

# ELEMENTS OF ECOGASTRONOMY AS A FACTOR FOR PROMOTING TOURISM IN THE LENÇÓIS MARANHENSES NATIONAL PARK

**Ronaldo Luiz Beleze**

MSc in Tourism and Hotel Management- Univali  
ronaldobeleze@ifma.edu.br

**Joniery Rubim de Souza**

MSc in Tourism and Hotel Management – Univali  
joniery@ifma.edu.br

RECEIVED: June 17<sup>th</sup>, 2016

APPROVED: November 17<sup>th</sup>, 2016

95

## ABSTRACT

Ecogastronomy, a term coined by Carlo Petrini in Italy, follows some principles and proposes a diet capable of preserving social groups, biodiversity and modes of production, ensuring the production and marketing of food products. This new way of eating associated with tourism indicates an alternative for the generation of income and improvement of the life quality in the villages of the municipality of Barreirinhas-MA, gateway to the PNLM (Lençóis Maranhenses National Park). The work is based on the geo-historical and economic aspects of Barreirinhas, to list the ecogastronomic potential of its villages and their reflection on tourist attraction. This study aims at analyzing the possibilities of food, human and infrastructure elements that make up the ecogastronomy, contributing as an alternative to increase the practice of tourism, generating income for less assisted communities. With a descriptive approach and quantitative method, the questionnaire used as an evaluation tool resulted in an interpretation that reveals great acceptance and approval regarding travel to experience the new attractions, as well as the positive profile of respondents concerning the elements of ecogastronomy.

**keywords:** Tourism. PNLM. Ecogastronomy. Barreirinhas.

## INTRODUCTION

Ecogastronomy proposes, among other principles, a natural and conscious diet and a philosophy of life that values the act of nutrition, teaches the pleasures of different flavors and varieties of food, recognizes the origins and producers responsible for food, and respects seasonality and Human social groups (Petrini, 2001). The term, ecogastronomy, coined during the SlowFood movement, is presented as a Gastronomic Cultural heritage, since among its several principles and commandments, it defends human social groups, the rural familial producer, and the food ethic, among other aspects.

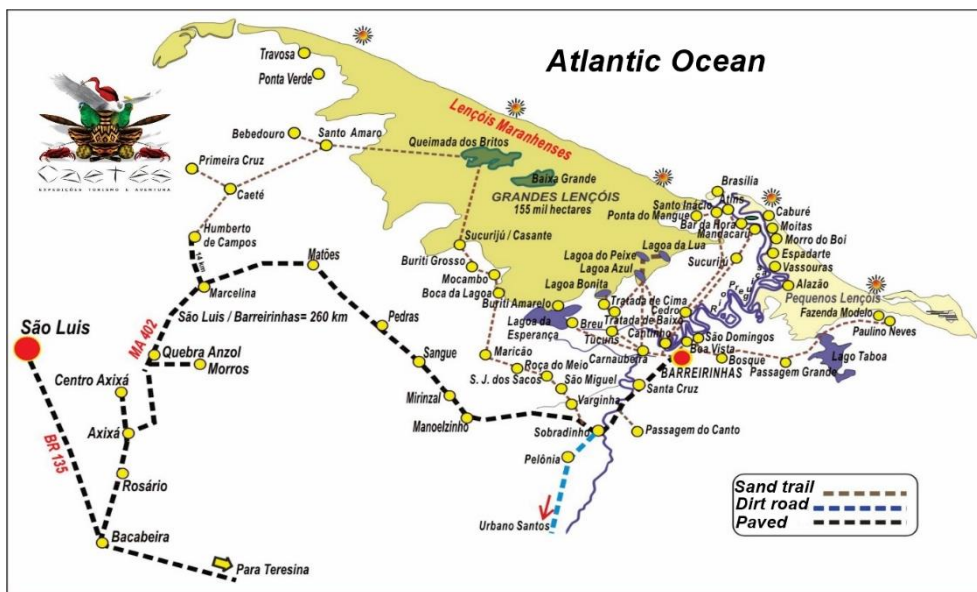
Through ecogastronomy, a new concept of sustainable and conscious food is born following the guidelines defined by the International Congress of Gastronomy – Table Pleasures – CIG (2011), / “The Charter of São Paulo: Gastronomy and Sustainability”, Where chefs disseminate “to worldwide society the commitment of individual responsibility and collective responsibility based on the following principles”:

Know the food we obtain, process and eat; Maintain the means and conditions that give rise to the food; Preserve, valorize and promote the natural qualities of food as well as its healthy use; Use all the food we get; Properly remunerate food producers, including environmental services provided to society; Apply knowledge and innovative technology to value the diversity and quality of the ingredients, as well as their uses; Honor and respect daily the act of eating and preparing food (The Charter of São Paulo, 2010).

The object area of this study is Barreirinhas, a municipality located in the northeast of the State of Maranhão, integrating the National Park of Lençóis Maranhenses (PNLM), and produces a wide range of cooking ingredients, through its agriculture (manioc, rice, corn, etc.), livestock (pigs, poultry and cattle) and extractivism (buriti, açaí, bacuri, pequi), among others (Aeci, 2004). It is part of the PNLM, that covers an area twice the size of the city of São Paulo (Ramos, 2002). Barreirinhas is recognized as the main gateway to the Park. Most of its population lives in villages that are difficult to access, and that can only be reached by four-wheel drive vehicles.

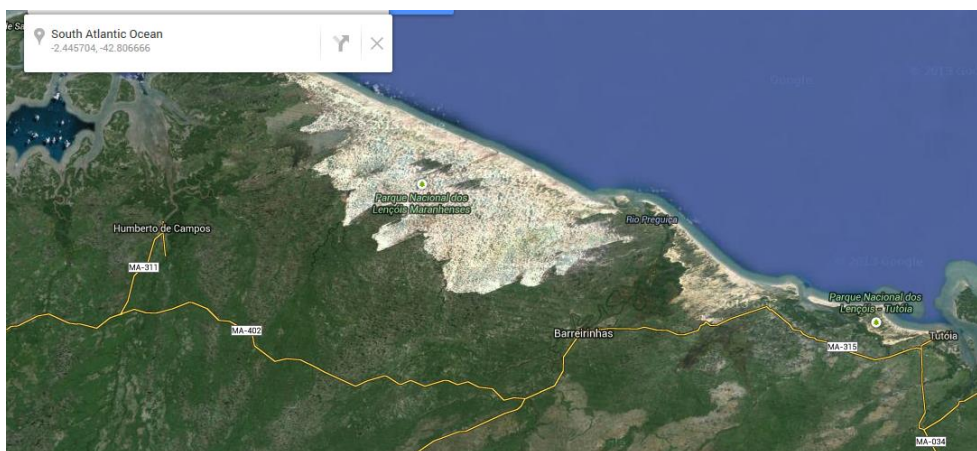
Figure 1 shows the entire territory of the municipality of Barreirinhas and its surrounding villages that are part of the PNLM. Figure 2 shows a satellite image of the great "lençóis" and small "lençóis" of Maranhão.

Figure 1 - PNLM, BARREIRINHAS AND VILLAGES.



Source: Artgraf, 2015

Figure 2 - PNLM (satellite view)



Source: Directorio cartográfico de España y América (2015).

Tourism activity is generally understood as a solution to the problems of different localities, promoting economic development and progress through the use of the potential that exists in a region. Ecogastronomic Tourism, which deals with production mainly from rural areas, following the principles of Ecogastronomy, directly involves the local residents of the rural villages, who for the most part, do not benefit from the income generated by tourism. According to the results of the questionnaires applied to tourists, the products of the ecogastronomic identified as having the most attraction and potential for tourists were: buriti, juçara, cashew, and manioc flour, as shown in figure 3.

Figure 3 - Ecogastronomic products; buriti, juçara, cashew and manioc flour production.



Source: Author, 2015

The objectives of the study were to analyze the material and immaterial elements of ecogastronomy that present alternative tourism practice, generating income for poorer communities and some of the villages of Barreirinhas, and to identify the tourist demands regarding the ecogastronomy in the villages of Barreirinhas and the behavior of the tourist in relation to them.

The increase in tourism produced by ecogastronomy is generally understood as a solution to the problems of different localities, promoting economic development of the villages in the municipality.

Based on these premises, it is possible to demonstrate, through the present study, alternatives to minimize the problem of low income with the perspective of generating

currencies (resources) for the villages, through the use of this new potential: ecogastronomy.

This study was justified by the fact that this provides an economic alternative for the villages, as many of them fulfill the principles of ecogastronomy. Nowadays, tourists do not leave foreign currency in these villages due to the lack of knowledge of these potentialities, which, when well publicized and structured with technical support, could open a new niche market through this new source of resources.

## METHODOLOGY

To achieve the objectives proposed in this study, a descriptive, quantitative approach was carried out by means of a survey. The application of quantitative study, framed in the positivist view of the social sciences, is characterized by Malhotra (2001, p.155) as one that "seeks to quantify the data and to apply statistical analysis in some way". And the survey, according to Hair et al. (2005), is a form of data collection, with the purpose of exploration, description and explanation, in a logical, deterministic and empirically verifiable method.

Two questionnaires developed by the authors, with open and closed questions, were used to detect behavioral and behavioral characteristics of tourists and residents, allowing more precise answers based on scales and numerical measures. The first questionnaire consisted of 16 items that were directly linked to the tourist for identifying their approval of tourism resources. The second questionnaire focused on the residents' understanding of offering quality in the feeding as an element of ecogastronomy. The data derived from the tourists and residents cross-referenced, and the results were divided into three different dimensions: food, human and infrastructure, as represented in the table in the Results section.

The data collection instrument was applied in the presence of the researchers. The respondents were asked to indicate their level of agreement with each of the statements,

on a scale from 1 to 5, where 1 is "slightly agree" and 5 is "strongly agree". Pre-test applications were performed with 5 individuals, to identify any potential difficulties in filling out the questionnaire.

The necessary adjustments were made to improve the respondents' understanding. The selection of the sample used for this study followed the non-probabilistic method, because according to Hair et al. (2005, p.200), "the selection of subjects for the sample is not necessarily done in order to make it statistically representative of the population".

In this regard, convenience sampling, according to Malhotra (2001, p.331), is understood in the "search for a sample of suitable elements. Selection of sample units is left to the interviewer."

The main criterion for participation in the research was the relevance of information that the data would generate and their agreement to take part in the study. A total of 382 people participated in the research.

100

## **THEORETICAL REFERENCES**

The dynamics of any geographic space need to be understood in the light of the social processes that engendered it, without forgetting the natural characteristics that provided the basis for its development (Pereira, 1997).

According to the author, it is important to understand the colonization and construction of Barreirinhas from the perspective of its socio-historical characteristics. In this city, which is the gateway to the PNLM, a tourist icon of the world, there are several villages that, due to their geography and rich and unique water attractions that surround them, are a valuable tourist heritage.

The Park, which constitutes a Conservation Unit (CU), is an area that integrates a set of natural and cultural resources of its own, which help ensure the perpetuation of the nation's natural and cultural heritage. It was created by Decree No. 86,060 of June 2nd, 1981 and covers a total area of 155,000 hectares, with a perimeter of 270 km. Within the PNLM are the municipalities of Primeira Cruz, occupying about 6.89% of the area of the Conservation Unit; Santo Amaro, with 42.15% and Barreirinhas, with 44.86%.

This vast dunes are known by several denominations. Originally, they were called the Lençóis Maranhenses (Maranhenses sheets) by the first navigators, who arrived with their boats, near the coast of the region. This name was given due to the fact that this area presents a flat relief, consisting of marine quartz sands and strings of immense white dunes that resemble "sheets thrown on the bed." (D'antona, 2002).

The PNLM has immense tourist potential, with the possibility of exploring several sectors linked to tourism. Its physical characteristics make it as a tourist attraction capable of attracting national and international demand, according to the Spanish Association for International Cooperation (Aeci, 2004).

Besides its great natural attractions, the PNLM and surrounding area offer various foods that can enhance gastronomy. The receptor nuclei corresponding to the villages of Barreirinhas-MA, has potential ingredients reported in the research of the Scientific Research Program (Pibic, 2011).

The PIBIC project was implemented in 2011, with the title: The culinary art in Barreirinhas. The aim of the project was to increase the potential of the cuisine and ingredients of the region, and its traditional productions. In this study of the program, the interviewees were asked open questions about food in the municipality, and reported the gastronomic potential of the region.



The data collected from PIBIC sources represent a good opportunity, with extractivism, livestock and agriculture, to make better use of the ecogastronomic productions that meet the tourists' needs and the expectations of the citizens of these villages. These productions must be focused on sustainability, and on natural and conscious food.

Ecogastronomic Tourism proposes, among other principles, the travel of the tourist to enjoy natural and conscious food, encouraging means of production and local producers, and seeking first hand the production carried out in the villages, thereby respecting the production that exists in rural areas, and following the principles of Ecogastronomy, which directly involves the residents of the villages. These villagers can be characterized as conscious agents and promoters of ecogastronomic nutrition, capable of being the actors in the quote below from the Guidebook in Sustainable Tourism and Poverty Alleviation in Brazil (Tsapb, 2005 apud Omt, 2003).

In other words, the villager, in implementing the idea of ecogastronomy, will be the actor of a differentiated tourist destination that values the potential of its tourist space, as well as its maintenance. In order to reach the focus of this study, it is necessary to characterize the ecogastronomy with respect to its characteristics as a gastronomic cultural heritage, in addition to the geo-historical aspects of the object of research previously reported.

When food is viewed in a conscious and natural way, among other principles, we refer to the patrimonial issue of food, which is the identity and memory of a people, perceived by the tradition and wealth that it can generate, in a sustainable way. Sustainable way because it is concerned with understanding the footpath of food, from its production to the table, by lovingly linking the producer, the land, and still conserving the patrimonial structures passed down from generation to generation. These actions promote the permanence of the cultural values of a group within the society and awaken a discussion about food and sustainable cultural heritage, creating multipliers of these concepts within their research. The food heritage, also represented by the act of eating, determines a panorama of social identity, observed by Alvarez (2002), who says:



[...] Eating, then, implies a complex social feat that sets in motion a set of movements of production and consumption, both material and symbolic, differentiated and differentiating. And in this regard, the consumption of food and the social and cultural processes that sustain them contribute to the constitution of collective identities, as they are expressions of social relations and power. (Alvarez, 2002, p. 11).

Thus, food choices constitute a way of representing a people and, consequently, they show many characteristics of those who practice them, reporting the potential patrimonial food of man.

When it comes to food, we are referring to the identity of an organized society, because it involves the formation of eating habits and thus, the history of the individual, marked by its phases, its growth and its formation.

In the field of ecogastronomy, from the perspective of food as patrimony, many chefs defend other tendencies that are contrary to natural and conscious gastronomy and that violate the principles of ecogastronomy of the slow food movement. Santamaria (2009) defends the responsibility of working and promoting ethics in gastronomy and also describes what he calls "the six points of my kitchen: for an ethic of the palate" to guide his speech against kitchens that do not defend these principles:

- I. Cultural: We must accept the existence of a culinary history that conditions us and makes us what we are. Catalan culture is my expression. We belong to a Europe where the cult of the table is like a religion.
- II. Natural: It is necessary to use products in season, following the seasonal calendar and rejecting chemical or artificial substances that have been added to the product. It is necessary to transform foods without destroying them, maintaining and enhancing their flavor.
- III. Evolutionary: It is necessary to advance in the exercise of the profession through the experience, improving the productive processes, thanks to the new

technologies. It is necessary to promote a kitchen where synthesis is a value, and where simplicity is a form of expression to help society understand the art of cooking.

- IV. Social: To improve everyday quality of life; every social advancement in the profession in favor of human quality improves the culinary results. The cook must get involved, flow, and make his voice heard among the movements that advocate a fairer and more concerned society.
- V. Artistic: The kitchen as a means for creation is one of our fine arts. To thrill, rather than feed, is my goal. My modernity is not a superficial aesthetic, but a sublimation of the sense of inner taste.
- VI. Universal: We must not stop being local. We must be engaged the search for a proper truth, authentic, so that no one has to renounce the influences of others, products and people from all over the world, even though our land never ceases to be perceived in our kitchen (Santamaria, 2009, p. 69-70).

The central agent of the theme, Ecogastronomic Tourism, is an income generator that has been associated with lodging and food. Since Barreirinhas has natural potential for tourism, due to the natural beauty of the PNLM, diversity in livestock, fishing, extractivism and agriculture, ecogastronomy is also a source of study as an alternative to tourism.

## RESULTS

Among the productions originating from these ingredients that follow the principles of ecogastronomy, we find many many foods that have potential that has not yet been socially or economically exploited through ecogastronomy, besides the valorization of the positive behavior seen in tourists in relation to these elements and also the acceptance of the residents in offering these products to the tourist.

Table 1- Elements x dimensions of ecogastronomy x quantification

Dimensions Elements of ecogastronomy	Food	humans	Infrastructure
<b>Satisfaction with the meal</b>	Good (34%)		
<b>Where do you eat?</b>	Restaurants (62%)		
<b>What do you eat?</b>	Fish (50%) Poultry (26%) Meat (19%)		
<b>What do you appreciate most?</b>	-Bacuri, buriti, cajá, cashew (72%) - Fish (41%) - Buriti jam, Tiquira, Manioc byproducts (98%)		
<b>Food in the villages</b>	Good (49%)		
<b>Hygiene and GMP</b>	Appreciate (49%)		
<b>Values healthy eating</b>	Yes (42%)		
<b>Cultural Heritage</b>	Yes (84%)		
<b>Reason for the trip</b>		Sun, beaches and dunes (68%)	
<b>With whom do you travel?</b>		Family (52%)	
<b>Visiting Lençóis</b>		Dunes and lakes(43%)	
<b>What did you buy?</b>		Food (43%)	

		Attractions (28%) Souvenirs (23%)	
<b>What is the main tourist attraction?</b>		Great and small lençóis (90%)	
<b>Travel up to 25 kilometers</b>			Swimming, sun and beaches, handicrafts, gastronomy (63%)
<b>How many hours would you drive/commute to reach the place?</b>			2h (75%) with other attractions.
<b>Where are you staying?</b>			Hotel (58%)

Source: Author, 2015

In the cross-referencing of the data, it is important to highlight some considerations originating from the research result. When asked about the preference for the food of the region, the majority opted for fish (50%). This preference for a fish-based diet is repeated among tourists seeking sun and beach destinations, including dunes and lagoons. However, studies indicate that they would enjoy walks to the interiors, and in this case could consume delicacies that are part of the gastronomic heritage and that are produced in the villages, such as dishes based on poultry and pork, juices, jellies and candies made from native fruits.

When asked about the typical dishes of the region, the following responses were obtained: the preferred fruit was bacuri (30%); and the main dish most mentioned was fish (41%). As for delicacies, buriti candy was preferred (47%). According to these results, it should be noted that the most of the cited ingredients and dishes, which partially represent the typical cuisine of Barreirinhas, are located in many of the villages surveyed, with the exception of fish that, to a lesser extent, originates from a pond. Since the ingredients are present in the villages, the figures demonstrate the relationship between the reality reflected in the

responses, and the research objective, which is to demonstrate the potential of these villages to attract tourism through ecogastronomy.

Regarding the hygiene at the places where food was offered, most of respondents were satisfied (49%). Although the villages did not have adequate structure to positively condition good manufacturing practices, this was not a concern for the tourists. However, these statistics can be improved by applying the results obtained in the surveys, which aim, among other objectives, to understand the relationship of ecogastronomy with the villages, including consumption and safe food practices.

According to the survey, 32% of the respondents attribute 10 the cultural heritage in in the 1-10 Likert scale. Most of the interviewees see the cultural heritage in all its dimensions positively, as a tourist attraction, and realize that the gastronomic heritage is inserted in this context and is also contextualized in the body of the text as a result of ecogastronomy.

107

When asked how much time they would spend to enjoy/get to know the local cuisine, most of the respondents (47%) said they would travel for up to two hours to do so. With regard to other attractions besides cooking, tourists (40%) said they would spend up to three hours traveling. The data reveal that the towns relatively far away from the destination (up to 20km) would be good attractions and that the tourists would be willing to go there to sample the local gastronomy, which demonstrates the feasibility of the study presented here. This time increases even more if other natural attractions are added.

Considering the justifications of this analysis, it can be observed that the application of Ecogastronomy can promote the lifestyle of the local residents and the quality of the destination for the tourists, promoting the search for a healthy diet, besides teaching them to appreciate new sensations, new palates, and new tastes, to be explored through the local raw materials available. Thus, it can be affirmed that Ecogastronomy has relevance, since it aims to offer conditions of a rich diet, promoting quality of life for the visitors.

## CONCLUDING REMARKS

This study addresses themes related to tourism and ecogastronomy in the PNLM region corresponding to the municipality of Barreirinhas and its villages. It opens some possibilities for study and suggests the creation of means of improving the quality of life in the more distant communities, and preserving the resources on which tourism activity depends.

This analysis of the scenario gives an overview of the municipality, identifying its potentialities and problems, especially in relation to food. Based its deficiencies and, above all, its characteristics, it is possible to raise proposals for the organization, structuring and development of tourism in Barreirinhas from the perspective of ecogastronomy.

When questioned about the natural and conscious food, the cultural heritage of gastronomy, and healthy eating, among other aspects, the tourists reacted positively, with most of the interviewees indicating that they would enjoy destinations that add “the principles of ecogastronomy”. Likewise, the majority of the respondents from the tourist trade, in the third questionnaire, expressed a desire to offer more attractions to the tourist based on sustainability, and that give greater value to rural inhabitants, in contrast to the exploratory and predatory attractions currently available.

The major challenge facing tourism management is the process of transformation – from resources into products and, in turn, from products into market-directed offers.

The starting point of the process is the structuring of resources — the natural and cultural gastronomic attractions of the municipality, its climate and local population, its cultural identity, its lifestyle, and its use and enjoyment of tourism.

Thus, a product is understood as the resource in which one or more activities can be carried out (visiting, attending, participating, studying, buying, eating ...), because it enables the creation of a proposal to make it accessible to the public. Thus, it can be said that

ecogastronomy is relevant, as it aims to offer conditions of a rich diet, making use of a culinary patrimony that offers social and economic sustainability. It is therefore concluded that ecogastronomy is an option for generating income and improving the quality of life of local residents of the villages in the inland region of Barreirinhas.

The result of this research allows us to conclude that it is possible (or feasible) to implement a series of actions capable of favoring the development of villages located in the inland region of the municipality of Barreirinhas, through the supply of new products based on natural and sustainable production, for 2020.

## REFERÊNCIAS

- AECI - COOPERACIÓN ESPAÑOLA. (2004). *Proyecto de Desarrollo Sostenible del Turismo en la Región de los Lençóis Maranhenses*. Espanha.
- Alvarez, M. (2002). La cocina como patrimônio (in)tangible. In: MARONESE, I. (Org). *Primeras jornadas de patrimônio gastronômico*. Buenos Aires: CPPHC-CABA, p.11.
- Appolinário, F. (2009). *Metodologia da Ciência: filosofia e prática da pesquisa*. São Paulo: Cengage Learning.
- Assunção, P. (2012). *História do turismo no Brasil entre os séculos XVI e XX: viagens, espaço e cultura*. Barueri, SP: Manole.
- CARTA DE SÃO PAULO. (2010). "Carta de São Paulo: por uma cozinha sustentável." *Congresso Internacional de Gastronomia - Mesa Tendências*. Disponível em :<http://prazeresdamesa.uol.com.br/exibirMateria/3324/carta-de-sao-paulo-por-uma-cozinha-sustentavel> (Acesso: 28 out., 2010).
- CIG – Congresso Internacional de Gastronomia. (2012). *Prazeres da Mesa*. Princípios e mandamentos de uma cozinha consciente. Disponível em: <http://www.mundolusiada.com.br/gastronomia/semana-mesa-sp-carta-de-sao-paulo-traz-discussao-sobre-cozinha-consciente/>. Acesso em 10 jun de 2011.
- D'antona, A. O. (2002). *O Verão, o Inverno e o Inverso: Lençóis Maranhenses, imagens*. Brasília: IBAMA.
- Hair, J. F. & Sant'anna, A. S. (2005). *Análise multivariada de dados*. 5. ed. Porto Alegre, RS: Bookman.
- Malhotra, N. K. (2001). *Pesquisa de marketing: uma orientacao aplicada*. 3. ed. Porto Alegre: Bookman.



Pereira, R. M. F. A. (1997). *A geografia e a formação nacional brasileira: uma interpretação fundamentada nas ideias de Ignácio Rangel*. Tese (Doutorado em Geografia Humana) – Universidade de São Paulo, São Paulo.

Petrini, C. (2001). *Slow Food: The Case for Taste*. New York: Columbia University Press.

PIBIC – 2011,2013,2014/2015 IFMA : Disponível em [http://www.ifma.edu.br/barreirinhas/index.php?option=com\\_content&view=article&id=3409:pesquisa-culinaria-do-campus-barreirinhas-e-destaque-no-globo-rural&catid=38:ultimas-noticias&Itemid=81](http://www.ifma.edu.br/barreirinhas/index.php?option=com_content&view=article&id=3409:pesquisa-culinaria-do-campus-barreirinhas-e-destaque-no-globo-rural&catid=38:ultimas-noticias&Itemid=81) ( Acesso :29 março 2015)

Santamaria, S. (2009). *A Cozinha a Nu*. São Paulo: Senac São Paulo.

Santos, R.. *Barreirinhas: apontamentos históricos*. Barreirinhas, MA: 2005.

Slow Food Brasil. *Slow Food Brasil*. Disponível em : <http://www.slowfoodbrasil.com/> (Acesso: 3 ago., 2013)

Turismo Sustentável e Alívio da Pobreza no Brasil (TSAPB),2005.Disponível.em.<http://www.slideshare.net/melfiguereado/turismo-sustentavel-e-alvio-da-pobreza-no-brasil>. Acesso em 06.jun de 2013