

ANNEX 2



GREEN TO BLUE: IMPROVEMENT OF SUSTAINABILITY COMPETENCIES IN THE FIELD OF FISHERY & AQUACULTURE

Result 2 COURSE PACKAGE AND TRAINING MANUAL

LEADING ORGANIZATION: ENALEIA

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1. Introduction

This document is a detailed guide for participating organizations in the "Green to blue" training program. In it you will find the necessary information and instructions that will contribute to the correct construction of the training material. Information such as the schedule of presentations, the objectives of each presentation and of each module. Instructions for the correct construction of the educational material will also be provided, such as the format of the presentations, the content of the modules, points to be emphasized and points that the instructor should pay attention to.

When adapting the sessions to local conditions, it is important that these learning objectives are still achieved. There are some general lessons and objectives and more specific lessons for each topic/lecture of the training that will remain the same even if we attend to educate different fishing communities from many countries.

2. General lessons and Objectives

Those who have successfully completed the training will have improved in the following skills:

Communication, cooperation, and negotiation: These skills include the ability of learners to communicate their problems and difficulties with people of the same or different social status. Collaboration and negotiation will be the solution to issues that concern them and will help them to develop in their industry.

Raising awareness of the problem of plastic pollution: Trainees will learn about the current situation regarding plastic pollution and how it affects their work and their daily lives. They will also learn about ways in which they can help eliminate this problem by learning the value of recycling, collecting plastic from the ocean, and reducing its use.

Raising awareness of climate change: During the delivery of the training program, participants will become aware of the current situation of this problem. How climate change affects fisheries and the marine environment and how they can help reduce this phenomenon by making small changes in their daily lives.

Knowledge of marine ecology: Participants will understand the importance of marine organisms and ecosystems. This will enable them to work with respect for the environment and marine organisms.

Fisheries management practices: During the implementation of the program, trainees will be able to identify which practices of their work increase or decrease the sustainability of the fishing industry and the management of fish stocks.

3. Plan of Presentations and thematic

| PHASE 1 | | |
|---|--|-------------------------------|
| Presentation 1 | “Education in the fishing Communities” | |
| Topics | Estimated durations of each topic | |
| Introduction | 10 minutes | |
| Knowledge of Marine Ecology | 20 minutes | |
| Fisheries Management | 30 minutes | |
| BREAK | 15 minutes | |
| Raising awareness on the issue of Climate Change | 15 minutes | |
| Raising awareness on the issue of Plastic Pollution | 15 minutes | |
| Importance of communication and cooperation for fishing communities | 30 minutes | |
| Conclusions and closing of the lecture. | 15 minutes | |
| Presentation 2 | “Training for researchers, bodies related to fisheries, and decision-makers.” | |
| Topics | Estimated durations of each topic | |
| Introduction | 10 minutes | |
| Biodiversity and Fisheries, Fisheries vs Marine Mammals and Reptiles. | 20 minutes | |
| Sustainable fisheries management | 25 minutes | |
| BREAK | 15 minutes | |
| Raising awareness on the issues of Climate Change and Plastic Pollution | 25 minutes | |
| Importance of communication and collaboration | 25 minutes | |
| Conclusions and closing of the lecture. | 15 minutes | |
| | | 2 hours and 30 minutes |
| | | 2 hours and 15 minutes |

| PHASE 2 | | |
|---------------------------------|---|--|
| Presentation | “Joint Training of participating Groups” | |
| Topics | Estimated durations of each topic | |
| Introduction | 5 minutes | |
| Marine Ecology and Biodiversity | 20 minutes | |

| | | |
|---|------------|----------------------------------|
| | | 2 hours and 5 minutes |
| Sustainable fisheries management | 20 minutes | |
| BREAK | 15 minutes | |
| Plastic Pollution and Climate Change | 20 minutes | |
| Communication and collaboration between teams | 30 minutes | |
| Conclusions of the training program | 15 minutes | |

4. Phase 1, part 1 “Education in the fishing Communities”

4.1. Introduction

In the introduction section the instructor should introduce himself to the trainees. The estimated time allotted for the introduction to both phase one presentations is considered sufficient for the instructor to accomplish the following:

1. First, to welcome and thank the attendees for their participation in the educational program.
2. Then introduce him/herself to the trainees creating a bond of familiarity between them.
3. Then to get to know the trainees, either through discussion or by addressing the word in turn.
4. Briefly present to the attendees the program of presentations and the topics of each presentation.
5. Finally, to explain to the trainees the purpose of the training program.

4.2. Knowledge of Marine Ecology

In this section, the instructor will talk about the importance of water resources, the marine ecosystem, the organisms that inhabit it and the types of shelters.

It is important to mention the importance of ecosystems, elements, and organisms (large or small) which on the one hand are not important for humans, as they are not exploited economically, but on the other hand are an important link in the proper functioning of ecosystems. For example, phytoplankton, small fish, marine mammals and even a Cnidaria or echinoderm. In discussing the importance of organisms for the

marine environment, extensive reference can be made to the importance of biodiversity.

What must be avoided during training is to give fishermen responsibility for any damage that may have been caused to some of these organisms or ecosystems by the way they work. We must also be careful that fishermen may be aware of the material we are trying to present to them, however, from a practical point of view and without the necessary terminology. For this reason, the necessary filtering of difficult concepts and the presence of local names next to the official names is welcome.

The subject of this presentation is given for the purpose of finding rich photographic and audiovisual material, so it is preferable to use pictures rather than words.

Questions for discussion towards the fishermen are also suggested which can warm up the atmosphere during the training and increase the intimacy of the trainers with the trainees.

4.3. Fisheries Management

The proper and sustainable management of fisheries is the most crucial factor for the existence of the fishing profession in the years to come, as well as for the protection of marine ecosystems and organisms.

The instructor in this lecture should refer to the definition of good fisheries management. Where can its correct application lead to and where can its wrong application lead to? Are the laws in force in the European Union all that fishermen and the seas need for their sustainability or is more needed?

This section is given for the existence of activities between the audience and the presenter. Activities which can assist in making messages easier to understand. For example, at the beginning of this module, the trainer can ask the trainees to discuss and present, in order of priority, the problems they face in their workplace. They can discuss things they would like to change in the legal framework of their work, always with the aim of making the fishing profession sustainable. They can also present the phenomenon of mismanagement of water resources through the example of the tragedy of the commons.

Additional help in understanding the content of the presentation can be given by the existence of images or audio-visual material to interpret some concepts.

What must be avoided during training is to give fishermen responsibility for any damage that may have been caused to marine organisms or ecosystems by the way they work. We are trying to help them understand the concept of sustainable fishing, not just to point out that they are fishing the wrong way all the time.

4.4. Raising awareness on the issue of Climate Change

The phenomenon of climate change has significantly affected terrestrial and aquatic ecosystems since the last decades. Even the smallest changes that can be caused by this phenomenon (for example the arrival of a small species of fish in an area) can have quite a significant effect on that place for years to come.

In this section the instructor should divide the burden of the presentation into two parts.

1. First, to show the trainees the importance of climate change and how it affects their field of work. From how it can change ecosystems to how it can affect them economically.

2. Then to show ways in which the trainees can reduce their carbon footprint, both in their daily life as citizens and in their field of work. As well as ways to combat climate change and exploit it (for example fishing of migratory species).

Additional help in understanding the content of the presentation can be given by the existence of images or audio-visual material to interpret some concepts.

4.5. Raising awareness on the issue of Plastic Pollution

The problem of plastic pollution is a major cause and catalyst for the destruction of aquatic ecosystems and organisms.

In this section the trainer must present to the audience some characteristics of solid waste. For example, what are they, in what percentage are they and where in the water column. What effects can they cause? Do these effects stop only at the environment? What happens in organisms and even in humans?

Note: The trainer at this point should be careful to emphasize the effects of plastic pollution on things that the trainee directly depends on. For example: Effects of plastic pollution on catches is more important to fishermen than the effects of plastic pollution on marine mammals.

Finally, in this section to present ways in which fishermen can help in the fight against plastic pollution and be a solution to this problem.

It is particularly important that the instructor does not assign responsibility to fishermen for the state of plastic pollution in the marine environment.

Additional help in understanding the content of the presentation can be given by the existence of images or audio-visual material to interpret some concepts.

4.6. Importance of communication and cooperation for fishing communities

This chapter is perhaps the most important of what has been presented for the trainees. Communication is the key to proper cooperation and harmonious competition between colleagues. Also, communication is the key ingredient for making demands or creating collaborations with other bodies, whether of a higher or lower social status.

For both the first and the second presentation of phase 1 the content of this section will be the same, with the difference of the recipient each time.

In this section it is suggested that the trainer follow the "we learn from our mistakes" method. Initially, to carry out two or three (if time permits) activities together with the trainees. Then these should be discussed and conclusions and moral lessons from these activities should be given. As long as the messages that the trainer wants to pass through the activities have been interpreted then he can continue the presentation and explain how proper communication, negotiation and communication can help to develop their profession and solve problems.

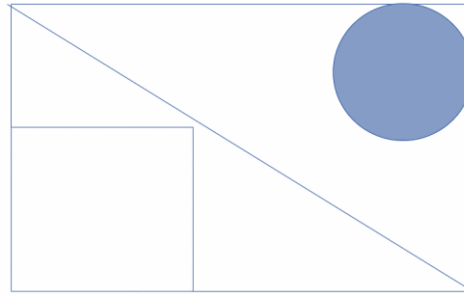
Examples of activities that can be presented:

1. Understanding messages (5 minutes):



The trainer presents a picture, and the trainers have to answer what they see. The instructor notes the answers and reads them at the end. What comes out of it? For the same thing (ex. A picture of a cat), the trainees will give different answers depending on their approach (some may say it's just a cat, some may say it's an angry cat, or a bored cat, etc.). So even in real life we must consider that others may have a different opinion on the same issue.

2. Describing and transferring a message (15 minutes):



In this activity the learners must choose one person from among themselves. That person will be given a printed intricate design that no one else will know. The goal is for the selected person to describe to the others what is depicted in the drawing and for them to capture it on paper. It is almost certain that not everyone will be able to have the same or come close to what the person describes. After a while, the audience will choose another person to help describe. Every few minutes another member will be added to those who describe (max 5 people). Whether they succeed in describing the message to the others or not, several conclusions can be drawn from this activity.

- a) We do not all perceive the same message
- b) We choose people we trust to represent us in making decisions, in a difficult moment, in a problem.
- c) If the problem is discussed between individuals, there are more chances of solving it than simply having an unbiased point of view.

Additional help in understanding the content of the presentation can be given by the existence of images or audio-visual material to interpret some concepts.

4.7. Conclusions and closing of the lecture.

With the end of the previous section the first presentation has come to an end.

The trainer can refer epigrammatically to the conclusions of the modules which were presented to the selected group.

It should also be mentioned that the next lecture will be attended by people from different agencies to discuss possible solutions to their problems.

An important goal is to discuss each group's perspective so that the other understands their perspective, and then find a middle ground that will make as many people happy as possible.

5. Phase 1, part 2 “Training for researchers, bodies related to fisheries, and decision-makers.”

5.1. Introduction

In the introduction section the instructor should introduce himself to the trainees. The estimated time allotted for the introduction to both phase one presentations is considered sufficient for the instructor to accomplish the following:

1. First, to welcome and thank the attendees for their participation in the educational program.
2. Then introduce him/herself to the trainees creating a bond of familiarity between them.
3. Then to get to know the trainees, either through discussion or by addressing the word in turn.
4. Briefly present to the attendees the program of presentations and the topics of each presentation.
5. Finally, to explain to the trainees the purpose of the training program.

5.2. Biodiversity and Fisheries

In this section, the instructor will talk about the importance of water resources, the marine ecosystem, the organisms that inhabit it and the types of shelters.

It is important to mention the importance of ecosystems, elements, and organisms (large or small) which on the one hand are not important for humans, as they are not exploited economically, but on the other hand are an important link in the proper functioning of ecosystems. For example, phytoplankton, small fish, marine mammals and even a Cnidaria or echinoderm. In discussing the importance of organisms for the marine environment, extensive reference can be made to the importance of biodiversity.

The subject of this presentation is given for the purpose of finding rich photographic and audiovisual material, so it is preferable to use pictures rather than words.

Questions for discussion towards the audience are also suggested which can warm up the atmosphere during the training and increase the intimacy of the trainers with the trainees.

Trainees this time, may be of higher educational level, so it is appropriate to present everything based on academic references.

5.3. Sustainable fisheries management

Proper and sustainable fisheries management is the most critical factor for the existence of the fishing profession in the years to come, as well as for the protection of marine ecosystems and organisms.

The instructor in this lecture should refer to the definition of good fisheries management. Where can its correct application lead and where can its wrong application lead? Are the laws in place in the European Union all that fishermen and the seas need for their sustainability, or do they need more?

This section is given for the existence of activities between the audience and the presenter. Activities that can help facilitate understanding of messages. For example, at the beginning of this unit, the trainer might ask the trainees to discuss and present, in order of priority, the problems they think the fishing industry is facing.

They can discuss things they would like to change in the legal framework of fishing, always with the aim of making the fishing profession sustainable.

The phenomenon of mismanagement of water resources can also be presented through the example of the tragedy of the commons.

Additional help in understanding the content of the presentation can be given by the existence of images or audio-visual material for the interpretation of some concepts.

Trainees this time, may be of higher educational level, so it is appropriate to present everything based on academic references.

5.4. Raising awareness on the issues of Climate Change and Plastic Pollution

In recent years, the phenomenon of climate change and plastic pollution have plagued marine ecosystems and organisms.

First, the instructor must make a brief explanation of the definitions of these problems. It is suggested that they present statistics (tables, diagrams) showing the effects of climate change and plastic pollution on fisheries.

Then, through a discussion with the attendees to present how fishing can help combat these problems from a small percentage to significant ones.

Regardless of the students' scientific level, the presence of images and audio-visual materials, if used correctly, can further help the understanding of the concepts.

5.5. Importance of communication and collaboration

This chapter can be the same for the two groups. For more information check back to chapter 4.6.

5.6. Conclusions and closing of the lecture.

With the end of the previous section the second presentation has come to an end.

The trainer can refer epigrammatically to the conclusions of the modules which were presented to the selected group.

It should also be mentioned that the next lecture will be attended by people from different agencies to discuss possible solutions to their problems.

An important goal is to discuss each group's opinions so that the other understands their perspective, and then find a middle ground that will make as many people happy as possible.

6. Phase 2, “Joint Training of participating Groups”

Perhaps the most important and critical of the presentations in this educational program. As each group should mix both in its distribution in space and in its ideas and opinions with those of the other group.

Each of the following modules will be presented in the form of activity and discussion between the learners.

- I. First, group members will stand up and discuss the question posed at the beginning of the chapter.
- II. Then, given a few minutes, they will write down the 5 solutions they propose.
- III. The solutions of both groups will then be discussed and presented out loud in the room for the other people to hear.
- IV. Finally, the most difficult part of this activity is to write 6 new proposals/solutions which will be decided by both groups at the same time.

These are either combinations or variations of the proposals submitted at the beginning. Each group will defend its point of view with bargaining and dialogue.

In this way we strengthen the cooperation between the people of the same group. But we also make these people communicate and cooperate with the people of the other group, increasing the ability of negotiation.

The trainer's role in the second phase is more of a facilitator role. He/she should give the participants the correct instructions for the questions in the modules, respect the

times required to complete the questions and maintain order in the room as the intense activity and discussions can raise the voices.

6.1. Introduction

In the introduction the instructor will greet and thank the attendees for making it to the final part of the training program.

Attendees will be told not to sit in the room as two separate groups but alternate with people from the other group. In this way, it will be possible to create familiarity between the groups and to bridge the gaps that may have been created from the past.

The instructor will briefly review the concepts presented in the previous training, and briefly refer to the modules and topics to be covered.

It is worth mentioning at this point that it is not just a lecture in which some topics are presented. It is a discussion to find solutions about issues related to the thematic of the previous lectures.

6.2. Marine Ecology and Biodiversity

Some of the questions that can be the subject of discussion in this section are:

1. What are the 5 most important organisms in the sea?
2. What are the 5 ways we can protect marine ecosystems?
3. Give 5 proposals for strengthening biodiversity in marine ecosystems.

6.3. Sustainable fisheries management

Some of the questions that can be the subject of discussion in this section are:

1. What are the 5 changes that could bring about the proper sustainable management of fisheries?
2. What are the 5 disadvantages of modern fishing as it is practiced now?
3. What are the 5 most important impacts of fishing on marine ecosystems?

6.4. Plastic Pollution and Climate Change

Some of the questions that can be the subject of discussion in this section are:

1. What are the 5 solutions to the issue of plastic pollution and climate change that fisheries can offer?
2. What are the 5 most damaging fishing activities that mitigate these problems?
3. What are the 5 most important problems from climate change and plastic pollution and 5 proposals to solve them?

6.5. Communication and collaboration between teams

The 2 teams are now familiar with the matter of communication and collaboration, and how this can help in achieving the goals of both teams.

The trainer can conduct a short communication activity between the two groups.

For example, the Mirror game:

Mirror is one of the most straightforward nonverbal communication games. Players partner up and face each other. One player is the leader, and the other the follower. The leader begins to move without speaking, and the follower matches each movement. Participants must rely entirely on body language. After a few minutes, the players switch roles and repeat the exercise.

This will be followed by a short lecture in which the trainer will present successful and unsuccessful examples of cooperation between fishermen and other agencies.

6.6. Conclusions of the training program

With the completion of the previous module comes the end of the second phase of the educational program.

The instructor should say a closing sentence that could be a summary of the whole educating program and then to thank the attendees of both groups who participated and helped to conduct the lectures properly.

To better implement future training programs, it is recommended that at the end the trainees be given a short questionnaire with questions aimed at evaluating the training material.

7. Common practices for the construction of presentations

For the correct and uniform construction of the educational program, below are instructions for the construction of the presentations.

1. The common template to be applied by the creators of the educational modules. (Cover, change chapters, main body of presentations, break slide, end of presentation):
2. The Font proposed to be used is: **Roboto Black** either with the white color (#F8FBFD) or with a dark blue one(#053D57) whenever it needs to be changed.

Some guidelines that can improve the presentation's appearance and make it easier to be understand:

- a) We include only one key concept per slide. So, in this way the learner focuses on one concept and what it encompasses as opposed to taking in a wealth of information at once.
- b) We try to remove as much as possible text on the slides by adding images, diagrams, or videos. So, the message we want to convey is easier to understand. We mention as text something quite important, or something that we want to draw the attention of the learner.
- c) It is better to put more slides with less time spent on each one than fewer slides with more time consuming on each one. Thus, the learner is not easily bored looking at the screen or listening to the instructor explaining the same matter for a few minutes.
- d) We try to add a bibliographic reference of the information we have used. It is an important persuasion of our speech even in cases where the audience does not belong to the highest level of education.
- e) The construction of the slides must be such that someone who does not pay attention to the instructor's words, can briefly understand the content and the basic concept we are talking about just by looking at the presentation at each time.

8. References

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