

"A new technology era in the Adriatic Sea – Big data sharing and analytics for a circular sea economy"

D3.3.2 Thematic seminar with primary and high schools students on the innovation in blue sectors

WP3 - Clustering thematic activities / A 3.3. Awareness raising and engagement

March 2023.

PP7 - Ministry of Agriculture, Directorate of Fisheries Contribution: PP4 - OGS

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CONSULTATION	Simone Libralato, Diego Borme, Igor Celić, Davide Agnetta, Rita Blanos, Flavia Rolli, Mounir Ghribi	OGS, IT	
	MBA Ivan Matijašević	ORKA PARTER Ltd.	
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D3.3.2 Thematic seminar with primary and high schools students on the innovation in blue sectors

(part 1)

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CONTENT

CONTENT	2
1. INTRODUCTION	
2. METHODOLOGY AND APPROACH	
2.1. INVITATION TO THE WORKSHOP	
2.2. WORKSHOP METHODOLOGY	6
3. MATERIAL USED FOR THE WORKSHOP	7
6. SURVEY RESULTS	9
7. PICTURES TAKEN AT THE WOKSHOP	16
8. CONCLUSION	20



1. INTRODUCTION

The Directorate of Fisheries, as part of the implementation of project activities on the TECHERA project, on November 21, 2022 in Zadar, organized a workshop for about 70 students of Sveti Filip i Jakov Elementary School and Stanko Ožanić Secondary Agricultural and Veterinary School from Zadar, with the theme of innovation in Blue sector and its subsectors (fishery and mariculture). The aim of the workshop was to familiarize students with the needs of the sector and identify ways to strengthen careers in fisheries as well as the development of future programs, and through interactive approaches to get feedback on students' interests in developing careers in the blue sector.

Project goals and opportunities for career development in the Blue sector are presented stated as: "Relying on the results from Act. 3.1. this activity will provide new ways to present the results or will engage with new targets. In particular, combined or harmonized results will be presented to a wider audience including stakeholders from the fishery sector, as well as the students from elementary and secondary schools for the first time. Forming demonstrative tools and guidelines are an essential part on how to transfer the harmonized cluster results to the blue economy sector ensuring durability of the results after the project itself and reinforcing results of Act.3.2. The results of this activity will represent a sort of preliminary applications of integration of projects thus paving the ground for the next programming period 2021-2027."

The workshop brought together eleven lecturers from the fisheries sector, from fishermen to breeders to representatives of the processing industry and representatives of the scientific community from Italy and Croatia.

The participants were also addressed by M.Sc. Ante Mišura, director of the Fisheries Administration, emphasized the ministry's role in the project in terms of disseminating the results and attracting young personnel to the sector and its long-term sustainability as a strategically important economic branch of the Republic of Croatia. Daniel Segarić, head of the Department for Agriculture, Fisheries and EU Funds at Zadar County, which is also a partner in this project, presented the role and possibilities of further development of the sector in the county.

The students had the opportunity to get first-hand information about the real market needs of specialist and other job positions in the Blue sector. One of the goals of the TECHERA project is the development and promotion of careers in this sector. As part of the workshop, a quiz "For those who want to know more" was organized with questions from the field of marine resource protection and marine science with appropriate prizes provided by representatives of the sector, as well as a survey of students' interest in occupations in the blue sector.

The cooperation of scientists, the administration and the sector itself will contribute to the development of sustainable fisheries, which needs a whole spectrum of experts from different professions who will contribute to the sustainable development of fisheries with new ideas and innovative technologies.



The workshop ended with an online survey, and the feedback received on their view of the observed sector will be used as a basis for creating the Guidelines for the development of blue careers.

The workshop was covered with a lot of national online media, taking place in multiple different portals dealing with this subject, which could be found on the following links:

- MPS Uprava ribarstvo > U Zadru održana radionica o razvoju karijere u plavom sektoru.
- U Inovaciji tematska radionica za učenike osnovnih i srednjih škola eZadar.hr (net.hr)
- Puno više ribe uskoro će se naći na školskim jelovnicima Zadarski list
- Zadarske učenike Ministarstvo poljoprivrede će upoznati s karijerom u ribarstvu (morski.hr)
- Ministarstvo će učenike upoznati s karijerom u ribarstvu Vijesti 057info Zadar
- PROJEKT TECHERA Učenici osmih razreda OŠ Sv. Filip i Jakov u Centru za kreativne industrije – Z NET

VIDEO:

- https://youtu.be/l3R19u-GrEc
- https://youtu.be/4yLye5LES8U

2. METHODOLOGY AND APPROACH

2.1. INVITATION TO THE WORKSHOP

Preliminary presentations were done in the mentioned schools to invite and introduce professors and students about the topics that will be discussed at the workshop. The sample picked are the students that are enrolled into the first year of studies in the high schools, and those taking the last semester in elementary schools. This has been done so those students can be connected at one spot. The elementary students were placed in the same room, with the high school ones which are already oriented, at least in some partial way to the agriculture, forestry, fishing and rural development. In that way the group of students had multiple benefits in sense of seeing the path for their future careers in Blue sector.

Pictures taken in pre workshop presentations:

M. of engineering, Valentina Andrić, Ministry of Agriculture, Directorate of Fisheries presenting the project goals and upcoming workshop to the students.













2.2. WORKSHOP METHODOLOGY

The methodology of the workshop itself has been adopted to young people which will join the labor market in a couple of years, to be educative and informing, but also to keep them paying attention, offering them a POP QUIZZ "Who wants to know more", where the students were competing by joining to online module with the series off questions from the knowledge they have learnt on the workshop. The winners and the fastest ones won the rewards (promo material organized by CRO MARIS Plc., PELAGOS NET FARM Ltd. and JADRAN TUNA Ltd. and MM MIŠLOV Ltd.



Picture of the Directorate of Fisheries principle, M.sc. Ante Mišura with the winners



3. MATERIAL USED FOR THE WORKSHOP

The workshop title has been defined as <u>BLUE INNOVATION SECTOR THEMATIC WORKSHOP WITH PRIMARY AND HIGH SCHOOL STUDENTS</u> TECHERA is an element of a cross-border cooperation project that aims to capitalize and connect data-driven approaches and practices in the fisheries sector towards a sustainable blue economy in the Adriatic. Therefore, 11 presenters from public and private sector have prepared their speeches and presentations with the following agenda and PPTs.



WORKSHOP AGENDA

MODERATOR: M. in Engineering, Valentina Andrić, Ministry of Agriculture

09:00 - 09:10 Registration

09:10 – 09:20 MofA role in project TECHERA / M.Sc., Ante Mišura, Ministry of Agriculture

09:20 – 09:30 Possibilities for the fisheries development in Zadar County / M. in Engineering, Danijel Segarić, Zadar County

09:30 – 09:40 Development of careers in Blue sector - project objectives / M. in Engineering, Valentina Andrić, Ministry of Agriculture

09:40 – 09:50 Application of innovative technologies and products in the fisheries sector development / M.Sc. Mario Lovrinov, MARIBU Ltd.

09:50 - 10:00 Working conditions on fishery boats / M. in Engineering, Alen Lovrinov, FC "Omega 3"

10:00 – 10:10 Self-employment in the fisheries sector / Marijan Maržić, fishery craft "MARIJAN"

10:10 – 10:30 Quiz - Who wants to know more?

10:30 — 10:40 Working conditions and needs for personnel at the tuna farms / M.Sc. in Economics, Ana Peroš, PELAGOS NET FARM Ltd. and JADRAN TUNA Ltd.

10:40 – 10:50 Working conditions and personnel needs at the white fish farms / M.Sc. in Economics, Andrea Jurčević, CROMARIS Plc.

10:50 – 11:20 Coffee break

11:20 – 11:30 Working conditions and needs for personnel in the processing sector / PhD. Krstina Mišlov, MM MIŠLOV Ltd.

11:30 – 11:40 The role of scientists in the development of fisheries / PhD. Simone Libralato and PhD. Diego Borme, OGS, Italy

11:40 – 11:50 From fishing practice to applied science, PhD. Lav Bavčević and PhD. Slavica Čolak, University of Zadar

11:50 – 12:20 Student survey / Ljiljana Kadija, Primary School St. Philip and Jacob

12:20 – 13:00 End of the workshop and distribution of appropriate materials



6. SURVEY RESULTS

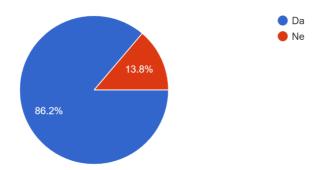
At the end of the workshop itself, an online survey was conducted, in which 58 students participated, who answered specific questions related to this sector. In addition to additional information through the survey, students were able to see for the first time what a complete questionnaire on preferences and employment opportunities in the Blue sector looks like in practice. We also gained an insight into how necessary these types of workshops are so that young people can be correctly guided around important decisions such as career paths, especially in coastal areas.

The results of the conducted survey

Below are the results of the survey, with the associated analyses.

1. Jeste li na ovoj radionici dobili nove informacije vezano za nastavak školovanja i zapošljavanja u području Plavih karijera vezanim uz sektor ribarstva?

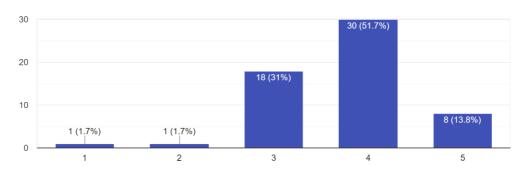
58 responses



86.2% of students think that the workshop is useful for informing about employability and future employment trends in the fishing sub-sector, while 13.8% of them think that they did not receive new information at this workshop. It is possible that this group either has a certain future career orientation or they are already familiar with the content of the Blue sector, considering that this is a low percentage compared to a representative group of respondents.

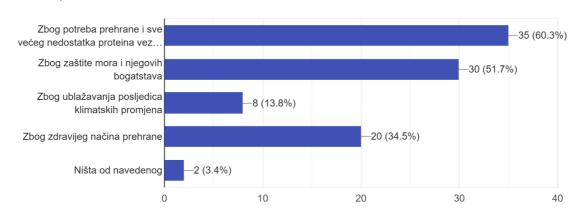


2. Koliko po Vama ribarstvo pridonosi čovječanstvu u pogledu osiguravanja hrane i zapošljavanja? ⁵⁸ responses



The majority of students believe that fishing greatly contributes to humanity in terms of providing food and employment, scoring 4 and 5 (65.5% of them), 31% of them believe that such a thesis contributes to a good extent, and a small percentage that fishing not important for humanity and employment. From this we can conclude that through the informative workshop and the school curriculum, they are well aware of the importance of fishing for humanity in terms of nutrition and sufficient resources for new generations, but also that this sector will grow and look for young workforce.

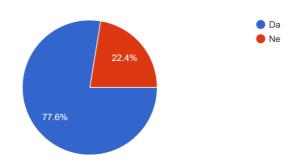
3. Zašto je važno upravljati ribolovom te imati uzgoj, preradu i trženje ribljim proizvodima? ⁵⁸ responses



From the questions about how important it is, and for what reasons, to have sustainable fishing, cultivation and processing, we see that the students are very aware of how it is necessary for the sake of the growing number of the world's population, which demands an increasing intake of protein, that fish is at the top of the food pyramid chain, how sustainable fishing and aquaculture are essential components of the protection of the sea and ocean and its natural resources, and how climate change can also be influenced by smart management of this sub-sector.

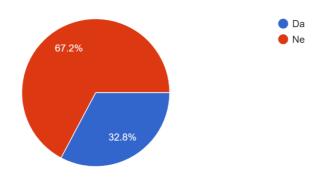


4. Dobivene informacije vam mogu pomoći prilikom donošenja odluke o daljnjem školovanju? ⁵⁸ responses



77.6% of respondents believe that the workshop contributed to an easier choice of decision in which direction to continue their education. It is possible that among the positive answers there are also those who know that they do not want to continue their career path in this sub-sector. However, the workshop itself was made attractive, with the aim of attracting young personnel to this sector, so such a claim is unlikely.

5. Možete li se vidjeti kao sutrašnji zaposlenik u sektoru ribolova? 58 responses



One of the key questions that follows on from the question above, where it was clarified what percentage of 77.6% want to continue their education in the area of this sub-sector. This figure is 32.8%. This is not a sufficient number compared to a representative sample, which will point to the fact that it is necessary to invest much more effort in the promotion of employment in this sector.

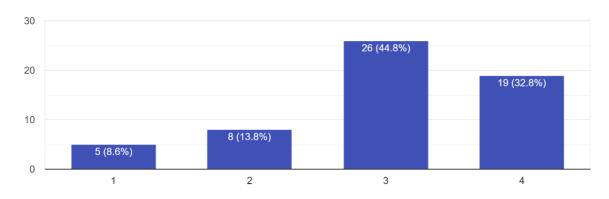


6. Koji dio ribarstva Vas najviše privlači? 58 responses



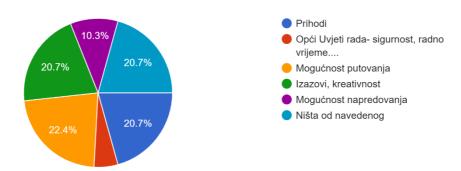
When asked which part of fishing attracts the students the most, it is evident that it is the fishing sector with 31%, and research of the sea through science and development. Given that a large part of the workforce will be concentrated in aquaculture in the future, it is clear that this sector needs strong promotion.

7. Koliko su vam važni uvjeti rada kod budućeg poslodavca? 58 responses



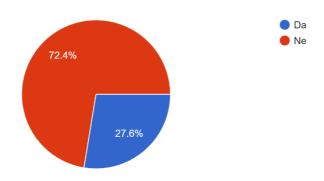


8. Što bi vas motiviralo za zapošljavanje u sektoru ribarstva? 58 responses



The majority of respondents consider that the working conditions of future employers are important to them, and the majority of them are most interested in the level of income, new challenges and creativity, and the possibility of travel. These areas should be used for future promotions of this sub-sector, because this is what young people expect from this industry.

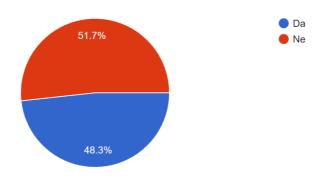
5. Jeste li zainteresirani za mogućnost zapošljavanja u sektoru uzgoja? 58 responses



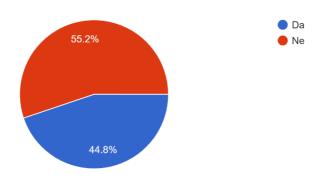
It is worrying to see the result that speaks of the interest of employment in the breeding or aquaculture sector, 72.4% of them are not seen in this sub-sector, which is crucial for supplementing the growing demand for fish products on the European market and which is impossible to satisfy only with fishing. It is necessary to pay more attention to this area in future workshops.



9. Imate li želju naučiti više o biologiji mora i baviti se istraživanjima iz tog područja? ⁵⁸ responses



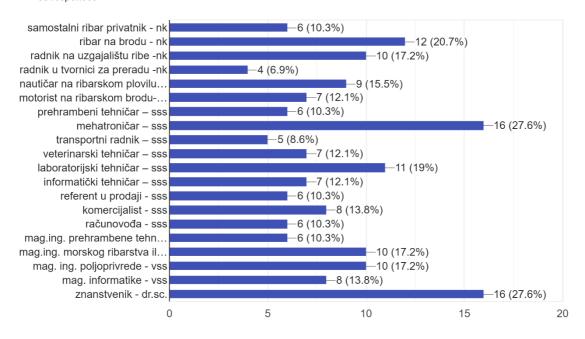
10. Zanimaju li vas inovacije, nove tehnologije, informatika, robotika u području ribarstva? ⁵⁸ responses



Given that the younger generations are more computer literate, they have the opportunity to join robotics and automation programs already in the early stages of their education, the answers to the 9th and 10th questions should be looked at with special attention. Why are the new generations not more interested in innovations, new technologies, research that has been made easier for them? It certainly remains as a suggestion for future workshops.



11. Za koje od ponuđenih zanimanja bi se odlučio/odlučila? 58 responses



The answer to the last question is interesting, how do young people see themselves as future scientists, mechatronics engineers, fishermen on a boat. One gets the impression that they are still not completely clear, which is understandable because they are in the adolescence phase which course to choose, which qualifications to focus on.

At the workshop, the employers presented all the benefits of working in this subsector, the reactions of the students were very positive. It is necessary to invest greater efforts in workshops and student encounters with the real sector, and even through visits to employers (processing factories, research laboratories, farms, etc.).



7. PICTURES TAKEN AT THE WORKSHOP

Directorate of Fisheries principle, M.sc. Ante Mišura, MofA and moderator and presenter, M. Of engineering Valentina Andrić, MofA





M. in Engineering, Danijel Segarić, Zadar County



M.Sc. Mario Lovrinov, MARIBU Ltd. and M. in Engineering, Alen Lovrinov, FC "Omega 3"







Marijan Maržić, fishery craft "MARIJAN" and M.Sc. in Economics, Ana Peroš, PELAGOS NET FARM Ltd. and JADRAN TUNA Ltd.





M.Sc. in Economics, Andrea Jurčević, CROMARIS Plc. and PhD. Krstina Mišlov, MM MIŠLOV Ltd.







From left PhD. Diego Borme, on right PhD. Simone Libralato, OGS, Italy and on the second photo from left PhD. Slavica Čolak, on right PhD. Lav Bavčević, University of Zadar



At the end of the workshop the promo materials were given to all of the participants as well as the letter of thanks for the participation for Schools to their principals.







8. CONCLUSION

The results of the held workshop showed that it is necessary to hold workshops in this subsector, but also in other sub-sectors of the Blue Economy, in order to provide young people with fresh and adequate information from the market and to keep them constantly informed. This is a serious deficiency in the promotion of careers, because there are very few workshops, especially those aimed at students and the young working population who live in coastal areas where industrial opportunities are great.

Recommendations for the promotion of blue careers and the attraction of young staff should certainly include frequent organization of such workshops, not only for students but also for the young active working population. Currently, there is no better instrument than the gathering of all stakeholders in one place, where it is possible for young people to interact with experts from all spheres of the Blue Sector. In addition to the workshops, it is also possible to organize targeted visits to schools, which would popularize this sector through short information about the news on the market, adapted to the ages.



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(part 2)

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PP4- National Institute of Oceanography and Applied Geophysics

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MEMBERS OF EXPERT TEAM	Simone Libralato, Diego Borme, Igor Celić, Davide Agnetta, Rita Blanos, Flavia Rolli, Mounir Ghribi	OGS	
CONSULTATION	M. of engineering Valentina Andrić M.sc. Mario Lovrinov	MPS MARIBU Ltd.	
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CONTENT

CONTENT	2
1. INTRODUCTION	3
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2.1. INVITATION TO THE WORKSHOP	4
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1. INTRODUCTION

The National Institute of Oceanography and Applied Geophysics - OGS, as part of the implementation of project activities on the TECHERA project, organized, on March 3 2023 in Trieste, a workshop for 27 students and 31 adults of the BLUESCHOOLMED, an Erasmus + funded project to support marine educational activities joining together 10 partners from four Mediterranean countries: France, Italy, Greece and Malta.

The aim of the workshop was to familiarize students with the Blue Economy and specifically on how the sustainable use of ocean resources can foster the protection of ecosystems and the economic growth. In addition, students were introduced to both study and career opportunities in the Blue Sector. At the end of the activities, a questionnaire was proposed to the students to get feedback on students' interests in developing careers in the blue sector.

Project goals and opportunities for career development in the Blue sector are presented stated as: "Relying on the results from Act. 3.1. this activity will provide new ways to present the results or will engage with new targets. In particular, combined or harmonized results will be presented to a wider audience including stakeholders from the fishery sector, as well as the students from elementary and secondary schools for the first time. Forming demonstrative tools and guidelines are an essential part on how to transfer the harmonized cluster results to the blue economy sector ensuring durability of the results after the project itself and reinforcing results of Act.3.2. The results of this activity will represent a sort of preliminary applications of integration of projects thus paving the ground for the next programming period 2021-2027."

1.1 AGENDA

The workshop was carried out in collaboration between OGS researchers and the WWF - Miramare Marine Protected Area and the activities were organized to make the contents easily understandable even by elementary school students. The first part of the workshop involved the following speakers:

Simone Libralato

Introduction of the scope of the event, in particular highlighting the impacts that humankind is producing on the sea and the need to integrate disciplines and monitoring in order to study the sea environment. Finding sustainable solutions means leaving to the next generations the opportunity to have the same goods and services that we have today from the sea.

Flavia Rolli

The mismatch between the training offer and the market needs is one of the main reasons for youth unemployment in the Mediterranean region. However, the Blue Economy offers great potential for jobs. A combination of higher education and vocational education and training (VET) is needed to create the right skillset to prepare your people for blue careers. Moreover, a multidisciplinary approach, such as the one adopted within the Blue Skills Initiative implemented



by OGS, is the key to equip the workforce with the skills to face the complexity of the blue economy.

Diego Borme

Description of the Adriatic Sea, considering its geographical position, the characteristics of its seabed and its hydrology and the distribution of fish fauna and its diversity within the entire Mediterranean basin. The composition of the Adriatic fishing fleet and its production was also explained, compared with other Italian fishing areas. Finally, particular emphasis was placed on the sustainable exploitation of resources.

Igor Celić

The ecological and fishery card game Fish and Ships was introduced to the students explaining through a playful mode the basics of an ecosystem functioning and its interaction with the fishery. The goal of the game is to create a fully functional ecosystem from primary producers to top predators, that is resilient to negative changes it might suffer and can be sustainably exploited by the fishery. The game engages the players into making choices on managing the equilibrium between the ecosystem's value and its biodiversity and exploiting for economic purposes by the fishery.

Saul Ciriaco

Description of the Adriatic Sea and its biodiversity using the large experience gained in years of protection, monitoring and doing research in the area. From the beauty of the many species to the functional importance of biodiversity, the presentation consisted in a virtual travel (with photos) on the biodiversity of the northern Adriatic Sea and its importance.

Davide Agnetta

The Sea is full of species some of them are of great value for humans. But we need to exploit them carefully in order to allow them to be exploited also by future generations. This imply considering all impacts humans produce on the marine environment and considering also the indirect cascading effects.



Agenda, Blue Schools event

03 march 2023, MEETING ROOM D, Via Beirut 2, Trieste

9.30 Introduction to TECHERA project (Simone Libralato, OGS)

9.40 Lecture on blue skills (Flavia Rolli, Mounir Ghribi, OGS)

9.40 -10:00 Game competition "How much do you know about the sea?" (ten general multiple choice questions)

10.00 Presentations:

The sea and its biodiversity (Saul Ciriaco, Miramare Marine Protected area)

Fishing in the Adriatic Sea (Diego Borme, OGS)

Sustainable fishing (Davide Agnetta, OGS)

11.00 Playing for learning

Introduction to the fish N' ships game (Igor Celic, OGS)

Team game on fishing and sustainable consumption (WWF team)

12.10 Questionnaire for learning assessment and survey "what do you like about the sea - you would like to work in this field in the future"

12.30 Workshop closure



2. METHODOLOGY AND APPROACH

2.1. INVITATION TO THE WORKSHOP

The conception of the workshop took place thanks to the collaboration of the OGS press office and the National Association of Teachers of Natural Sciences, partner of the BLUESCHOOLMED project with the aim to introduce the Blue Economy to school education and support students to be aware of the blue economy and culture and learn how to build a sustainable future in coastal areas. Schools and project partners were then invited to participate in the workshop on Blue Economy and Sustainable Fishing organized at the OGS headquarters.



2.2. WORKSHOP METHODOLOGY

The workshop included a plenary session with a general introduction to the TECHERA project and its objectives. In addition, the opportunities for study and careers in the Blue Economy were presented. Subsequently, students were involved in play-based learning educational activities through which they understood the concepts of food web and sustainable fishing. To facilitate learning, the students were divided into two groups; the little ones were involved in educational activities proposed by the WWF while the older ones played Fish n' Ships, the card game developed within the FAIRSEA project. The workshop ended with a survey, and the feedback received on their view of the observed sector that will be used as a basis for creating the Guidelines for the development of blue careers.

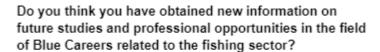


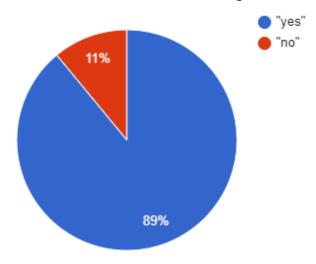
3. SURVEY RESULTS

A survey was conducted during the workshop in which 28 students participated, who answered specific questions related to this sector. In addition to additional information through the survey, students were able to see for the first time what a complete questionnaire on preferences and employment opportunities in the Blue sector looks like in practice. We also gained an insight into how necessary these types of workshops are so that young people can be correctly guided around important decisions such as career paths, especially in coastal areas.

The results of the conducted survey

Below are the results of the survey, with the associated analyses.

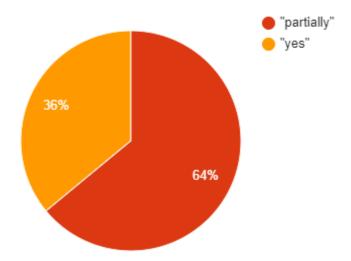




1. A majority of students (89%) think they have obtained new information on future studies and professional opportunities in the field of Blue Careers related to fishing sector, and only 11% think that the information received during the workshop were not sufficient. The positive outcome is promising since the surveyed students are from different countries and to our knowledge they were not biased towards Blue Careers, although we should keep in mind that we need more students for a representative group of respondents.



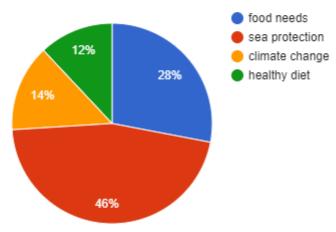
Fishing contributes to humanity in terms of food supply and employment?



2. The majority of students believe that fishing greatly contributes to humanity in terms of providing food and employment (64% of them), while the remaining believe that this contribution is only partial (36% of them). None of the students negated fisheries contribution to food supply and employment, therefore the students perception left the impression as they acknowledge the fisheries role in the human society.



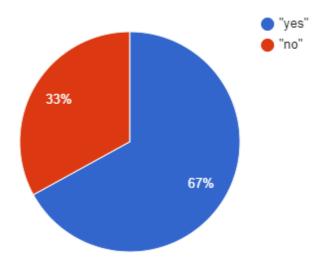




3. Our students had different views on the importance of managing fishing activities and having farms and industries for the processing and marketing of fish products our students had different views. The students view the management of sea related production activities mainly linked to the protection of sea (46%), and secondly for its food need for the human population (28%). The least important aspect viewed by the students is related to fight the climate change (14%) and for the diversity of the human diet (12%). From the acquired answers it is encouraging that the new generation of the students sees the importance of the protection of the sea, both the marine environment and by extension its resources. The low perception of other aspects, such as climate change and dietary diversification, might be due to the complexity of the problem and difficulty to comprehend such broad concepts. On the other hand, environmental protection and food requirements are more simple concepts, benefiting of vast media coverage.

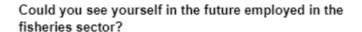


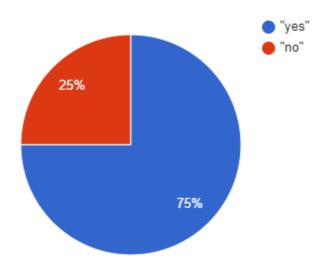
Can the information you have had today help you choose how to continue your studies?



4. The majority of the students answered positively that the information they had during this event will help them choose how to continue their studies (67%). On the other hand, one-third (33%) said that the presented information will not help them in future studies orientation. It is encouraging that the students gave positive responses, and those might evolve both to them choosing effectively a blue career, or otherwise at least understand better the complexity of the blue world and how to contribute to its improvement even with other careers. Same goes for the negative answers, which are not by default wrong, as they may just express that the students know they will pursue a career in fields not related to the blue world.

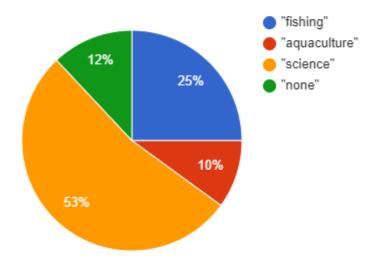






5. Three quarters of the students answered they see themselves in the future employed in the fisheries sector (75%). Although the number of the students are not a representative sample, this answer is still encouraging, since the field is very wide and there are a lot of opportunities, from actually fishing, to any of the steps that come before and after that, including preparation of ships and its equipment, food processing, marketing and sales.

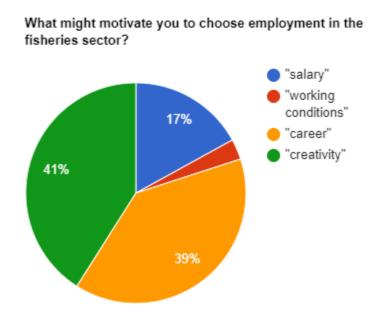
Which fisheries sector interests you most?



6. The majority of the students answered they might be interested in some of the sectors related to fisheries (88%). The most interesting sector is the scientific aspect of the fishery (53%), followed by fishing (25%) and aquaculture as the least interesting (10%).



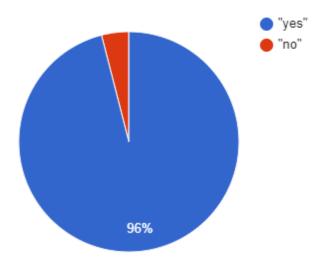
Scientific promotion and the fisheries are the sectors that are promoted the most, therefore the answer might be biased due to the lack of knowledge of the aquaculture activities. Given that the aquaculture activities are the one that are continuously expanding, more promotion should be addressed to it, since it can still prove to be interesting given the challenges in running an aquaculture farm.



7. The majority of respondents consider that the opportunity to have a career and express their creativity are the major motivators fir them in pursuing the employment in the fishery sector (respectively 39% and 41%). The salary results as a minor motivation factor (17%) and the least important is the working conditions (3%). These results indicate the promotion of the opportunities that the work offer might be the best selling card for boosting employment in this sector. On the other side, probably illustrating better the salaries and the working conditions to the possible candidates should be improved as this result might also suggest that they are not well informed of these aspects in the fisheries sector.

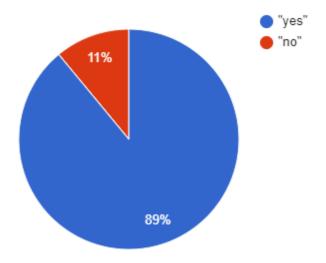


Do you have the desire to learn more about marine biology and research in this field?



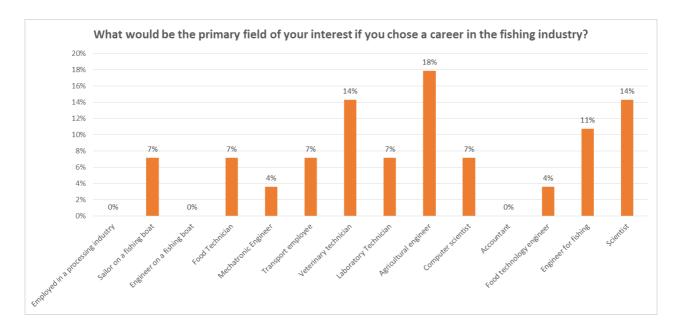
8. Almost all students expressed their desire to learn more about marine biology and research in the fisheries field (96%). The result is encouraging as it indicates a very high interest for the Blue World.

Are you interested in innovation, new technologies, information technology and robotics in the fisheries sector?



9. Similarly to the previous question, students indicate a high interest in innovation, new technologies, information technology and robotics in the fisheries sector (89%). This result also indicates the students' predisposition to look for opportunities and challenges that the sector might offer, motivated by their curiosity and the desire to bring changes.





10. At the last questions the students gave different preferences on what would be their primary field of interest for a career in the fishing industry. The four most notable preferences were to be an agricultural engineer (18%), veterinary technician (14%), scientist (14%) and the engineer for fishing (11%). Less interest was expressed for being a sailor on a fishing boat, food technician, transport employee, laboratory technician, computer scientist (all with the share of 7%). The least preferences were expressed for a mecatronic engineer and a food technology engineer (both 4%) and no interest for the processing industry, engineer on a fishing boat and an accountant. This question gives an idea how the different task are perceived and how desiriable they might be to young people. We should also keep in mind that this preferences should not be confused with the future careers that the students desire in previous question, but however is a good indication on how they are perceived if a choice for a future work should be among the proposed options.



7. PICTURES TAKEN AT THE WORKSHOP



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8. CONCLUSIONS

The results of the held workshop showed that it is necessary to hold workshops in this sub-sector, but also in other sub-sectors of the Blue Economy, in order to provide young people with fresh and adequate information from the market and to keep them constantly informed. This is a serious deficiency in the promotion of careers, because there are very few workshops, especially those aimed at students and the young working population who live in coastal areas where industrial opportunities are great.

Recommendations for the promotion of blue careers and the attraction of young staff should certainly include frequent organization of such workshops, not only for students but also for the young active working population. Currently, there is no better instrument than the gathering of all stakeholders in one place, where it is possible for young people to interact with experts from all spheres of the Blue Sector. In addition to the workshops, it is also possible to organize targeted visits to schools, which would popularize this sector through short information about the news on the market, adapted to the ages.