	شباك التروول للاعماق المتوسطة المزدوجة	03	03
03230	Midwater shrimp trawls	شباك التروول للاعماق المتوسطة للقرديس	03	03
03290	Midwater trawls (not specified)	شباك التروول للاعماق المتوسطة (غير محددة)	03	03
03300	Otter twin trawls	شباك التروول المزدوجة ذوات ألواح التروول	03	03
03490	Otter trawls (not specified)	شباك التروول ذوات ألواح التروول (غير محددة)	03	03
03590	Pair trawls (not specified)	شباك التروول المزدوجة (غير محددة)	03	03
03900	Other trawls (not specified)	شباك التروول (غير محددة)	03	03
04000	DREDGES	الشباك الجارفة	04	04
04100	Boat dredges	جاروفة بحر/ طبليات	04	04
04200	Hand dredges	جاروفة بر	04	04
05000	LIFT NETS	شباك الرفع	05	05
05100	Portable lift nets	شباك الرفع القابلة للحمل	05	05
05200	Boat -operated lift nets	شباك الرفع التي تدار من الزورق	05	05
05300	Shore -operated stationary lift nets	شباك الرفع التي تدار من الساحل	05	05
05900	Lift nets (not specified)	شباك الرفع (غير محددة)	05	05
06000	FALLING GEAR	أدوات الصيد الهابطة	06	06
06100	Cast nets	شباك الطرح	06	06
06900	Falling gear (not specified)	أدوات الصيد الهابطة (غير محددة)	06	06
07000	GILLNETS AND ENTANGLING NETS	شباك الغل/البشلولية والشرك	07	07
07100	Set gillnets (anchored)	شباك الغل المثبتة/بشلولية	07	07
07200	Driftnets	الشباك الانجرافية/الانسيابية	07	07
07300	Encircling gillnets	شباك الغل/البشلولية التحويقية	07	07
07400	Fixed gillnets (on stakes)	شباك الغل/البشلولية المثبتة (على أوتاد)	07	07
07500	Trammel nets	الشباك المبطننة	07	07
07600	Combined gillnets- trammel nets	شباك المبطن- شبكات الغل/البشلولية المتحدة	07	07

07900	Gillnets and entangling nets (not specified)	شباك الغل/البشلولة والشرك (غير محددة)	07	07
07910	Gillnets (not specified)	شباك البشلولة (غير محددة)	07	07
08000	TRAPS	أفخاخ	08	08
08100	Stationary uncovered pound nets	شباك الباوند المكشوفة الثابتة	08	08
08200	Pots	السلال/ الأقفاص	08	08
08300	Fyke nets	شبكة صيد (كبسية الشكل)	08	08
08400	Stow nets	شباك التجميع	08	08
08500	Barrier, fences, weirs, etc	العوائق، الأسوار، سياج قضبان، الزرائب، الخ	08	08
08600	Aerial traps	الافخاخ الهوائية	08	08
08900	Traps (not specified)	أفخاخ (غير محددة)	08	08
09000	HOOKS AND LINES	الصنابير والقصبات	09	09
09100	Handlines and pole- lines (hand operated)	الخيوط والبوصل (التي تدار يدويا)	09	09
09200	Handlines and pole lines (mechanized)	الخيوط والبوصل (التي تدار ميكانيكيا)	09	09
09300	Set longlines	الشرك	09	09
09400	Drifting longlines	الجرجارة	09	09
09500	Longlines (not specified)	الخيوط الطويلة (غير محددة)	09	09
09600	Trolling lines	خيوط الصنابير	09	09
09900	Hooks and lines (not specified)	الصنابير والقصبات (غير محددة)	09	09
10000	GRAPPLING AND WOUNDING	الإمساك والتجريح	10	10
10100	Harpoons	الحراب	10	10
11000	HARVESTING MACHINES	آلات الحصاد	11	11
11100	Pumps	المضخات	11	11
11200	Mechanized dredges	الجواريف التي تدار أليا	11	11
11900	Harvesting machines (not specified)	آلات الحصاد (غير محددة)	11	11
20000	MISCELLANEOUS GEAR	معدات متنوعة	20	20
25000	RECREATIONAL FISHING GEAR	معدات صيد الهواة	25	25
98000	Other Gear	معدات أخرى	98	98
99000	GEAR NOT KNOWN OR NOT SPECIFIED	معدات غير معروفة أو غير محددة	99	99

Table 2.2.1A National Fishing Gear Classes

جدول ٢,٢,١ A التصنيف اللبناني لفئات معدات الصيد

Table description: list of national fishing gear classes.

شرح الجدول: لائحة بالتصنيف اللبناني لفئات معدات الصيد

الرمز Code	Gear Class English Name	فئة معدات الصيد	Description الوصف
01	Surrounding Nets	شباك الإحاطة / التحويق	
02	Seine Nets	شباك السينية/الجرف	
03	Trawls	شباك الترول	
04	Dredges	الشباك الجارفة	
05	Lift Nets	شباك الرفع	
06	Falling Gear	أدوات الصيد الهابطة	
07	Gillnets and Entangling Nets	شباك الغل/البشلولة والمبطن	
08	Traps	أفخاخ	
09	Hooks and Lines	الصنابير والقصبات	
10	Grappling and Wounding	الإمساك والتجريح	
11	Harvesting Machines	آلات الحصاد	
20	Miscellaneous Gear	معدات متنوعة	
25	Recreational Fishing Gear	معدات صيد الهواة	
98	Other Gear	معدات أخرى	
99	Gear Not Known or Not Specified	معدات غير معروفة أو غير محددة	

Table 2.2.1 B FAO Fishing Gear Classes

جدول ٢,٢,١ B تصنيف الفاو لفئات معدات الصيد

Table description: list of FAO fishing gear classes.

شرح الجدول: لائحة بتصنيف الفاو لفئات معدات الصيد

الرمز Code	Gear Class English Name	فئة معدات الصيد	Description الوصف
01	Surrounding Nets	شباك الإحاطة / التحويق	
02	Seine Nets	شباك السينية/الجرف	
03	Trawls	شباك التروول	
04	Dredges	الشباك الجارفة	
05	Lift Nets	شباك الرفع	
06	Falling Gear	أدوات الصيد الهابطة	
07	Gillnets and Entangling Nets	شباك الغل/البشلولة والشرك	
08	Traps	أفخاخ	
09	Hooks and Lines	الصناتير والقصبات	
10	Grappling and Wounding	الإمساك والتجريح	
11	Harvesting Machines	آلات الحصاد	
20	Miscellaneous Gear	معدات متنوعة	
25	Recreational Fishing Gear	معدات صيد الهواة	
98	Other Gear	معدات أخرى	
99	Gear Not Known or Not Specified	معدات غير معروفة أو غير محددة	

Table 3.7 reference to Hull Material (item 3.7)

جدول ٣,٧ يرمز إلى مواد صنع بدن الزورق (بند ٣,٧)

Table description: list of materials which can be used to construct the vessel.

شرح الجدول: لائحة بالمواد الممكن استعمالها في بناء الزورق

الرمز Code	Hull material	مواد بدن الزورق	Description الوصف
01	Wood	خشب	
02	Marine plywood	معاكس بحري	
03	Aluminum	ألومنيوم	
04	Iron/Steel	حديد/فولاذ	
05	Fiberglass	فايبرغلاس	
06	Rubber	مطاط	
07	Cement	اسمنت	
08	Plastic	بلاستيك	
09	Wood/Fiber	خشب/فايبرغلاس	
10	Wood/Iron	خشب/حديد	
98	Other	غيرها	
99	Unknown	مجهول	

Table 4.4 reference to Energy Sources (item 4.4)

جدول ٤,٤ يرمز إلى مصدر الطاقة (الوقود) (بند ٤,٤)

Table description: list of the energy source types for the propulsion of the vessel's engine.

شرح الجدول: لائحة بأنواع مصادر الطاقة (الوقود) لدفع محرك الزورق

الرمز Code	Energy Source English Name	نوع الوقود	Description الوصف
01	Diesel	ديزل	
02	Petroleum	بتروول	
03	Electricity (generated on board)	كهرباء (مولدة على الزورق)	
04	Petrol/Gasoline	بنزين	
05	Petrol/Gasoline mixed with oil	خليط بنزين مع زيت	
98	Other	غيرها	
99	Unknown	مجهول	

Table 5.1.1.1 reference to Navigation equipments (items 5.1.1.1-5.1.4.1)

جدول ٥,١,١,١ يرمز إلى أجهزة الملاحة (بنود ٥,١,١,١ - ٥,١,١,١)

Table description: list of the navigation equipment which can be present on the vessel.

شرح الجدول: لائحة بأجهزة الملاحة الممكن وجودها على الزورق

الرمز Code	Navigation Equipment English Name	اسم الجهاز	Description الوصف
01	No navigation equipment	لا يوجد أجهزة ملاحة	
02	Loran C	لوران C	
03	Loran A	لوران A	
04	Omega	اوميغا	
05	Decca	ديكا	
06	GPS (Satellite navigation)	جي بي اس (الملاحة بواسطة الأقمار الاصطناعية)	
07	Radar	رادار	
08	Direction finder	محدد الاتجاه	
09	Automatic pilot	ملاح أوتوماتيكي	
10	Meteorological map receiver	لاقط لخرائط الطقس	
11	Gyrocompass	بوصلة دوارة	
98	Other	غيرها	
99	Unknown	مجهول	

Table 5.2.1.1 reference to Communication equipments (items 5.2.1.1-5.2.3.1)

جدول ٥,٢,١,١ ترمز إلى أجهزة الاتصال (بنود ٥,٢,١,١ - ٥,٢,٣,١)

Table description: list of the communication equipment which can be present on the vessel.

شرح الجدول: لائحة بأجهزة الاتصال الممكن وجودها على الزورق

الرمز Code	Communication Equipment English Name	أجهزة الاتصالات	Description الوصف
1	Radio VHF	جهاز لاسلكي	
2	Radio telephone	تلفون لاسلكي	
3	Cellular phone	تلفون خلوي	
4	Fax	فاكس	
5	Satellite radio	جهاز لاسلكي بواسطة الأقمار الاصطناعية	
6	Telegraph	تلغراف	
8	Other	غيرها	
9	Unknown	مجهول	

Table 5.3.1.1 reference to Fish Finder apparatus (items 5.3.1.1-5.3.3.1)

جدول ٥,٣,١,١ يرمز إلى جهاز كشف الأسماك (بنود ٥,٣,١,١ - ٥,٣,٣,١)

Table description: list of the fish finder apparatus which can be present on the vessel.

شرح الجدول: لائحة بأجهزة كشف الأسماك الممكن وجودها على الزورق

الرمز Code	Fish Finder Apparatus English Name	جهاز تحديد الأسماك	Description الوصف
1	Echo sounder	مرجع الصدى (ايكو ساوندر)	
2	Sonar	سونار	
3	Net sond	نيت سوند	
8	Other	غيرها	
9	Unknown	مجهول	

Table 6.1 reference to Method of Activating the Fishing Gear (item 6.1)

جدول ٦,١ يرمز إلى طريقة تشغيل معدات الصيد (بند ٦,١)

Table description: list of the gear activation methods which can be present on the vessels.

شرح الجدول: لائحة بطرق تشغيل معدات الصيد الممكن وجودها على الزورق

الرمز Code	Activation Method English Name	نظام التشغيل	Description الوصف
01	Manual	يدوي	
10	Automatic	أوتوماتيكي	
11	Automatic -Mechanical	أوتوماتيكي - ميكانيكي	
12	Automatic -Hydraulic	أوتوماتيكي - هيدروليكي	
13	Automatic -Electric	أوتوماتيكي - كهربائي	
14	Automatic -Belts	أوتوماتيكي - أحزمة	
20	Semi-Automatic	نصف أوتوماتيكي	
21	Semiautomatic -Mechanical	نصف أوتوماتيكي - ميكانيكي	
22	Semiautomatic -Hydraulic	نصف أوتوماتيكي - هيدروليكي	
23	Semiautomatic -Electric	نصف أوتوماتيكي - كهربائي	
24	Semiautomatic -Belts	نصف أوتوماتيكي - أحزمة	
31	Not Present	غير موجود	
98	Other	غيره	
99	Unknown	مجهول	

Table 6.2 reference to Winches Operated by (items 6.2-7)

جدول ٦,٢ يرمز إلى طريقة تشغيل الونشات (بنود ٦,٢ - ٦,٧)

Table description: list of the activation methods of the winches which can be present on the vessel.

شرح الجدول: لائحة بطرق تشغيل الونشات الممكن وجودها على الزورق

الرمز Code	Method of activating the winch English Name	طريقة تشغيل الونشات	Description الوصف
1	Not present	غير موجود	
2	Mechanical	ميكانيكية	
3	Hydraulic	هيدروليكية	
4	Electric	كهربائية	
5	Belts	أحزمة	
8	Other	غيرها	
9	Unknown	مجهول	

Table 7.1.1 reference to Type of company (item 7.1.1) (بند ٧,١,١)**Table description:** list of the types of ownership.

شرح الجدول: لائحة بأنواع الملكية

الرمز Code	Type of company English Name	نوع الشركة	Description الوصف
01	National private	وطنية خاصة	
10	State company	شركة حكومية	
11	National private industrial	وطنية خاصة صناعية	
12	National cooperative	تعاونية وطنية	
13	National partnership	شراكة وطنية	
19	National undecided	وطنية غير محددة	
20	Foreign company	شركة أجنبية	
30	Joint venture	مشروع مشترك	
98	Other	غيرها	
99	Unknown	مجهول	

Table 7.2.2 reference to Operated by (item 7.2.2) جدول ٧,٢,٢ يرمز إلى مشغلة بواسطة (بند ٧,٢,٢) **Table description:** list of possible operators of the company. شرح الجدول: لائحة بالمشغلين الممكنين للشركة

Code الرمز	Operator English Name	المشغل	Description الوصف
1	Owner	المالك	
2	Operator	مشغل	
8	Other	غيره	
9	Unknown	مجهول	

Table 10.5 reference to Fishing zones (item 10.5) جدول ١٠,٥ يرمز إلى مناطق الصيد (بند ١٠,٥)

Table description: list of the fishing zones where the vessels present in the country have fished.

شرح الجدول: لائحة بمناطق حيث يمكن للزوارق اللبنانية أن تصطاد

Code الرمز	Description	الوصف
10010	North - Less than 3 miles	الشمال - أقل من ٣ أميال
10011	North - Less than 6 miles	الشمال - أقل من ٦ أميال
10012	North - Less than 9 miles	الشمال - أقل من ٩ أميال
10013	North - Less than 12 miles	الشمال - أقل من ١٢ ميل
10014	North - More than 12 miles	الشمال - أكثر من ١٢ ميل
10020	Mount Lebanon - Less than 3 miles	جبل لبنان - أقل من ٣ أميال
10021	Mount Lebanon - Less than 6 miles	جبل لبنان - أقل من ٦ أميال
10022	Mount Lebanon - Less than 9 miles	جبل لبنان - أقل من ٩ أميال
10023	Mount Lebanon - Less than 12 miles	جبل لبنان - أقل من ١٢ ميل
10024	Mount Lebanon - More than 12 miles	جبل لبنان - أكثر من ١٢ ميل
10030	Beirut - Less than 3 miles	بيروت - أقل من ٣ أميال
10031	Beirut - Less than 6 miles	بيروت - أقل من ٦ أميال
10032	Beirut - Less than 9 miles	بيروت - أقل من ٩ أميال
10033	Beirut - Less than 12 miles	بيروت - أقل من ١٢ ميل
10034	Beirut - More than 12 miles	بيروت - أكثر من ١٢ ميل
10040	South - Less than 3 miles	الجنوب - أقل من ٣ أميال
10041	South - Less than 6 miles	الجنوب - أقل من ٦ أميال
10042	South - Less than 9 miles	الجنوب - أقل من ٩ أميال
10043	South - Less than 12 miles	الجنوب - أقل من ١٢ ميل
10044	South - More than 12 miles	الجنوب - أكثر من ١٢ ميل
10098	Other	غيره
10099	Unknown	مجهول

Table 10.6 references to Targeted stock /species (item 10.6)

جدول ١٠,٦ يرمز إلى الأرصدة السمكية / أصناف الأسماك المستهدفة (بند ١٠,٦)

Table description: list of the stocks.

شرح الجدول: لائحة بالأرصدة السمكية

Code الرمز	Main stock name	الأرصدة الأساسية	Description الوصف
31	Small gregarious pelagic (e.g. anchovies, sardines, mackerel)	الأسماك البيلاجية (السطحية) الصغيرة التي تعيش في مجموعات (مثل الامشوا، سردين، ومكاريل)	
32	Large pelagic (e.g. tunas, amberjacks)	الأسماك البيلاجية (السطحية) الكبيرة (مثل التونا)	
33	Demersal inshore species, mainly of hard sub-stratum (e.g., sea-bream)	الأسماك القاعية القريبة من الشاطئ، عادة في الطبقات القاسية (مثل الفريديات)	
34	Demersal offshore species, mainly of soft sub-stratum (e.g. codfish)	الأسماك القاعية البعيدة من الشاطئ، عادة في الطبقات الطرية (مثل سمكة القد)	
35	Sessile organisms (e.g., clams, mussels, warty venus)	المخلوقات الثابتة (مثل الصدف، بلح البحر)	
36	Special fish, monospecies and similar (e.g., lobsters, red porgy)	اسماك خاصة، الأصناف المنفردة وغيرها (مثل الكركند)	
37	Coryphaena hippurus (Lampuki)		لمبوكا
38	Octopus		إخطبوط
98	Other		غيرها
99	Unknown		مجهول

Table 11.1.5.3 reference to Ice Format (item 11.1.5.3)

جدول ١١,١,٥,٣ يرمز إلى شكل الثلج (بند ١١,١,٥,٣)

Table description: list of the ice formats which can be present on the vessel.

شرح الجدول: لائحة بأشكال الثلج الممكن وجودها على الزورق

الرمز Code	Ice format English Name	شكل الثلج	Description الوصف
1	Bars	ألواح	
2	Cubes	مكعبات	
3	Scales	مبشور	
4	Grinded	مطحون	
8	Other	غيره	
9	Unknown	مجهول	

Appendix 4

Lebanese Fishing Ports Survey

مسح مرفأى صيد الأسماك اللبنانية

Name of Port / Landing site:

Official Port / Landing site:

Governorate

Kada

Liaison Port

Coordinates:

Yes

نعم

No

كلا

اسم المرفأ / المرربط

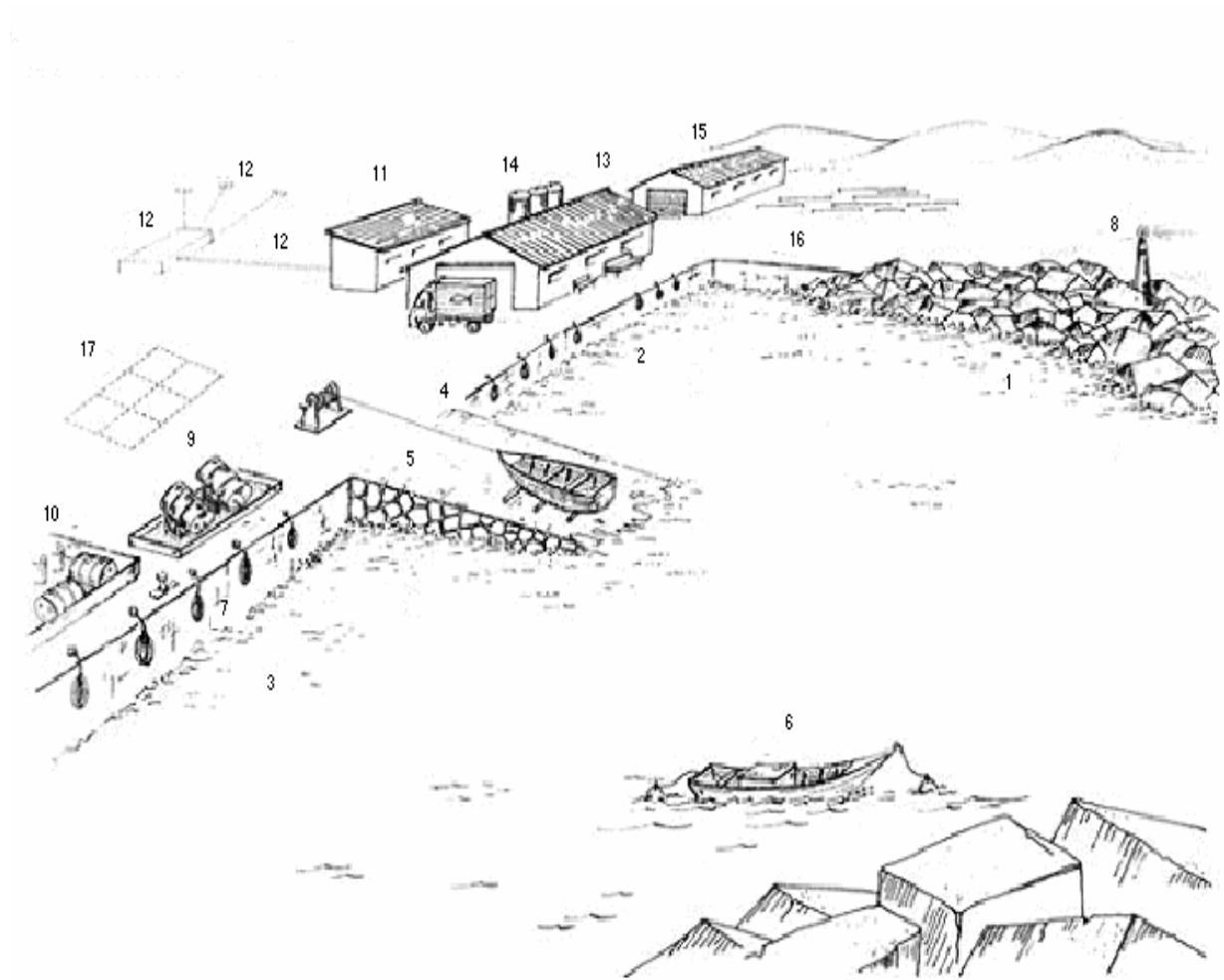
مرفأ / مرربط رسمى

المحافظة

القضاء

مرفأ الارتباط

إحداثيات



Sketch of Port

رسم تخطيطى للمرفأ

1. Breakwater	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	كاسر الأمواج
1.1 Necessity:	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	الضرورة
1.2 Type:	النوع		
<input type="checkbox"/> Rubble	صخور وأنقاض		
<input type="checkbox"/> Reinforced Concrete Wall	حائط خرسانة مسلحة		
<input type="checkbox"/> Other Precast Concrete structures	إشكال خرسانية أخرى مسبقة الصب		
1.3 Length of Breakwater: _____ m	طول كاسر الموج: _____ متر		
1.4 Remarks	ملاحظات		

2. Fish handling basin for offloading	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	حوض معاملة الأسماك عند تفريغها
2.1 Length: _____ m	الطول: _____ متر		
2.2 Description/Remarks	الوصف/ملاحظات		

3. Boat servicing basin for maintenance	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	حوض خدمة وصيانة الزوارق
3.1 Length: _____ m	الطول: _____ متر		
3.2 Description/Remarks	الوصف/ملاحظات		
3.3 Lifting Equipment	معدات رفع		
3.3.1 Winch	رافعة / ونش		
<input type="checkbox"/> Hand operated يدوية	<input type="checkbox"/> Hydraulic هيدروليكية		
<input type="checkbox"/> Electrical كهربائية	<input type="checkbox"/> Belts أحزمة		
<input type="checkbox"/> Other غيرها:			
3.3.2 Winch Capacity : _____ ton	القدرة: _____ طن		
3.3.3 Remarks	ملاحظات		

4. Quay/Jetty wall	رصيف/ محط السفن النائم		
4.1 Quay	رصيف		
4.1.1 Construction Material مواد الإنشاء			
<input type="checkbox"/> Solid Construction	إنشاء ثابت		
<input type="checkbox"/> Piles	على ركائز		
<input type="checkbox"/> Floating: timber over treated empty oil drums or plastic drums	عائم: أخشاب فوق براميل نفط فارغة أو براميل بلاستيكية		
4.1.2 Length: _____ m	طول: _____ متر		
4.1.3 Width: _____ m	عرض: _____ متر		
4.1.4 Depth: _____ m	عمق: _____ متر		
4.1.5 Remarks ملاحظات			
4.2 Jetty	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	محط السفن النائم
4.2.1 Construction Material مواد الإنشاء			
<input type="checkbox"/> Timber/Precast concrete with timber/steel/reinforced concrete piles	خشب/ خرسانة مسبقة الصب على ركائز من الخشب/ فولاذ/ خرسانة مسلحة		
<input type="checkbox"/> Floating: timber over treated empty oil drums or plastic drums	عائم: أخشاب فوق براميل نفط فارغة أو براميل بلاستيكية		
4.2.2 Length: _____ m	طول: _____ متر		
4.2.3 Width: _____ m	عرض: _____ متر		
4.2.4 Depth: _____ m	عمق: _____ متر		
4.2.5 Remarks ملاحظات			

5. Slipway (man-made slope) with a simple winch	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	منحدر صناعي مع رافعة بسيطة
5.1 Material	المواد		
<input type="checkbox"/> Concrete	اسمنت		
<input type="checkbox"/> Timber	خشب		
5.2 Width: _____ m	عرض: _____ متر		
5.3 Length: _____ m	الطول: _____ متر		
5.4 Slope: _____ %	الانحدار: _____ %		
5.5 Winch	رافعة / ونش		

<input type="checkbox"/> Hand operated	يدوية	<input type="checkbox"/> Hydraulic	هيدروليكية
<input type="checkbox"/> Electrical	كهربائية	<input type="checkbox"/> Belts	أحزمة
<input type="checkbox"/> Other : _____		غيرها	
5.5.1 Capacity: _____ ton		القدرة: _____ طن	

6 Tie-up area for boats;	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	منطقة ربط الزوارق
<input type="checkbox"/> For anchorage	للربط		
<input type="checkbox"/> waiting for maintenance and/or spare parts	المنتظرة الصيانة و/أو قطع غيار		
<input type="checkbox"/> other: Specify	غيرها: حدد:		

7 Mooring fittings	تجهيزات مراسي السفن		
7.1 Bollards	مرابط الحبال		
<input type="checkbox"/> Steel	فولاذ		
<input type="checkbox"/> Timber	خشب		
<input type="checkbox"/> Other	آخر		
7.2 Mooring ring	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مربط حلقة
7.3 Fenders	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	سياج واقى
<input type="checkbox"/> Individual (Used car tyres as fenders)	افرادية إطارات مستعملة مستخدمة كواقى		
<input type="checkbox"/> Timber	خشب		
<input type="radio"/> Continuous timber fender	واق خشبي متواصل		
<input type="radio"/> Vertical timber strips every _____ m	أخشاب عامودية كل متر		
7.4 Mooring lines and sinkers:	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	حبال/جنزير الربط والغطاسات
7.4.1 Galvanized chain	جنزير		
<input type="checkbox"/> Length: _____ m	طول: _____ متر		
<input type="checkbox"/> Diameter: _____ cm	قطر: _____ سم		
7.4.2 Rope	حبل		
<input type="checkbox"/> Length: _____ m	طول: _____ متر		
<input type="checkbox"/> Diameter: _____ cm	قطر: _____ سم		
7.4.3 Shackle	مشبك		
<input type="checkbox"/> "D"	"D"		
<input type="checkbox"/> Other	غيره		
7.4.4 Buoys	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	عوامة
7.4.5 Vessel's own anchor	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مرساة المركب نفسه

8 Aids to navigation	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مساعدات الملاحة
8.1 Class	الصف		
<input type="checkbox"/> Landfall lights: lighthouses which are invariably of great power and are usually visible at a great distance.	مصابيح اقتراب من اليابسة: منارة ذات قدرة كبيرة و عادة مرئية من مسافة بعيدة		
<input type="checkbox"/> Position lights: are also of considerable power, but their primary function is to indicate the position of a harbor mouth or headland	مصابيح موقع: أيضا لديهم قدرة كبيرة، لكن وظيفتهم الأساسية هي الإشارة إلى موقع مدخل الميناء أو رأس بحري		
<input type="checkbox"/> Lighted aids to navigation: comprises those Lightbuoys which mark the existence of an offshore shoal or rock, or a navigable channel	عوامات مضيئة التي تحدد وجود ضحل قريب من الشاطئ أو صخرة، أو قناة صالحة للملاحة مساعدات الملاحة المضيئة: يشمل ذلك		
<input type="radio"/> Lantern mounted on a floating buoy and anchored.	فانوس محمول على عوامة أو مثبتة		
<input type="radio"/> Fixed marker.	علامة ثابتة		
8.2 Lights are distinguishable from each other by	المصابيح يمكن تمييز أنواعها بالتالي		
8.2.1 Character:	صفاته		
<input type="checkbox"/> Fixed: a fixed or steady light which is eclipsed or blanked-out at stated intervals	ثابتة: مصباح ثابت الذي يكسف أو يخفى في فترات محددة		
<input type="checkbox"/> Flashing: Lightbuoys nearly always carry flashing or occulting lights to distinguish them from riding lights of moored vessels.	وامضة: عوامات مضيئة دائما تحمل مصابيح وامضة أو كاسفة لتمييزها عن أضواء السفن الراسية		
<input type="checkbox"/> Occulting	كاسفة		

8.2.2 Color:	الألوان
<input type="checkbox"/> The color of a light unless otherwise specified must be white .	ألوان الأضواء يجب أن تكون بيضاء
<input type="checkbox"/> Position lights are usually red (port or left side) and green (starboard or right side).	مصابيح الموقع هي عادة حمراء (من جهة المرفأ أو اليسار) و خضراء (من اليمين)
8.2.3 Period: The period of a light is the interval between recommencement of successive phases: _____ minutes	الفترة: فترة الضوء هي الفترة بين مواصلة المراحل المتتالية: _____ دقيقة
In a simple flashing light the period is the length of time between one flash and the next: in a group flashing system it is the interval between the beginning of one complete phase and the beginning of the next.	في مصباح بسيط، الفترة هي الوقت بين ومضة وأخرى. في مجموعة مصابيح ومضبة الفترة هي الفترة بين بدء مرحلة كاملة وبداية المرحلة الثانية

9 Refueling point	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	محطة تزود بالوقود
9.1 Location	الموقع		
<input type="checkbox"/> Central	مركزي		
<input type="checkbox"/> Other: Specify	آخر: حدد		
9.2 Type	نوع		
<input type="checkbox"/> Simple	بسيط		
<input type="checkbox"/> Professional	محترف		
9.3 Fuel Type	نوع الوقود		
<input type="checkbox"/> Diesel	ديزل	<input type="checkbox"/> Gasoline	بنزين
<input type="checkbox"/> Other	غيره: _____		
9.4 Fuel Tank	خزان وقود		
<input type="checkbox"/> Size: _____ m3	حجم: _____ م ³		
<input type="checkbox"/> Type	نوع		
<input type="radio"/> Oil barrels	براميل نفطية		
<input type="radio"/> Galvanized Steel	فولاذ مغلفن		
<input type="radio"/> Plastic	بلاستيك		

10 Waste oil & slops disposal/separation	التخلص أو فصل الزيوت المستعملة والفضلات		
10.1 Slops	الفضلات		
10.1.1 Collection	جمع		
<input type="checkbox"/> Throw directly into sea	رمي مباشرة في البحر		
<input type="checkbox"/> Collect slops in boxes	تجميع في مستوعبات		
<input type="checkbox"/> Collect in one location then burn	تجميع في مكان واحد ثم حرقها		
10.1.2 Disposal	نقل		
<input type="checkbox"/> Municipality	البلدية	<input type="checkbox"/> Contractor	مقاول
<input type="checkbox"/> Other	غيره		
10.2 Waste oil	الزيوت المستعملة		
10.2.1 Collection	جمع		
<input type="checkbox"/> Throw directly into sea	رمي مباشرة في البحر		
<input type="checkbox"/> Collect in drums	تجميع في براميل		
<input type="checkbox"/> Collect in one location	تجميع في مكان واحد		
10.2.2 Disposal	نقل		
<input type="checkbox"/> Municipality	البلدية	<input type="checkbox"/> Contractor	مقاول
<input type="checkbox"/> Other	غيره		

11 Toilets and washrooms	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مراحيض و حمامات
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12 Sewage disposal for fish handling areas (fish stalls) and sanitary facilities (toilets)		
تصريف المياه المبتذلة الناجمة عن تنظيف الأسماك والمنشآت الصحية		
12.1 Septic Tank	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
حفرة صحية		
12.1.1 Septic Tank Cleanup: تنظيف الحفرة الصحية		
<input type="checkbox"/> Contractor مقاول	<input type="checkbox"/> Other غيره	
12.2 Municipal sewer	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
مجاري عمومية		
12.3 Soakaway	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
حوض ترسيب/امتصاص		
<input type="checkbox"/> Proximity to nearby urban centers: _____ m قربها من المراكز الحضرية/السكنية القريبة: _____ متر		
<input type="checkbox"/> Proximity to ground water drinking supply e.g. a shallow borehole or well: _____ m قربها من مياه الشرب الجوفية (بئر ضحل أو عميق): _____ متر		
12.4 Sewage Effluent Treatment (if using fresh water)	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
معالجة مياه المجاري (بحال استعمال مياه عذبة)		
12.5 Screens	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
مصافي منخل		
12.6 Traps	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
مصيدة أوساخ/محبس روائح		

13 Fish hall for sorting, packing/selling and icing fish including ice store or small ice plant;		
قاعة اسماك لفرز، وتوضيب/بيع وتثليج الأسماك بما في ذلك متجر ثلج أو مصنع ثلج صغير		
13.1 Fish Stall/Auction	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
ساحة مزاد الأسماك		
13.1.1 Walls Construction Material مواد الإنشاء الحيطان		
<input type="checkbox"/> Wooden خشبية	<input type="checkbox"/> Concrete اسمنت	
<input type="checkbox"/> Metal حديد	<input type="checkbox"/> Container مستوعب	
<input type="checkbox"/> Other غيرها		
13.1.2 Roof Construction Material مواد إنشاء السقف		
<input type="checkbox"/> Wooden خشبية	<input type="checkbox"/> Concrete اسمنت	
<input type="checkbox"/> Metal حديد	<input type="checkbox"/> Container مستوعب	
<input type="checkbox"/> Other غيرها		
13.2 Water source	<input type="checkbox"/> Freshwater مياه عذبة	
<input type="checkbox"/> Seawater مياه البحر		
13.3 Drainage	تصريف المياه المبتذلة	
<input type="checkbox"/> Soakaway (if using Seawater) (بحال استعمال مياه البحر) حوض ترسيب/امتصاص		
<input type="checkbox"/> Septic Tank (if using fresh water) (بحال استعمال مياه عذبة) حفرة صحية		
<input type="checkbox"/> Municipal sewer مجاري عمومية		
13.4 Cold Storage & Ice	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
مخزن مبرد و ثلج		
<input type="checkbox"/> Chill Rooms/Refrigerator غرف مبردة/ثلاجة		
<input type="checkbox"/> Ice ثلج		
<input type="checkbox"/> OBlock قالب	<input type="checkbox"/> Flake رقائق	
<input type="checkbox"/> OCrushed مسحوق/مبروش	<input type="checkbox"/> Tubular أنبوبي	
13.5 Ice source	مصدر الثلج	
<input type="checkbox"/> Ice plant: Capacity: _____ kg/hr مصنع الثلج: القدرة: _____ كلغ/ساعة		
<input type="checkbox"/> Ready-made crushed/blocks ice from commercial suppliers جاهز (قوالب/مبروش) من موردين تجاريين		
13.6 Ice boxes for sale to fishermen, processors and households	صناديق ثلاجة لبيعها لصيادي الأسماك، معالجو الأسماك، والمنزل	
<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	
13.7 Ice crusher	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
كسارة ثلج		
13.8 Power supply	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
مصدر الكهرباء		
<input type="checkbox"/> Local Electricity Company شركة الكهرباء المحلية		
<input type="checkbox"/> Standby electrical generator: _____ KVA مولد كهربائي: _____ كيلو فولت		
<input type="checkbox"/> For whole Port لكل المرفأ		
<input type="checkbox"/> For Fish Stalls لصالة المزاد		
<input type="checkbox"/> For Recreation Area لمركز الترفيه		
<input type="checkbox"/> For key facilities للاماكن الحيوية		
<input type="checkbox"/> For Coop / Syndicate للتعاونية و/أو النقابة		
<input type="checkbox"/> Other: specify غيرها: حدد		
<input type="checkbox"/> Other: specify	غيرها: حدد	

13.9 Storage	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مستودعات
13.9.1 Size: _____ m2	المساحة: _____ متر مربع		
13.9.2 Construction Material	مواد الإنشاء		
<input type="checkbox"/> Concrete	اسمنت	<input type="checkbox"/> Metal	حديد
<input type="checkbox"/> Wood	خشب	<input type="checkbox"/> Container	مستوعب
<input type="checkbox"/> Other	غيرها		
13.9.3 Roof	السقف		
<input type="checkbox"/> Wood	خشب	<input type="checkbox"/> Plastic	بلاستيك
<input type="checkbox"/> Asbestos	اترنيت	<input type="checkbox"/> Concrete	اسمنت
<input type="checkbox"/> Metal	حديد	<input type="checkbox"/> Other	غيرها
13.9.4 Individual rooms for fishermen:	غرف فردية للصيادين		
<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا		
13.9.4.1 Number of rooms:	عدد الغرف		
13.9.4.2 Size of each room: _____ m2	مساحة كل غرفة: _____ متر مربع		
13.10 Boat building/maintenance facility:	منشأة لبناء / صيانة الزوارق		
<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا		
13.11 Fishermen's cooperative:	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مركز لتعاونية الصيادين
13.11.1 Name of Cooperative:	اسم التعاونية		
13.11.2 Name & phone of president of Cooperative:	اسم وتلفون رئيس التعاونية		
13.12 Fishermen Syndicate:	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مركز لنقابة الصيادين
13.12.1 Name of Syndicate	اسم النقابة		
13.12.2 Name & phone number of president of Syndicate	اسم ورقم تلفون رئيس النقابة		

14 Elevated fresh water supply tanks;	خزانات مياه عذبة مرفوعة		
<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا		
14.1 Water reservoir:	cu.m	خزان الماء: _____ م³	
<input type="checkbox"/> Concrete	اسمنت	<input type="checkbox"/> Galvanized Steel (مز بيق)	فولاذ مغلفن (مز بيق)
<input type="checkbox"/> Steel Drums	براميل حديد	<input type="checkbox"/> Plastic (Fiberglass/polyethylene)	بلاستيك (فبير غلاس/بولي اثيلين)
14.2 Water Supply	مصدر المياه		
<input type="checkbox"/> Municipal	شركة المياه	<input type="checkbox"/> Borehole	بئر
<input type="checkbox"/> Contractor	مقاول	<input type="checkbox"/> Other	غيرها
14.3 Water Pump	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مضخة المياه
14.3.1 Power: _____ HP	قوتها: _____ حصان		
14.3.2 Type	النوع		
<input type="checkbox"/> Electrical	كهربائية	<input type="checkbox"/> Diesel	ديزل
<input type="checkbox"/> Manual	يدوية	<input type="checkbox"/> Other	غيرها
14.4 Fittings & Accessories	تجهيزات و إكسسوارات		
14.4.1 Filter	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	فلتر/مصفاة
14.4.2 Type	النوع		
<input type="checkbox"/> Steel (galvanized)	فولاذ مغلف	<input type="checkbox"/> PVC	بلاستيك (بي في سي)
<input type="checkbox"/> Bronze	برونز	<input type="checkbox"/> Other	غيرها

15 Other facilities	منشآت أخرى		
15.1 Fishermen's net store	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	متجر شبك الصيادين
15.2 Engine spares	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	قطع غيار للمحركات
15.3 Hawker stalls	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	أكشاك البائعين
15.4 Recreation/food facilities	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	أماكن الترفية والطعام
16 Flat area for net repair;	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	ساحة لإصلاح الشباك

17 Parking area	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	موقف سيارات
16.1 Parking area capacity: _____ vehicles	سعة موقف السيارات: _____ سيارة		

18 Asphalted/Paved Roads		الطرق المعبدة
<input type="radio"/> Internal		داخلية
<input type="radio"/> Access to Public Road Network		الوصول إلى شبكة الطرق العامة
<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	

19 Fishing Vessels Official Capacity: _____ vessels	زورق _____	قدرة المرفأ الرسمية لاستيعاب زورق الصيد:
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20 Number of fishing vessels at port: _____ vessels	زورق _____	عدد زورق الصيد الموجودة في المرفأ:
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21 Security		الامن
21.1 Fence	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
21.2 Gate/Entrance	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
21.3 Police Station	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
21.4 Army Post	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
21.5 Army Intelligence Post	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا
21.6 State Security Post	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا

22 Civil Defense Position	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مركز للدفاع المدني
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23 Medical Emergency Center	<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	مركز طوارئ طبي
23.1 in port			داخل المرفأ
23.2 outside port			خارج المرفأ
23.2.1 Proximity to Port: _____ km		كلم	قربه من المرفأ:
23.2.2 Name of Center			اسم المركز

24 Communication Equipment		<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	أجهزة الاتصال
24.1 Type				
<input type="checkbox"/> Telephone/Fax	تلفون/فاكس	<input type="checkbox"/> Cellular phone	تلفون خلوي	
<input type="checkbox"/> Radio telephone	تلفون لاسلكي	<input type="checkbox"/> Telegraph	تلغراف	
<input type="checkbox"/> Radio VHF	جهاز لاسلكي	<input type="checkbox"/> Other	غيره	
<input type="checkbox"/> Satellite radio	جهاز لاسلكي بواسطة الأقمار الاصطناعية			

25 Navigation Equipment		<input type="checkbox"/> Yes نعم	<input type="checkbox"/> No كلا	أجهزة الملاحة
25.1 Type				
<input type="checkbox"/> Loran C	لوران C	<input type="checkbox"/> Direction finder	محدد الاتجاه	
<input type="checkbox"/> Loran A	لوران A	<input type="checkbox"/> Automatic pilot	ملاح أوتوماتيكي	
<input type="checkbox"/> Omega	اوميغا	<input type="checkbox"/> Radar	رادار	
<input type="checkbox"/> Decca	ديكا	<input type="checkbox"/> Gyrocompass	بوصلة دوارة	
<input type="checkbox"/> GPS	جي بي اس	<input type="checkbox"/> Other	غيرها	
<input type="checkbox"/> Meteorological map receive	لاقط لخرائط الطقس			

26 Remarks	ملاحظات