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Full Length Research Paper

The Partnership for Change Mechanism of Productive Sector Matrix Craft White Fishing in the Republic of Ecuador

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This study aims to determine the associativity as a mechanism for changing the production model of the artisanal fisheries sector Ecuador, through the strengthening of fishermen associations, technical training, certification and formalization of artisanal fishermen; through a systematic study to the development of business integration process aimed at achieving competitive advantage. The need to design and advance collective strategies becomes not only a chance to develop individual and joint competitive advantages, but may constitute a basic requirement of survival for the artisanal fishermen of Ecuador. The inductive method is applied in order to observe the causes and draw a conclusion, in order to determine that such an effect is incident on the underlying problem; deductive method was used, noting what effect the application of a model of associative organization in artisanal fisheries production activities. The methodology used is basic type: Descriptive correlational level. Design: No experimental cross. Techniques: Documentary analysis, reading records, interviews, surveys, questionnaire and interview guide.

Keywords: Associativity, matrix production, artisan fishing

INTRODUCTION

In Ecuador artisanal fishing or small scale fishery, it recognizes as limits from the capture that is done with typically craft methods until that is carried out with boats of lengths of around 13 meters. Included in this type of activity is the method of fishing without the use of boats and by the application of traction to blood and artisanal vessels that include those without motor or with outboard or internal motor, cataloged under the name of canoes, boats, and boats, as well as a portion of those characterized as roads or rivers.

Therefore, the basic variables that distinguish them should be identified, which are not related to their operational scale, to the characteristics related to ownership, distribution of utilities and methods of capture used.

We agree with Garcia Allut (2008) that as long as more precise and differentiated criteria are not established, serious mistakes can be made in implementing certain policies in the sector, since it makes the process of identification and specification difficult Are the productive units and the related social contingent on which to investigate when talking about artisanal fishing. The craft sector has survived over time precisely because of its adaptive capacity to different economic, social and ideological contexts. That is, we can see producers linked to artisanal fishing activities in rural as well as urban contexts or in industrial and developing countries. It is not therefore a specific productive activity of underdeveloped socio-economic environments, but rather a production strategy based on economic flexibility and related to a series of socio-economic and cultural parameters. In this sense, we conceive artisanal activity as an economic option whose choice, by the social actors, will depend on a series of factors related both to the characteristics of the family context and to the local socioeconomic.

Garcia A, (2002) in his research "Processes of fishery production and uncertainty: the commercialization of fishery products in artisanal fisheries in Galicia", establishes how a series of environmental, socioeconomic and political factors affect the fishing activity in Galicia. The purpose is to emphasize how some of these "environmental hazards" constitute a source of uncertainty (problems) for the development of fishing activity affecting in a special way the less capitalized production processes. Finally, by way of example, we will focus on the commercialization of fish products in "first sale" and their problems, showing some of the answers given by artisanal fishers in the market.

Gouin S, (2001) in his research "Seafood Products Enhancement: The Case of Artisanal Fishing in France", states that fishermen, who initially harvest the resource, are generally satisfied with the landing and sale of raw material. It is the food processing industry, wholesalers, distributors and retailers that create added value of the fish by transforming it and / or differentiate different types or grades of quality.

In this context, it is necessary to formulate management plans for the different forms of fishing that take into account the biological, technological, economic, social, legal and political aspects inherent to them. It would be desirable for the implementing authority to engage in participatory management and facilitate technology transfer by improving staff methods and capacity in extension activities. It is the state's role in this process: to improve participation, to stimulate coordination between ngos and governments (provincial, local, etc.), to facilitate consultation by focusing on conflict resolution and, where necessary, to increase local capacity organization or association. This change requires adequate institutional structures and programs that build capacity.

Ben-Yami, M (2007), in his research "Community Centers for its Founding and Operation," states that the Community Production Centers (CCP) strategy is presented as an organizational concept to provide the infrastructure and basic services needed to deal with the problems facing the development of small-scale fisheries. Several types of fishers' organizations, integrated development strategies, and alternatives for technical services and support modules are discussed in detail, the combination of which may constitute a <CCP. Particular attention is given to the participatory identification of major problems by confronting fishing communities, planning, mobilizing local resources, and implementing site-based micro-projects to address such problems. The operation and management of CCP, and the Multidisciplinary Fisheries Development Unit, which provides technical support and training to one or more CCPs, is described in some detail.

In Ecuador artisanal fishing is an economic niche that represents an option for subsistence and for a certain capitalization of those individuals where 1) the levels of training to develop alternative jobs is low and the possibilities of choice to be used in other areas are Reduced in that context (2); The available capital is insufficient to make investments in other sectors and 3) there is a close linkage of the individual to a family and / or social context marked by the fishing tradition. These characteristics condition the choice of economic activity at the individual level and socially characterize the craft sector: low level of training and capitalization of its members. A profile that places the artisanal sector in a disadvantaged position, in relation to the most capitalized fishing subsectors, to access capital and relevant information in the interests of the sector. (PROPESCAR 2014).

It is evident that the growth of the sector occurred in such a way that, despite its magnitude today, it exhibits

undesirable results, and a significant lag in the interaction of the subsystems that make up the artisanal fishery system. This gap between the subsystems is accentuated in times of crisis with serious economic and social consequences for the sector and the region in which it is inserted. It is not possible to determine these crises, nor to measure their incidence reliably, since no methodical and systematic investigation of the artisanal fishing system has been carried out so far. The antecedents in the knowledge regarding the artisanal fishery system are limited to a set of descriptions and recommendations, but taken in isolation and without continuity. (Peña, J. 2005).

For too long fishing has been confused with the simple action of increasing catches. Such a misconception would imply that only fishing could enter into a development process to the extent that an expansion of effort is possible. The process of sustainable development of the fishing activity must be understood as the set of actions that imply the best economic and social use of the fishing resources; this includes considering aspects of technological, economic and social, as well as biological aspects. In any case, its starting point will always consist of the real dimension of the resources available, an aspect sufficiently developed in Ecuador.

THEORETICAL FRAMEWORK

The present work is within the frame of reference that proposes the study of the artisanal fishing sector through a systemic approach.

Associativity an alternative for development

Allaire Ivan (2009), states that association is understood as a mechanism for cooperation between small and medium-sized enterprises, where each participating company, while maintaining its legal independence and managerial autonomy, voluntarily decides to participate in a joint effort with the other participants to the pursuit of a common goal. Common objectives may be conjuncture, such as acquiring a volume of raw material, or generating a more stable relationship over time such as research and development of technologies for common benefit or access to financing that requires guarantees that are covered proportionately by each of the participants.

The structural changes that have taken place in Ecuador since the 1990s have led to changes in the conditions under which the economy operates, which have forced Smes to take a strategic approach to adapt to new competitive requirements. Economic globalization, on the one hand, provides opportunities for access to new markets as a result of advances in information, technology and capital flows. On the other hand, for the Smes sector in particular, it brings threats that require companies to change strategies in order to achieve greater efficiency in dealing with competition.

In this new scenario, the traditional way of functioning of Smes has been the need to face conversion processes to survive in the market. However, despite the flexibility that characterizes this sector, a large part of it has not been able to successfully meet the new conditions. Facing this reality, the development of innovative capacities, becomes a fundamental element for the search of a greater competitiveness. That is to say, the transformation required by the new conditions of the economy, in order to overcome the insufficiency of individual scales, is aimed at encouraging the associative processes between Smes or between Smes and large companies. Given this reality, the need arises to design collective strategies not only as an appropriate tool to increase competitiveness, but in some cases, as the only alternative of survival for micro and small enterprises. (Ferraz, J. 2014).

Fisheries production in the world

According to the FAO (Food and Agriculture Organization), the excess of fishing capacity is responsible for the overall degradation of resources, which is putting in question the marine reserves and, therefore, the future. Fishing capacity continues to expand in a process begun in the 1990s that is endangering species such as Atlantic cod, haddock haddock, and temperate tuna. According to this global body, it would also be necessary to limit artisanal inshore fishing, even recommending the repopulation of certain areas. At present, more than a third of the world's large fishery resources are in need of management to restore the damage to date. The species most in need of intervention are: cod, haddock haddock, redfish, red shop, sardine and anchovy in the Atlantic. Orange fish, swordfish and common tuna, bigeye and white tuna in the pacific. (Ramalho, W. 2014).

Analysis of the World Fisheries Sector

According to FAO 2012, global fish production is above 142 million tonnes. They correspond to catches of 94 million tonnes and 48 million tonnes of aquaculture. The first producer is China (17%) followed by Japan and Russia with just over 10% each, Peru (10.7%), Chile (4.3%) and the United States (4.7%). Between 20 countries account for approximately 80% of fishing. The European Union as a whole has a fishing production of about 8 million tonnes. Spain ranks between positions 15 and 17 with a share of 1.5% worldwide. Aquaculture contributes around 33% of the total food from the world. globally, catches are increasing at a rate of 1.6% per annum, somewhat less than the growth recorded

Table 1. Capacity and Production of Aquaculture In The World

Country	Millions of Tonnes
China	37
Japan	27
United States	24,7
Peru	20,7
Indonesia	14,1

Source: FAO (2012)

Table 2. Number of Artisanal Fishermen registered in the main Artisanal Fishing Ports of Ecuador

Province	Port	No. of Boats	No. of Artisanal Fishermen
Santa Elena	Anconcito	500	1.900
Santa Elena	Santa Rosa	1.000	3.900
Manabí	Jaramijo	700	2.500
Manabí	San Mateo	700	2.900
Esmeraldas	La Poza	900	3.000
Total	**5**	**3.800**	**14.200**

between 1984 and 1989 (2.9%). There are around 1.2 million fishing vessels in the world, most of them in Asia.

Characteristics of the Ecuadorian Fishing Sector

According to the National Fisheries Institute (INP 2015), the capture of species of Thunnus (albacore) and Katsuwomus (bonito skipjack), together with Coryphaena hippurus (dorado), and members of the Istiophoridae family are mainly species that sustain the Exports of fresh frozen and canned goods, as well as to a large extent the domestic market. On the other hand, it is considered that within the fishing operations, a large number of sharks are caught using artisanal and industrial techniques (nets and longlines), which do not select the resource to be extracted.

Commercial fishing of small fish was estimated to have begun in the 1960s, following the collapse of the anchovy fishery (decade 70's) in Peruvian waters, a large part of vessels with steel hulls and greater autonomy Were acquired by Ecuadorian companies, which caused a significant increase in the fishing capacity of this fleet. At the same time, the expansion and improvements in the infrastructure of existing flour mills and canneries were developed. Small fish are part of Ecuador's most economically and socially important fishery resources, and its extractive activity, landings, processing (canned and fishmeal) and exports generates a significant amount of foreign exchange for the country. (Jara, W. 2010).

METHODOLOGY

Five in depth interviews were held with the representatives of the various artisanal fishermen's organizations of the five main artisanal fishing ports that are being promoted by the Governments of the Citizen's Revolution in Ecuador: Port La Poza in the Province of Esmeraldas, Ports de Jaramijo and San Mateo in the Province of Manabí and Ports de Aconcito and Santa Rosa in the Province of Santa Elena, aiming at learning about events and activities that cannot be directly observed.

In order to identify the needs of the fishermen and the actors involved in this activity, artisanal fishermen from the Artisanal Ports of La Poza in the Province of Esmeraldas were surveyed; San Mateo and Jaramijo in the Province of Manabí, and Anconcito and Santa Rosa in the Province of Santa Elena, the indicators were: technology level, credit, identification of support institutions, and marketing strategies used so far.

The number of artisanal fishermen registered in Ecuador is approximately 14.200 according to the Ministry of Agriculture, Livestock, Aquaculture and Fisheries, through the Ecuadorian Sub secretariat of Fisheries. In order to determine the sample size, the probabilistic sampling method was used; the sample was taken proportionally to the percentage of the number of artisanal fishermen in each of the mentioned ports, with the value of the applied sample being 392. (National Fisheries Institute of Ecuador INP 2014)

Subsequently, responses were coded according to the following topics: number of fishermen, fishermen, fishing permits, degree of informality, relationship with municipal governments, infrastructure, commercialization, trade union organization, conflict between actors, conflict with other actors by use of the beach, perception of the role of the state, relation with the fishing resource, requested aid for development.

The descriptive swot analysis was used to detect the strengths, opportunities, weaknesses and threats of the

Descriptive Statistics

	Mean	Standard deviation	N
Associativity	1.0833	.24644	392
Improving the Efficiency of the Artisanal Fishing Production Chain	1.3423	.49419	392

Correlations

		Associativity	Improvement of the Efficiency of the Artisanal Fishing Production Chain
Associativity	Pearson's correlation	1	.954
	Sig. (bilateral)		.046
	N	392	392
Improvement of the Efficiency of the Artisanal Fishing Production Chain		.954	1
	Sig. (bilateral)	.046	
	N	392	392

** The correlation is significant at the 0.01 level (bilateral)
Table No. 2 Validation of the General Hypothesis

sector, to begin working with a development proposal for the artisan sector.

RESULTS

Characterization Of The Sector

Artisanal fishing has developed significantly over the last 15 years, especially in the context of unemployment and job insecurity in Ecuador. Most artisanal fishermen come from sport fishing, unstable jobs, precarious or poorly paid or fired from another activity. The activity was strengthened by the economic crisis experienced by Ecuador in 1999 and the subsequent dollarization of the country's currency, which substantially improved the sale price of the fish, which increased the perception of this activity as profitable.

There are approximately 14,000 artisanal fishermen and about 30% do not have fishing permits, so the level of informality is high. Only 40% are fishermen with "history in the sector", perceiving their work as highly qualified. In general they are organized jointly, most consolidated but many with internal conflicts, and with a high degree of distrust to group and have no port or sales infrastructure.

The conflict between actors is high, especially with larger fleets and fishermen with no trajectory or future projection in artisanal fishing. In 60% of the landing points they manifest conflicts over beach sharing with tourism.

The marketing is done through intermediaries who stipulate the sales prices and do not pay a price differential for being a fish of better quality (white or hook fishing). They perceive the State as non-proactive, reactive to the conflict, disarticulated politically and without vocation for the development of the sector. In this regard, they argue that no explicit policies have been formulated and there are no mechanisms for effective consultation in the face of the imminent change in the country's productive matrix.

Situation of the Fisheries Policy for the Artisanal Sector

There is no adequate compatibility of the fisheries policy

Descriptive Statistics

	Mean	Standard deviation	N
hnical labor training	**1.0833**	.24644	392
Improvement of the Efficiency Production Chain goes of the Sector of Artisanal Fishing	**1.3213**	.47459	392

CORRELATIONS

		Technical skills training	Improvement of the Efficiency of the Artisanal Fishing Production Chain
Training labor technique	Pearson correlation	1	.985
	Sig. (bilateral)		.015
	N	392	392
Improvement of Chain Efficiency Productive Fisheries Practical	Pearson correlation	.985	1
	Sig. (bilateral)		
	Sig. (bilateral)	.015	
	N	392	392

Table No. 3 Validation of the first specific hypothesis
** The correlation is significant at the 0.01 (bilateral) level.

with other intra or intersectoral public policies, due inter alia to a lack of interinstitutional coordination, lack of definition or overlapping of competencies, and lack of continuity due to frequent changes at the hierarchical and political levels; Leading to difficulties in monitoring and monitoring the fishery and often lacking the political will to do so.

The use and sustenance of methodologies, interdisciplinarity and appropriate techniques for policy formulation is limited; nor do they consider the social, cultural and anthropological aspects that characterize the fishing communities.

Proposals For Development

The success of development plans depends on two hypotheses: most small scale fisheries are or have the potential to be economically feasible and many of the problems can be successfully addressed if they are supported by administrative and technical support.

An integrated, participatory and interdisciplinary program should therefore be established to improve the organization, efficiency and productivity of small scale fishing communities, with proposals that are clearly achievable and with the political will to avoid false expectations and discourage Participation of artisanal fishermen. They must be socialized before implementation to ensure that they meet the needs of fishermen and must consider both the technical aspects of development and the socio-economic needs of small-scale fishing communities, appropriately balancing the biological, technological, socio-economic and productive aspects of the same; For which it is essential to carry out a participatory diagnosis, in order to define timely and efficient strategies and policies.

FODUS DESCRIPTIVE ANALYSIS

Internal analysis

Strengths

- Life support, poverty reduction
- Source of employment and retention of populations in coastal areas; Improves social vulnerability
- High socio-economic impact on the territory
- Exclusive fishing zone established by law
- Commitment to conserve the resource
- Insertion of women as a transmitter of culture and leading processes
- Use of non-predatory fishing gear
- Readaptation of the main artisanal fisheries
- Growing trend to organize for greater benefits
- Incipient linkage in marketing
- Increased awareness of health and hygiene standards
- Greater knowledge on fisheries management

Weaknesses

- High vulnerability to weather phenomena and fluctuations in market prices

Descriptive Statistics

	Mean	Standard deviation	N
Quality Level of the Productive Process	**1.0833**	.24644	392
Improving the Efficiency of the Artisanal Fishing Production Chain	**1.6556**	.66090	392

Descriptive Statistics

	Mean	Standard deviation	N
Implementation of an Organizational Associative Model	1.0833	.24644	392
Improving the Efficiency of the Artisanal Fishing Production Chain	2.2644	.46748	392

- Fearful to be grouped, they must stop being competitors to become partners
- Lack of marketing training\
- Incipient trade union organization
- High level of informality, no fishing permits
- High dependence on the intermediary, without negotiation power of the sale price and payment terms
- Little training in the handling of post catch fish especially by "new fishermen" in the application of quality standards
- Lack of navigation safety
- Without social security

External Analysis

Opportunities

- Diversity of species with the possibility of incorporating non traditional resources
- Increased domestic and external demand for quality fish
- Increase in domestic demand in the segments with higher population income
- Consumer association of a "better quality" product with a "handmade" product
- Participation of artisanal fisheries in international trade
- Collaboration agreements with government agencies, ngos and municipal governments.
- Development of eco-tourism
- Access to communication and navigation technologies

Threats

- Lack of sources
- Lack of a policy aimed at the sector
- Non-responsible trade in fish and fishery products
- Lack of government support for partnerships
- Bureaucratic, expensive and difficult paperwork to obtain capture, sale and direct marketing permits
- Unregulated increase in fishing capacity
- Conflicts of uses with tourism (beach space)
- Conflicts with other larger fleets
- Lack of support from local governments

Analysis Of The Surveys Conducted

From the surveys carried out on artisanal fishermen from the various artisanal fishing ports of Ecuador, the following results were obtained using the Crombach Method.

Validation of Hypothesis

In relation to the main hypothesis, which mentions that "Organizational Behavior will improve the Efficiency of the Productive Chain of the Artisanal Fishing sector in the Republic of Ecuador", the results as follows are as follows:

As can be seen in Table 2, the relation ship between the two variables is directly proportional, so it is evident in its two variables that, if organizational behavior increases and improves, the efficiency of the artisanal fishing chain, There is a level of direct relationship between both variables, this can be analyzed through means comparison, as seen both do not have a significant difference, being observed that they are direct in their correlation, then, as seen in Table No .2 on the correlation, with an index of 95.4%, superior to the 95.0%

CORRELATIONS

		Quality Level of the Productive Process	Improving the Efficiency of the Artisanal Fishing Production Chain
Quality Level of the Productive Process	Pearson Correlation	1	.954
	Sig. (bilateral)		.046
	N	392	392
Improving the Efficiency of the Artisanal Fishing Production Chain Pearson Correlation	Pearson Correlation	.954	1
	Sig. (bilateral)	.046	
	N	392	392

** The correlation is significant at the 0.01 level (bilateral

Table No. 5 Validation of the Third Specific Hypothesis

that is demanded, with a margin of error of 4.6% or 0.046 points, validating the general hypothesis, which establishes "The Associativity will improve ChainEfficiency Production of the Artisanal Fishing Sector in the Republic of Ecuador ".

Regarding the first of the specific hypothesis, which states that "The technical training of labor directly influences the improvement of the efficiency of the production chain of the artisanal fishing sector of the republic of Ecuador", the following can be observed:

In the first specific hypothesis, it shows in its two indicators that "Labor Technical Training directly influences the Improvement of the Efficiency of the Productive Chain of the artisanal fishing sector of the Republic of Ecuador", there being a level of direct relationship between both indicators, This can be analyzed through means comparison, both have a significant difference by positioning themselves at extremes, meaning that they are inverse in their correlation, then shown in Table 3 on correlation, with a 98.5% index, Higher than the 95.0% required, with a margin of error of 1.5% or 0.029 points, which validates the first specific hypothesis, which states that "Technical Training Labor directly influences the Improvement of Chain Efficiency Productive Sector of the Artisanal Fishing Sector of the Republic of Ecuador".

In relation to the second specific hypothesis, which assumes that, "The Quality Level of the Productive Process influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador", the following results were found:

In the second specific hypothesis, the two indicators show that "Productivity Process Quality Level", and as a second indicator "Improvement of the Efficiency of the Productive Chain of Artisanal Fisheries", there is a level of direct relationship between both indicators, This can be analyzed through means comparison, they do not have a significant difference by positioning themselves at the same end, meaning that they are direct in their correlation, as shown in Table No. 4 on correlation, with an index of 96.7 %, Above the 95.0% required, with a margin of error of 3.3% or 0.033 points, validating the second specific hypothesis, which states that "The Quality Level of the Productive Process influences the Efficiency of the Productive Chain of the Sector Of Artisanal Fisheries of the Republic of Ecuador".

As for the third specific hypothesis, which implies that "The Implementation of an Organizational Associative Model influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador", the following results were obtained.

In this specific hypothesis, which manifests in its two indicators that "The Implementation of an Organizational Associative Model", and as a second indicator "Improvement of the Efficiency of the Productive Chain of Artisanal Fisheries", there is a level of direct relationship between both Indicators, this can be analyzed through means comparison, it is seen that both show a significant difference by positioning themselves at the same end, meaning that they are direct in their correlation, as shown in Table No. 6 on correlation, with An index of 96.6%, higher than the 95.0% required, with a margin of error of 3.4% or 0.034 points, validating the third specific hypothesis, which states that "The Implementation of an Organizational Associative Model influences the Efficiency of Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador ".

ANALYSIS OF RESULTS

In the analysis of the results made for the research work on whether Associativity is a mechanism to improve the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador, it is necessary to take into account that according to the "Theory of Economic Development" proposed by Joseph A. Chumpeter, which is fundamentally oriented towards a development by

impulses within the structure of the functioning of the capitalist economy, in the sense that all progress is the result of abrupt or inharmonic impulses, and not static, due to the development promoters entering new areas and horizons, which in the present analysis is poor in the current reality of artisanal fishermen of Ecuador, so it is necessary to breathe new proposals of technical specialization that allow them to improve their Their families, even more so if we take into account that the Ecuadorian government is to give impetus to the change of the productive matrix in the country. In this context, in the analysis of results it can be observed that 91.7% of the artisanal fishermen interviewed are willing to participate in technical training courses in order to obtain the necessary preparation to carry out, on the one hand, their fishing operations and On the other hand, receive the necessary assistance for the processing and presentation of products for direct human consumption. Only 8.3% disagree mainly on the grounds of age, they are people over 60, who nevertheless support young people to train and specialize to be more competitive. Even 95% of the fishermen consider that their participation in alternative labor activities is important for the purpose of increasing the family economy. This shows that there is a concern to break these paradigms of poverty and therefore need technical and financial help that we must provide through public and private agencies, according to the circumstances.

According to the main hypothesis that "The Associativity Improves the Efficiency of the Productive Chain of the Artisanal Fishing Sector in the Republic of Ecuador", we find that the relation of both variables are directly proportional, it is observed that an adequate This behavior can be verified by means of the comparison of means, where there is no significant difference, which can be verified by means of the comparison of means, where there is no significant difference in the performance of the productive chain of the Artisanal Fishery Sector of Ecuador. Which means that they are presented as direct in their correlation with a 95.4% index, higher than 95.0%, with a margin of error of 4.6% or 0.0046 points, validating the general hypothesis, which establishes that the Associativity directly influences will improve the efficiency of the productive chain of the Artisanal Fishing Sector in the Republic of Ecuador. Regarding the first specific hypothesis, which states that "Labor Technical Training directly influences the Improvement of the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador", it is revealed the existence of a Level of direct relationship between the indicator referring to the technical training and the efficiency of the productive chain of the artisanal fishing sector, this can be analyzed through means comparison, in which it is observed that both have a significant difference positioning at the extremes: meaning that they are inverse in their correlation. This correlation has an index of 98.5%, above the 95% that is demanded, with a margin of error of 1.5% or 0.029. On the other hand we have according to a survey made to workers 91.7% and only 8.3% do not consider it important.

In relation to the second specific hypothesis, it assumes that "The Quality Level of the Productive Process influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador", there being a level of direct relationship and that can be analyzed through our comparison of means, which do not have a significant difference by positioning themselves at the same end, meaning that they are direct in their correlation with an index of 98.7%, higher than the 95.0% that is demanded, with a margin of Error of 3.3% or 0.033 points, validating the second specific hypothesis, which establishes that "The Quality Level of the Productive Process Influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador." In this sense, according to the survey, 86.7% of the fishermen share the important idea of participating in the formation of a micro-enterprise of commercial fishing promotion and only 13.3% disagree, which leads us to think that there is an interesting vocation to formalize their activities, having as vision to acquire a greater level of competitiveness in their fishing activities, obtaining better economic results in their daily tasks. From this reading, it is concluded that this false image that the artisanal fishermen of Ecuador, is due mainly to the lack of information and technical knowledge. In the third specific hypothesis, which manifests in its two indicators that the implementation of an Organizational Associative Model and as a second indicator the Efficiency of the Productive Chain of the Artisanal Fisheries Sector, there being a level of direct relationship between both indicators, this is can be analyzed by means of a comparison of means, with an index of 96.6%, higher than the 95.0% required, with a margin of error of 3.4% or 0.034 points, validating the third specific hypothesis, which states that "Implementation of an Organizational Associative Model influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador".

In relation to the second specific hypothesis, it assumes that "The quality level of the productive process influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador", there being a level of direct relationship and that Can be analyzed through our comparison of means, which do not have a significant difference by positioning themselves at the same end, meaning that they are direct in their correlation with an index of 98.7%, higher than the 95.0% that is demanded, with a margin of error of 3.3% or 0.033 points, validating the second specific hypothesis, which establishes that "The Quality Level of the Productive Process Influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador."

In this sense, according to the survey, 86.7% of the fishermen share the important idea of participating in the formation of a micro enterprise of commercial fishing promotion and only 13.3% disagree, which leads us to think that there is an interesting vocation to formalize their activities, having as vision to acquire a greater level of competitiveness in their fishing activities, obtaining better economic results in their daily tasks. From this reading, it is concluded that this false image that the artisanal fishermen of Ecuador, is due mainly to the lack of information and technical knowledge. In the third specific hypothesis, which manifests in its two indicators that the implementation of an Organizational Associative Model and as a second indicator the Efficiency of the Productive Chain of the Artisanal Fisheries Sector, there being a level of direct relationship between both indicators, this is can be analyzed by means of a comparison of means, with an index of 96.6%, higher than the 95.0% required, with a margin of error of 3.4% or 0.034 points, validating the third specific hypothesis, which states that "Implementation of an Organizational Associative Model influences the Efficiency of the Productive Chain of the Artisanal Fishing Sector of the Republic of Ecuador".

It is fundamental to obtain competitive advantages, in order to achieve profitability in the market in relation to its competitors, since this depends on the relationship between the value and quantity of the product offered and the necessary inputs to obtain it, through the associativity will be allowed the development of this sector in a sustainable and sustainable way.

CONCLUSIONS

According to the research the heterogeneity in the social situation of the fishermen could be evidenced; the dispersion between them and the absence of organizations that represent and organize the collective of fishermen, it is important the associativity as a mechanism of business cooperation for the pursuit of a common goal.

The lack of access to financing, low capital endowments, lack of acquisition of inputs for fishing, low productivity of the technology they own and lack of basic infrastructure, such as the supply of ice, workshops for the maintenance of their boats.

In the aspects of commercialization, the lack of diversity in marketing channels was highlighted, since the product that is extracted is marketed through intermediaries, therefore there is no clear ability to control the conditions of commercialization of the product.

Of the almost 14,200 artisanal fishermen registered in the main artisanal fishing ports of Ecuador, almost 50% remain unoccupied in the fishing activity, bringing about 170,000 people directly to poverty, among other causes are the overprotection of marine resources,

As well as natural phenomena that affect the normal development of fishing activity; however, this human potential (artisanal fishermen) due to ignorance and lack of constancy is not dedicated to minimizing or varying these conditions that are presented, it refers to the exploitation of biotonic marine resources through exploitation through management areas, in preferential zones that are present on our coasts and that with the direct participation of the State according to law would grant exclusive rights of use of marine resources to fishing communities of the coast; So to achieve economic development, taking advantage of our biodiversity and a good insular administration with good aquaculture and adequate mariculture for the sustainable use of hydrobiological resources.

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