



ORFISH - Development of innovative, low-impact offshore fishing practices for small-scale vessels in outermost regions - MARE/2015/06



# WP2 Creating alternative fishing opportunities

Task 4.2 Pesca-tourism: opportunities for small-case fisheries in the ORs

Deliverable #54

Final report of the Task 4.2

#### The ORFISH project

The ORFISH project aims at providing a platform for exchange of knowledge on low-impact offshore fishing techniques among fishers for the outermost regions with a view to developing and optimizing these techniques and with the principal objective of alleviating fishing pressure on coastal fish resources. The specific objectives of the project are the following:

- Raising awareness of the opportunities to develop innovative fishing techniques allowing to divert fishing effort away from coastal resources;
- Developing and testing low impact fishing techniques adapted to the bio-geographical conditions of each outermost region;
- Creating alternative fishing opportunities that will help to consolidate jobs in the fishing industry and ensure a steady supply of fisheries products to local markets;
- Exchanging of best practice on low-impact offshore fishing techniques between ORs, which will also do good to overseas countries and territories and third countries;
- Improving communication among outermost regions' fishing sectors as part of the good functioning of the Advisory Council on Outermost Regions.

ORFISH website:

http://orfish.eu

WP4 Creating alternative sustainable fishing opportunities

Task 4.2 Pesca-tourism: opportunities for small-case fisheries in the ORs

Contributors to this deliverable

Léa Lebechnech, Vertigo Lab

Olivier Guyader and Lionel Reynal, Ifremer

César Gomes and Jorge Lucas, DRP Madeira

Lorenzo Cruces, CIMA Canary

Daniela Costa, Federação das Pescas dos Açores

Gualberto Rita, Federação das Pescas dos Açores







# Table of contents

١.	Obi	ective	es and methodology	4
ı	.1		ectives	
ı	.2		hodology	
II.	Intr		tion	
III.			activities: pesca-tourism and itti-tourism	
	II.1		aries	
	III.1		Examples of itti-tourism	
	III.1	L.2	Problems to implant pesca-tourism	
ı	II.2		leira	
	III.2		Itti-tourism	
	III.2	2.2	Problems to implement pesca-tourism	
ı	II.3		es	
	III.3		Pesca-tourism	
	III.3		Other land-based activities linked to SSF community	
ı	11.4	Mar	tinique	
IV.			on and financial support	
ı	V.1		aries	
ı	V.2		°es	
V.	Cor		nts et benefits	
,	<b>V</b> .1		aries	
,	<b>/</b> .2		leira	
VI.	Ma	in cha	allenges	27
,	/I.1		aries	
,	/I.2	Mad	leira	28
,	/I.3		tinique	
	/II.1		aries	
,	/II.2		leira	
	/II.3		tinique	
			phic references	







# Task 2.1 Pesca-tourism: opportunities for small-case fisheries in the ORs

Deliverable #54

VIII.1	Canaries	32
VIII.2	Madeira	33
\/III 2	Azores	2:







# Objectives and methodology

## I.1 Objectives

The main objective of this task is to establish well-founded proposals for the design, implementation and responsible management of the comprehensive product "fishing tourism or pesca-toursim", taking into account its diversity and adaptability to environmental, socioeconomic and cultural impacts. The project will seek to establish a comprehensive intelligent management system to promote sustainable relationships among the different stakeholders for activities developed in coastal ecosystems. This product of "Fishing-Tourism" may be closely related to protected areas, as it may be intended to show not only the fishing culture but also the natural heritage of the areas involved. This task emphasizes the relevance of stakeholders' participation (co-creation) processes, highlighting their degree of responsibility in the dynamics of conservation and the potential of differentiation of the destination through the valorisation of the cultural and natural heritage.

The main objectives of the task are:

- Diagnosis of the interactions of SSF communities in relation with tourism activities in the coastal area + identify synergies and best practices
- Analysis of the actual experiences and potentialities for developing fishing tourism activities involving SSfishers and their boats, encouraging synergies and promoting the development of the quality of the host populations involved
- Proposals for the development of activities related to fishing communities that can be developed on land

## I.2 Methodology

The socio-economic forum in Terceira Island have permitted to get a first general view of these subjects in the RUPs' SSF, and exchange knowledge about all of them.

Based on their knowledge and on what they learned in the forum, all the concerned partners have been invited to prepare a PPT presentation, in order to present it to the ORFISH partners assembly in Tenerife.

After the presentations of all the partners, for each objective and based on all the presented results, Vertigo Lab lead a participative "post-it work session", in order to identify the main challenges, problems, and needs on each OR.

The work was articulated about this crucial question: What are main challenges and how to overcome them?

Based on all these results, Vertigo Lab worked and built a common canvas, adapted to the specificities of each ORs.







## II. Introduction

The European Parliament Research Blog defines pesca-tourism as "(...) an activity that involves professional fishermen welcoming a certain number of tourists on to their boats in a tourism-recreation activity to discover the world of fishing. It can be seen as a complementary activity to a fisherman's regular activity or it can be seen as a commercial tourist activity in its own right — conducted as a parallel activity to fishing." Other definitions classify it simply as an activity in which fishermen bring tourists on board their vessels to experience their day-to-day work<sup>1</sup> <sup>2</sup>.

Pesca-tourism is a relatively new concept of assimilating tourism with fisheries<sup>3</sup>, being promoted in different coastal areas of the world. The activity derives from several socio-economic contexts but can be related specifically to the need that fishermen have to diversify their income, due to lower catches worldwide and the increase of interest by tourists on sea activities, reconciling artisanal fishing with tourism, becoming an economic complement for these families<sup>4</sup>. Consequently, the gradual increase of the numbers of tourists participating in such activities lead to the implementation of more detailed regulations, defining and regulating all possible aspects related to the presence of non-crew persons on board a fishing vessel.

# III. Current activities: pesca-tourism and ittitourism

#### III.1 Canaries

The main fishing activities in the Canary Islands are small-scale coastal fishing (for small pelagic species, benthic species and tuna), cephalopod fishing near the African coast through a fleet of freezer trawlers and tuna fishing in the high seas. The catches are landed at authorized ports as first-sale markets.

Small-scale coastal fishery in Canary Islands has several problems to apply and implement pescatourism activities. Itti-tourism activities have not these problems and, as we will see, they are slowly growing up in the islands.







<sup>&</sup>lt;sup>1</sup> Burch, 2011

<sup>&</sup>lt;sup>2</sup> Lai et al., 2016

<sup>&</sup>lt;sup>3</sup> Piasecki et al., 2016

<sup>&</sup>lt;sup>4</sup> Muñoz, 2018

Spanish Government has just carried out the new pesca-tourism regulation and now it is time for local Governments to prepare their own regulation. Canarian Government has still not prepared pesca-tourism laws, so at the moment, this kind of activities are not taking place.

About itti-tourism, it is not really clear if it is itti-tourism, but almost the only tourist activity that concern directly fishermen and their products are restaurants in fishers' guilds. These restaurants only sell local artisanal fresh fish and usually are managed by fisher families.

Another itti-tourist current activities are gastronomic events generated around local fresh fish, for example "La Feria del Patudo" (The Bluefin Fair) and "La Feria del Mar" (The Sea Fair) in Gran Canaria Island. And, mixing with local religious events, it is possible to speak about the "Virgen del Carmen Festivities", on every island.

#### III.1.1 Examples of itti-tourism

#### Fishers guild restaurants

This kind of restaurants are usually managed by fisher families and from some years till now they are quite famous between local people and tourists in general. Here in Canary Islands, and in other Spanish coasts, it is normal that fisher guilds have a restaurant in order to improve their financial situation.

As it is possible to read in the Task 4.1 Final Report, direct sale to Bars and Restaurants is the most valued selling channel by fishermen and, usually, first restaurant to have fresh fish are guild restaurants.

Fishers guild restaurants are one of the most preferred places to eat fresh fish at canaries. That is why among local people, Canarian and foreign tourists, they are so famous and wanted.

Several of these restaurants in Canary Islands are placed in Rustic Coastal Protection Land with special competent administrations permissions. These permissions usually have a type date of expiry and depend on different administrations (City Council, Autonomous Community and/or Ministry of the Environment). This system appears to be a problem when political changes or rivalries interfere in normal renewal.

#### Land-based itti-tourism gastronomic activities

Other itti-tourism activities to empower fishermen work and products are Gastronomic fresh fish events. This kind ofevents are generated around local fresh fish, for example "La Feria del Patudo Canario" (The Canarian Bluefin Fair) in Tegueste (Tenerife Island), or "La Feria del Patudo" (The Bluefin Fair) in Arguineguín, or "La Feria del Atún de Mogán" (Mogán's Tuna Fair) and "La Feria Internacional del Mar" (International Sea Fair - FIMAR) in Las Palmas. They are all from Gran Canaria Island originally.







This May 2018, the 8<sup>th</sup> FIMAR occurred in Gran Canaria Island. This fair has been consolidated over the last few years as an essential meeting for professionals in the nautical and marinemaritime sector.

FIMAR is a three days fair that has a double goal:

- To promote sea culture,
- To develop blue economy.

From this perspective, FIMAR has a local vocation, to reach city-island people, with a general character, to enhance everything that has to do with the sea.

On the other hand, FIMAR has a global vocation, beyond our geographical limits, because it is about fostering, both inside and outside, our economy linked to the marine-maritime world, that is, the blue economy that is an important part of our present and future wealth.

This fair entrance is free and there it is possible to find several professional sectors: boating, naval repairs, charter, naval electronics, motor boats and sailing, traditional fishing, surfing, canoeing, motor boating, diving, paddle surfing, kite surfing, kayaking, port activities, windsurfing, nautical tourism, traditional fishing, schools nautical, institutions, marinas sports, sailing, decoration, nautical fashion, pneumatics, paintings, fun zone, music, workshops, exhibitions, nautical repairs, underwater robotics, diving repair and maritime services, etc.

All Patudo Fairs (in Tenerife and Gran Canaria) are made to give social importance to this tasty fish. In this kind of events it is possible to find different tuna "tapas" to try local typical recipes and the new ones too. Usually local tunas events are mixed with local wines for having a global gastronomical experience

It seems that this kind of fairs will have a long life here in Canary Islands since it is helping to inform citizens about artisanal fisheries sector and its products. By the moment they only take place in the two main islands, but it is sure that these fairs will be "exported" to smaller ones.

#### III.1.2 Problems to implant pesca-tourism

Since the meeting of CIMA with other sea professionals at Tourism, Nature, Fishing and Aquaculture Forum in the Ministry of the Environment (Madrid, 2017), where it has been heard for the first time about pesca-tourism laws that Government were preparing, a lot about different news of pesca-tourism activity tests and regulation has been heard. About one year later national pesca-tourism laws were made, but people are still waiting to have local laws that regulate these activities in Canary Islands.







Most of the activities and success-stories heard about, come from Andalucía (south of Spain - Iberian Peninsula), where vessels are bigger than Canarian ones<sup>5</sup>. As we will see, most of Canarian problems with Pesca-tourism, besides that there is no law at the moment, will come because of small vessels size, so maybe it would be difficult to import their model.

		Vessels	Gross tonnage GT	Power KW
Canary Islands	Minor fishing gear	676	2.180,46	17.540,39
,	Tuna fishing rods	55	2.963,21	9.331,07
	Trawling	75	17.072,62	28.768,63
	Minor fishing gear	4.258	11.590,63	100.017,77
Cantabrian Sea	Purse seine fishing	258	21.467,50	61.820,61
NW	Deep longline	61	2.659,21	7.581,27
	RASCO	23	1.037,04	2.991,27
	VOLANTA	40	2.573,30	5.663,78
	Trawling	129	5.456,86	20.044,78
Cadiz Gulf	Minor fishing gear	555	2.981,61	19.405,99
	Purse seine fishing	82	2.301,86	11.085,40
	Trawling	589	34.144,00	105.876,34
	Minor fishing gear	1.488	6.032,16	52.057,44
Mediterranean Sea	Purse seine fishing	207	7.533,54	34.360,63
	Red tuna purse seine fishing	6	1.613,36	5.845,01
	Deep longline	51	458,7	4.048,31

Table 1: Spanish fleet distribution at December 31th 2018 by fishing ground<sup>6</sup>. Source: La flota española. Situación a 31 de diciembre de 2018.

<sup>&</sup>lt;sup>6</sup> La flota española. Situación a 31 de diciembre de 2018







<sup>&</sup>lt;sup>5</sup>Caracterización de la pesca costera artesanal en Andalucía.

One of the prime problems to implant pesca-tourism in Canary Islands is the boats size.

- Most fishing vessel size in the Canary Islands are less than 12 m length.
- Average power of a Canary ship is 62.8 kW, considerably lower than the national equivalent (86.5 kW).
- Most of the boats are made of wood (73%) and fiberglass (21%). Metal hull vessels represent 6% of the number of vessels, but also 83% of the total capacity.
- Most of artisanal vessels has two persons crew and has not much space for tourists.

In comparison, Canarian vessels are the second smaller in Spain, quite smaller than Andalusian, where most of pesca-tourism success experiences come.

Depending on the fishing gear they use, most of artisanal vessels calculate their work with only one exit at sea per day. That means that, if they want to have better incomes, they should go to sea more times. The problem is that, as it has been pointed before, most of artisanal vessels are quite lower than 12m length (the average 8m length<sup>7</sup>) and if at least two fishermen are needed to show how the work is, only 4-5 people could be safe aboard. Consequently, fishers would have to practice high prices or going out much more times if they want to amortize fuel, insurances, entry and departure port taxes, profit taxes and have enough income.

These problems make that, at the moment, pesca-tourism is not seen with hope by fish scope here. They could take aboard few tourists per day and probably it will not expect enough profit to cover all expenses.

To these few expectations of the sector, we must add that national laws are very new and there are still no local laws for the realization of this activity, for now, more problems than benefits are expected by fishermen.

In general, fishermen and fisherwoman we have talked with are agree with this kind of pescatourism projects and see it as an opportunity to diversify jobs, to reduce species fishing pressure, to have more incomes and to make the sector more interesting for young people. But they are waiting for so long to Canarian Government to finish pesca-tourism law that some of them are losing hope that it would be a future reality.

#### III.2 Madeira

The current scenario of this activity in Madeira is somewhat underdeveloped and confined to small scale businesses. The commercial fishing sector is not prepared to accommodate tourists in their vessels. Although some fishermen may be open to such activity, vessels would need to

<sup>&</sup>lt;sup>7</sup> Documentación complementaria. Informe anual de la actividad de la flota pesquera española. Año 2018 (datos 2017).







be refurbished in order to comply with the legislation in place for touristic activities operating in the sea.

The activity revolves essentially around big game fishing companies, tourist-maritime companies for leisure fishing purposes, and spearfishing leisure companies. These mostly operate in Funchal and Calheta harbours. These businesses are managed not only by Madeirans but also by foreigners (Dutch, British, French, and others), and activities revolve around Madeira island in most occasions.

Madeira is known worldwide for big game fishing. This region attracts some of the most sought-after game fish in the ocean, who are attracted to the warm, calm waters of the Gulf stream that passes the west coast of the island. The designation 'big game fishing' describes a competition where boats compete to catch the largest specimen in a designated time (Fig. 1). The target species are generally tunids such as big eye tuna (*Thunnus obesus*), the Atlantic blue marlin (*Makaira nigricans*), the white marlin (*Tetrapturus albidus*), the mahi-mahi (*Coryphaena hippurus*), the swordfish (*Xiphias gladius*), and the sailfish from the Istiophoridae family.



Figure
1: Big
game
fishing
vessel

'Balançal' in Madeira, with Funchal in the background (Source: www.sportquestholidays.com).

Tourist-maritime companies generally target demersal and pelagic species such as the red snapper (*Pagrus pagrus*), the amberjack (*Seriola* spp.), the barracuda (*Sphyraena viridensis*), the wahoo (*Acanthocybium solandri*), the mahi-mahi (*C. hippurus*), tunas, billfish and sailfish, as referenced previously, and others. Fishing consists in using rods to capture these specimens, in which tourists pay to fully experience all the moments involved in the angling and capture of the individual. The vessels that provide this type of service are basically the same that enter the big game fishing contests.

Spearfishing companies operate by offering the service of conducting spearfishing and catching fish by apnea in spots known to have the preferred species for the activity. The target species are mostly demersals, but pelagic species and molluscs are also targeted (Fig. 2).









Figure. 2: Spearfishing in Madeira (Source: www.madeira-rmktours.com).

#### III.2.1 Itti-tourism

According to Piasecki et al. (2016), itti-tourism, also designated as ichthyotourism, is defined as not only the participation of fishing activities by tourists but something far more wide-ranging. Tourists may choose to stay for several days with the fisherman's family, having local and traditional meals. In addition, "(...) tourists may also participate in everyday life of the landlord and witness the everyday routines, including not only household chores, but also those in the fish store or those related to fixing the fishing gear".

In Madeira, itti-tourism is inexistent. As referenced previously, pesca-tourism is still underdeveloped in the archipelago, and this extended form remains to be established. Although the activity does not consist itself a segment within tourism, cases may happen when tourists participate in the capture of fish, whether from big game fishing contests or in spearfishing events and display and cook their catches in fairs or similar venues. However, these occasional events hardly constitute a business and, therefore, cannot be considered an itti-tourism activity.

#### III.2.2 Problems to implement pesca-tourism

Fisheries entities from all over Europe have been interested in implementing this activity in their own coastal areas. Although this notion is supported by mostly positive arguments and is an excellent mean to endorse local fisheries, culture and traditions, quite often it faces legal barriers and, therefore, in many countries such activity is illegal8.

<sup>8</sup> Piasecki et al., 2016







The main problems regarding the implementation of pesca-tourism in Madeira are the following:

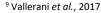
- No legislation;
- Safety issues;
- Nature of the fleet;
- Shortage of fishermen willing to engage pesca-tourism.

One of the main problems relates to the lack of legislation that exists to regulate this sector. Although tourism represents a significant portion of Madeira's GDP<sup>9</sup>, this segment remains to be developed. It would be expected from a place where tourism is so important that this area would attract investment and clients from abroad, but fishing tourism remains unappreciated and this feature is perhaps one of the reasons no new legislation has been presented to change the local landscape. To worsen things up, commercial fishing is characterized by extended bureaucracy, which makes professional fishermen uncomfortable to manage their own professional vessels, let alone to convert their boats into touristic vessels.

A problem which relates specifically to Madeiran fleet is the fact that vessels are old, and safety issues often rise. To bring non-professional people onboard, several requirements would have to be fulfilled, such as having safety vests for everyone, proper lights indicating the type of service they were doing, toilets would have to installed (especially in larger vessels, although lower than 15 m), amongst other obstacles that are considered too high of an effort to invest. As such, the amount of money that would be needed for refurbishment is unaffordable, and since no public subsidies exists to assist, no immediate change is likely in the future.

A likely problem would be related to the shortage of fishermen willing to engage pesca-tourism. No interest has been shown by professional fishermen to abandon their activity and embrace pesca-tourism. Fishermen are usually hard to change, which makes such alteration to their livelihoods so much harder. They've known fishing their entire lives, and suddenly changing to a different business would be too much of a change. The exception might be the younger fishermen population, since they may be prone to change if the economic situation of the activity is much more viable than fishing itself.

A reality check was done by means of interviewing several fishermen, within the ORFISH project. These were given by considering the prospects of embracing pesca-tourism. One was done to a black scabbardfish shipowner regarding several aspects of the fishing sector in Madeira, and the regime shift to pesca-tourism. Mr. José Agostinho dos Reis, owner of two vessels, 'Lombo do Doutor' and 'Estrela do Mar', was interviewed in Porto Moniz harbour, on the northwest coast of Madeira island. Upon asked about the chances for moving towards pesca-tourism, Mr. Agostinho replied "(...) No, I'm not interested. Perhaps in the future, with the lack of labour, fishermen may tend towards pesca-tourism, but not at the moment (...)".









Another testimony was given by Mr. José Luís, owner of the boat 'Bons Caminhos', at Calheta harbour, in the southwest coast of Madeira island. Regarding the question about taking tourists with him, he replied "Tourists have asked if they could come with me, but I didn't take them. Fishing vessel does not take tourists!". Furthermore, upon asked why, he replied "(...) what if I'm caught while taking them?! The penalty hurts." Once asked if he was opened to change, he replied "(...) I'll continue fishing for as long as I can. I'm not interesedt in pesca-tourism. Fishing is more interesting".

Both testimonies attest the previously mentioned arguments. In Madeira, pesca-tourism is still seen by professional fishermen with disdain. The sector may need a couple more years to adapt to the idea, and perhaps that will be something for the next generation of fishermen. With dwindling stocks, more people going to university, legislative support, and without the willingness to go through the hardships of fishing, may be reasons enough to embrace such activity. For now, the sector remains unchanged.

#### III.3 Azores

#### III.3.1 Pesca-tourism

At the beginning, when the pesca-tourism activity was proposed to the fishermen, they weren't very interested, because it's something that they think will keep them away from doing their usual professional fishing, with their crew and that implies fishing with the tourists, which are strange people and that most of the times they don't understand their language.







Figure 3 - Pesca-tourism activity in Terceira Island (Azores) - Photos © AMPA

In Azores, pesca-tourism is considered as an offer of maritime-touristic services of cultural, leisure, fishing and complementary activities which can include the observation and participation in the commercial fishing activities like the fish processing aboard the vessels, based on the used vessel for these activities.

For the Regional Director of Azores Fisheries, we must "share the good things that the fisheries can offer". For example, "the fishing communities, with their cultural and landscaping heritage are by itself, a fishing product that can create complementary incoming to the commercial fishing."

All the fish incoming from pesca-tourism activity, shall be registered in the boat fishing logbook. Each pesca-tourism client is allowed to capture 2 kg of fish or, if the unit weight is higher, a single specimen. If there is an additional operator catering service, the fish that is destined to be consumed in a restaurant, or similar, is only allowed to affect the customer 500g of fish.







Figure 4 - Meal in a local restaurant using the fish caught in the pesca-tourism activity.

In the Azores, they still don't have proper infrastructures to welcome the clients. They receive the tourists for the pesca-tourism in the headquarters of the fisheries association and also take care of all of the logistics. It would also be useful, for the fishing boats, that the pesca-tourism infrastructures could be equipped with a bathroom, because the boats that do this activity are small size vessels and the clients don't have a place to keep their personal belongings or dry clothes.

#### Cooperation projects

The Regional Directorate of Tourism (DRT) of the Azores, is studying how to better promote the pesca-tourism, and we gave our opinion in their strategic plan (POTRAA). There is also some cooperation between the promoters of pesca-tourism and some travel agencies.

Based on studies made by DRT, the FPA have the following data relatively to the pesca-tourism in the Autonomous Region of Azores, summarized in the table below:

Table 2- Data from the Azorean Program for Tourism Planning (POTRAA)

	Current promotion	PEMTA (1)		Current situation	Future	
Island		Primary attraction	Secondary attraction	(POTRAA) (1)	prediction (1)	FPA opinion
Corvo	NA		Х	Product with potential		Promote the start of the activity
Flores			х	Product with potential	Need of formation as turistic guides	





Faial		x		Product with potential	
Pico		Х		Product with potential	
São Jorge		х		Cultural turistic product with potential and resources to be developed	
Graciosa				Product with potential	Promote the start/restart of the activity
Terceira	АМРА	x		Product with potential	Increase the promotion of the Resource and the structure of the cultural turistic resource in its various dimensions
São Miguel	NA	Х		Product with potential	Increase the promotion of the Resource
Santa Maria	NA	NA	NA	Cultural turistic resource with potential	Increase the promotion of the Resource

PEMTA - Strategic Plan and Marketing of Tourism of the Azores

POTRAA - Tourism Planning Program of the Autonomous Region of the Azores

(1) Data from POTRAA

It is considered that the promotion of the pesca-tourism must be associated with the creation of jobs in the Fishing sector and related with a sustainable and quality tourism, ensuring the development of the fishing communities.

#### Pesca-tourism divulgation flyers



Figure 5- Flyer for the promotion of pesca-tourism in the RAA. Partnership between the Federation of Fisheries of the Azores and the Regional Directorate for Tourism



Figure 6 - Bilingual brochure for the promotion of Pesca-tourism in Ribeira Quente, São Miguel Island.

Partnership between the Federation of Fisheries of the Azores and the Cooperative of Solidary

Economy of Fishermen of Ribeira Quente.











Figure 7 - Flyers disclosure Pesca-tourism in São Mateus da Calheta, Terceira Island. Partnership between the AMPA and the Government of the Azores



Figure 8 - Internet site of the company Hamar, for divulgation of Pesca-tourism in Porto Formoso, island of São Miguel





Figure 9 - Flyers for the promotion of Pesca-tourism in Rabo de Peixe, São Miguel Island. Partnership between the Association of Fishermen of Rabo de Peixe, the Nava Club of Rabo de Peixe and the Government of the Azores.



#### III.3.2 Other land-based activities linked to SSF community

#### Restaurante "Genuíno"

Born in the Pico Island (Azores), Genuíno Madruga quickly became a "son of the sea". After leaving Pico island, he started a new life in the neighbour island of Faial, where he still lives.

He started working very early in the fisheries in a small vessel that has been continually replaced by others with better conditions. In 1983/4, he introduces, for the first time in Azores, fishing vessels with fiberglass booths.

Genuino lives in Horta, a mythical sea city where many navigators stop by, must hear and know all the stories, legends and adventures told by this explorers in the magical "Peter's" Café Sport.

In the distant year of 1975, Genuíno finds, for the first time, Marcel Bardiaux, protagonist of incredible adventures: he was the first navigator to pass through the Horn cape, from east to west, built the first insubmersible yacht in stainless steel, did 4 laps around the world and was made prisoner by Germany in the last Great War. In 1998, both Genuíno and Marcel, now with 88 years old, met again.

In November 1999, Genuíno Madruga acquires in Germany a fiberglass sailboat with 11 meters and named it "Hemingway". This experienced man of the Azorean sea, at 9.am of October 28th, 2000, started a challenge that he promised to overcome: explore around the planet aboard in a sailboat.

In 2002, when ended his travel, he was honored by the Legislative Assembly of the Autonomus Region of Azores, by many municipal chambers of the archipelago and other entities. In June 10th of 2003, he was honored by the Portuguese President, Jorge Sampaio, with the degree of "Comendador da Ordem do Infante D.Henrique".

Now, the city of Horta, has a restaurant where visitors can see many of the memories that the solitary navigator – fisherman and shipowner - Genuíno Madruga collected during his travels around the world.













Figure 10 - Restaurant Genuíno and Genuino Madruga picture

#### AIDART – Terceira Island

Mrs. Aida Barbosa (AIDART owner) does not have a direct connection with the fisheries community, but she uses fish scales as the main raw material in the elaboration of her works. This kind of handcraft is a traditional and ancient hobby for the Azorean women.



Figure 11 - Mrs Aida Barbosa in the handcraft exhibition of Praia da Vitória (August 2018)





The idea of producing handicrafts using fishery products emerged in 2010, as part of a workshop in handcraft with fish scales, promoted by the Local authority of Santa Cruz - Praia da Vitória.

The scales that she uses, come from Parrotfish and Thicklip Grey Mullet, obtained from domestic consumption.

This activity doesn't allow Mrs. Barbosa to have enough financial income to live. It just works as an add-on. In order to be able to live only on handicraft, greater support would be needed in the dissemination and disposal of the product.





Figure 12 - Some works done from AIDART, with fish scales and shells (2018)

Mrs. Barbosa develops other artistic projects, namely: cribs in shells and jewelry in seeds "Tear of Our Lady" (*Coix Lacryma jobi*).

#### João Manuel Pimentel – São Miguel Island

Mr João Pimentel has a part-time job as an artisan and uses products of the ocean and from fisheries to develop his art, such as shells and ropes. He presents is work in handcraft fairs. Mr Pimentel work is supported by "Cooperativa Norte Solidário" which has in its objectives: the promotion of equal support given to vulnerable groups, in particular to young people and people with special difficulties, the support to families and communities socially disadvantaged so they can have better life quality and socioeconomic integration; the support to immigrant and emigrant citizen in bad socioeconomic situation; to develop support programmes to certain groups in situation of illness, old age or disability; to promote the access to education, formation and integration of socially disadvantaged professional groups; the development of local projects and easier access to services and oportunities to population in rural spaces.









Figure 13 - Mr João Pimentel, and his products, in the handcraft exhibition at Praia da Vitória (August 2018)

#### Fishermen formation

A reinforcment in the formation of the fishermen and shipowners and improves the valorization of the jobs related with the traditional activities of the sea. This passes by the establishment of professional courses of short duration related with relevant subjects in the fisheries, improving people's and companies abilities that are linked to this sector.

Therefore, FPA considers a priority the realization of training actions in the following areas:

- Environmental management on board;
- Maritime-radio communications;
- Handling and conservation of the fish on board;
- Management in the small scale fisheries;
- Safety and human life security at the sea.

In April 2019, in partnership with FOR-MAR (Professional Training Centre of Fisheries and Sea) and the Regional Directorate of Fisheries, FPA opened inscriptions for Radio-maritime Communications courses.







Figure 14 - Advertising of the training formation in Radio-maritime Communications (FPA)

### III.4 Martinique

Artisanal fishing in the French West Indies has been experiencing difficulties for several years due to excessive exploitation of coastal resources. In Martinique, where the data exist, there was a reduction in landings of demersal species from the insular shelf of about 1 000 tons per year, or 2/3 of the production, between 1987 and 2009, accompanied by a decrease in average catch per gear (bottom nets and traps)<sup>10</sup>. At the same time, there has been a shift in fishing towards offshore resources with the development of anchored FADs and towards tourism activities<sup>11</sup>. These developments are alternatives to over-exploitation of coastal resources.

These new orientations were made with existing means that would have required support to allow fishermen to perform these new activities in compliance with regulatory standards for safety or quality.

<sup>&</sup>lt;sup>11</sup> Desse M. et L. Reynal, 2009. L'évolution récente des pêches antillaises, entre DCP et tourisme. Les littoraux de la Caraïbe ; pratiques sociales et nouvelles dynamiques spatiales. Paris : Khartala, coll. Terres d'Amérique n° 7, p. 13-35.







<sup>&</sup>lt;sup>10</sup> Reynal, L., S. Demanèche, O. Guyader, J. Bertrand, P. Berthou, C. Dromer, M. Bruneau, M. Bellanger, C.Merrien, F. Guegan, P. Lespagnol, M. Pitel, M. Jézéquel, E. Leblond, F. Daurès, 2013. Projet pilote du Système d'Informations Halieutiques (SIH) Martinique (2007-2010). Premières données sur la pêche en Martinique (2009-2010), Ifremer-SIH-2013/06/30. http://archimer.ifremer.fr/doc/00156/26762/, 176 p.

# IV. Legislation and financial support

#### IV.1 Canaries

As pointed before, by the moment in Spain there is a new national legislation, but Canary Islands has no local regulation. In the same way, with no regulation, there is no economic support for this kind of pesca-tourism activities.

Complementary land-based activities and itti-tourism are best represented if we talk about financial supported, most of this support comes from Coastal Action Groups or from local Governments.

Fishing activity has been historically a key element in the development of coastal towns, contributing important cultural, economic, environmental and social values. In the last decades, the change of economic model has caused that traditional activities like inshore fishing have considerably diminished, with the consistent negative repercussions. In this context, tourist activities directly linked with fishing, become, both in Spain and in the European Union, interesting diversification alternatives for the coastal zones traditionally dependent on fishing.

As we can read in the article "Fisheries Tourism as a support instrument for sustainable development in littoral zones: The experience of Sagital Project", SAGITAL Project<sup>12</sup> served to promote, both technical and legally, the development of fishing tourism activities, the Fishing-tourism specially. The methodology of management and promotion of the participation used in the Project, allowed a consensus between the professionals and the administrations of the fishing sector, in order to adequate the current fishing legal rules to allow and regulate the development of these activities.

Here in Canary Islands financial support from Tourism and Environment Counselings will be welcomed and needed, but while we have no regulation about pesca-tourism activities, only ittitourism and other land-based activities could enjoy this type of financing.

#### IV.2 Azores

This activity is regulated by the Regional Legislative Decree nº23/2007/A, of October 23rd and by the Regional Legislative Decree nº36/2008/A, of July 30th which obligates to a license payment of the maritime-turistic activity issued by the responsible entity in the fisheries area (see Portaria n.45/2009, of June 4th).

Can apply for licensing, owners or operators of vessels that are registered seafarers, with a minimum category of local fishing skippers and perform their professional activity of fishing in

<sup>&</sup>lt;sup>12</sup>El turismo pesquero como instrumento de apoyo al desarrollo sostenible en zonas litorales: la experiencia del Proyecto Sagital







the Azores (RAA) and legal persons owning vessels registered in the course of commercial fishing, when at least one of the managing partners or member of the board are sea registered with the minimum category of local fishing skippers and perform their professional activity of fishing in the region.

This registration has a cost (approximately) of €250,00/year/licence and of €250,00/year/insurance. The licensing for the Pesca-tourism activity is annual. Its validity coincides with the calendar year and depends on the validity of the commercial fishing license.

The Federation of Fisheries of the Azores requested the Regional Directorate of Fisheries, an exemption from the license fee for vessel owners who require licensing for the practice of fishing-tourism for the first time, and it was accepted.

Offenses are punished as established in the Chapter IV of the Regional Legislative Decree n.36/2008/A, of July 30th.

 Ano
 Faial
 Pico
 S. Jorge
 Graciosa
 Terceira
 Flores
 Corvo
 S. Miguel
 S. Maria

 2012
 1
 1
 2
 3
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1
 1

Table 1 - Commercial Vessels registered for the Pesca-Tourism Activity (data from DRP)

From the analysis of the table above, we can notice that there are already some boats licensed for the Pesca-tourism in the Azores, but we still notice that it's a very unknown activity. It needs to be promoted in the communities and by the travel agencies.

## V. Constraints et benefits

#### V.1 Canaries

As already pointed, speaking with fishermen and fisherwomen, nowadays we have seen several constraints:

• Most vessels are less than 10 meters length. That means that few persons will be able to get on board each time.





- Keeping in mind that usually vessels only go out once a day, or each trip is well paid, or the profit margin will be quite scarce.
- Although nothing is known yet, it is feared that double activity paperwork will be quite difficult for the sector to handle. Withoutcountinginsurance, etc.
- Maybe a special supporting figure will be needed. Government will have to help thissector to enjoythis new activity.
- Due to fishing sector characteristics in Canary Islands, more specific rules are needed: keeping in mind vessels size, and the reality of Canarian artisanal fishermen and fisherwomen, for example.

There are numerous works that have been showing the virtues of introducing tourism activities within of our battered fishing sector. Among the benefit, we could find:

- Reduction of fishing effort, avoiding overfishing.
- Energy saving and reduction of sea pollution.
- Improvement of professional fishermen living conditions, reducing the effective hours on board and providing greater security the workers' income.
- -Improves the conditions of occupational safety of the sea workers.
- Increase in the social valuation of fishing.
- Factor of development of local communities coastal.

All these factors have led to the appearance of different initiatives along the entire coastline Spanish, however these initiatives are isolated and the experience leads us to affirm that they usually have a short temporary duration, since they face important problems among which the lack of legal security.

#### V.2 Madeira

Madeira possesses the ideal features to introduce this activity. It's a touristic destination, searched for thousands of people for its calmness, warm weather, and splendid wildlife and forests. As such, several benefits could be originated by implementing pesca-tourism within these features. These could be:

- Reduction of the local fishing effort;
- Improved stock healthiness of local populations;
- Introduce conscientious behaviour in local populations through awareness of the local wildlife;
- Increase in the social appraisal of fishing;
- Factor of development of local communities coastal.







# VI. Main challenges

#### VI.1 Canaries

Collective organisations are essential if fishermen want to push National and/or Local Governments to make things easy for this kind of projects. Nowadays, most of the budgets has big and difficult paperwork and fishermen know how to fish, but much times they don't know, or don't have the time, for writing special projects. These collective organisations can push Government to make things easier, or could have professionals that can help fishermen with their projects and legal paperwork.

In other hand, at WP4 – TASK 4.1, has been already written about training needs for fishermen and fisherwomen. Most of our training ideas had relation with marketing and fisheries communication. But in this case, keeping in mind our conversations and what we have written previously, laws and project management training may be required. At least, a guide or training in how to initiate pesca-tourism or itti-tourism projects or companies in Canary Islands will be needed.

This could be an opportunity for diversifying fisheries spaces and jobs.

Tourism is the first Canarian economic strength. Although it may be unfair for Canarian economic diversify, most of tourism related jobs have a good opportunity of growing up. Therefore, linking fishing and tourism activities have great possibilities to establish, grow and help reduce fishing pressure on islands.

There are much public budgets for tourism and projects that embrace RIS priorities, like:

- Improvement of competitiveness and productivity of the Canarian tourism product.
- Productive diversification based on tourism.
- Eco-innovation, agriculture, fishing and environmental protection.

In consequence, linking these two kinds of activities would help to grow new companies and to diversify tourism proposals.

As pointed before, maybe this is a good opportunity for diversifying fisheries spaces and jobs, meaning that some fishermen and fisherwoman, and members of their families, could handle this kind of activities and, temporary or finally, leave fisheries. For example, in the north of Tenerife Island, where fishermen almost cannot leave port in all the winter and autumn, working in pesca-tourism and/or itti-tourism (maybe in other places of the island) will be of great help for family economy, and in spring and summer, this could be a good economic reinforcement too.

But, in general, it would be fine that grow of pesca-tourism and itti-tourism activities would come accompanied by a reduction of fishing pressure on the islands.





As a medium-long term challenge it is good to name education too. As have pointed in other reports, to improve artisanal fisheries empowerment of fishermen and fisherwomen is needed but, maybe as important as this, is to educate consumers and future consumers in benefits of this kind of fisheries. Making specific educational projects to show children how a fisherman life is, or why is important to environment, emphasizing in the effort it takes, its hardness, why local artisanal fisheries are more sustainable than industrial ones, etc. In brief, pointing how important these fisheries are. This kind of educational projects may encourage children to have more curiosity about artisanal fisheries and this is a good opportunity for making specific educational pesca-tourism activities with schools or pesca-tourism activities with families.

As a conclusion, the Canarian pesca-tourism main priorities are the following:

- To publish a Canarian pesca-tourism and itti-tourism law.
- To have Government budgets for these activities.
- To have a public special office and professional people for managing and helping with this projects.
- To train fishermen, fisherwomen and their families in this activities and how to make and fill this kind of projects for public budgets. And, why not, to train them in startup developing.
- To train fishermen, fisherwomen and their families in communication and marketing aims for developing good campaigns for their new activities.
- To prepare educational projects (as pointed before).

#### VI.2 Madeira

As referenced above, the main challenges may be involved in the regulation of the sector, since the activity could be prone to safety violations. In addition, fishermen may resort to off the record deals, fostering the parallel economy in a way to cash-out incomes, and the activity could damage stock healthiness by disturbing wild populations, especially those in need of recovery.

Fishing vessels are generally known to have all sorts of mechanisms to make life easier at sea, but occasionally cases occur where those features are borderline-safe. This creates potential problems that could jeopardize pesca-tourism, meaning that regular inspections would have to happen to ensure appropriate and safe ways to carry people onboard. Not only that but procedures would have to be probably implemented so that in specific situations, a certain procedure would have to be followed.

To bring people onboard without any experience at sea or just unaware of the potential dangers that going to sea carries, safety demonstrations before embarking, enlisting every person boarding the vessel on the log and contacting the authorities of that fact would have to be followed thoroughly. In case of an accident or any unforeseen event, it would have to be reported to the authorities and adequate measures would have to be followed onboard to ensure the integrity of the crew and clients.

The subject of protecting stock healthiness would be important as well. Several species are under tight regulation. An example in Madeira is the case of the limpet fishery, regulated





regionally by Ordinance nº 40/2016 of February 17<sup>th</sup>. Amongst other guidelines, the stock has a closed season from December 1<sup>st</sup> to March 31<sup>st</sup> each year. This period corresponds to the reproduction period of *Patella* spp. and capture is prohibited. Since this measure was introduced due to long-years of overfishing, catches and landings are monitored the best way possible, to ensure the recovery of the stock. Introducing the variable of pesca-toruism on this particular example may bring additional pressure and constraints onto the stock's healthiness. Would the occasional and low-expression fishing from pesca-tourism be inserted within the regulation of commercial fishing? Or a different regulation would have to be formulated specifically for pescatourism? This minor challenge could create friction among fishermen, which rely on this fishery that represents 120 tons annually. Precedents are difficult to manage and establishing one could create an avalanche of pressure to other species potentially targeted by pesca-tourism. But enlisting pesca-tourism within professional fishing could be an argument that the first is taking income from the latter.

Furthermore, a similar question may rise towards fishing quotas. How would catches from pesca-tourism be inserted, amongst the general quotas or to concede a small portion to pesca-tourism catches? This is another delicate question, since quotas are extremely important. As an example, tuna may trigger the largest disagreements. Tuna is the target of the fleet based in Caniçal harbour, where not only Madeiran vessels but also several Azorean vessels are based (many Azorean tuna vessels have Madeiran crew and shipowners). For several years the quota for big eye tuna (*T. obesus*) has been completed. A single individual may weight between 50 kg to 200 kg, worthing between 5 to 10 €/kg, depending on the size, demand and supply, meaning that a single individual may be worth hundreds and even thousands of euros. Removing this type of revenues from the commercial fleet may be hard to accept, and this could potentially be controversial and generate disharmony within the sector. One could argue that catches would be so small that they would not interfere with the rest of the fleet but when incomes is in the question, every euro matters.

In the end, tricky situations may rise. Legislation needs to approach all issues with as much details as possible, to avoid leaving any particular question unresolved. So, a careful and thorough analysis should be done to avoid misconceptions and confusions.

## VI.3 Martinique

In the field of tourism, the activity practiced by fishermen is generally not "pesca-tourism" but an activity that would require a change of status. However, many are reluctant to join because they would end up in a new job that they do not fully dominate, with new constraints and loads higher than those to which they are subjected as fisher. It would therefore be desirable to provide support for the sustainable development of this "Tourism-Fisher" product in order to promote a necessary reduction of the fishing effort on the coastal resources of the insular shelf and to increase the diversity of the Antilles tourist offer of high quality.





## VII. Improvement proposals

#### VII.1 Canaries

As have already seen, first thing to improve these economical activities is to regulate them in Canary Islands keeping an eye in the Canarian fishermen reality and in specific problems that will appear: small vessels, low quantity of departures by these vessels, etc. Then, Government will have to approve new budget items in order to help first pesca-tourism activities. In our conversations we have heard that, another important thing to do, is to have easy paperworks or people prepared to help fishermen to get these budgets.

Real and serious economic studies to see if this kind of activities can grow up and improve fishermen situation are needed.

Another proposal could be this kind of "pesca-tourism activity": a possible association between fisher and leisure vessels, in a similar way how whale watching boats work, this symbiosis could be good for both. Fishermen and fisherwomen do their work without other paperwork problems, insurances, etc. and touristic boats join them to show tourists how they work. This would work as a diversification for touristic boats and give an income compensation to fishermen without more expenditure.

To make realistic improvement proposals, fishermen and fisherwomen have to start pescatourism activities and, then, see how they could improve them. Right now, before improvement proposals, have to see main challenges and priorities in this kind of activities.

#### VII.2 Madeira

The implementation of pesca-tourism within the commercial fleet could be an alternative to the sector. Many fishermen still rely on catches to support their families and with inconsistency on the horizon, due to climate change and degrading stocks, the turn to pesca-tourism may be an opportunity to guarantee alternative incomes.

To instate something, one has to create legislation and make way for private investment to come forward. In addition, to assist the rise of pesca-tourism, a kind of public subsidy to kickstart the activity could be a huge boost. In the past, shipowners have been paid, through European subsidies, to destroy their vessels as a campaign to reduce fishing effort. A similar effort could be arranged in order to assist shipowners to convert their vessels into taking onboard tourists to accompany them while fishing.

In order to help in the transition, fishermen associations could have an important role to play. These organizations, created originally to help fishermen, could assist the change and be the link between the authorities, regulations and the fishermen themselves. Not only that, but they could even participate in the legislative process by suggesting measures and opportunities. Such cooperation could only benefit the sector.





Deliverable #54

The fact remains that Madeira is a touristic destination. Nominated several years in a row as the best insular destination in the world, the archipelago would have much to profit from these ventures. The market exists, and the opportunity is there. All that is needed is political will, legislation discussion and approval to regulate the sector, and tight surveillance of the activity.

## VII.3 Martinique

In the first place, appropriate training could be offered to fishermen considering conversion. These would be based in particular on a preliminary survey of the heritage (landscape, ecological, technological, ethnological, linguistic, historical, archaeological...) to be valued by fishermen. It would also be desirable to examine the possibility of labeling such an activity. Its integration in the field of the prerogatives of the fisheries committees would have the double advantage of allowing the fishermen not to have the obligation to leave the socio-cultural world to which they are integrated and to favor the maintenance of the "ethnological" character of such activity.





# VIII. Bibliographic references

#### VIII.1 Canaries

Cetmar (2010). La pesca de bajura: situación en 2007 yperspectivas para una orientación sostenible.Recopilación de estudios realizados por el proyectoSEREA. Ed. CETMAR. Pontevedra. <a href="http://www.ceida.org/sites/default/files/adxuntos-publicaciones/libroserea.pdf">http://www.ceida.org/sites/default/files/adxuntos-publicaciones/libroserea.pdf</a>

Comisión Europea (2009). Libro verde de la Reforma dela Política Pesquera Común. Bruselas. https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:52009DC0163&from=FR

Comisión Europea (2011). Reforma de la PolíticaPesquera Común. Bruselas. https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/leaflet\_reform\_es.pdf

Consejería de Agricultura y Pesca del Gobierno de Andalucía. 2012. Caracterización de la pescacostera artesanal en Andalucía.

https://www.juntadeandalucia.es/export/drupaljda/pesca costera artesanal andaluza 2012.pdf

Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente. 2018.Documentacióncomplementaria.Informe anual de la actividad de la flota pesquera española. Año 2018 (datos 2017).

https://www.mapa.gob.es/es/pesca/planes-y-estrategias/anexo-informe-anual-2018-esp-mapamadef tcm30-451000.pdf

Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente. 2018. La flota española. Situación a 31 de diciembre de 2018.

https://www.mapa.gob.es/es/pesca/temas/registro-flota/la-flota-espanola-situacion-a-31-diciembre-2018 tcm30-501141.pdf

Ministerio de Fomento. 2000. Orden de 18 de enero de 2000 por la que se aprueba el Reglamento sobre Despacho de Buques.

https://www.fomento.gob.es/recursos\_mfom/pdf/5798E951-7B54-4AE9-929D-8BBB7479C859/17479/ORDEN180100.pdf

Molina-García, A (2013). Diagnóstico estratégico de laactividad de Pesca Turismo en España. Ministeriode Agricultura, Alimentación y Medio Ambiente. Madrid.

https://www.mapa.gob.es/es/pesca/temas/diversificacion/Diagnostico%20Pesca-turismo%20en%20Espa%C3%B1a%20(UPM)\_tcm30-286139.pdf

Molina, A. González, J.F. y García, C (2010). El turismopesquero como instrumento de apoyo al desarrollosostenible en zonas litorales: la experiencia delproyecto Sagital. XIV International Congress on Project Engineering. Madrid.

http://oa.upm.es/8159/1/INVE MEM 2010 81564.pdf

Miret-Pastor, Lluís & Muñoz-Zamora, Carmen & Herrera-Racionero, Paloma & Martínez-Novo, Rodrigo. (2015). Análisis Regional del Turismo Pesquero en España. Revista de Análisis Económico. 20. 23-80.







Deliverable #54

https://www.researchgate.net/publication/295912491 Analisis Regional del Turismo Pesquero en E spaa

Pardellas, X.; Padín, G y Aboy, S. (2011). Turismopesquero: experiencias en Europa y España. Papeles de Economía Española, 128, 221-227.

https://www.funcas.es/Publicaciones/Detalle.aspx?IdArt=20243

Secretaría General de Pesca. Ministerio de Agricultura, Alimentación y Medio Ambiente. 2013. Diagnóstico estratégico de la actividad de Pesca-turismo en España.

https://www.mapa.gob.es/es/pesca/temas/diversificacion/Diagnostico%20Pesca turismo%20en%20Espa%C3%B1a%20(UPM) tcm30-286139.pdf

#### VIII.2 Madeira

Burch, M. (2011). Pesca-tourism. FARNET Support Unit. Brussels.

Lai, M. B., Cicia, G., Del Giudice, T. (2016). Pescatourism, a sustainable tourist experience. *Journal of Cleaner Production*, 133: 1034–1042.

Piasecki, W., Głąbiński, Z., Francour, P., Koper, P., Saba, G., Molina Garcia, A., Ünal, V., Karachle, P., Lepetit, A., Tservenis, R., Kızılkaya, Z., Stergiou, K. (2016). Pescatourism - A European Revew and Perspective. *Acta Ichthyologica Et Piscatoria*, 46 (4): 325–350.

Vallerani, M., Martí, C., Ojamaa, P. (2017). The overview of the fisheries in Madeira was prepared to provide information for the mission of the Committee of Fisheries to Madeira in 2017 (22-25 May). European Parliament, pe 601.978. 15p.

#### VIII.3 Azores

Açores, G. R. (2018). Obtido de http://www.azores.gov.pt/



