An Analytical Study of The Most Important Problems and Proposed Solutions Facing Fishermen in The Port of Al-Ataka, Suez Governorate

Esraa G. Mahmoud[1*], Ashraf S. Youness[1], Mohammed S. Al-Sabbagh[1], Mohammed A. Elramily[2]

[1] Department of Human Development and Economics, Faculty of Fisheries, Suez University P.O. Box:43221, Suez, Egypt

[2] Department of Agricultural Economics- Faculty of Agriculture, Beni Suef University P.O. Box: 62521, Egypt

ABSTRACT

This research aims to identify the degree of problems facing fishermen in the port of Atka in Suez Governorate and to know the proposed solutions to overcome these problems, the data was collected using the questionnaire form through a personal interview, for a random sample of about 159 fishermen by 7.2% of the total number of fishermen working on fishing boats in the purse seine net in the research area. During the month of December 2023, descriptive statistical analysis methods were used, including the use of frequencies, percentages, and relative weight to describe the variables in question, and the most important results reached by the research were:The degree of presence of problems facing the fishermen was represented by environmental problems, which are the problem of overfishing in the Gulf of Suez, and pollution by petroleum waste from cruise ships, with a relative weight of 80.97 and 73.9, In administrative problems, which is the problem of lack of services directed to fishermen, and failure to assist fishermen financially during moratorium periods, with a relative weight of 97.16 and 91.82, In the financial problems, which is the problem of the high prices of oils and fuel, with a relative weight of 91.35. While the degree of technical and guidance problems facing the fishermen surveyed was the problem of the lack of availability of everything new in the field of fishing, and the lack of training courses for fishermen, with a relative weight of 65.56 and 61.79 , The research recommended the executive and guidance authorities to focus on personal sources in the dissemination of guidance recommendations related to innovations in the field of fishing by identifying the people on whom fishermen depend in their respective communities, and developing specialized training programs for fishermen to overcome the problems they face during fishing operations, while facilitating access for fishermen to complete the tasks of the guidance device in the field of fishing.

1. INTRODUCTION

The production of fish from natural sources in the Suez Governorate depends on the production of fish from the Gulf of Suez, where the amount of fish production is estimated at about 76,376 thousand tons, representing about 38.7% of the total fish production from the Red Sea catch. Fish production from the Gulf of Suez also depends on multiple landing sites, represented by: From the port of Al-Ataka, Al-Tur, Ras Gharib, and Al-Salakhana, where the amount of fish production in these locations is estimated at approximately 11,020 thousand tons, 3960 thousand tons, 795 thousand tons, and 601 thousand tons for each of them **(Lakes and Fish Resources Protection and Development Authority, 2021)**.

Despite this production is not commensurate with the productive potential available in the port of Al-Ataka, which can be exploited optimally when the problems and obstacles facing fishermen at their various levels are overcome, as these problems are considered production determinants and are represented in four main groups: environmental problems, administrative problems, financial problems, technical and Extension problems, and each group of these problems contains a set of related elements. If these problems are overcome, fish production from the catch can be increased.

The human element represents a pivotal and essential component of these groups, and then the solutions to these problems have many requirements, including working to develop the capabilities of the human element of this production in its various elements and different stages. In this regard, fish extension plays one of the main roles in this area related to the development of fishermen's capabilities, which represent the most important basic axes in the advancement of the fisheries sector, where fish guidance works to raise awareness of laws Which are issued in order to preserve fish wealth and balanced fish stocks, as well as the marine environment, The process of raising the awareness of fishermen and developing their knowledge and skills and their attitudes towards the laws regulating the fishing process is important in achieving the goals that the fisheries sector seeks to achieve, without which it is difficult to achieve any of them.

Identifying the problem is one of the most important stages of planning extension programs in the models of **Pesson (1966)**, **Raudabaugh (1963)** and **Powers (1966)** and represents relative importance in the model of **Lawrence (1973)**. Opinions have differed on the problem and some researchers see it as mainly unsatisfied needs, but it turns out that the need tends to be centered on the individual while the problem tends to be centered on the local community, definitions of the problem vary from one field to another according to the nature of the circumstances in which the problem exists, **Khairallah (1979)** believes that the problem is "a state of dissatisfaction and tension that arises when it is realized that there are obstacles to reaching the goal or the inability and deficiency to obtain better results by taking advantage of familiar processes and activities in a better and more efficient manner, and the size of the problem can be measured by

finding the difference between the imposed and the reality" while **Atman (2004)** defined it as "an obstacle facing individuals and attracting their interest and needing what is often called a solution, or it is something mysterious and unspecified that causes tension and arouses motivation in individuals if the group to unravel the mystery and remove this tension." and **Abu Saad (2009)** has defined the problem as "a situation in which we cannot make an appropriate response or an obstacle that prevents us from achieving the goal" while **Jabbara and Ali (2003)** defined it as: "undesirable and frequent behavior, attitude or situation.

After presenting some definitions of the concept of the problem, it can be said that the problem is a situation that needs to be solved, and this situation stands without the individual achieving his goals that he seeks, which leads him to a state of imbalance.

With regard to the problems facing fishing boats in the port of Atka in Suez Governorate, the results of **(Younis, 2021)** divided the problems into three main groups: environmental problems, marketing problems, and productivity problems.

2. Research Problem

Research studies dealt with the problems that limit the productive capacities of the Gulf of Suez catch in general, and the problems related to one of its ports in particular, but there is a scarcity of research that dealt with the problems that limit the productive capabilities of fishermen working on fishing boats in the purse seine net in the port of Atka, and the consequent weakness of production, failure to meet the needs of the population, and not keeping pace with the continuous development in fishing technology, which requires the knowledge of fishermen working on fishing boats of purse seine net at the port of Atka with all that is new, as not providing them with new knowledge and skills leads to the lack of optimal economic exploitation of this Atka catch and thus low fish production. Therefore, it was necessary to identify the problems that limit the productive capabilities of fishermen working on fishing boats in purse seine net in the port of Atka.

3. Research Objectives

1.   Identify the personal, social and economic characteristics of the fishermen in purse seine net surveyed.

2.   Identify the community participation of respondents in social organizations in the research area.

3.   Identify the sources of respondents' access to information related to fishing operations in purse seine net

4.   Determining the level of problems facing the fishermen surveyed in the port of Atka that limit their production capacities.

4.   Research method

4.1.   Type of research and the method used

This research is considered descriptive research of a survey nature, where some of the studied variables and factors related to the characteristics of fishermen and the current situation in the study area are described. As for the method used in this research, the partial social survey approach with a sample was relied upon to achieve the research objectives.

4.2. Research field

It is the framework in which the research is conducted, and it includes three sub-fields: -

1.Geographical area: It means the area in which the research was conducted, which is the port of Ataka in Suez Governorate as it is considered the most productive port.

2.Human field: It means fishermen working on fishing boats for the purse seine net in the port of Atka, and their number is 2208 fishermen representing the comprehensive search. A simple random sample of 159 fishermen representing 7.2% of the total number of fishermen working on fishing boats the purse seine net was selected in the research area.

3.Time zone : This is the time period during which the data was collected. This data was collected during December in 2023/2024 production season.

4.3. Sources, method and tools for collecting data

This data was collected using personal interviews with the respondents, and reliance was placed on both:

1.The primary data, which is the data collected from the questionnaire form through fishermen who works on fishing boats of the purse seine net, and the questionnaire form was divided into basic data, and the environmental, administrative, physical, technical and Extension problems facing them in the port of Atka, which are closed questions.

2.Secondary data, which has been collected by ministries and institutions concerned with the fisheries sector, in addition to research references, scientific theses, and the Internet.

4.4.   Quantitative treatment of research variables

1-Age: This means the age of the respondents at the time of conducting the research. It was divided into 3 age groups according to the age range.

2- Educational status: It means the educational level of the respondents and it was divided into 4 categories (illiterate - reads and writes - intermediate qualification - high qualification) and symbolic values were given to them (1-2-3-4) respectively.

3- Full-time work in fishing: They were divided into two categories (full-time -part-time) and symbolic values were given to them (1-2).

4- Number of years of experience: It is divided into 3 categories according to the number of years of experience.

5- social status: It was divided into two categories (unmarried - married) and values were given to it (1-2).

6- number of family members: It means the number of children of the respondents and they were divided into 3 categories (none - less than 4 - more than 4).

7- Number of children who practice the fishing profession: It was divided into two categories (none - less than 4).

8- Source of income: It was divided into two categories (fishing - an additional source) and values were given to them (1-2).

9- Type of possession: This means the type of possession of the fishing boat among the respondents. They were divided into four categories: owner, participant, rent, and do not own, and values were given to them (1, 2, 3, 4).

10- Attending extension activities: The respondents were divided in terms of attendance into two categories (no, yes) and values were given to them (1-2).

11-Social Participation: This means the extent of the respondents' participation in social organizations and the type of membership in them. It was divided into two categories (non-participant - participant) and symbolic values were given, 1 and 2. In the case of community participation, it was divided into two categories: ordinary member, council member. Symbolic values (1, 2) were given.

12- Sources for obtaining fishing information: This means the source from which the respondents obtained fishing information. They were divided into 9 sources on a graduated scale consisting of 4 categories: (no, rarely, sometimes, always). Symbolic values 1-2- 3-4 were given respectively.

13- Problems facing fishermen in Atka Port: The problems facing fishermen of purse seine net in Atka

Port were identified, and these problems were divided into four main groups, each of which contains a number of elements, and these groups are as follows: a group of environmental problems containing 8 problems, a group of administrative problems containing 13 problems, a group of financial problems containing 12 problems, and a group of technical and guidance problems containing 8 problems. Each researcher was asked to develop his response to determine the level of existence of each problem on a graded scale consisting of four categories: (non-existent, weak, medium, large), and symbolic values were given (1, 2, 3, 4) respectively.

4.5. Statistical analysis tools: Descriptive analysis methods were used, frequencies, percentages, and relative weight were used to describe the variables in the research.

5. Results and discussion

5.1. Identify some personal, social, economic and cognitive variables of the fishermen who works in purse seine boats surveyed related to the practice of the profession

Some personal, social, economic, and cognitive variables of the fishermen studied were identified. In terms of: age, educational status, social status, devote himself to the profession of fishing, Number of sons workers in the fishing profession, Number of years of experience in the field of fishing, the sources of income of the fishermen, Type of boat ownership, number of boats, membership of social organizations, attendance (participation) in extension activities, extension services, sources of access to extension information in the field of fish and fishing.

5.1.1. Age

The data of Table (1) shows that 44.7% of the total respondents fall in the age group (36-55), while a third of the respondents 33.3% fall in the age group (16-35), and that 22% of the total respondents fall in the age group 55 years and over.

It is concluded from the results of Table (1) that the vast majority of respondents are from the working age groups (15-65), which is characterized by the ability to work and support other age groups (children and the elderly). It is also clear from the results of Table (1) that there are two age groups, namely the youth group (16-35). A third of the respondents represent 33,3%, which is an age group characterized by activity, vitality, work and production, and the ability to withstand workloads,

exert physical effort, the ability to acquire many skills and experiences, and to adopt ideas and innovations in the field of fishing. The second category is the elderly (36-55 and over), representing two-thirds of the respondents 66,7%, which is characterized by life experience, work, and the ability to make decisions, overcome difficulties and face crises.

5.1.2. Educational status

It is clear from the data in Table No. (1) that 45.3% of the total respondents are illiterate (cannot read and write), and that 23.3% of the total respondents are in the category of (read and write). The percentage of respondents who have an average qualification and a high qualification are 27% and 4.4% of the total respondents, respectively.

This indicates that less than half of the respondents are illiterate (not fluent in reading and writing) and this is due to the nature of the fishing profession that attracts individuals without being bound by the requirement of education or obtaining a certificate, and this is an obstacle to the ability of these respondents to accept and learn modern methods and ideas and not to exploit the financial, economic and social potential they have, which constitutes a significant loss in the exploitation of the element of work optimal economic exploitation.

5.1.3. Profession of fishing

The results of the research show that the vast majority by 98.7% of the total respondents are full-time to work in fishing and it is concluded from this that the source of their income is the profession of fishing, which pushes them to accept the ideas developed to improve the level of their income, while the percentage of respondents who own another profession besides fishing is 1.3% of the total respondents.

5.1.4. Number of years of experience

The results of Table (1) indicate that 45.9% of the total respondents (less than 20 years) have experience in the fishing profession and 42.8% of the total respondents have acquired experience of (20-40) years in the fishing profession, which reflects the high level of their acquired knowledge.

5.1.5. Social status

The results contained in Table (1) indicate that the vast majority are married by 75.5% of the total respondents and this category is characterized by striving, seriousness, responsibility, and supporting their families, which pushes them to seek to work to increase their income in order to improve the

standard of living of their families, which pushes them to accept the new ideas provided by the agricultural extension apparatus.

5.1.6. Number of family members

The results of Table (1) indicate that the majority of respondents own medium to large families, where they obtained 95.8% of the total respondents, while those who do not have children were 4.2% of the total respondents, which increases the burdens on the fisherman in order to perform his duties towards his family and requires him to work more to provide a decent life for his family, and the presence of large families on one landfill, which reduces the level of general income for each family.

5.1.7. Number of sons workers in the fishing profession

The results of Table No. (1) indicate that the majority of the respondents their children do not practice the profession of fishing, as their percentage is 78.4% of the total respondents, as a result of the parents' fear for the children to the risks of fishing, while the percentage of children who practice the profession of fishing is 21.6% of the total respondents, and therefore because of the keenness of their parents to teach them the

profession of fishing and the keenness of children to help their parents perform fishing practices to improve the level of income.

5.1.8. The sources of income of the fishermen

The results indicate that the vast majority of the respondents, by 98.7% of the total respondents, depend on the fishing profession as their only source of income, so fish extension must develop their knowledge and skills to increase production in order to improve their standard of living.

5.1.9. Type of boat ownership

The data of Table (1) shows that the majority of respondents 79.2% do not own fishing boats, and that 5.7% of the respondents own fishing boats, while 13.8% and 1.3% of the total respondents are chartered and participate in fishing boats respectively.

5.1.10. Attendance (participation) in extension activities

Table (1) indicates that the vast majority of the respondents 80,5% of the total respondents did not participate in any extension activities, which requires the Fish extension Authority to increase the participation of fishermen in activities.

Table (1): Numerical and Relative Distribution of Fishermen Surveyed According to Personal, Social, Economic and Cognitive Characteristics Related to Practicing the Profession

Variabels (N=159)		Number	%
Age	35-16	53	33,3
	55-36	71	44,7
	55more than	35	22,0
Educational status	Illiterate	72	3,45
	Read and write	37	3,23
	average qualification	43	27,0
	high qualification	7	4,4
Profession of fishing	Full time	157	98,7
	Part time	2	1,3
Number of years of experience	20less than	73	45,9
	40-20	68	42,8
	40 more than	18	11,3
Social status	single	39	24,5
	Married	120	75,5
Number of family members (n=120)	No	5	4,2
	Less than 4	104	86,6
	More than	11	9,2
Number of sons workers in the fishing profession (n=120)	No	94	78,4
	Less than	26	21,6

Source of income	Fishing	157	98,7
	additional source of income	2	1,3
Type of boat ownership	Owner	9	5,7
	Rent	22	13,8
	Participant	2	1,3
	not owner	126	79,2
Attendance (participation) in extension activities	Yes	31	19,5
	No	128	80,5

Source: Respondents Questionnaire Form

5.2. Participation in the membership of social organizations

Table (2) indicates that the vast majority of respondents by 63.5% of the total respondents are participating in the Cooperative Society for Fishing, and that 1.9% of the total respondents are participating in the membership of the Fishermen's Welfare Association, while all respondents are 100% non-participants in the membership of the organizations of the Parents Council, the Local Community Development Association, social and sports clubs, and political parties. This concludes from the lack of participation of respondents in the membership of many social organizations in their villages. Also, the weak participation in the membership of the Fishermen's Welfare Association, despite the fact that this organization is linked to the nature of their work. This requires guidance agencies in the field of fishing to include extension programs to raise fishermen's awareness of the importance of participating in the membership of community organizations in their communities, and to highlight the importance of these organizations in achieving their professional and societal demands.

5.3. Sources of obtaining fishery information

The results indicate that the respondents acknowledged that personal experience, family, neighbors, and friends are among the sources they rely on to obtain fishing information and knowledge, with a relative weight of 98.1 and 94.7%, respectively. They are followed by satellite channel programmes, and the Agency for the Protection and Development of Lakes and Fish Resources (Fish

Table (2): Distribution of respondents according to their participation in social organizations in their communities

social organizations	Participation			
	Yes		No	
	number	%	Number	%
Cooperative Union for Water Resources	0	0	159	100
Fishing Cooperative Society	101	63,5	58	36,5
Fishermen's Welfare Association	3	1,9	156	98,1
Council Fathers	0	0	159	100
Local Community Development Association	0	0	159	100
Social and sports clubs	0	0	159	100
Political	0	0	159	100

Source: Respondents Questionnaire Form

Resources Authority) with a relative weight of 28.1 and 27.8, respectively.

The results also show that the degree of benefit of the respondents from the sources of information was represented in personal experience, family, neighbors and friends with a relative weight of 85.4 and 81.9 respectively.

It is concluded from the table that the multiplicity of sources of information to which the fishermen surveyed are exposed, but the personal sources in both personal experience, family, neighbors and friends came in first place, followed by public sources and represented in television programs on

satellite channels, while the research and scientific bodies came in last place among the respondents in terms of their exposure to them, as well as the degree of confidence in those sources and represented in both the National Institute of Oceanography and Fisheries in Suez, and the Faculty of Fisheries in Suez.

This requires the executive and guiding authorities to focus on personal sources in publishing guiding

recommendations related to innovations in the field of fishing by identifying the people on whom fishermen depend in their respective communities, and developing specialized training programs for them to be the link between the guidance body and the fishermen to facilitate the tasks of the guidance apparatus.

Table (3): The relative importance of the sources of obtaining hunting information for the respondents

Sources of obtaining fishery information	Degree of benefit								Relative weight	Extent of exposure								Relative weight %
	No		Weak		average		large			No		rarely		some times		always		
	n	%	N	%	N	%	n	%	%	n	%	n	%	n	%	n	%	
Fish Resources Authority	154	97	5	3	-	-	-	-	25,8	155	98	3	2	-	-	4	0.6	27,8
Faculty of Fisheries, Suez	155	97,5	4	2,5	-	-	-	-	32,4	155	98	2	1	1	1	1	0.6	26,1
National Institute of Marine Sciences and Fisheries in Suez	152	95,6	7	4,4	-	-	-		26,1	152	96	4	3	1	1	2	1.3	26,9
Personal experience gained	31	20	-	-	-	-	128	80.5	85,4	4	2.5	-	-	-	-	155	98	98,1
Family, neighbors and friends	38	24	-	-	1	0.6	120	75.5	81,9	11	6.9	_	_	1	1	147	93	94,7
Satellite channels	147	92,5	10	6,3	1	0,6	1	0,6	27,4	143	90	13	8	2	1	1	0.6	28,1
Social media (Facebook,...)	159	100	-	-	-	-	-	-	25,0	159	100	-	-	-	-	-	-	25,0
Companies selling fishing machinery and equipment	159	100	-	-	-	-	-	-	25	159	100	-	-	-	-	-	-	25,0
Magazines	159	100	-	-	-	-	-	-	25,0	159	100	-	-	-	-	-	-	25,0

Source: Respondents Questionnaire Form

5.4. Problems facing the surveyed fishermen working in the purse seine net in the port of Atka: -

The problems facing fishermen working in the purse seine net in the port of Atka were divided into four main groups, each of which contains a number of elements, as follows: the group of environmental problems, the group of administrative problems, the group of financial problems, and the group of technical and extension problems.

5.4.1. Environmental problems:

The data of Table (4) shows that there is a variation in the degree of environmental problems facing the respondents during the fishing process in the port of Atka, ranging from 80.97% to 57.07% according to the relative weight of the degree of environmental problems. The highest rates of their presence were represented in the following problems: overfishing in the Gulf of Suez, pollution by petroleum waste from cruise ships, and the problem of the presence of coral reefs, with a relative weight of 80.97, 73.9%, and 70.59%, respectively. Its minimum according to

relative weight was the dumping of materials that are difficult to decompose, such as plastics and solids, with a relative weight of 57.07%. This requires the Fisheries Extension Body, the fisheries sector agencies, and the Environmental Affairs Agency to develop appropriate mechanisms and programs to reduce these problems that hinder the increase in fish yield.

Table (4): Distribution of fishermen surveyed according to the degree of environmental problems they face during the fishing process

Environmental Problems	Not				Presence				relative weight %
	non-existent		Weak		average		Large		
	No.	%	No.	%	No.	%	No.	%	
Pollution resulting from sewage on the shores of the Red Sea	13	8.1	75	47.2	33	20.8	38	23.9	65,1
Pollution resulting from the wastewater of boats established on the shores of the Red Sea	11	6.9	75	47.2	26	16.4	47	29.5	67,13
Pollution resulting from factory waste built on the shores of the Red Sea	10	6.3	71	44.6	26	16.4	52	32.7	68,9
Pollution by petroleum residues from cruise ships and freight transport	12	7.5	40	25.3	50	31.4	57	35.8	73,9
Overfishing in the Gulf of Suez	26	16.3	6	3.8	31	19.5	96	60.4	80,97
The presence of coral reefs that hinder fishing	35	22	14	8.8	54	34	56	35.2	70,59
Throwing away materials that are difficult to decompose such as plastics and solids	60	37.7	33	20.8	27	17	39	24.5	57,07
The presence of pieces of iron from scrap fishing vessels causes damage to the fishing net	32	20.2	36	22.6	24	15.1	67	42.1	69,81

Source: Collected and calculated from the questionnaire forms for the research season 2023/2024

5.4.2. Administrative problems

It is clear from the results of Table (5) that the administrative problems are arranged in descending order according to the relative weight of the degree of their presence among the respondents, which is the problem of lack of services directed to fishermen, lack of financial assistance to fishermen during the suspension periods, and the lack of health care places for fishermen in the port for 97.16%, 91.82%, and 91.19% of the total respondents, respectively. While at the bottom of the problems according to the relative weight of the degree of presence among the respondents is the lack of special workshops for the repair of boats, and the granting of licenses to those who do not practice the profession of fishing with a relative weight of 44.1% and 49.37% respectively.

Table (5): Distribution of fishermen surveyed according to the degree of administrative problems they face during the fishing process

Administrative Problems	Degree of problem presence								Relative weight %
	non-existent		Weak		average		Large		
	No.	%	No.	%	No.	%	No.	%	
weak security and executive control	12	7.5	88	55	44	28	15	9.4	59,74

	No.	%	No.	%	No.	%	No.	%	Relative weight %
non-compliance with fishing stopped periods	24	15	52	33	60	38	23	15	62,89
non-compliance with specific fishing areas	43	27	58	37	48	30	10	6.3	53,93
Lack of health insurance for fishermen	18	11	1	0.6	11	6.9	129	81	89,46
lack of places for health care for fishermen in the port	15	9.4	1	0.6	9	5.7	134	84	91,19
not helping fishermen financially during the stopped periods	15	9.4	-	-	7	4.4	137	86	91,82
lack of services	5	3.1	-	-	3	1.9	151	95	97,16
Giving licenses to those who do not practice the fishing profession	57	36	70	44	11	6.9	21	13	49,37
low numbers of fishermen	56	35	24	15	30	19	49	31	61,32
the length of the prohibition period in addition to the weekend	53	34	8	5	5	3	93	59	71,69
lack of special workshops for the repair of boats	66	42	72	45	13	8.2	8	5	44,1
Increased insurance and license fees	63	40	8	5	27	17	61	38	63,52
Lack of equipment in the port	53	33	3	1.9	7	4.4	96	60	72,95

Source: Collected and calculated from the questionnaire forms for the research season 2023/2024

5.4.3. Financial problems

The data of Table (6) shows that the most common financial problems according to the relative weight are the problem of the high prices of oils and fuel at 91.35%, followed by the increase in the prices of spare parts, and the increase in the price of motor according to the relative weight by 77.04% and 71.22% respectively. While the least common financial problem according to relative weight is the inability to buy boats by 47.01%.

Table (6): Distribution of fishermen surveyed according to the degree of financial problems they face during the fishing process

	Degree of problem presence								Relative weight %
financial problems	non-existent		Weak		Average		large		
	No.	%	No.	%	No.	%	No.	%	
High price of the boat	25	16	52	33	19	12	63	40	68,86
The shelf life of the boat is short	62	39	48	30	32	20	17	11	50,62
High oil and fuel prices	4	2.5	3	1.9	37	23	115	72	91,35
High price of the motor	46	29	4	2.5	37	23	72	45	71,22
Inability to maintain boats	44	28	69	43	23	15	23	15	53,93
Unavailability of spare parts	53	33	38	24	50	31	18	11	55,18
High prices of spare parts	32	20	5	3.1	40	25	82	52	77,04

	No.	%	No.	%	No.	%	No.	%	Relative weight %
High prices of fishing equipment	46	29	3	1.9	43	27	67	42	70,59
Lack of equipped fishing boats	30	19	36	23	49	31	44	28	66,82
Inability to purchase boats	70	44	51	32	25	16	13	8.2	47,01
Lack of modern nets	47	30	45	28	36	23	31	20	58,17
Lack of modern boats	34	21	46	29	37	23	42	26	63,67

Source: Collected and calculated from the questionnaire forms for the research season 2023/2024

5.4.4. Technical and guidance problems

The data of Table (7) show that the most common technical and guidance problems facing respondents according to relative weight are the lack of everything new in the field of fishing, the lack of training courses for fishermen, and the lack of a fish guide to transfer new knowledge and recommendations with a relative weight of 65.56%, 61.79% and 60.06% respectively. While the least problems present in the face of respondents according to the relative weight are the lack of means of practical demonstration by viewing for the purpose of teaching fishermen a new skill or experience, and the lack of practical means of demonstration to display the results for the purpose of explaining the results of following a new skill or experience for fishermen with a relative weight of 43.08 and 42.61 respectively.

Table (7): Distribution of fishermen surveyed according to the degree of technical and guidance they encounter during the fishing process

Technical and guidance problems	Degree of problem presence								Relative weight %
	non-existent		Weak		Average		Large		
	No.	%	No.	%	No.	%	No.	%	
Lack of availability of everything new in the field of fishing	19	12	42	26	78	49	20	13	65,56
Lack of a fish guide to transfer new knowledge and recommendations	17	11	69	44	60	38	12	7.5	60,06
Lack of training courses for fishermen	16	10	78	49	39	25	26	16	61,79
Lack of guidance brochures, books and awareness programmes	38	24	93	59	16	10	12	7.5	50,31
Lack of guidance seminars	42	26	89	56	18	11	10	6.3	49,37
Lack of practical demonstration means for the purpose of teaching fishermen a new skill or experience.	61	38	86	54	7	4.4	5	3.1	43,08
lack of practical means of demonstration to display the results for the purpose of explaining the results	62	39	86	54	7	4.4	4	2.5	42,61
Lack of fish extension activities directed at fishermen	59	37	84	53	9	5.7	7	4.4	44,33

Source: Collected and calculated from the questionnaire forms in the research season 2023/2024

REFERENCES

Abu Saad, A. A. (2009). Guidance Skills. Dar Al Masirah for Publishing and Distribution - Amman.

Atman, M. I. (2004). Identifying the problems affecting the level of functional competence of veterinary counselors in some governorates of North and West Delta. Mansoura University Journal of Agricultural Sciences, 29(4): 1859-1843.

Jabbara, A. J. and Ali, A. A. (2003). Social Problems. Dar Al-Wafaa for Printing and Publishing - Alexandria.

Khairallah, S. (1979). Educational Psychology, Its Theoretical or Experimental Foundations. Dar Al Nahda Al Arabiya for Printing and Publishing, Beirut.

Lakes and Fish Resources Protection and Development Authority (2021). Annual Statistics Book.

Lawrence, R. L. (1973). Extension Program Development and its Relationship to Extension Management Information System, Iowa State University, Ames, Iowa.

Pesson, L. (1966). Extension Program Planning with participation of Clientele in Sanders et. al, (eds) The Cooperation Extension Service, Prentice Hall Inc. Englewood cliffs, NJ.

Powers, D. (1966). Background information in Planning. Journal of Co-operative Extension, 4(1): 11-22.

Raudabaugh, J. N. (1963). Guidelines for County Extension Program Development and Evaluation. Federal Extension Service, US Department of Agriculture, ER & T-53 (2-63).

Younis, A. S. (2021). An Economic Study of the Determinants of Fish Production and Consumption in Suez Governorate. Journal of Agricultural Economics and Social Sciences, 12(10): 873-887.