

The Spondylus and the Traditional Artisanal Fishing Enterprise since 1526 in the Coastal Zone of Santa Elena

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Abstract

The present research identifies entrepreneurial activities in artisanal fishing since the arrival of the Spanish conquistadors in 1526 that already exchanged the Spondylus, a mollusk genus, a bivalve characterized by the strong shell, its external spines and its coloration ranging from white to deep purple. Community life seems to be governed by ceremonies and the ritual emblem of the Spondylus shell in the historical sites of Real Alto, Cerro Narrio, Salango, Santa Elena and Isla de La Plata, up to the present time in the localities of San Pedro, San Pablo, La Libertad, Santa Rosa, Anconcito and Chanduy, whose main activity is artisanal fishing, which takes care of the marine and terrestrial environment. A qualitative study methodology with a descriptive scope was used. Surveys to fishermen and artisans allowed to know traditional arts and traditions that remain in force in the oral tradition but are not yet perpetuated with writing. Among the main results, it was found that their important economic use is not visualized due to insufficient knowledge in implementing sustainable businesses, which limits the creation of commercial development projects.

Keywords: entrepreneurship, port, fishing, artisanal, community and Spondylus

Resumen

La presente investigación consiste en identificar actividades emprendedoras de la pesca artesanal desde el arribo de los conquistadores españoles desde 1526 que ya se intercambiaba el Spondylus, género de molusco, un bivalvo que se caracteriza por la fuerte concha, sus espinas exteriores y su coloración que va desde el blanco hasta el púrpura intenso, la vida comunitaria parece estar regida por ceremonias y el emblema ritual de la concha Spondylus en los sitios históricos de Real Alto, Cerro Narrio, Salango, Santa Elena e Isla de La Plata, hasta la presente época en las localidades de San Pedro, San Pablo, La Libertad, Santa Rosa, Anconcito y Chanduy, cuya actividad principal es la pesca artesanal, que cuida el medio ambiente marino y terrestre. Se empleó una metodología de estudio con enfoque cualitativo y un alcance descriptivo. Con encuestas a pescadores y artesanos que permitieron conocer: artes y tradiciones ancestrales que permanecen vigentes en la oralidad pero que aún no se perpetúan con la escritura. Entre los principales resultados se encontró que no se visualiza su aprovechamiento económico significativo, debido al escaso conocimiento en implementación de negocios sostenibles, que como efecto tiene la limitación en la creación de proyectos de desarrollo comercial.

Palabras Clave: emprendimiento, puerto, pesquero, artesanal, comunitaria y Spondylus

1. Introduction

The beginning of the agricultural rite “mullo,” the **Spondylus princeps** (Broderip 1833), has been archaeologically associated with propitiatory rain rites. Therefore, it is possible to distinguish that this rite began at the dawn of the Valdivia culture on the coast of Ecuador (3,600 B.C.). Probably, the observation of the increase of **Spondylus princeps** in the waters of the bay of Santa Elena when the sea water warmed up and the rains came led the Valdivias and their descendants to convert this bivalve into a ritual symbol of rain.

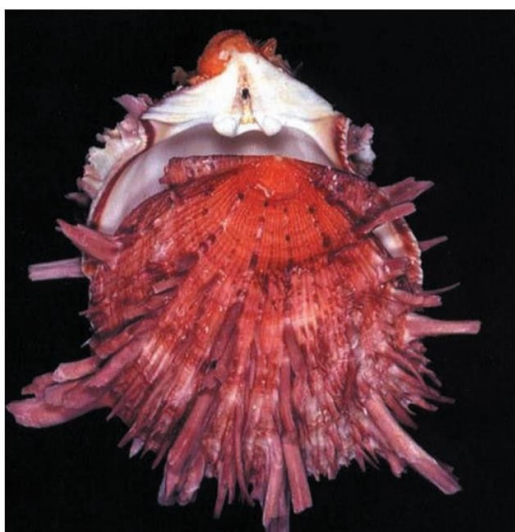


Fig. 1 “Mullo” Spondylus princeps Broderip.

However, it was Pizarro, a Spanish conqueror, who, in March 1528, began a new adventure to Pueblo Viejo, Puná and Tumbes, where they found, saw and met prosperous indigenous nations. They had seen ocean-going rafts, stone and adobe buildings, markets and well-cultivated and irrigated fields. They had marveled at the magnificence of the civilizations of Andean America and had glimpsed what awaited them.

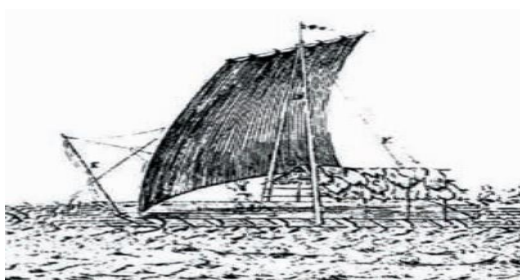


Fig. 2. Oceanic raft described by Jorge Juan.

The “Mullo” long-distance traffic system

The global long-distance exchange system, which will be called “Mullo,” also involves other materials with exchange, use and prestige value, such as obsidian, turquoise, sodalite, lapis lazuli, chalcedonies, ceramics, textiles, dyed yarn, dyes, clothing, oysters, pearls, mother-of-pearl, mother-of-pearl jewelry. Copper, silver, gold, metallurgical products and goldsmithery, corn “harinoso de ocho” and “reventón de altura” axe-coins, strings of Spondylus beads, coca leaves (*Erothroxylum coca*), “Mullo” (*Spondylus Princeps*, *S. calcifer*), “Pututo” (*strombus peruvianis*, *S. galeatus*), esoteric knowledge (dyad “Mullo” and “Pututo”) and technical

information. Artisanal fishing (shellfishing, coastal net fishing, bivalve and octopus harvesting) constitutes the only form of exploitation of coastal resources in the Ecuadorian coastal region [1].

2. Materials and methods

The research is descriptive, carried out with the participation of students of Accounting and Auditing, Business Administration and some research professionals from other Universities. The analytical, qualitative and quantitative methods were useful in selecting, reviewing and collecting information related to the object of study. Furthermore, the deductive and inductive methods were present to obtain, collect, understand and interpret data and information. In addition, the research was conducted through descriptive, exploratory and correlational levels, establishing a theoretical and legal foundation.

For the diagnosis or field study, the instruments used for this research were determined as primary instruments in the urban parishes of Santa Rosa, San Pedro, La Libertad and Anconcito and as secondary instruments in magazines, theses or other bibliographic sources.

Fishing in the Santa Elena Peninsula

The communities of San Pedro, San Pablo, Palmar, La Libertad, Santa Rosa, Anconcito and Chanduy carry out this millenary activity that is a product of ancestral knowledge and an essential source of food for humanity, employment and economic benefits for the communities. However, this fishing activity is not adequately exploited because artisanal fishermen have only basic training, which does not allow them to negotiate and manage the fishing activity or finances to help them run sustainable businesses.



Fig. 3. Santa Rosa Fishing Port.

“The Fishing of the different fishing ports of the Ecuadorian coast is significant; the fiberglass fishing fleet has increased significantly, which has led to a significant increase in exports per year. The fishing work of the fiberglass crews is very productive, especially when fishing for dorado, albacore and billfish, which are highly sought after by different households whose income often exceeds \$2000. Furthermore, fishing is part of the ancestral knowledge, an activity practiced before the arrival of the Spaniards to the Ecuadorian coast, an activity that had evolved significantly over time, from the times when the boats went to sea with sailboats to now using outboard motors.

However, the fishing development has allowed fishing to be diversified, and there are different associations in which their activity is specific. For example, there are the pargueros, who only catch redfish, called Pargo, as well as those called white fishing, which only catch the famous dorado and those who catch the albacore, fish that is the delight of the dish called the onion, so there are those who are only dedicated to sport fishing of the billfish, fish highly desired by the upper class and also has the best price in the market. There are also fishing boats in the different fishing ports; they have greater autonomy, and their fishing is varied; a good part of this fleet works for the industrial sector or for the production of canned tuna and sardines that are also desired in the market.

Pirates at sea

For a long time now, one of the biggest problems that has harmed fishing operations, production and even the departure of vessels to the sea is precisely the lack of safety on the high seas since it is common knowledge that fishermen cannot carry weapons to defend themselves from pirates, organized gangs that with firearms rob the fishermen of their work tools such as outboard motors, nets, backbones and in many occasions they have even taken the fibers leaving the crew adrift that with much luck sometimes are rescued by other crew members, today artisanal fishing is one of the most profitable professions for many families, an activity usually carried out by men.

Illegal Fishing and Cocaine

Another unrecognized activity is illegal, unreported and unregulated (IUU) fishing, which consists of the capture of certain species, the excess of specific quotas established by species, and illegal methods.

This illegal activity, which has external financing, has grown significantly, generating up to US\$23 billion a year [4].

Transnational organized crime groups (TOCs) are at the core of this prolific activity [5].

It poses a threat to the oceans' biodiversity and compromises the well-being of our future generations and the food sovereignty of our country [6].

Nevertheless, the illicit activity that has most significantly affected artisanal fishermen is drug trafficking, in which they are involved willingly and threaten to pressure others. It is known that there are more than 700 fishermen imprisoned in the U.S. and Central America [7].

Illegal Fishing near Galapagos

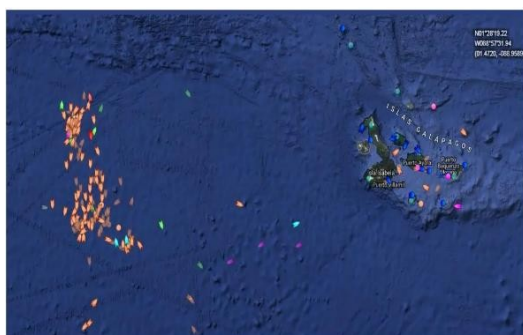


Fig. 4. Marine Reserve - Galapagos.

A problem that has shocked locals and strangers alike, seeing how a large fleet of Chinese origin navigates in international waters near Ecuador's Exclusive Economic Zone, such as the Galapagos archipelago province [8], at certain times of the year international waters are not controlled by the maritime authority. Therefore, preserving the fishery resources in our marine reserves is impossible.

“The UNESCO Heritage Committee declared the Galapagos National Park a Natural World Heritage Site on September 8, 1978” [9,12]. The Galapagos National Park was declared a Natural World Heritage Site on September 8, 1978, by the Unesco Heritage Committee, and therefore must permanently legislate to safeguard marine reserves.

Ocean research is essential for sustainable exploitation.

From the research conducted by the newspaper El Universo, it is clear that there is no real political commitment on the part of the countries that have marine reserves to significantly develop ocean sciences, which would improve, to some extent, the predictive part of the climate, the biology of the ecosystems and their natural resources. International trade moves through the oceans and seas; as has been demonstrated,

they have significant potential as suppliers of food and mining. According to this research, Ecuador is one of the countries with the least marine research produced, along with most of the poorest Latin American, African and Asian countries,

most Western European nations, Canada, Japan and Australia, between 15,000 and 30,000, with the United States and China publishing the most 30,000 - 100,000 [10,13].

11 tons of sharks seized



Fig. 5. Illegal shark fishing.

Likewise, international news reported that 11 tons of sharks, a species from Ecuador [11], were fished in Peru for export to other countries. Sharks, a species from Ecuador [11], were being fished in Peru for export to other countries.

However, in Ecuador, a whole series of agencies and governmental institutions exercise control over this main activity of the fishing communities on the Ecuadorian coast without any significant progress. Therefore, the National Assembly, the Ecuadorian people and the guardians of the coastal marine reserve should make maximum efforts to controlling the marine resources that are exploited as well as those ecological processes so that the fishing wealth does not have negative consequences.

3. Discussion and Results

It is undoubtedly that the fishing ports, in some measure, have had growth of their communities, as well as the growth of the fishing fleet in fibers and small boats in the different ports of the province of Santa Elena. However, there was no real structure of the docks for handling the product of the sea until its commercialization, as well as the control of drug trafficking and pirates in the maritime area. All this has only one cause, the little participation of the economic agents and the governmental aid for this branch and the distancing of the Ecuadorian State.

4. Conclusions

Some of the problems that fishermen have to face are the difficulty in obtaining credit to finance the purchase of all the implements they must use in their fishing operations, the need to be equipped with basic navigation instruments, technology for the safety of the crew members and the conservation of the product and in the marketing stage. These are some of the inconveniences that fishermen face daily and that undoubtedly have a negative impact on the household economy and affect the socioeconomic development of the localities in general.

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