

Growth Opportunities for Artisanal Fisheries in Mexico

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Abstract: Currently the fishing cooperatives in Mexico are of great importance for the integration of economic, social and environmental objectives that are part of their daily work. Collective action to build and strengthen fishing communities have had an impact on the quality of life of its inhabitants becoming the cooperative in a social and economic institution of deep cultural roots in coastal areas. Sinaloa is one of the states of northwestern Mexico that contributes most to the economy of the region for its concentration of biggest fleet, fishery processing, producing shrimp farms, coastal fishing cooperatives and just over 15% of the population national fisheries, this is more than 45 thousand direct jobs and a considerable number of indirect jobs. Public policy for the cooperative greatest impact has been the opening of shrimping private investment, creating strong competition between private investors and fishing cooperatives; and other factors such as deterioration of coastal ecosystems, the management capacity of government support and economic management mechanisms of cooperatives under the scheme of family organization. In this context coastal fishing cooperatives are challenged to manage their investment projects with strategic advantages in exploiting growth opportunities to compete in the global marketplace by optimizing the value of their flat on the risk ratios, organization products, and entrepreneurship as a line of investigation.

It is therefore carrying out this research in order to analyze what are the opportunities that have the fishing cooperatives of Sinaloa can be exploited under the scheme of family organization to grow and remain in the market. He approach methodological is made using the paradigm quantitative, using as instrument of collection a survey and collecting it information in a sample of 86 partners of cooperative; sample obtained through the use of formula statistics for populations finite. Main findings are that the perception about the Government supports is almost non-existent since cooperative members feel adrift in the development of their activities, competitiveness is on the decrease, infrastructure deteriorates, what they move away from competitiveness, since the infrastructure deteriorates and there is no improvement in processes due to the lack of trade regulation operational and strategic to motivate regional economic development. We need cooperators to optimize their scarce resources and create value, looking for growth opportunities through the use of their resources and capabilities to remain and not only survive.

Key words: entrepreneurship, cooperatives and risk

1. Introduction

Currently the fishing cooperatives in Mexico have a great importance for the integration of economic, social and ecological objectives that form part of their everyday work, and to check this relationship was considered as study area The Huitussi fishing camp, located in Guasave, Sinaloa, in the Gulf of California where most fishing activity is concentrated.

One of the most important wetlands on the Mexican Coast for its abundant biomass contribution and various marine species, is located in the coastal area of Sonora, Sinaloa, Nayarit and Jalisco; turning it into a protected area of conservation for feeding, breeding and rearing of fish and invertebrates such as shrimp and sardines; so in general fisheries and aquaculture in this area represent an economic livelihood for coastal residents [1].

In Mexico the fishing craft management is structured on the basis of cooperative organizations, which give voice to small-scale fishermen to meet the objectives of fisheries management and the generation of economic

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benefits, in addition to conserve the wetlands which have been affected by pollution, overexploitation and degradation of the soil use in the last time [2].

According to a study conducted by Oropeza & López [3], the region of the Gulf of California stands out by:

- a) its important role in the production of primary products.
- b) the rates of population growth higher than the national average, especially in coastal municipalities.
- c) the rate of economic growth, which in recent years have fluctuated above the 2.4%.
- d) its natural resources and its economic dynamism.
- e) the high annual revenues generated by tourism.

With regard to fishing only Sinaloa captures nationwide nearly 90% of Mexican tuna, more than 50% of shrimp, more than 40% of crab and more than 10% of squid; these species are the greatest commercial value. The great economic contribution of this region is due to its coastal lagoons, estuaries and bays extension, addition to the majority of the population of fishermen, vessels of height and riparian, of aquaculture farms, and the processing plants are located in this area of the Gulf of California [4].

In general, fisheries craft beyond its importance for their economic contribution to GDP, are socio-economic entities that represent the social integration of geographic sectors with high responsibility in environmental care and the search for a social welfare that provides a familiar and sectoral development of relevance in the business and political participation in the region.

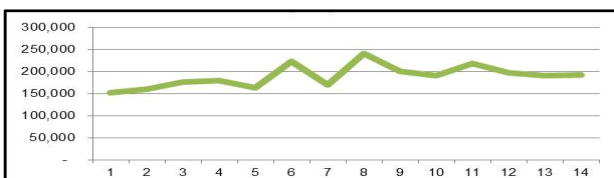


Fig. 1 Fisheries production in Sinaloa Tons caught in Sinaloa from 2000 to 2014.

Since the end of the 20th century, fisheries face constant challenges especially in sustainability in terms of specialization, extractive control, food safety and resource optimization. As stated, in the State of Sinaloa, Mexico, this activity is relevant to the socio-economic fabric, and they currently face major challenges, since 15 years fisheries have reduced its catch quotas, aquaculture production has been concentrated in a single species, and can be seen the waste of technological innovations to improve the productivity of coastal fisheries cooperatives.

So that the fisheries sector is in a situation that requires care and support sustainable and creates the need for breaking paradigms in the processes of economic activity to properly enhance the extraction of marine fisheries and innovation in production through aquaculture or mariculture. The added value that facilitates the integration of the supply chain to the international distribution requires an incentive to encourage a holistic approach to business growth. Thus fishing under cooperative management, requires businesses with impact on regional economic development and internationalization of fisheries under an innovative framework in the Organization and financing of the fisheries sector.

In this context the coastal fishing cooperatives are challenged to manage their investment projects with strategic advantages in taking advantage of growth opportunities to compete in the global market through the optimization of the value of their products; supported by the relationships of risk, organization and entrepreneurship as a line of research.

2. Theoretical approach

2.1 Social Entrepreneurship, Opportunity Growth for Artisanal Fishing

In recent times the environment of business and economic activities has been influenced by the concept of sustainability with the basic objective of creating value; establishing that to achieve social goals must be factors management, environmental stewardship and

economic development factors of business success as access to new markets and investment capital, increase of productivity and human capital, brand value and risk management [5].

Thus, the business projects with social responsibility approach in international markets require discover competitive advantages to encourage organizational development through the innovative capacity, the development of organizational knowledge, structural flexibility, quality management and entrepreneurial orientation [6].

In this conjugation of challenges, social entrepreneurship must expose a sustainable business model that is profitable and that meets social needs, transforming the lives of the beneficiaries of the project; as established by Esparza [7] the basic idea is to keep the balance between a project viable and profitable, in addition to resolving a problem that afflicts society; meet these two objectives as Martínez [8] confirms it allows undertakings having a great future.

Coastal communities which has as its main economic activity the capture of fish for subsistence, small-scale or semi-industrial are a sector where you can develop social enterprises, given their conditions and characteristics such as: their level of poverty, the intensive use of labor, their grouping in cooperative, and limited investment in equipment since they continue catching fish for human consumption in a strip no more than 5 nautical miles with small boats with an average of 10 meters in length with engines out of outboard and a capacity of volume of extraction between 0.5 and 1.5 tons [9].

3. Methodology

The research methodology was structured through the application of a survey to the leaders of the fisheries cooperative located in the field of fisheries of the Huitussi, located in the municipality of Guasave, Sinaloa, Mexico. The variables were:

- (1) Development policies,
- (2) Ventures and investments,

(3) Evaluation of the processing, preservation and commercialization of fishery products,

(4) Financing strategies, and

(5) Risk and funding.

In total 86 questionnaires were in the period of March to may 2016, which were processed with statistical software to determine the relationships that promote the growth and development of new business opportunities in the field of coastal fishing.

4. Results and Analysis

Riverine fisheries development policies, according to Conapesca [10], you are required to give “national capacity-building, the promotion of internal productivity and better use of current resources within the framework of the food security”. And at the same time fight the need to reach a sustainable level: a) correction of structural problems in the overexploitation of fisheries and a more effective management through self-regulation, b) increase efficiency promoting increases in the value of production, expanding the quality and moderating the costs of production, and c) attention to the care of the environment and market demands to maintain a competitive edge with higher standards of quality and safety.

There is evidence that to the extent that the enterprises increase will generate economic value added in regions and in particular in the income of people who develop them. However, in the primary sector and especially in the fields of fisheries urged joint efforts to find opportunity for growth through the development of training programs on new forms of production organization, selling their catches and local enterprises which meet the economic, social and ecological objectives [11].

The determination of strategic financial risk, that relates the expected growth with risk-adjusted return on investment can be considered in the evaluation of the potential of enterprises to generate economic value. This means that the management of new projects in

order to achieve sustained growth should be considered the retention of profits, one financial cost less than

double digits and optimal leverage [12].

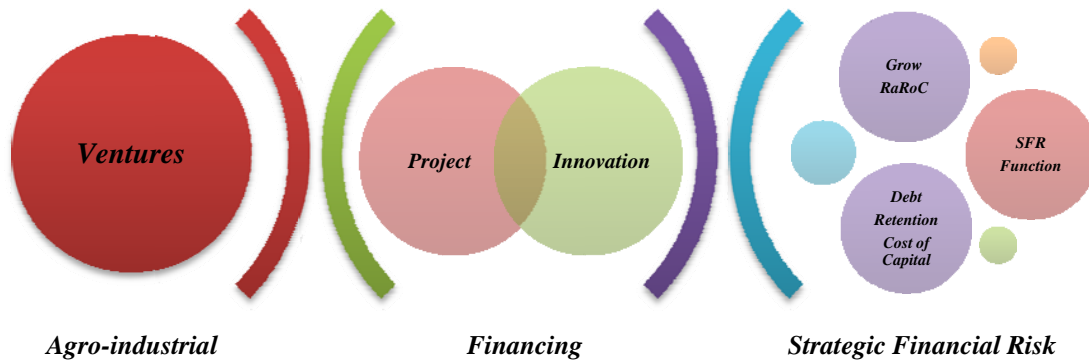


Fig. 2 The relationship of the strategic financial risk in agro-industrial investment projects.

The creation of economic value of entrepreneurship in new business in the primary sector and especially in the fishing sector has to be motivated with access to financing considering factors of innovation in the value chain that starts with the capture of commercial species; there are opportunities for generating returns in the processing, conservation and marketing of the products of the sea; only that this should be a goal of the management of the fishing cooperatives and eliminate the middlemen do not relate to the goal of sustainability of fishing communities.

One of the most important challenges of coastal fisheries is how the traditional form of fishing activity is complemented, namely the families of fishermen or members of the cooperatives to penetrate in innovative projects where the territorial and marine space take advantage to lay the Foundation for the development of mariculture and aquaculture. The fishermen know this type of business but the reality is rarely involved directly in their benefits.

And although apparently the Government authorities encourage or support artisanal fisheries, the feeling is almost never or very rarely meet the needs and challenges faced by the fishing communities. In addition, of that cohíben the reorganization of the fishing cooperatives, disabling supports funding for

both the arts of fishing as for the operation of the captures in the seasons you define for each species.

This can be seen in the fishing fields that each day that passes away from competitiveness, since infrastructure deteriorates and in processes of capture is limited by lack of trade, operational, and strategic regulation to encourage regional economic development.

An important factor is the lack of vision of leadership in fisheries, showing indifference in the major problems facing artisanal fisheries, such as the disintegration of the socioeconomic loom, the positioning of the catch of fish as a subsistence activity, and only sometimes feel worried about caring for the environment.

All of the above, creates a risk perception on fishing as a source of resources, putting it in the negative circle of stagnation, the unsustainability, the political and social disorder and the loss of opportunities for growth, such as those offered by new technologies of fishery production engineering and new channels of international marketing, as well as an increase in the demand in the domestic consumption of marine products.

This analysis of results was supplemented with the observation in the fisheries field selected as research

area, the perception that fishing communities require comprehensive care is relevant, but at the same time the strengths of fishing organizations and family members of the coastal communities retain the potential generation of opportunities for development by:

- a) available to work as a team so much as with the Government as with the scientific community,
- b) the training necessary to meet the social, economic and ecological challenges.

Table 1 Results of the evaluation of aspects that motivate the growth opportunities in the fishery sector.

Variable	Criteria	Answers media	Standard deviation
Development policy	Situations complicated in the management of the fisheries sector, is received immediate attention from the Government authorities?	3.49	1.72
	Do you consider aquaculture or mariculture as complementary activities of fishing organizations?	4.69	2.14
Ventures	Would you and your family cooperate in projects for the improvement of the scientific and technical conditions in small-scale fisheries?	6.45	0.84
Investments	What is the degree of improvement in the processes of capture in the last 15 years?	3.29	1.97
	How assesses conditions of infrastructure at his fishing camp?	4.80	1.83
Value chain - processing	Whereas the processes of fishing activity, what is the degree of training that is required to create economic value in processing?	4.80	1.83
Value chain - conservation	Whereas the processes of fishing activity, what is the degree of training that is required to create economic value in conservation?	4.80	1.83
Value chain - marketing	Whereas the processes of fishing activity, what is the degree of training that is required to create economic value in marketing?	4.12	2.25
Growth strategies	The performance of cooperative leaders in 15 years has been based on promoting sustained growth?	5.48	1.37
	Do you consider that a partnership with the public sector is necessary to operate business of artisanal fisheries?	6.13	0.75
Risk	Do you consider that fishing activity as a business has a high level of risk?	6.65	0.52
Financing	Do you consider that the funding supports receiving cooperatives are appropriate?	4.16	2.04
<i>Scale of answers</i>			
1	Totally in disagreement/Never	0-15%	
2	Disagree/rarely	16-30%	
3	Somewhat disagree	31-45%	
4	Neutral / indifferent/sometimes	46-60%	
5	Somewhat agree	61-75%	
6	Agreement/almost always	76-90%	
7	Agree/always	91-100%	

5. Conclusions

Collective action for building and strengthening in fishing communities have caused an impact on the quality of life of its inhabitants making cooperatives in an economic and social institution with deep cultural roots in riparian areas. Sinaloa is one of the States of Northwest Mexico that contributes most to the economy of the region by its concentration of major fleet, fishery processing, shrimp, coastal fishing cooperatives farms and for little more than 15% of the

fishing population national, this is more than 45 thousand direct jobs and a substantial number of indirect jobs. Public policy of greater impact for the cooperative movement has been the opening of shrimp to private investment, generating a strong competition between private investors and the fishing cooperatives; In addition to other factors such as the deterioration of coastal ecosystems, management of Government support and the mechanisms of economic management of cooperatives under the scheme of family organization.

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