Consumption habits of fish in Zacatecas city

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Received March 25, 2015; Accepted June 27, 2015

Abstract

In recent years, in Zacatecas has promoted the production of several species of fish, including tilapia, carp, bass, etc, through dams or farms. But recent studies have found that fish consumption annual per capita in the state is just 800 grams. This research is based on identifying and describing the habits of fish consumption in the city of Zacatecas as a base to detonate the merchandising of these products in the state.

Consumer habits, use of natural resources, commercialization.

Citation: Vargas-Hernández, José, Campos-Álvarez, Rosa Elvira and Figueroa-Ibarra, Gabriela Noemi. Consumption habits of fish in Zacatecas city. ECORFAN Journal-Mexico 2015, 6-15: 1280-1288

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Introduction

This research is based on identifying the habits of fish consumption in the city of Zacatecas and conurbation, in order to lay the groundwork for, in subsequent studies, develop a strategy to help aquaculture producers in the region, to market and position their products in the state, as it is one of the activities, alternative to agriculture and livestock which has been promoted in recent years. People are unaware of these products, even though the state is landlocked. However it has several dams which are cultivating various aquaculture species, including tilapia, carp, and largemouth bass, among others.

This research consists of four sections. The first section describes the problem and justification of the research. In the second section it is exposed the contextual framework that gives rise to this investigation. In the third section it is established the methodology used to support research and ensuring the accuracy of the results. And the fourth and final section presents the results and conclusions presented.

Background of the problem

Under the National Development Plan, within the shaft 4 Mexico Prosper: 4.10 objective mentions the importance of building a productive agriculture and fisheries to ensure food security. Under this heading, in recent years, it has been encouraged aquaculture in the state of Zacatecas, mainly Tilapia production.

However, some of the farms for which resource and funding was granted for their installation, are currently without production and those that are producing, they have declared present stagnation and little or no increase in marketing their products.

Delimitation of the problem

With the results of this research it will obtained the fish consumer characteristics and habits in the consumption of it, being the basis for further research to culminate in a marketing program for this product, both at the state, national and international. This being the research question: What are the habits of fish consumption in the city and its suburbs Zacatecas?

Justification

One of the main aspects to establish a marketing program is primarily to know the consumer. In the case of aquaculture products produced in Zacatecas, there was so far a study to determine the characteristics and habits of customers for these products. That is why this research is crucial to know the consumer, then perform an integration program for aquaculture producers based on the needs of customers, including from cultivation to marketing their products.

Contextual framework of consumption and production of fish in Mexico

Although fish consumption has increased in recent years, reaching a per capita consumption of 10 kgs per year, this is below the world average, which is 18 kgs (CONAPESCA); and well below countries such as Japan and some European countries where consumption becomes more than 30 kg, per year. Similarly seafood, are the foods least consumed in Mexico.
Aquaculture production in Mexico is divided between coastal states (Pacific, Gulf and Caribbean), as well as landlocked states, where the states of the Pacific coast have the highest production.

Table 1: Volume of aquaculture production in live weight by main species. Annual series 2007-2012

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</table>

Table 2: Volume of fish production in live weight and percentage share by coast and federal entity. Annual series from 2007 to 2012.

Contextual framework of fish consumption in Zacatecas

Zacatecas is among the states with landlocked aquaculture production. This production has increased in recent years.
Among the species most occur in Zacatecas are crappie and carp:

**Table 3 Production of crappie**

However, although in Zacatecas aquaculture products are produced, it is one of the states with lower processing industry:
Research methods

For this research an analytical descriptive cross-sectional study in which 324 research instruments were applied and by which the level of consumption of aquaculture products was determined with particular emphasis on consumption zacatecana tilapia, among a random sample of people that were carried out in Zacatecas. The data included demographic aspects such as place of residence and colony, which helped them classify participants elements.

The data obtained were treated through SPSS Statics for Mac.

Table 4 Enterprise characteristics of preparation and packaging of seafood

Results

After analyzing the data, the following results were obtained, which are usually presented (fish consumption) to the particular (zacatecana consumption tilapia).

As for fish consumption it was obtained that 75% of respondents said yes they consume fish as part of their diet, equivalent to 242 of total 324 respondents surveyed items (Figure 3).

Meanwhile, the 83 respondents who do not consume the product, they were asked what the reasons were for not doing so. The most frequently mentioned reasons were 53% who responded they did not like the taste and 12% avoiding the product due to the smell thereof.
Another aspect considered in the investigation was because they considered or not considered fish within the daily diet to which the 71% who think the fish mentioned it was mainly for being nutritious, healthy and tasty and 29% that considers the product within their daily diet mentioned that the main causes are that they do not like the taste or that causes allergy.

This can be seen in a better way in F.

As it can be seen, even when people mentioned who ate fish on a daily basis, when asked how often, 41% of the population said that consumed 1 to 2 times a month which can not necessarily be considered every day.

Another important aspect to consider in the investigation was the time of year when most frequently consumed product. The results showed that the time when more was consumed during Lent (69%).

In relation to the above, they were asked in what place used to take the fish, to what most people answered that at home (58%) (Figure 6).

Because sometimes the perception that people have about the word 'everyday' may vary, the specific frequency of product consumption among the population was also investigated. The results are presented in Figure 5.

Subsequently, it was asked the population the way that prepares the product regularly where 48% responded that breading and 20% fried such responses constituted the majority (Figure 7).
Another specific objective of the research was to know if the product price directly influences the consumption of the population which asked respondents how much influence this factor. To give a point of comparison, it was estimated that the item had to be related to the cost of other meat. 33% of the population said the fish was more expensive than other meats, 24% less expensive, 26% considered to have the same cost and 16% mentioned not know about it. This is shown in Figure 8.

![Figure 7 Preparation of fish.](image)

![Figure 8 Cost of fish compared to other meats](image)

In the same vein and comparing fish meat with other meats respondents were asked if they knew that the product brought the same quality of protein than beef to which 64% said no.

Similarly, they were asked if they knew that the fish meat had a higher amount of unsaturated fats compared to most consumed meat (beef, pork and chicken), to which 60% answered yes.

This shows that the Zacatecanos know that fish is best in fat but had no knowledge of its content for protein.

To learn more about if people knew about the benefits of fish meat, it was asked openly what they saw as the specific contributions of fish health. In this aspect, the most frequently mentioned response was that fish is nutritious, followed by healthy and low in cholesterol (Figure 9).

![Figure 9 Health benefits of fish](image)

Regarding marketing aspects, respondents were asked where they bought the fish, how much they would pay for one kilogram of fish and fish is what they buy more frequently. The results of these questions were for the first fishmongers and supermarkets with 35 and 34% respectively.
To the second question the answer with the most frequency was 100 to 120 pesos per kilogram (29%) and finally as the most consumed fish fillet and the result was crappie with 50 and 36% respectively.

Finally, respondents were asked about their knowledge of tilapia and cultivation of the same in a farm. For the above, they were considered some items related to knowledge of tilapia, consumption, where consumed, knowledge about the production of this product in Zacatecas farms and the benefits of tilapia produced in farms.

For the first 3 questions, 64% of respondents said yes they were aware about the existence of tilapia. However, they do not relate to the crappie but feel it is a completely different fish. 70% of respondents mentioned that although they have known, they have not consumed it, which contrasts with the type of product they buy where they mentioned that 36% buy crappie. Finally at 30% of people who reported eating tilapia they asked where have they tried it. This percentage (72 of 324 people) 54% said they consumed at home and 22% in restaurants (Figures 10, 11 and 12).

As for the results of the tilapia produced on farm, of all respondents only 59 of 324 people said they knew the existence of tilapia farms in the state.

94% of interviewed people said not knowing the benefits that can be tilapia it produced on farms regarding tilapia in general and finally to the 18 people who said they knew the benefits of farmed tilapia were asked what were the benefits where most mentioned freshness (27%).
Based on the above and after analyzing each of the above aspects, it can be concluded the following:

- 75% of respondents eat fish.
- Fish consumption in households is 1 or 2 times a month.
- Those who consume fish only eat special seasons particularly in Lent.
- People consume fish mostly at home; they buy mostly in fishmongers and supermarkets.
- The most consumed fish fillet and crappie.
- Most people think that the preparation of fish consumption does affect consumption. However when asked how difficult it considered preparation that most responded that easy.
- The way it is prepared fish is mostly breading.
- Respondents consider that fish is more expensive than other types of meat which is proven with the fact that they are willing to pay between 100 and 120 pesos per kilogram.
- Finally, it is important to emphasize that even though the majority of respondents said not knowing the benefits that brought the fish to their health, they have in mind that fish is better than other meats. They perceived as nutritious and healthy and it has more "good fats".

**Conclusions**

The objective of this research was to determine consumer habits of fish in the metropolitan area of Zacatecas. In order to determine the consumer profile for aquaculture farms in the region, these farms grow mainly tilapia. The results yielded valuable information that will be considered for further research which aims to culminate in an efficient marketing strategy for the products of these farms, which allow positioning the fish farm between local and national consumers, finding an area of opportunity especially in data mentioned the fact that most of the population displays fish as better meat than other meats.

**References**


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