

# Catching THE Potential

## D4.7 Evaluation report Azores

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## INTRODUCTION

Catching the potential is a project that started in 2019. The goal of this project is to develop a sustainable fisheries training standard for fishers in Europe (or even the world). As input for this standard, the project conducts sustainable fisheries trainings in seven European member states spread over the various sea basins located within the EU. In the member states different partners have been identified to develop and conduct the training pilots.

Two partners within the project represent the European fishing industry. These partners are Europêche and PFA, and they will contribute to the project through assisting in the development and implementation of the standard at the European level.

To make the training standard effective and efficient, evaluating the pilots in the seven different European member states is key. This report describes the lessons learned and the evaluation process of the sustainable fisheries training pilot in the Azores with partner Direção Regional das Pescas (DRP) and Escola do Mar dos Açores (EMA).

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## 1. QUICK SCAN

A quick scan was done for every partner at the start of Catching the Potential. The goal of this quick scan is to collect some background information on all partners in the project and the fisheries sector in the various EU member states. Two main questions were investigated:

- **Background partner:** Who are our partners? What do they do?
- **Background fishing sector:** What, how, where do they fish? What are relevant/sensitive topics that require attention in the development of the training?

The following checklist with topics was followed during the quick scan:

### Background partner

1. School or institute
2. Size (number of students, age, teachers)
3. Type of education, level, duration, theoretic/practical, structure and internships
4. Method/mission
5. Relation to fisheries sector
6. Language
7. Country specifics

### Background fishing sector

1. Size of the fisheries sector (economics, employment, ships)
2. Characteristics of the fisheries sector (type of fisheries, target species, size of companies, number of ships, innovations)
3. Fishing grounds (location, stock status, issues)
4. Geographical/regional spread
5. Challenges, issues, threats, opportunities?
6. Country specifics

The next chapter discusses the outcomes of this quick scan which was conducted with project partner DRP from the Azores.

## 1.1 BACKGROUND PARTNERS

In the Autonomous Region of the Azores (Portugal), two different partners are involved in the project. The official project partner is the DRP, a governmental department, that became partner to the CTP-project since the intended partner, EMA, did not yet exist when the project started. However, EMA is the main partner concerned the implementation activities since they provide trainings to fishers on the Azores.

### 1.1.1 BACKGROUND DRP

The DRP is the government body that works to ensure the sustainable development of the fisheries, protect the marine environment and support responsible fishing practices in the Autonomous Region of the Azores (Portugal).

It is their mission to promote sustainable development of the fisheries sector, the fishing communities, and to seize new opportunities in traditional and emerging maritime activities. They do this through:

- Promoting training
- Improving working conditions and safety of fishers
- Valuing and improving fish quality
- Promoting wealth and the development of coastal zones

DRP is involved in collaborative co-management schemes to conserve and manage marine resources. It is important to them to ensure the support and participation of all industry partners in the decision-making processes.

### 1.1.2 BACKGROUND EMA

EMA is a newly established training institute (2022) at Faial Island in the Azores. They offer professional education aimed at seafarers and other professionals associated with the blue economy. Their trainings target the following sectors:

- Shipbuilding and repair
- Recreational nautical
- Fishing and aquaculture
- Ports and transport logistics
- Fish processing

Through the various trainings, EMA contributes to the improvement of qualifications and professional skills that are active in these maritime sectors at the Azores.

### 1.1.3 TYPE OF EDUCATION, LEVEL, DURATION, THEORY/PRACTICE, STRUCTURE, INTERNSHIPS?

All trainings provided by EMA are performed in a classroom setting. The trainings for fishers are mostly of a theoretical nature, although they also need to perform practical tasks (mostly safety related like firefighting, swimming tests and maneuvering of vessels).

Most trainings are organised in the school of EMA at Faial, but trainings for fishers are also offered at the other islands of the Azores to make it more accessible to them. In that case, trainers from EMA travel to other islands to conduct the training.

EMA offers the following trainings that are relevant for fishers:

- Environmental management on board
- Basic security training

There is a vocational training program to become a fisher, however, to be captain on a fishing vessel an internship is required as well as an evaluation test. The focus of the training and courses offered by EMA is to meet the legal requirements that allow you to fish. Since Portugal ratified the STCW-F Convention, EMA needs to cover the topics discussed in this convention within their trainings.

Next to international advice for the management of several deep-sea fish stocks, DRP, at regional level, has its own management tools to manage fisheries in the Azores. Fishers in the Azores need to complete the training, as mentioned above, to receive a license to fish. Without this license, they are not allowed to go onboard as fishers. Several other training courses have been imposed by DRP, particularly Environmental management on board and Basic security.

Before EMA was established, the training of fishers was the responsibility of DRP. Courses were only taught when qualified trainers were available. In this situation, temporary licenses were given under several conditions such as small trainings and tests were performed. There is a high degree of illiteracy in coastal communities, which is why DRP imposed, until the end of 2023, the 6<sup>th</sup> year of schooling to have access to the vocational training program to become a fisher.

#### 1.1.4 LANGUAGE

All trainings are offered in Portuguese, their native language.

#### 1.1.5 COUNTRY SPECIFICS

There are a few specifics when talking about the training of fishers on the Azores:

- Only recently EMA started with the formal training of fishers. Before EMA was established, DRP was responsible for training fishers.
- The Azores consists of several islands, which makes training challenging. In several situations fishers need to travel and seek accommodation when they follow a training at EMA. This can be a barrier to participate in a training, since they do not earn an income (not able to fish). EMA supports all the expenses related to travel and accommodation.
- It is not uncommon for fishers of the Azores to be illiterate. Some fishers only attended primary school.

## 1.2 AZOREAN FISHERIES SECTOR

No information on the Azorean fisheries sector was shared during the quick scan with DRP. The focus was on clarifying the role and responsibilities between DRP and EMA. Most information on the Azorean fisheries sector was collected during the visit to the Azores in 2022, see chapter 4.1 First Catching the Potential visit to DRP and EMA on the Azores.

## 2. FOR ALL COUNTRIES: DEVELOP A SET OF MATERIALS AS STARTING POINT FOR PILOT DEVELOPMENT

The overall goal of Catching the Potential is to develop an international training standard for all fishers on sustainable fisheries training. To make sure we can compare all pilot trainings given with our partners, it is important to have the same starting point. To determine this starting point, we looked at all available best practices on sustainable fisheries training through a desk study (D2.2). In addition, an overview was made of all important rules and regulations for fisheries that we should incorporate in the training material (D2.1).

This desk study identified that several countries provide training on various aspects of sustainable fisheries to fishers, but that the ‘Fishing with a future’ training is offering the most holistic approach to sustainable fisheries training. The desk study also revealed that some additional topics should be added to this training, mainly on social sustainability topics such as:

1. Fair wages
2. Save working environment
3. Slavery
4. Corruption

## 2.1 FOR ALL COUNTRIES: DEVELOP PRESENTATION OF STARTING POINT

A set of PowerPoint presentations was made to form the backbone of the various training pilots. These PowerPoint presentations can be found in deliverable D4.1 Evaluation report Greece.

### 3. FINDING AND COMMUNICATION WITH LOCAL PARTNERS (TASK 4.1)

When the CTP-project started, the official project partner on the Azores was Direção Regional dos Assuntos do Mar (DRAM). At the time, our contact person at DRAM was very positive about participating in the project since they were busy with setting-up the first maritime school in the Azores. Since the school was not yet finished, they could not participate in the project as a partner. To not miss the chance of participating in the project, DRAM registered to become the project partner with the intention to allocate most of the work and budget for the new sea school.

Soon after the CTP-project officially started, the covid-19 pandemic broke loose. This pandemic delayed the construction of the school. In the meantime, elections were held at the Azores and the outcome of the election had a negative impact at our contact person at DRAM. He lost his position at DRAM and there was unclarity at the side of DRAM about their role in, and the goal of the CTP-project. They did not have the capacity to assign a replacement.

We were about to remove the Azores from the project, but suddenly DRP contacted ProSea and asked to replace DRAM in the project. After a fruitful meeting with DRP, the process of changing DRAM for DRP in the project was started up. Once this process was finalized, we agreed with DRP that we would pick-up preparations for the first pilot on the Azores once the school would be finished.

### 4. PREPARATION FIRST PILOT (TASK 4.2)

In October 2021 the school officially opened and in 2022 they started with the first trainings. After a meeting with DRP in March 2022, ProSea and DRP agreed to plan a preparatory visit in July 2022. This preparatory visit would allow ProSea to meet with project partner DRP and EMA, other local stakeholders, and learn more about the Azorean fishing industry. All the input gathered during this preparatory meeting would provide useful input for adapting the training material to the Azorean context.

#### 4.1 FIRST CATCHING THE POTENTIAL VISIT TO DRP AND EMA ON THE AZORES

The first visit of ProSea to the Azores took place from July 6<sup>th</sup> till 12<sup>th</sup>, 2022. This trip started at the island Faial where the office of DRP and EMA are located. Prior to the visit, Alexandra C.S. Garcia Guerreiro, the Regional Director for Fisheries (DRP) had planned several meetings with local stakeholders that could help with developing and/or implementing the Azorean sustainable fishing training. All stakeholders are

active or have an interest in the Azorean fishing industry. In the following days the project visited:

- Morgan Casal Ribeiro and Régis Vinicius Souza Santos – scientists from Universidade dos Açores - Azores fisheries research group.
- Marco Dutra, José Sousa, Joana Marcos, and Ana Rita Rodrigues – staff from EMA.
- Norberto Serpa and Mauro Matos – Fishers and representatives from A.A.P.A.P, the Fishers' association of Pico.
- Raquel Rodrigues – marine biologist and technician of the Azorean Fish Federation (FPA).

These visits allowed the project to get an overview of the challenges in the Azorean fisheries sector and the perspectives of the stakeholders involved.

#### 4.1.1 MEETING DRP

On the 7<sup>th</sup> of July we met with Alexandra C.S. Garcia Guerreiro at the office of DRP in Horta (Faial Island). Here we worked on some administration, developed a plan to conduct the first pilot with local stakeholders in the Azorean fisheries sector, discussed the various challenges of the Azorean fishing industry and prepared our visits to Pico and São Miguel islands.



*Figure 1. Head office of DRP.*

DRP is responsible for managing fisheries on the Azores. Formal communication with the fishing industry mainly takes place through the Azorean Fisheries Federation which is the umbrella organisation for all fishing associations on the Azores. There are 16 fishing associations in total, spread over the various islands. However, since the community of the Azores is relatively small, there is also a lot of

direct contact between DRP and various fishers and fisheries associations across the different islands.

After learning more about DRP and how fisheries are managed at the Azores, we discussed the various types of fishing activities and main species landed at the Azores. The Azorean fishing fleet consists of primarily small-scale fishing vessels. There is a pelagic fishing pole and line industry on large species, targeting mainly tuna species. The season normally starts in April and runs up to September following the migration patterns of the target species.

During winter there is no tuna fishing. When the tuna season is finished, the fishers switch to deep-sea longline fishing vessels that operate year-round. Most fishing trips have a duration of multiple days (3 to 7), and it depends on the weather if fishers leave the harbor.

The main fishing grounds for deep-sea fish species in the Azores are located in the seamounts.

There is a Total Allowable Catch (TAC) for tuna and this TAC is set for the whole fleet. As a result, as soon as the fishing season opens there is a run to catch as much tuna as possible within the TAC. The season usually closes around September but in recent years it closes earlier. In 2021 the fishing fleet reached the TAC in August while in 2022 in June.

Some deep-sea species are also managed by a TAC, while several coastal species are managed through regional quotas. Next to the TAC, there are other local management tools like landing restrictions: fish in weight limits by trip per vessel, per month and year. Quota are divided among fishers based on historical landings. A requirement that is set on the Azores is that a permit to fish with a certain gear can be withdrawn when you do not reach a minimum amount of catch of the target species. Since there is only a limited number of licenses, DRP wants to avoid licenses being owned by fishers that do not make use of it.

The number of deep-sea longline permits needs to decrease in the coming years, so once these permits end, they will be taken out entirely. Fishers can also change their deep-sea longline permit for another permit, for example by a handline permit. There are almost no permits for fishing with nets on the Azores. A handful of fishers still have a license to fish with nets for baitfish that are used for the tuna pole and line fishery.

Next talking point on the list was solid and liquid waste. Fishers at the Azores are not hindered by plastic in their fishing areas. When asking for problems with Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG), she tells us that multiple fishers pointed out that they sometimes do lose fishing gear (lines and

hooks). This is mainly caused by rough weather conditions and sea. However, she believes that the total amount of lost fishing gear is limited.

Fishers can hand in their waste and oil residues in port reception facilities. Each port should have these facilities. Fishers don't have to pay a fee for handing in their waste; waste collection and processing is funded by the government. However, ports are not always well equipped to dispose waste and oil in a correct manner.

At this moment a project is starting to equip fishing vessels and ports with boxes/bags and stimulate them to collect waste that they see floating while fishing. Challenge here is the limited amount of space aboard the vessels since most vessels are < 12m in length.

There are not a lot of environmental NGOs active on the islands related to fishing. One of the most active NGOs in the Azores is the Azorean Marine Observatory (OMA). It is an NGO that focusses on science communication, dissemination, education and raising awareness about the ocean mainly aimed at children and the general public. Through outreach activities they try to make people aware of plastic pollution and climate change, but the NGO does not have a specific focus on fisheries.

DRP is very active in the field of Marine Spatial Planning (MSP). The Azores is in the process to protect 30% of the Azorean waters where half of the areas (15%) will be no take zones for fishers. Although fishers seem to understand the importance of installing Marine Protected Areas, the entire process leads to a lot of opposition among fishers since they cannot agree on the area's where to install them. In the decision process they try to involve fishers, but it is a difficult and time-consuming process.

Final topic to discuss is fisheries economy. It is unusual for fishers to process the fish they catch themselves. They land their fresh fish and sell it via auctions. In some cases, they also directly sell to buyers. A big challenge is the export capacity of the islands. A lot of the catch is exported to mainland Europe (Portugal, Spain, and Italy) by airplane, but capacity is not always sufficient leading to spoilage of the fish.

For a lot of fishers, it is hard to understand the relation between supply and demand. To give an example, the case of Atlantic blue jack mackerel is mentioned. Prices drop significantly when the supply by the fishers is high since there is a low demand for it from the market. Fishers still catch and land the fish and when there is no buyer, they ask the government to help and for financial support. It is hard to make fishers see that an improved management would result in better prices and a more stable market.

When it comes to sustainability certification, the Azorean tuna fisheries are (partly) certified for Dolphin Safe and Friends of the Sea. MSC certification is currently starting up. There is also contact with the International Pole and Line Foundation (IPNLF).

Diversification of business activities is not common for Azorean fishers. Tourism is a major economic activity on the Azores, but combining fishing and tourism hardly occurs.

#### 4.1.2 MEETING EMA

EMA opened its doors in 2021 and started delivering regular training courses. The training for fishers will be a classroom training. Fishers will not have to pay for the training themselves. DRP will pay EMA to provide the training to the fishers.



*Figure 2. Escola do Mar Dos Açores (EMA).*

Although training all fishers of the Azores, it is difficult to achieve this objective as fishers are scattered across nine islands. They would need to travel and seek accommodation. In the future EMA also wants to provide your own accommodation for fishers that attend training, but accommodations have not been built yet. However, there are also plans on providing some trainings on other islands to make the training as accessible for fishers as possible.

EMA is currently in the process of developing and revising the training for fishers. Due to changes in the regulations, they need to make some adjustments in the program they developed so far. EMA promises us to send a translated outline of the current training to see what topics are covered. Everyone agrees that the training they are currently developing at EMA could be a perfect vehicle to develop and conduct the Azorean sustainable fishing training.

When asked about the level of education, it becomes clear that the level of education of Azorean fishers is generally low. In some villages fishers do not even finish primary/high school and learn the profession from father to son. Some fishers speak English, but most fishers are only capable of speaking in Portuguese. As a result, the training for fishers needs to be taught in Portuguese.

## 4.2 INCLUDE BROADER NETWORK

After having met with DRP and EMA, we also met with various other local stakeholders active in the Azorean fishing industry. We started with a meeting with researchers from Universidade dos Açores. Next on the list was a meeting with A.A.P.A.P., which is the Fishers' association of the Pico Island. We finished the preparatory visit with a meeting with the Azorean Fish Federation (FPA) on the island São Miguel. After that meeting, we went back to Faial Island to discuss the way forward with DRP. Below you can find a summary of what has been discussed with the various Azorean stakeholders.

### 4.2.1 UNIVERSIDADE DOS AÇORES - AZORES FISHERIES RESEARCH GROUP

We started the meeting with a presentation explaining the goals and setup of the CTP project. After the presentation, we discussed the role of the Universidade dos Açores supporting the decision making. Morgan Casal Ribeiro and Régis Vinicius Souza Santor explained that the university participates in various working groups of ICES. The Azores is in ICES subarea 10, where mainland Portugal is in ICES subarea 9. There is a regional observer program for the tuna fisheries, which is funded by DRP and contributes to essential data that support the certifications needed for the canning industry to conquest markets.

A few deep-sea species, like the Black-spot Seabream, Alfonsim and Imperador (these last two are considered as 1 stock for assessment purposes, *Beryx spp.*) are also managed by an EU TAC. In deep-sea fishing the bycatch of deep-sea sharks is a challenge. Another key point is understanding marine ecology and especially the dynamics of deep-sea fish stocks (long longevity, slow reproduction).

Data on deep-sea species is also limited which makes stock assessments challenging. There is as Spring Survey which is executed by the Azorean University to collect data. The survey is performed by a research vessel using a deep longline from April to September, covering all the islands. The Data Collection Framework also contributes to collect fishery dependent data.

In general, it can be concluded that scientists (including ICES) have a different perspective on the stock status of deep-sea fish stocks compared to fishers. According to ICES the abundance is increasing of some of the most important

commercial fish stocks. The local perspective is that Catch Per Unit of Effort (CPUE) is declining. CPUE data is not accepted by ICES for stock assessments as some essential data is missing for stock assessment. One fisher recently shared his views and told scientists that fish are getting smaller and less abundant. The main reason for this trend in the view of the fisher was that the fleet has become more efficient (technological developments in the last 20 years).

Key points for the Azorean sustainable fishing training would be to focus on the need for management, and promote the cooperation between sector, policy, and science. Fishers often feel powerless in the management process. To illustrate this, there was a science project to tag fish to get more data. But when fishers caught tagged fish, they did not bother to hand in the fish although a reward was in place. They were reluctant to share data as they are afraid that it will negatively affect their job. We were also told that during the Spring Survey fishers went on a strike.

The researchers mentioned that the University is trying to improve communication with fishers by using videos about fisheries management and workshops. They acknowledge that up till now, there is still room for improvement.

#### 4.2.2 A.A.P.A.P. - FISHERS' ASSOCIATION PICO

The next local partner to visit was A.A.P.A.P., which is the Fishers' Association of Pico. We travelled to Pico by ferry and met with Norberto Serpa (fisher and owner of 2 boats) and Mauro Matos (fisher). After presenting the goals of the CTP-project, we had a conversation about various topics.



*Figure 3. Wall painting outside the office of A.A.P.A.P. on the island Pico.*

One of the talking points was about the way fishers are organised in the Azores. Both fishers acknowledged that with 16 associations and a federation, communication is not easy. The various associations have different views and interests on the management topics. According to them, there is a fierce competition between fishers of different islands. Especially fishers from the fishing

community Rabo de Peixe (located at São Miguel) are considered to be fishers that are not taking regulations and management agreements too seriously. Both fishers also expressed their concern about the lack of enforcement in some parts of the archipelago. They stated that it allows for fishers to illegally land and sell fish.

They are also concerned about the average age of Azorean fishers, since a lot of fishers are rather old, and the number of new entrants is very low. They expect that in 10 years' time a lot of fishers from the Azores will retire. When we asked them about possible reasons for the low number of new entrants, the fishers told us that people think it is hard job (although you can make a good income from it) and that parents do not want their children to become fishers. There seems to be a stigma that fishers are low educated and poor. One of the fishers said that he currently employs Indonesian fishers on his vessel due to a shortage of personnel on the Azores. Fishers from Cabo Verde are also frequent as crew on Azorean fishing vessels. As far as they know, there are currently no measures taken to promote a career in the fishing industry.

Final talking point was about fisheries economics at the Azores. We asked them if fishers participate in direct selling of their catch. Both fishers indicated that this is done in some cases, but that the majority is sold through the fish auctions. Direct selling involves considerably risks as one fisher explained. He made a deal for selling his fish directly with a certain party, but in the end, he had to wait 3 years to finally get his money. By selling their catch through a fish auction, they avoid the risk of not receiving payment.

They were also very interested to hear more about our experiences in the other countries participating in the CTP-project. We discussed several findings with them and told them that fishers in Greece most likely resembled those in the Azores the most. During that conversation, we also talked about the diversification of some Greek fishers in combining their fishing activities with tourism. Both fishers were very interested in this type of diversification and considered this to be an added value to the training for the Azores. In general, they were enthusiastic about the CTP-project and type of training we want to develop for the Azores. They considered it to be of added value for fishers.

#### 4.2.3 AZOREAN FISH FEDERATION (FPA)

On São Miguel we met with Raquel Rodrigues of the Azorean Fish Federation (FPA). We presented the goals of the CTP-project and verified some of the information that we had already collected during our preparatory visit.

One of the topics we discussed was the impact of climate change on the Azorean fishing industry. Fishers have witnessed a change in the weather in recent years on the Azores. In general, they state that winters have become warmer, whereas

summers are colder. At the moment, they do not see a clear shift in fish species. Last year bad weather conditions did have a negative impact on the fishing industry though, because it prevents fishers from going out at sea to fish.



*Figure 4. The meeting with FPA was followed by a tour through the port of Rabo de Peixe on the island of São Miguel.*

We also spoke about the image of fishers in the Azores. It seems that communities at the Azores are (still) strongly tied to the ocean. As a result, society has a neutral or even positive image on fishers. There is hardly any opposition and/or criticism against fishers. This seems to be different compared to some other European countries.

### 4.3 ORGANISING THE FIRST PILOT

After the preparatory visit in July 2022, preparations were started for the first pilot between ProSea and Ana Rita from EMA. All PowerPoint presentations were shared, and we went through all presentations in detail to discuss learning goals, approach and required local information/context/examples. EMD also shared an outline of the topics they had to cover in the environmental training for fishers. This outline can be found in Annex 8.

In November 2022 we started planning the first pilot with DRP and EMA. During the meeting on the 16<sup>th</sup> of November, we agreed that we would organize the first pilot

for a broader group of stakeholders (e.g., scientists, policymakers, industry representatives) involved in fisheries on the Azores. This would allow ProSea to conduct the training in English and this would enable EMA to learn from the approach used by ProSea. Another advantage of this approach is that we could get the support from a broader group of stakeholders and collect input from these stakeholders in adjusting the training even further to the Azorean context.

Although parties agreed on the approach for the first pilot, some unclarity remained on the administrative responsibilities and overall project goal of CTP at EMA. Since EMA was not the formal project partner, they were not aware of the available budget to participate in the CTP-project. Apparently, it was not clear to EMA that DRP had budget for their role. This needed to be clarified. It was also unclear to EMA that they were not obliged to implement the CTP-training format one-on-one within EMA and that they were allowed to freely use all the developed training material. Luckily, we were able to clarify all these points in January 2023. The first pilot training was planned for the 7<sup>th</sup> and 8<sup>th</sup> of March 2023.

There was a clear division of the tasks between ProSea, EMA and DRP for preparing this first pilot. ProSea adapted the training material to the local situation on the Azores. EMA arranged the logistics like a venue, meals and drinks, and material for the games and workshops. DRP was responsible for recruiting participants for the pilot training. ProSea made an invitation for the pilot training, which was translated by EMA, and that was shared by DRP within their network. A list with all persons/organisations that were invited to join the pilot can be found in Annex 2.

Next to adapting the training material to the local context, ProSea was also responsible for conducting the first pilot training in English. This was possible since the first pilot training was organised for local stakeholders that are capable of English. Through this way, EMA staff could experience the approach and didactics used by ProSea trainers. The idea is that this will enable EMA to play a more prominent role during the second pilot for fishers.

We scheduled an additional day after the first pilot training for a train-the-trainer program on the 9<sup>th</sup> of March. It turned out to be difficult to find enough participants for the train-the-trainer program since we only had one participant from EMA. Main reasons for stakeholders not to participate were that:

- They hold no ambition to train fishers;
- It was impossible for them to participate in a 3-day event due to other obligations; and
- EMA staff was occupied with conducting training.

However, together with EMA we agreed that a train-the-trainer program would not be very effective with only one participant since it includes various workshops and assignments that require at least three participants.

Instead of a train-the-trainer program, we planned a meeting with EMA trainer Ana Rita Rodrigues to evaluate the first pilot training, elaborate on the didactics behind the training (theory of the train-the-trainer program), and discuss a strategy for the second pilot training. Since she is responsible at EMA for the environmental training, she will most likely continue the implementation of sustainable fisheries training on the Azores. We were pleased to hear that she already used several workshops and games from CTP in the trainings she provided to fishers and included some of the training content in her lectures. We agreed that she will conduct the second pilot training with fishers in September 2023 and ProSea will be present in an observer role. This will allow ProSea to reflect on how the fishers respond to the training and on how the training is delivered by EMA. This approach would make a train-the-trainer program redundant since we work very closely together with Ana Rita from EMA.

ProSea arrived on Faial on the 5<sup>th</sup> of March. On Monday the 6<sup>th</sup> of March 2023, a meeting was held with Alexandra Garcia Guerreiro (DRP), Ana Rita Rodrigues (EMA), and the ProSea team at EMA. We discussed remaining questions in preparation of the first pilot training. A summary of talking points and outcomes of the meeting can be found below:

- There is no data on the most important export markets for seafood products from the Azores (at least not known to DRP). Seafood is exported to the Portuguese, Spanish, and Italian market but it is unclear in what quantities. It is the ambition to collect these data as part of the Data Collection Program (DCP).
- Various MPA's have been installed and some additional MPA's are being discussed. Within some MPA's there will be 'no take' zones for fisheries. The process of setting up new MPA's is complex since it involves various stakeholders. Fishers generally seem to understand the idea behind MPA's but require compensation for lost income due to lost fishing grounds.
- Currently there are no concrete plans for renewable energy within the EEZ waters of the Azores (wind, waves, tides, solar). The depth of the ocean and the sometimes rough weather conditions make it technically challenging to invest in offshore renewable energy projects.
- There are hardly any aquaculture activities within the Azorean waters. This is also due to the rough weather. Alexandra indicated that there is currently one aquaculture company active in the Azores called Aqualab/Aquazoic. There used to be pilots with farming limpets, but these were not successful.
- The potential of deep-sea mining has been explored, but the regional government of the Azores has concluded that the potential impact on the deep-sea ecosystem could be catastrophic. As a result, they have decided not to invest in deep-sea mining.
- There have been initiatives for fishers to combine fishing with tourism. However, most fishers are not interested in combining fishing with tourism, mainly because they are not familiar with it. In total around 20 licenses have

been handed out that allow fishers to take tourists onboard for fishing trips. Fishers with these licenses are positive about combining fishing with tourism.

- There are plans to reduce fleet capacity through a scrapping scheme since fishing pressure is too high on certain stocks.
- Various industry-science cooperation projects have been carried out, but the number of projects is limited. According to DRP it is sometimes challenging to obtain data from universities and science institutions since they are not keen on sharing data out of fear for competition. There is pressure on science institutions to publish and if you share data, others might publish papers with your data/results. This lack of data sharing does not contribute to the willingness of parties to cooperate with scientists.
- There are currently various data collection framework programs for deep-sea fish species.
- A clear overview of the training requirements and certificates for fishers in Portugal/Azores and how these link-up with the competences described at the IMO seems to be missing (e.g., with certificate X, you are allowed to perform the following duties onboard a fishing vessel operating in Y area). It would be useful if DRP/EMA could provide such an overview. This would also be valuable input for the mutual recognition of certificates.

#### 4.3.1 ORGANISATION OF PRACTICAL ASPECTS

##### **Materials**

ProSea adjusted all PowerPoint presentation to the local Azorean context. Due to time constraints, the materials were not translated into Portuguese prior to the first pilot. This was not a problem, since the first pilot would be delivered in English anyway as only local stakeholders capable of English joined this first pilot. A list of all materials required for the workshops was shared with EMA and can be found in Annex 4.

##### **Venue**

The first pilot training was held at Escola do Mar dos Açores in Horta (Faial Island). EMA also facilitated lunch and drinks.

##### **Participants**

DRP was responsible for recruiting local stakeholders that would participate in the first pilot training. In total 10 participants registered for the first pilot training in the Azores and this group of participants consisted of local stakeholders with various backgrounds. Some participants worked for the Regional Directorate for Fisheries (DRP), while others were active as fisheries representatives, scientists or as educators. EMA's fisheries educator, Ana Rita Rodrigues, was also present for the whole duration of the pilot. A list of the participants can be found in Annex 3.

**Classroom material**

All the necessary material for conducting the pilot was present in the training room. There was a screen, sound, and a whiteboard.

**Time of the pilot**

The pilot training took place on the 7<sup>th</sup> and 8<sup>th</sup> of March 2023.

**Course leaders/ trainers**

The first pilot training was conducted by:

- Tim Haasnoot (ProSea)
- Tamar Poppelier (ProSea)
- Daphne Pezij (ProSea)

## 5. CONDUCTING THE FIRST AZOREAN PILOT (TASK NUMBER 4.3)

The first pilot in the Azores was conducted on the 7<sup>th</sup> and 8<sup>th</sup> of March 2023 at Escola do Mar dos Açores (EMA). The training was led by trainers Tim Haasnoot, Tamar Poppelier, and Daphne Pezij from ProSea. This first pilot training was conducted in English to a group of 10 participants of different backgrounds in the Azorean fisheries sector. A list of all participants can be found in Annex 3.

The group of participants had the following backgrounds:

- One participant was a consultant hired by DRP to promote co-management among fishers on the Azores.
- Four participants worked for DRP in various functions. Some were involved in data collection programs, others worked as technical experts.
- One participant worked as a fishing industry representative in Rabo de Peixe.
- One participant worked for an NGO involved in scientific outreach programs and activities in the Azores.
- Two participants were conducting research at the University of the Azores.
- One participant worked as a trainer at EMA.

Next to the diverse backgrounds of the participants, the demographics of the group was also mixed, with different ages and gender. All of this positively contributed to having interesting discussions during the first pilot training. No commercial fishers were present during the first pilot due to a language barrier, as fishers in the Azores almost exclusively speak Portuguese.

The training was held over the course of two days and included several interactive workshops and games. A train-the-trainer session had been planned on the day after the pilot training (Thursday 9<sup>th</sup> of March 2023) but was ultimately cancelled due to a shortage of participants. Instead of a train-the-trainer program we had a fruitful meeting with Ana Rita Rodrigues from EMA who will continue the implementation of the sustainable fisheries training in the Azores. She was

extensively briefed on the training setup, approach and didactics and will conduct the second pilot.



Figure 5. Participant explaining her group's Top 5 during the Top 5 workshop. During this workshop participants list what they consider to be the top 5 challenges for sustainable fisheries in the Azores.



Figure 6. Group of participants playing the Fishing Game.



*Figure 7. Participants of the pilot training playing the 'Fisheries management game'.*



*Figure 8. Group photo at the end of the pilot training.*

## 6. EVALUATION FIRST PILOT IN THE AZORES (TASK 4.4)

The evaluation of the first pilot in the Azores has four parts (read the explanation below) and will be discussed per part.

### 1. Close-out session at the end of the training

The close-out session was held at the end of the pilot training program with the participants and took around 10 minutes. Through the close-out sessions we invite participants to share their overall impression and opinion about the training, guided by a set of open questions. The following questions were asked during the close-out session in the Azores:

- Would this type of training be beneficial to fishers of the Azores?
- What are the most useful parts?
- What are the least interesting/relevant parts?
- What would be needed to implement this type of training in the Azores?
- Who sees a role for him/herself?

### 2. Evaluation form for participants

All the participants in the first pilot training received an evaluation form, which they were asked to complete. This form invites them to share their opinion on the training through open- and closed-ended questions. It is designed to assess the results of the training with a focus on their understanding before/after the training, area/topics participants liked and/or disliked, how they see their personal role in the sustainable development of the fishing industry, and how participants keep track of new developments in fisheries. Participants are also free to add comments or suggestions regarding improvement of the pilot training. The (filled out) evaluation forms of the pilot training in the Azores can be found in Annex 5.

### 3. Evaluation by trainers

The first pilot training in the Azores was conducted by three trainers of ProSea. All trainers sat together and evaluated this first pilot training. This evaluation will focus on what went well during the pilot, what could have gone better and how the interaction was with the participants.

### 4. Evaluation EMA

After the pilot training, each CTP-project partner evaluates the pilot. During this evaluation, partners share their experiences and opinions on the development, organization, and execution of the pilot training in their country. In addition to sharing what went right or wrong in the pilot training, the form identifies lessons-learned and consequences of the pilot for the development of the standard training in WP5 of the CTP-project and elaborates on next steps to take for the second pilot and for implementing sustainable fisheries trainings in the pilot country.

Although DRP is the official partner on this project, the evaluation form was filled out by Ana Rita Rodrigues, the fisheries educator of EMA. This was decided as Ana Rita had been present during the whole pilot training and EMA will have a crucial role in the structural implementation of sustainable fisheries training in the Azores. The filled-out evaluation form can be found in Annex 6.

## 6.1 CLOSE-OUT SESSION AT THE END OF THE PILOT

After concluding the first two-day pilot training in the Azores, we held a close-out session to collect some feedback from the participants. In general, the participants were positive about the training content and training approach, stating that the topics were relevant, and the subjects were taught with an openminded approach.

### What the participants liked

When asked what they liked best about the training, they mentioned the following points:

1. Fisheries economy and marine ecology were mentioned by most participants as the lectures they liked most.
2. The representative of the fishing industry stated that there is a great need to improve knowledge on basic economics and on how to operate a fishing company amongst fishers on the Azores. “Most fishers go out at sea when they are out of money, but don’t know anything about costs, income, market price developments, supply and demand, and how to organize your business”. Providing them with this basic type of knowledge through this training could help fishers in being less reliable of governmental support, it would strengthen coastal communities and could take of some fishing pressure from certain stocks.
3. When the participants were asked whether the learning goals and topics of the training were relevant, the consensus was positive.
4. Overall, participants were positive about the potential of this training to equip fishers of the Azores with new knowledge and skills, thereby promoting sustainable development of fishing communities. Various participants highly appreciated the dynamics between the trainers and the participants. It was made clear during the close-out session that participants really appreciated the effort put into adapting the material to the Azorean fisheries and that they were very willing to help in adapting it even further. The inputs and suggestions to ameliorate the training will be considered when preparing the second pilot.

### Points for improvement

When asked about changes that could be made on the content, they came with the following suggestions:

- One participant suggested to start off the training by discussing and showing positive, local initiatives of sustainable fishing in the Azores. When asked about

the kind of initiatives, the participant mentions the overall small-scale nature of the Azorean fleet and the fishing techniques used (not making use of nets).

- Another suggestion included changing the video example of plastic ingestion by Albatrosses in the solid waste lecture to Cory's shearwaters, which are seabirds that nest in the Azores and have been found to suffer from similar rates of plastic ingestion.
- A participant mentioned to include the POPA Fisheries Observer Program in the fisheries management lecture since it would be of added value if fishers are familiar with the program and its goals.
- One participant argued that the training should be spread over a longer period for fishers, since they probably have a lower attention span. If possible, it would be interesting to include more practical exercises, while also reorganizing and adapting some of the content.
- It was mentioned that EMA has a classroom available in the port of Horta, which was suggested to be more accessible for the fishers. This could be interesting for the second pilot and will be investigated.

During the close-out session, a participant working at Observatório do Mar dos Açores (OMA) invited the ProSea team to visit the office to look through extra materials that could be beneficial for the training. A report on this visit can be found in Annex 7.

## 6.2 EVALUATION BY PARTICIPANTS

The participants were asked to fill out evaluation forms at the end of the training. All the collected forms were processed and summarized, of which the results can be found below. The original evaluation forms can be found as copies in Annex 5.

### 6.2.1 HOW FAMILIAR WERE YOU WITH SUSTAINABLE FISHING BEFORE AND AFTER THE TRAINING?

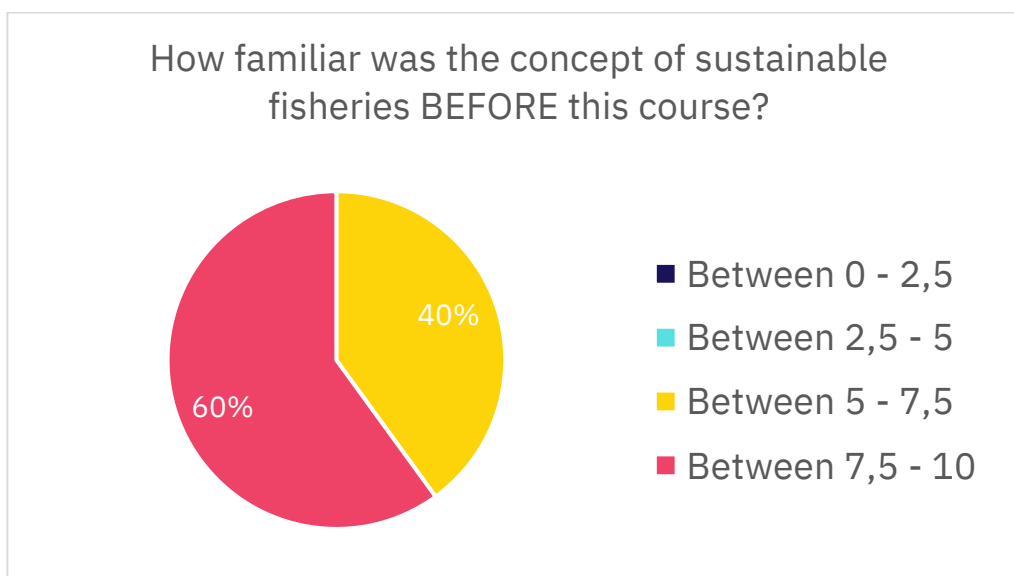


Figure 9. How familiar was the concept of sustainable fisheries before this training? (0 – 2,5: not familiar at all, 2,5 – 5: a little familiar, 5 – 7,5: familiar, 7,5 – 10: very familiar).

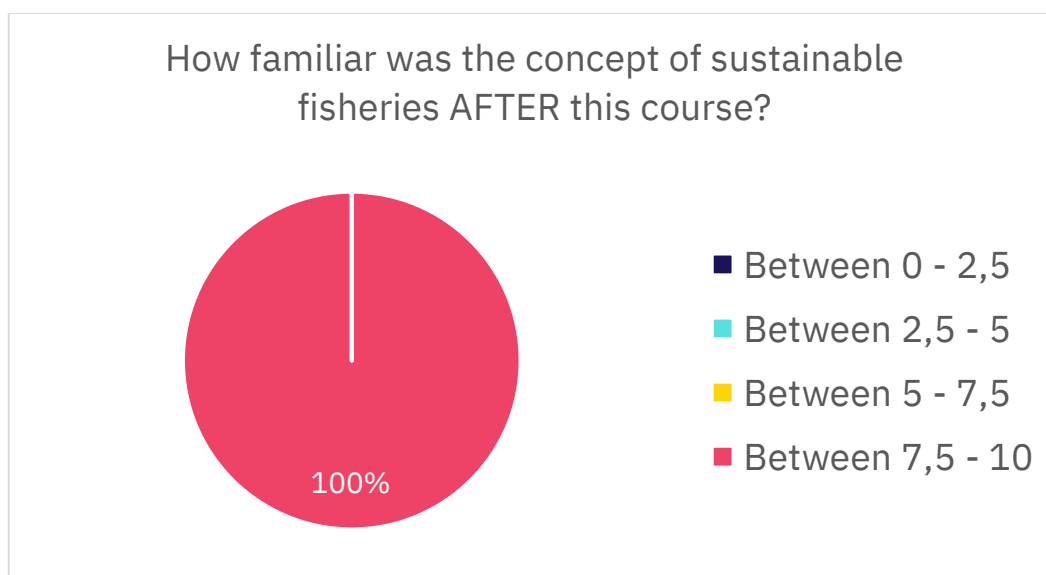


Figure 10. How familiar was the concept of sustainable fisheries after this training? (0 – 2,5: not familiar at all, 2,5 – 5: a little familiar, 5 – 7,5: familiar, 7,5 – 10: very familiar).

When asked to assess their familiarity with the concept of sustainable fisheries before the training, participants indicated being already quite familiar with the concept. Those participants that had indicated to be familiar with the concept, all indicated to be very familiar with the concept after having completed the training (100 %).

### 6.2.2 APPRECIATION OF THE TRAINING CONTENT

Participants were asked to give a score to each of the training topics by choosing from a scale of five emoticons. Their feedback on the evaluation form is presented

below in figure 11. The best valued topics were the ‘Top 5 Workshop’, ‘Marine Ecology’, ‘Oil’, and ‘Solid Waste’.

When looking at the topics that were appreciated the least by the participants, then ‘Fisheries management’ and the ‘Communication workshop’ are the only topics with a light or dark blue bar indicating a lower score. The low score for the ‘Communication workshop’ was given by one participant and this participant indicated it to be “not useful” in the comment section.

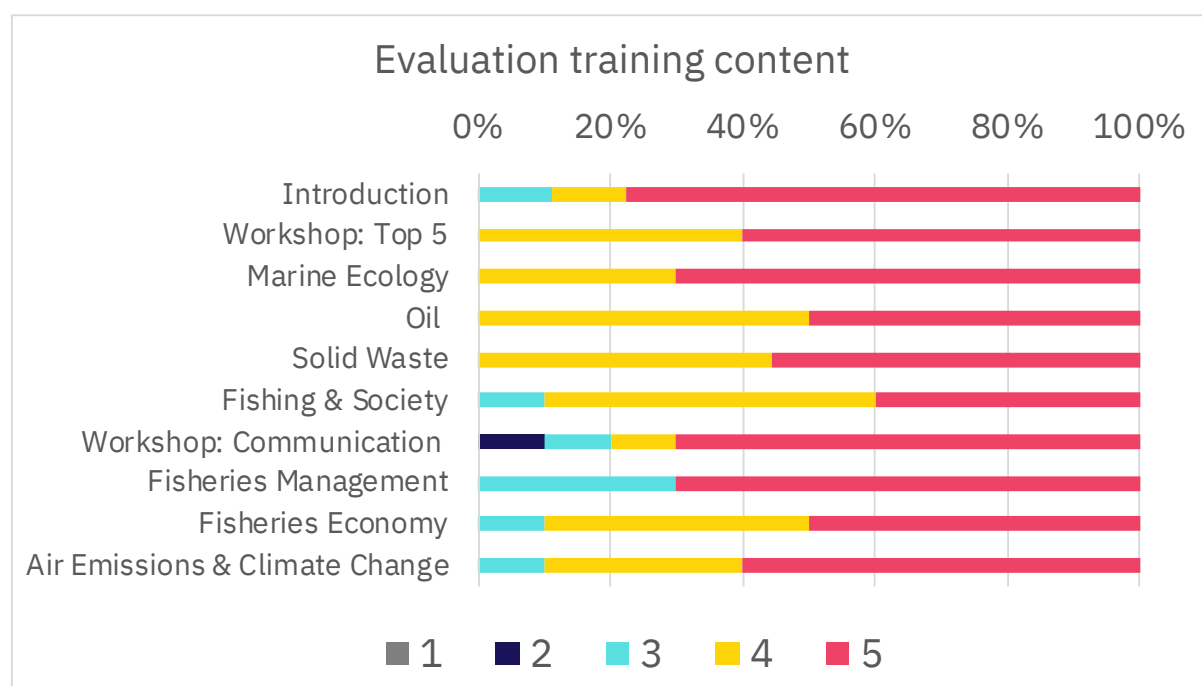


Figure 11. An overview on how participants appreciated the various training topics.

### Comments on question ‘What did you like the least?’

The following comments were given by participants that filled-out this section of the evaluation form:

- One participant commented that the ‘Marine ecology’ lecture should emphasize the importance of plankton to fishers more and that it should be more focused on the Azorean ecosystem.
- Fisheries management was also mentioned by two participants with the argument that focusing was difficult. Another participant argued that there was no clear conclusion and that the lecture contained too many specific definitions. We will consider simplifying some areas within this lecture to make it more accessible and relevant for fishers of the Azores.

### Comments on question ‘Which topics did you like the most?’

The following comments were given by participants that filled-out this section of the evaluation form:

- ‘Fisheries Management’ was mentioned five times and was deemed important to understand what poor management can do to ocean health.

- Four participants indicated that ‘Fisheries Economy’ had been enjoyed the most and was thought to be empowering for the fishers of the Azores and important due to its real-life effect on a fishers’ life.
- ‘Marine Ecology’ was mentioned four times and was deemed well-organized and explained in a simple way.

### 6.2.3 INFORMATION SOURCES USED BY PARTICIPANTS

The participants were asked how they kept track of developments in the fishing industry, of which the response ratio can be seen in the chart below. Most of the participants indicated to keep up with new developments through contact with their colleagues. Examples of elaborations to ‘other’ include ‘Internet’, ‘Twitter’, and ‘scientific papers’.

### 6.2.4 HOW DID YOU LIKE THE VARIOUS TRAINING METHODS, SUGGESTIONS OR RECOMMENDATIONS

The participants were very positive regarding the various training methods used. Presentations were deemed ‘dynamic’, and it was highlighted that it was beneficial for the training to use more than one trainer. The games and workshops were thought to work well in embodying the theory, as well as being practical and fun.

When asked about recommendations, comments, or suggestions only a few were made. One participant argued that, although the games work well, many fishers would not be used to playing games and would require more motivation to let them participate. Another participant stated that some videos were too long at times. Lastly, it was mentioned that the materials could be more adapted to the local context.

### 6.2.5 PERSONAL ROLE IN SUSTAINABLE FISHERIES

When answering the question ‘Which role do you see for yourself in making fisheries more sustainable?’, answers varied, though many participants mentioned educating the fishing community through communication. This pilot training was thought to be important to be taught more commonly and changes in human behavior were believed to be key.

Other answers varied from ‘Working, preparing, and managing data’ to ‘Already on it, as a fisherman association president’. One participant mentioned the importance of making good choices as a consumer.

### 6.2.6 SUGGESTIONS FOR IMPROVEMENT FROM PARTICIPANTS

In the evaluation form we also asked participants for suggestions to improve the training. The following suggestions/comments were given:

- Adjusting the training to the reality of the Azores, with more local examples (mentioned four times).
- Make a connection to POPA (Fisheries Observer Program).

## 6.3 EVALUATION BY THE TRAINERS ON THE FIRST PILOT

Below the evaluation of the ProSea trainers on the first pilot training can be found. The evaluation focusses on both the practical aspects of the pilot training and on the training itself.

### 6.3.1 PARTICIPANTS

The participants were very interested in the training contents and contributed to several good group discussions. It was interesting to receive inputs from participants working in the Azorean fisheries sector, as they could clarify any matters relating to the local context. Conversations during the training, as well as during lunch and coffee breaks further illustrated the local reality of the Azorean fishing sector and generated relevant input for preparing the second pilot.

Alexandra Garcia Guerreiro, who is our main contact at partner DRP, was unfortunately unable to attend the first pilot training, which is a missed opportunity to become familiar with the contents and materials. Hopefully we were able to give good feedback on how the training went and will she be able to attend the second pilot training.

It was great that Ana Rita Rodrigues, which is our main contact at EMA, was able to participate in the entire pilot. This enabled her to get a feel for the content and didactics. We hope that she can incorporate some of the content and didactics in the trainings that she already provides to fishers as part of her work at EMA.

### 6.3.2 VENUE

EMA was helpful in organizing all needed facilities for the training, including the training room and lunch. The training was held in a large and open space with sufficient tables and chairs. One minor downside of the room was the presence of a large skylight from which sunlight entered the room and obstructed participants from seeing the projected PowerPoint slides at times. This was fixed by utilizing a large monitor on wheels instead. For the second pilot it will be useful to conduct the whole training with the monitor instead of the projector if we want to use the same venue.

Lunch and coffee breaks were facilitated by EMA on a short notice, which is highly appreciated. There were sufficient beverages and food available for all participants and the quality was excellent.

### 6.3.3 TIME OF THE PILOT

The two pilot days both started at 09:00 and ended around 15:30. It was possible to deliver the entire training within those hours, though some lectures (e.g. marine ecology) had to be shortened in order to finish within the scheduled time.

In the case of a second pilot involving fishers, it is advised to spread the training over more than two days. Paying full attention to the training for approximately 6 hours a day is thought to be too intense for the attention span of the fishers.

### 6.3.4 MATERIALS AND TECHNICAL EQUIPMENT

All the material that had to be printed (program, participant list, fisheries management game cards) and that was on the shopping list was collected and prepared by Ana Rita Rodrigues (EMA). All other technical equipment that was required for the pilot training was present, except for a flip over that was needed for the Top 5 workshop. This was resolved by using a whiteboard instead.

### 6.3.5 TRAINING MATERIAL

The training material was received positively and is suitable for providing sustainable fisheries trainings in the Azores. Some changes will have to be made prior to conducting the second pilot, which mainly concern adapting the training material even more to the local context. Participants mentioned that more Azorean examples would be beneficial.

## 6.4 EVALUATION EMA

After finishing the pilot training in the Azores, a meeting was held between the ProSea trainers and Ana Rita Rodrigues (EMA) on the 9<sup>th</sup> of March 2023 to evaluate the first pilot training. Ana Rita also filled out an evaluation form for the partner which can be found in Annex 6.

Overall, she felt positive about the pilot training and enjoyed experiencing how ProSea discussed certain topics. She was also pleased to see that there was quite some overlap in the way that she provides the environmental training for fishers at EMA.

Within the trainings she provides, she already uses the ‘sustainable fisheries game’ based on the instructions that we shared. She has made several changes to the setup, for instance by using larger and smaller candy to simulate young and adult fish. Leaving more adult fish (large candy) results in a higher reproduction compared to the younger fish (small candy). The game is always a big success to illustrate the tragedy of the commons and the complexity of fisheries management.

Of all the topics discussed during the first pilot in the Azores, Ana Rita (EMA) thinks that the lectures on ‘fisheries economy’, ‘fishing and society’ and ‘communication’ would be the most useful additions to the trainings EMA already provides to fishers since these topics are not yet discussed. The other topics (marine ecology, oil, solid waste, air emissions and climate change, fisheries management) are all covered, although the approach, content and length of the lectures differs from the CTP-training setup. She is also very enthusiastic about the Kahoot quiz tool and intends to use a (similar) quiz tool within her trainings.

According to Ana Rita (EMA), the younger fishers already seem to be much more aware on the ocean and the impacts of fishing on the marine environment compared to the older generation. She believes that it is important to also keep investing in the education of young children and teens on marine literacy. The CTP-training package could also be useful in that process.

Although some fishers already seem aware, they do sometimes make unsustainable choices since they want to put money on the table or simply keep doing things as a force of habit. The disposal of cigarette buds in the sea, for instance, is very common amongst fishers according to Ana Rita (EMA). Added value of the training is to provide fishers with the background information on ‘why’ certain choices are unsustainable, give them insight on the consequences of their behaviour and offer them potential solutions.

The lecture on marine litter triggered Ana Rita (EMA) to investigate the way garbage is being handled and recycled in the Azores. She believes that most ports offer some sort of garbage collection facilities for fishers, but she believes that recycling is not taking place at most of the islands. A concern of Ana Rita (EMA) is the use of bleach when fishers clean their boats. She would be interested to learn more on the potential impacts of bleach on the marine environment.

Everyone owning a boat in the Azores is required to follow a training at EMA to receive a license to operate a vessel. This is a 5-day training program (so called basic security training) consisting of three days of theory and two days of practice (e.g. firefighting). Within that training, Ana Rita (EMA) covers the topic ‘Ocean literacy’ and discusses some marine ecology topics but only has 30 minutes within the program to do so.

Professional fishers also need to follow another 3-day training (gestão Ambiental a bordo, ‘environmental management on board’ in English) which is offered by EMA, and which is obligatory for fishers to receive a fishing license. This training is the most likely vehicle for structural implementation of sustainable fisheries training in the Azores. As a result, ProSea and EMA agree that the second pilot training could best be linked to this training.

DRP currently finances all trainings provided to fishers on the Azores. Fishers only need to pay an application fee of 10 euro and attend the training within a certain timeframe. If they miss the timeframe, fishers will need to pay for the entire training themselves if they want to obtain a license.

There is website from the Portuguese government stating all training requirements that should be covered in the training of fishers. This website can be found through the following link: <https://catalogo.anqep.gov.pt/>. The ministry responsible for fisheries is also in charge concerned the training requirements for fishers in Portugal. It is unclear to Ana Rita (EMA) how the accreditation of trainings is organised in Portugal. She knows that EMA must report on the trainings they provide but does not know who receives these reports and what is done with them.

It would be possible to schedule a second pilot with fishers in September 2023. Ana Rita (EMA) suggests that offering some sort of compensation for fishers to attend the pilot training should be considered, since they generate no income from fishing during these days. A compensation like the one used for the fishers in Greece could be sufficient.

## 7. LESSONS LEARNED AND CONSEQUENCES FOR STANDARD – WP 5

In this part of the evaluation, we identify lessons-learned and consequences of the pilot for the development of the training standard (WP5) of the CTP-project. After conducting the first pilot in the Azores, the following lessons were learned:

1. The general training content, presentation approach, and workshops were highly appreciated by the participants. They are positive about its potential for the Azorean fishing sector.
2. A point of improvement for the training material concerns further adapting the content to the local situation. In a practical sense, this means including more local examples (e.g. fishing for litter initiatives), adding management regulations and data, and finding more imagery.
3. During the training it became clear that there is still room for improving data collection and sharing data. The lack of socio-economic data, as well as infrastructures to share data between the various stakeholders, was a recurring topic during the training and appears to be a concern in the Azores.
4. The management of fisheries in the Azores happens a lot through regional legislation since the region differs considerably compared to mainland Europe. It is of importance to consider this when preparing the second pilot by researching the most relevant regulations for the management of fisheries in the Azores and include those in the training.

5. In the current CTP-training package for the Azores, there are various examples from large-scale fisheries that are not very relevant for the small-scale fishers of the Azores. It would be useful to develop a set of training material specifically relevant for small-scale fishers. For instance, a more comprehensive module explaining basic economic concepts (e.g. how to make money with fishing and how to handle money earned with fishing).

We will take these lessons into account in the development process of the European training standard.

## 8. NEXT STEPS AND RECOMMENDATIONS

When looking at the next steps to take in preparing the second pilot and in the further implementation of the training in the Azores, the following steps are proposed, and recommendations are given:

- ProSea and EMA will make changes to the training material based on the feedback of the participants.
- Ana Rita Rodrigues (EMA) will translate the materials to Portuguese once they have been adapted.
- EMA will plan a second pilot in September 2023 with fishers and this pilot training will be conducted by Ana Rita Rodrigues from EMA in Portuguese. ProSea will attend this pilot in an observer role. This will allow ProSea to reflect on how the fishers respond to the training and on how the training is delivered by EMA. This approach would make a train-the-trainer program redundant since we work very closely together with Ana Rita from EMA.
- ProSea will discuss with DRP and the project officer if the time of fishers can be compensated for attending the second pilot training.
- DRP, EMA and ProSea will try to describe how the training and certification of fishers is organised in the Azores and Portugal in terms of structure, responsible ministries, accreditation of trainings/certificates, finances.

## 9. CONCLUSIONS

After having conducted the first pilot training in the Azores, the following conclusions can be drawn:

- The first pilot training in the Azores was pilot training number 9 in the CTP project. The project has now completed 9 out of 14 pilots (64% completion). In total the project has trained 125 active fishers or other relevant stakeholders in the European fishing industry out of an expected total of 300 (42% completion).
- Communication with project partners on the Azores was a big challenge from the start of the project since the contact from DRAM left the project and the school was still under construction. Luckily this communication improved once

DRP replaced DRAM in the project. However, it is important that DRP and EMA keep in close contact concerned the management of the project and when working out the structural implementation of sustainable fisheries training in the Azores.

- The general training content, presentation approach, and workshops were highly appreciated by the participants and the training has great potential for the future of the Azorean fisheries sector. Several participants expressed their enthusiasm and willingness to remain involved and help during the next steps.

## ANNEX 1 PROGRAM

## Programa

Catching  
THE Potential

## Março 7, 2023

- 09.00 - 09.45** Abertura  
Introdução a “Avaliação do potencial em sustentabilidade”
- 09.45 - 10.30** Top 5 do workshop
- 10.30 PAUSA PARA CAFÉ**
- 10.45 - 11.45** Ecologia Marinha
- 11.45 - 12.00** Óleo
- 12.00 ALMOÇO**
- 13.00 - 13.45** Lixo sólido
- 13.45 - 14.45** A pesca e a sociedade
- 14.45 - 15.30** Comunicação do workshop

## Março 8, 2023

- 09.00 - 09.15** Abertura
- 09.15 - 10.30** Gestão Pesqueira
- 10.30 PAUSA PARA CAFÉ**
- 10.45 - 11.15** Gestão Pesqueira
- 11.30 - 12.00** Economia Pesqueira
- 12.00 ALMOÇO**
- 13.00 - 13.30** Economia Pesqueira
- 13.30 - 14.15** Emissões para a atmosfera e alterações climáticas
- 14.15 - 15.00** Debate e avaliação



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Fisheries  
Fund of the European  
Union

## ANNEX 2 INVITATION LIST

The following persons were invited to participate in the first pilot training in the Azores:

- Alexandra S. Simas (DRP)
- Alexandre MO. Morais (DRP)
- Alzira MGS. Luís (DRP)
- Ana PHMM. Mendonça (DRP)
- André C. Silva (DRP)
- Andreia FDB. Henriques (DRP)
- Ângela ML. Canha (DRP)
- António PHS. Oliveira (DRP)
- Carlos JN. Trigueiro (DRP)
- Conceição MSSSM. Lourenço (DRP)
- Dália CC. Reis (DRP)
- Duarte NB. Melo (DRP)
- Flávia PM. Goulart (DRP)
- Hugo MC. Diogo (DRP)
- Isabel MAS. Cardoso (DRP)
- Jorge MM. Oliveira (DRP)
- Luís FM. Costa (DRP)
- Maria ELPN. Naia (DRP)
- Maria JF. Neto (DRP)
- Maria JPPM. Évora (DRP)
- Paula CMC. Menezes (DRP)
- Renato ES. Cruz Rute MA. Matos (DRP)
- Sara AS. Tomás (DRP)
- Telmo Morato (University of the Azores)
- Patricia Amorim (University of the Azores)
- Luis Silva (University of the Azores)
- Jorge Miguel Rodrigues Fontes (University of the Azores)
- Inês do Carmo Alves Martins (University of the Azores)
- Mário RR. Pinho (DRP)
- Miguel Ângelo Gaspar Couto Machete (University of the Azores)
- Frederic Vandepierre (University of the Azores)
- Régis Vinícius Sousa Santos (University of the Azores)
- Wendell Melquias Medeiros Leal da Silva (University of the Azores)
- Gui Manuel Machado Menezes (University of the Azores)
- João Manuel dos Anjos Gonçalves (University of the Azores)
- Gilberto MP. Carreira (DRP)
- Paula MGV. Rosa (DRP)

## ANNEX 3 PARTICIPATION LIST

CTP

**Catching  
THE Potential**

Participant list  
First pilot Açores

Name	Tuesday March 7, 2023	Wednesday March 8, 2023	GDPR approval*
Ana Luísa Barata Valentim	AV	AV	AV
Alexandra Silveira de Simas	Alex	Alex	Alex
Ana Paula Horta Martins de Mergulhão Mendonça	Ana Paula	Ana Paula	Ana Paula
Ruben do Couto Farias	Ruben Farias	Ruben Farias	Ruben Farias
Carlos Jerónimo Nória Trigueiro	Carlos Trigueiro	Carlos Trigueiro	Carlos Trigueiro
Ângela Maria Lourenço Canha	Angela Canha	Angela Canha	Angela Canha
Marc Larose	Marc	Marc	Marc
Carolina Doã	Carolina	Carolina	Carolina
Joana da Rosa	Joana Da Rosa	Joana Da Rosa	Joana Da Rosa
David Milla			
Katharina Leeb	Leeb	Leeb	Leeb
Laurence Fauconnet			
Alexandra C.S. Garcia Guerreiro			
Ana Rita Rodrigues	Ana Rita Rodrigues	Ana Rita Rodrigues	Ana Rita Rodrigues

\* By signing here, you agree that you can be filmed or photographed. This footage can be used in communication and reporting of the EU Catching the Potential project.



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## ANNEX 4 LIST OF ESSENTIALS FOR CTP WORKSHOPS

## WORKSHOPS

## TOP 5

- Flip-over with sheets
- Markers

## FISHING GAME (10 PARTICIPANTS)

- 3 large tubs
- 100 – 150 Candies (in a wrapper and which fit on a teaspoon)



- Spoons of different sizes (teaspoons, larger spoons, serving spoons)
- Tongs



- 10 blindfolds



## FISHERIES MANAGEMENT GAME

- Cards translated and printed in Portuguese



## ANNEX 5 EVALUATION FORMS PARTICIPANTS

**Catching  
THE Potential**

CTP






## Evaluation form

First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

## QUESTIONS

## WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures						Remarks
<i>Day 1</i>						
Introduction in sustainability					x	
Top 5 Challenges					x	
Marine Ecology					x	
Oil					x	
Solid Waste					x	
Fishing & society					x	
Communication					x	
<i>Day 2</i>						
Fisheries Management					x	
Fisheries Economy				x		
Air emissions and climate change				x		JUST BECAUSE I HAVEN'T WATCH IT ALL



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**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- 0 – 2,5
- 2,5 – 5
- 5 – 7,5
- 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- 0 – 2,5
- 2,5 – 5
- 5 – 7,5
- 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

SOLID WASTE, BECAUSE I DO BELIEVE IT HAS A BIG ROLE AND IMPORTANCE  
 COMMUNICATION, IT IS IMPORTANT TO KNOW HOW TO REACH TO THE MAIN PUBLIC (FISHERMEN)  
 FISHERIES MANAGEMENT, IT'S IMPORTANT TO UNDERSTAND THE UNBALANCE THAT A POOR  
 MANAGEMENT CAN DO TO OCEAN HEALTH

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

MARINE ECOLOGY, JUST BECAUSE WAS THE ONE I LEARN THE LESS

**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.)

VERY DYNAMIC AND HELPFUL FOR COMMUNICATION



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

CHANGING FISHERMAN MINDSET AND EDUCATE YOUNGER GENERATIONS

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

- ☒ News show (tv)  
Which one? "NORMAL" NEWS ON TV OR OTHER CHANNELS SUCH AS \* DISCOVERY CHANNEL
- ☒ News application (phone)  
Which one? INSTAGRAM PAGE FROM THE NEWS PASSED ON TV
- ☐ Newsletters  
Which one? \_\_\_\_\_
- ☐ Eurofish Magazine
- ☐ Colleagues
- ☐ Other: \_\_\_\_\_

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

- \* ADJUSTING TO THE REALITY TO THE PROPOS (WORK IN PROGRESS)
- \* OTHER THAN THAT I REALLY LIKED METHODS AND HOW CONTENT IS INTRODUCED.



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## Evaluation form





MARC LAROSE

First pilot course Azores

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## QUESTIONS

## WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability				✓	
Top 5 Challenges			✓		
Marine Ecology			✓		
Oil			✓		
Solid Waste					
Fishing & society			✓		
Communication		✓			
<i>Day 2</i>					
Fisheries Management			✓		
Fisheries Economy			✓		
Air emissions and climate change			✓		



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## Catching THE Potential

Catching  
THE Potential

HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?

- 0 - 2,5
- 2,5 - 5
- 5 - 7,5
- ✓ 7,5 - 10 ✓

HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?

- 0 - 2,5
- 2,5 - 5
- 5 - 7,5
- ✓ 7,5 - 10

WHAT TOPICS DID YOU LIKE THE MOST? WHY?

- SOCIAL IMAGE → IMP AND NEW APPROACHES
- DISTRIBUTION CHAIN → VERY IMPORTANT
- 

WHICH TOPIC DID YOU LIKE THE LEAST? WHY?

- COMMUNICATIONS → NOT USEFUL
- 

HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?

(LECTURES, WORKSHOPS, ETC.)

- VERY WELL DONE - DYNAMIC
- 3 PRESENTATION



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## Unleashing THE Potential

CTP

### WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?

- ⇒ Social Advisory
- ⇒ Co-Management

### HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?

- ☐ News show (tv)  
Which one? NO
- ☐ News application (phone)  
Which one? NO
- ☐ Newsletters  
Which one? NO
- ☐ Eurofish Magazine
- ☐ Colleagues NO
- ☐ Other: - Google Search
- ⇒ EXPERIENCE AND MANAGEMENT INSTINCT

### DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?

WE WOULD NEED TO TALK!




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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability				X	
Top 5 Challenges				X	
Marine Ecology				X	
Oil			X		
Solid Waste				X	
Fishing & society				X	
Communication				X	
<i>Day 2</i>					
Fisheries Management				X	
Fisheries Economy				X	
Air emissions and climate change				X	

**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☒ 5 – 7,5
- ☐ 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

I enjoyed most of the topics but personally my favourites were the Fishing and Society (because I think it is so important this connection of all the parties and understanding the influence of each), and also the fisheries management and economics because I was able to learn from topics that are not much spoken in marine sciences.

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?****HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.)

I think they were all very engaging and interesting, and it was able to note all the effort put on adapting the presentations to the region.



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

I think education is one of the best ways to spread the message and to change the way we think about certain topics. I would love to join this change and contribute to a more sustainable fishing activity.

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

☐ News show (tv)

Which one? \_\_\_\_\_

☐ News application (phone)

Which one? \_\_\_\_\_

☐ Newsletters

Which one? \_\_\_\_\_

☐ Eurofish Magazine

☒ Colleagues

☒ Other: working place and ~~then~~ through scientific  
papers.

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**



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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures						Remarks
<i>Day 1</i>						
Introduction in sustainability					<input checked="" type="checkbox"/>	
Top 5 Challenges					<input checked="" type="checkbox"/>	
Marine Ecology					<input checked="" type="checkbox"/>	
Oil					<input checked="" type="checkbox"/>	
Solid Waste					<input checked="" type="checkbox"/>	
Fishing & society					<input checked="" type="checkbox"/>	
Communication					<input checked="" type="checkbox"/>	
<i>Day 2</i>						
Fisheries Management					<input checked="" type="checkbox"/>	
Fisheries Economy					<input checked="" type="checkbox"/>	
Air emissions and climate change					<input checked="" type="checkbox"/>	



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HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☐ 5 - 7,5
- ☒ 7,5 - 10

HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☐ 5 - 7,5
- ☒ 7,5 - 10

WHAT TOPICS DID YOU LIKE THE MOST? WHY?

⇒ Fisheries Management and Economics  
Because of the real direct impact on the life of fishermen.

WHICH TOPIC DID YOU LIKE THE LEAST? WHY?

NONE in particular. Everything was OK.

HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?

(LECTURES, WORKSHOPS, ETC.)

Good dynamics in the presentations. The materials used was good too. The "Iceberg" in the beginning could be improved, but it's OK.



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

Already on it, as a fishermen association president.


**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

☒ News show (tv)

Which one? \_\_\_\_\_

☐ News application (phone)

Which one? \_\_\_\_\_

☒ Newsletters

Which one? EUROPEAN COMMUNITY

☐ Eurofish Magazine

☐ Colleagues

☒ Other: Investigation

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

Remember... WSWF is very important.  
Congratulations!



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## Evaluation form

### First pilot course Azores

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#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability				X	
Top 5 Challenges				X	
Marine Ecology				X	
Oil				X	
Solid Waste				X	
Fishing & society				X	
Communication				X	
<i>Day 2</i>					
Fisheries Management				X	
Fisheries Economy				X	
Air emissions and climate change				X	



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**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☒ 5 - 7,5
- ☐ 7,5 - 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☐ 5 - 7,5
- ☒ 7,5 - 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

MARINE ECOLOGY BY PUTTING IN 'CONTEXT' MARINE LIFE

COMMUNICATION - AWARENESS OF ITS IMPORTANCE

MANAGEMENT - UNDERSTANDING THE BACKGROUND AND WHAT'S INVOLVED

ECONOMY - HELPS IMPROVE ACTIVITY GOAL

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

NOT APPLICABLE

**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.)

100%

1. PRACTICAL EXAMPLES
2. VIDEOS / INFOGRAPHICS (?)
3. GAMES

AND, VERY IMPORTANT, HAVING MORE THAN JUST 1 "TEACHER"



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

BY COMMUNICATING ABOUT THE SUBJECT WITH ~~THE~~ THE FISHING COMMUNITY.

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

- ☐ News show (tv)  
Which one? \_\_\_\_\_
- ☐ News application (phone)  
Which one? \_\_\_\_\_
- ☐ Newsletters  
Which one? \_\_\_\_\_
- ☒ Eurofish Magazine
- ☒ Colleagues
- ☒ Other: Attending meetings, Wks, training

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

CONGRATS, YOU'RE ON THE RIGHT PATH!



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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability				X	
Top 5 Challenges				X	
Marine Ecology					X
Oil				X	
Solid Waste				X	
Fishing & society				X	
Communication				X	
<i>Day 2</i>					
Fisheries Management			X		
Fisheries Economy				X	
Air emissions and climate change				X	



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**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

Various ecology because it was very well organized and explained in a simple way.

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

Fisheries Management, because in the end it doesn't have a clear conclusion and it has a lot of specific names and structures.

**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.)

I enjoy it, I will do more of the games, more practical and fun. More adapted to Agri-food (real) reality will definitely be a plus.



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## WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?

Making good choices for a consumer and  
communicating the knowledge.

## HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?

☐ News show (tv)

Which one? \_\_\_\_\_

☐ News application (phone)

Which one? \_\_\_\_\_

☐ Newsletters

Which one? \_\_\_\_\_

☐ Eurofish Magazine

☒ Colleagues

☐ Other: \_\_\_\_\_

## DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?



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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability				X	
Top 5 Challenges				X	
Marine Ecology				X	
Oil				X	
Solid Waste				X	
Fishing & society				X	
Communication				X	
<i>Day 2</i>					
Fisheries Management				X	
Fisheries Economy				X	
Air emissions and climate change				X	



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**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☒ 5 – 7,5
- ☐ 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

Fisheries economy and Fisheries management

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

Oil

**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.) Very good with excellent examples.

Dinamic very good with the workshops, games and game (fishing).



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

- ☐ News show (tv)  
Which one? \_\_\_\_\_
- ☐ News application (phone)  
Which one? \_\_\_\_\_
- ☐ Newsletters  
Which one? \_\_\_\_\_
- ☐ Eurofish Magazine
- ☐ Colleagues
- ☐ Other: \_\_\_\_\_

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

→ More local / regional examples



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## Evaluation form

### First pilot course Azores

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#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures					Remarks
<i>Day 1</i>					
Introduction in sustainability					<i>missed that part</i>
Top 5 Challenges			X		
Marine Ecology			X		<i>very theoretical, could be more adapted to Azores, maybe get a water sample to show them the plankton</i>
Oil				X	
Solid Waste				X	<i>mention Porto Fino &amp; microplastic + existing effort to bring in litter</i>
Fishing & society			X		<i>example of lip dip fishing in Azores, maybe too distant &amp; out of local context</i>
Communication				X	
<i>Day 2</i>					
Fisheries Management				X	<i>in the video with areas Azores was almost cut out make sure fishermen understand transhumance/institutions before starting the TAC ground</i>
Fisheries Economy				X	<i>new product ideas maybe too far*</i>
Air emissions and climate change			X		<i>could be more local</i>

\* away from local reality BUT maybe big ~~potential~~ potential for growing tourism. Tourism could also be source of conflict (fishermen were not very happy about all the boats trying to see the whale sharks in Pico last year - at least they seemed annoyed in the few times I was there)



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#### HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☐ 5 - 7,5
- ☒ 7,5 - 10

#### HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?

- ☐ 0 - 2,5
- ☐ 2,5 - 5
- ☐ 5 - 7,5
- ☒ 7,5 - 10

#### WHAT TOPICS DID YOU LIKE THE MOST? WHY?

I liked the fisheries economy the most because I thought it would be very empowering & can be helpful to change the ~~new~~ picture of fishermen for themselves & what is possible

#### WHICH TOPIC DID YOU LIKE THE LEAST? WHY?

Marine ecology - it ~~was~~ was not very specific on why fishermen should care about plankton. The point could be emphasised more on connections. + I think it should be more focused on the ecosystem here (fishermen probably don't care so much about hydrothermal vents)

#### HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?

(LECTURES, WORKSHOPS, ETC.)

I liked the games to embody the theory, but I know lot of people who are not used to them might need a bit more incentive to participate.  
Great lectures visually, some videos were a bit long.  
I enjoyed the way the discussions were structured.



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

☐ News show (tv)

Which one? \_\_\_\_\_

☐ News application (phone)

Which one? \_\_\_\_\_

☐ Newsletters

Which one? \_\_\_\_\_

☐ Eurofish Magazine

☒ Colleagues

☒ Other: Twitter

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

*Make a connection to FOPA (Fisheries Observer Program)*



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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures						Remarks
<i>Day 1</i>						
Introduction in sustainability			✓			
Top 5 Challenges				✓		
Marine Ecology					✓	
Oil				✓		
Solid Waste				✓		
Fishing & society			✓			
Communication			✓			
<i>Day 2</i>						
Fisheries Management			✓			
Fisheries Economy				✓		
Air emissions and climate change					✓	



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**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

*Marine Ecology: The dynamics and interconnections; The elegance of the presentation, their interests for me  
The type of content's; followed by air emissions  
and climate change*

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

*Fisheries management: The more difficult to get focused  
absolutely not my area.*

**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.) *The most interactive are more interesting,  
but it depends of the kind of content*



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## Unleashing THE Potential

CIP

WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?

*Working, preparing and managing data, mainly statistical for planning and decision.*

HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?

☒ News show (tv)

Which one? *Regional and National information channels*

☐ News application (phone)

Which one? \_\_\_\_\_

☐ Newsletters

Which one? \_\_\_\_\_

☐ Eurofish Magazine

☒ Colleagues

☐ Other: *Internet*

DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?

*To make the contents more practical, with more examples, and more adapted to agri-fisheries.*



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## Evaluation form

### First pilot course Azores

Thank you for participating in the first pilot course of the Catching the Potential project! We are happy to receive feedback on the contents, teaching methods or trainers of this course.

#### QUESTIONS

#### WHAT DID YOU THINK OF THE COURSE IN GENERAL?

Lectures						Remarks
<i>Day 1</i>						
Introduction in sustainability					X	
Top 5 Challenges					X	
Marine Ecology				X		
Oil					X	
Solid Waste				X		
Fishing & society				X		
Communication					X	
<i>Day 2</i>						
Fisheries Management					X	
Fisheries Economy				X		
Air emissions and climate change					X	

**HOW FAMILIAR WAS THE CONCEPT OF SUSTAINABLE FISHERIES BEFORE THIS COURSE?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☒ 5 – 7,5
- ☐ 7,5 – 10

**HOW FAMILIAR IS THE CONCEPT OF SUSTAINABLE FISHERIES NOW?**

- ☐ 0 – 2,5
- ☐ 2,5 – 5
- ☐ 5 – 7,5
- ☒ 7,5 – 10

**WHAT TOPICS DID YOU LIKE THE MOST? WHY?**

I liked more the topics about ecology and ecosystems management.

**WHICH TOPIC DID YOU LIKE THE LEAST? WHY?**

I liked all ~~these~~ topics, they all ~~are~~ are important, I only wish we could have time to see all the videos.

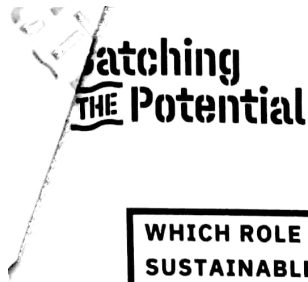
**HOW DID YOU LIKE THE VARIOUS TEACHING METHODS?**

(LECTURES, WORKSHOPS, ETC.)

All the presentation's was very well organized, and very dynamic.



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**WHICH ROLE DO YOU SEE FOR YOURSELF IN MAKING FISHERIES MORE SUSTAINABLE?**

I believe the communication with the professional of fisheries is very important, and the training ~~the~~ have to be a part of the management of fisheries. The information and the ~~decision~~ change in the human behavior is the key.

**HOW DO YOU KEEP TRACK OF NEW DEVELOPMENTS IN FISHERIES?**

- ☐ News show (tv)  
Which one? \_\_\_\_\_
- ☐ News application (phone)  
Which one? \_\_\_\_\_
- ☐ Newsletters  
Which one? \_\_\_\_\_
- ☐ Eurofish Magazine
- ☒ Colleagues
- ☒ Other: some regulation

**DO YOU HAVE ANY COMMENTS OR SUGGESTIONS FOR IMPROVEMENT?**

As <sup>was told</sup> ~~said~~ in the end discussion, adapt to the different locals is important.



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## ANNEX 6 EVALUATION OF ANA RITA RODRIGUES (EMA)

**How did the preparation and organisation of the first pilot course go? Describe the role your organisation played. Who was involved? What went well? What could be improved?**

*From my perspective the organisation went well, however with not much time to prepare but at the end of the day everything was well performed. The organisation was responsible to inform and promote the training to the stakeholders who might be interested on this subject, and to provide some materials needed for the training. On the next pilot information should be released earlier to be able to reach more people that might be interested.*

**How did the pilot course go? Describe your overall impression. How did the course leader do? What went well? What could be improved?**

*The pilot course was successful. Very straight forward and right to the main points to consider when talking about sustainable fishing. All the leaders were clear at sending the main message as well as the methods used to make it more interactive.*

**Give your opinion on the content of the pilot course. Describe which subjects were useful and which subjects could be improved. Are there any subjects that should be left out next time, or are there any subjects that were missing and should be included? Make sure to provide reasons, examples and/or lecture specific details when needed.**

*In my opinion all content of the pilot is needed and useful for this training. All very well developed. The only thing that is missing is maybe more content about the reality that happens in Azores, that should be happening on the 2 pilot with fisherman as audience.*

**Give your opinion on the course set-up and the different teaching methods. Any changes needed?**

*I'm happy with the course set-up and all the different teaching techniques used by the leaders. I have learned new ones myself such as Kahoot, which I think is really useful and interactive to learn in a playful way.*

**How was the engagement and participation of the fishers? Describe examples when needed.**

*In this case the participants were stakeholders, with the purpose to learn how to do the training. From my perspective and talking with the participants they have shown engagement and motivation for this project.*

**How did the practical organisation of the course go (course venue/# participants/catering/course materials/communication with participants etc.)? Describe examples when needed.**

*The practical organisation went well. Everyone was highly interested and participative at all activities. Catering had good presentation as well as the tasting. Some of the course materials were improvised with what school have in inventory, but I didn't find it a problem because it all worked well.*

**What are your three main lessons-learnt from this pilot course?**

*Importance of communication, fishing economics and management.*

**In your opinion, what is the next step that the CTP project should take to implement sustainable fisheries training in the Azores?**

*The next step will be the 2 pilot, this time with fisherman in order to educate them more about the issues of unsustainable fishing, and what is the options to improve behaviours at sea.*

**How did you experience the cooperation with CTP partner ProSea? What went well? What could be improved? Please address both the development and their role in the execution of the pilot course.**

*The experience with ProSea has been very productive so far. A lot of learning with people who has a lot of experience and knowledge about these subjects in different countries, which is important because we all share different cultures.*

**Give your impression of how fishers benefited from the course.**

*Fisherman will benefit from this training by having a better conscience about what's the real meaning of sustainable fishing, understanding a lot more about marine ecology (ocean dynamics), how to do a better job at preventing pollution, fisheries economics, and management as well as their own rights and working conditions. Also, how to communicate better between themselves.*

**Any other remarks?**

*Don't know if this idea fits this, but I think getting fisherman rewarded when they make sustainable choices would be a good way to motivated them to be more sustainable.*

## ANNEX 7 VISIT TO OMA

We were invited to the Observatório do Mar dos Açores (OMA), located in an old whaling station in Porto Pim, and shown around by employees Ana Luísa Barata Valentim and Maria Joana Cruz on Thursday the 9<sup>th</sup> of March 2023. OMA develops and carries out educational courses for all ages in the Azores. Children are a substantial target group of the NGO, and they often give courses to up to 500 children a month. Topics of these courses include, but are not limited to marine history, oceanography, and sustainable fisheries.

We were shown various interactive games OMA had created for children at school and booklets containing relevant information regarding Azorean fisheries (see figures below). Both Ana and Maria were enthusiastic about the project and willing to help with the second pilot. They gave us their contact details and indicated that another employee would also be available to aid with preparations during the September period.



*Trainer Tamar Poppelier being shown interactive games for children at OMA by Ana Luísa Barata Valentim.*



Materials and booklets containing relevant information on sustainable fisheries in the Azores.

## ANNEX 8 OUTLINE ENVIRONMENTAL MANAGEMENT TRAINING EMA

### Ecology and environmental fundamentals

- Ecology and concepts associated
- Biotic relationships
- Interaction between men and environment

### Legislation and politics of environmental fisheries

- National environmental legislation relevant for maritime activities
- Legislation and fishing politics: norms and regulations regarding minimum mesh sizes, closed seasons and other regulations governing the fishing activity.
- Control and fisheries inspection
- Code of conduct for responsible fishing

### Sustainable development

- Renewable and non-renewable resources
- Overexploitation of natural resources
- Ability to renew and regenerate
- Rational exploitation of resources

### Vessel Management

- Attitudes and behaviours that contribute to the degradation of the environment
- Environmental control practices on board
- Rational fuel consumption
- Importance of fuel costs in the commercial operation of a vessel
- Fishing planning taking fuel management into account
- Management of consumer goods on board
- Vessel energy management
- Types of waste
- Waste generated on vessels
- Waste associated with cargo
- Fish waste

### Waste management

- Collection
- Transport
- Storage

- Treatment
- Valuation
- Elimination

### Renewable energy

- New technologies with reduced impact
- Renewable energies that can be used on board vessels