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BlueDiversity – ITHR0200404

Deliverable 1.3.1
White Paper to BlueDiversity

**Activity 1.3 – Targets definition
(Version 1.0 – February 2025)**

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BlueDiversity
Shared BLUE knowledge and skills to sustain BIODIVERSITY in mariculture

Project Details

Project Acronym	BlueDiversity
Project Title	Shared BLUE knowledge and skills to sustain BIODIVERSITY in mariculture
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Deliverable Details

WP1	State of the Blue Art
Activity 1.3	Targets definition
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PP contributors	LP1, PP3, PP4, PP5, PP6, PP7

REVISION TABLE

Version	Name(s)	Date	Description
V 0.1	Josip Boban	October 2024	Description of the activities, Instruction to all co-authors, Brainstorming, Bibliographic research
V 0.2	Josip Boban	January 2025	First draft
V 0.3	Josip Boban	February 2025	Deliverable revised
V 1.0	Josip Boban	February 2025	Deliverable submission

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ABOUT THE **BlueDiversity** PROJECT

The **BlueDiversity** project is part of the Interreg Italy-Croatia 2021-2027 Programme, co-funded by the European Union. The **BlueDiversity** project's priority is priority 2 (Green and resilient shared environment). The Specific Objective is SO2.2: improve the protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reduce all forms of pollution. In light of this, the **BlueDiversity** project aims at enhancing the ecosystem services-based practices, which allow the sustainment of local ecosystems' preservation through reducing human activities' impacts on biodiversity, while enhancing and developing economic and territorial opportunities.

To achieve the project's objectives, the Project Partners have the need to assess the State of the Art about the main biodiversity threats identified in the pilot areas, by analysing biodiversity, non-indigenous species, marine litter, and lagoon litter. The State of the Art analysis will also target, experiment and screen existing practices, innovations, resources available and attitudes of the ecosystem services end users in the context of the Adriatic Sea.

The Adriatic socio-eco-cultural features represent the common thread for the project actions, bringing relevant stakeholders of the blue economy and blue research to work together towards best and innovative practices with the common scope to develop a green and sustainable transition in the blue sector. In particular, the **BlueDiversity** project targets small and medium enterprises aiming to establish "living laboratories", providing institutional support on the one hand, and placing them as didactic examples at the much-needed interface with schools and younger generations, enhancing the framework of the blue economy with a multilateral approach that includes institutional actors and citizens.

The Adriatic Sea, shared by Italy and Croatia, represents one of the best examples of natural backgrounds in ecological terms, where the dynamics of co-creation, based on an intertwinement of tradition and innovation, can be established. The project aims to develop pilot activities that will experiment with innovative fishing gear to tackle the presence of non-indigenous species that seriously threaten the Adriatic coasts' aquatic ecosystems.

The **BlueDiversity** project is modular, aiming at fully replicable successful experiences, representing the actions' legacy and the core of a shift towards the blue economy. Such elements will be strategically disseminated targeting different institutional and non-institutional entities focusing on the capitalization of the knowledge, know-how and innovative instruments developed throughout the project and aimed at building a sound ground for future major innovative developments.

D 1.3.1 - EXECUTIVE SUMMARY

The BlueDiversity Project addresses the urgent need to balance biodiversity preservation with sustainable economic practices in the Adriatic region, focusing on Italy and Croatia. With the Mediterranean ecosystem threatened by invasive species, pollution, and unsustainable fishing practices, BlueDiversity promotes cross-border collaboration to equip stakeholders with innovative tools, skills, and methodologies. By incorporating sustainable technologies, educational programs, and circular economy principles, the project transforms these challenges into opportunities, ensuring long-term ecological and economic benefits for the region.

D 1.3.1 - LINKS WITH OTHER PROJECT ACTIVITIES

This activity relies on the data and deliverables produced by Activity 1.1 and Activity 1.2. The data will be used as a ground base for the next actions envisaged in the BlueDiversity project. A draft of a Roadmap (Activity 1.4) is proposed, through a White Paper, by LP1 and PP2, while agreed by all other PPS. This choice is linked to the necessity of giving consistency from a territorial point of view so that both, Italy and Croatia, will benefit on a larger scale of the project outputs and results. This draft will be submitted to 50 stakeholders per area (50 for Italy and 50 for Croatia) to have comments and review.

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Summary

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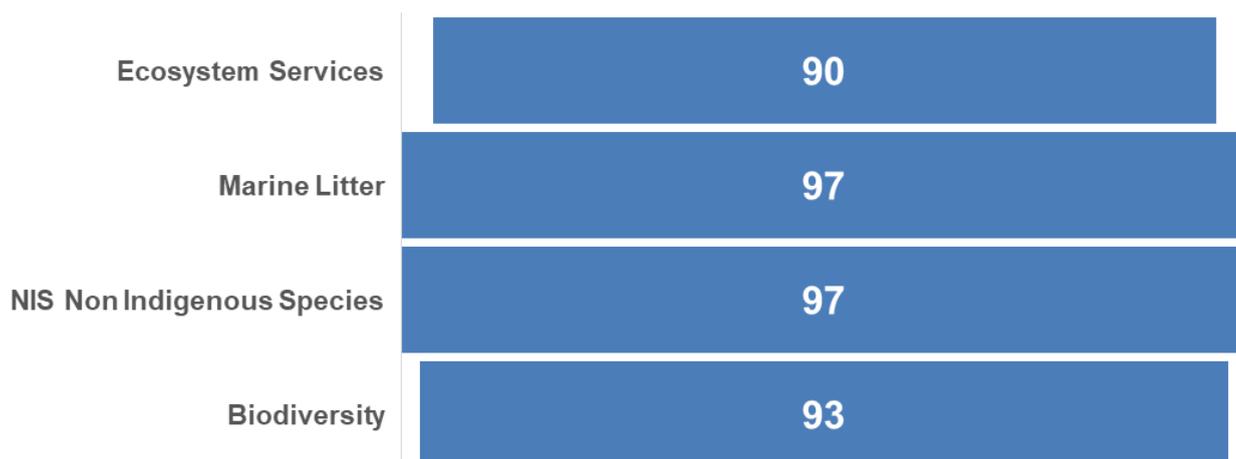**BlueDiversity**

1. INTRODUCTION

PROBLEM STATEMENT

What do we know about the seas in the past? Humans have always influenced the once-pristine waters. However, can we determine when the Adriatic Sea was truly pristine? Probably not, as evidence of human presence and impact on the sea dates back to the earliest written history in our region. Today, the changes occurring in the sea are happening at an unprecedented rate.

Even in recent history, human activities have had significant effects, whether through various pollutants or the targeted fishing of specific species. Furthermore, humans have connected two seas by building a canal, which has dramatically altered the biodiversity of the Mediterranean and other connected seas, with these changes continuing to accelerate.

Additionally, climate change is further impacting the marine ecosystem. But how aware are people of these issues, particularly those who rely on the sea for their livelihoods?

For what concern BlueDiversity topics, most of the respondents comprehend the terminology: 90% are familiar with ecosystem services, 97% recognize Marine Litter and NIS while 93% are aware of Biodiversity.

% of Awareness of BlueDiversity Topics in Puglia Pilot Area

Ecosystem Services	90
Marine Litter	97
NIS Non Indigenous Species	97
Biodiversity	93

In the Marche area, a compelling majority of respondents declare to know the topics investigated by BlueDiversity: 91% recognize the term Marine Litter, 82% NIS and 95% Biodiversity, Ecosystem Services represent the exception with almost half (52%) not understanding its meaning.

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% of Awareness of BlueDiversity Topics in Marche Pilot Area

Topic	Value
Ecosystem Services	52
Marine Litter	91
NIS Non Indigenous Species	82
Biodiversity	95
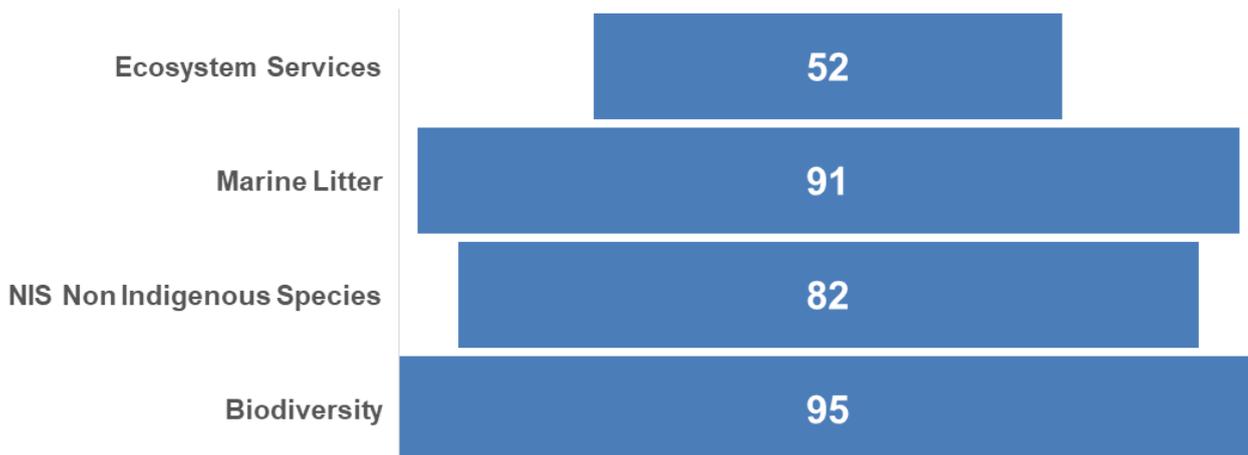
Most of the respondents are familiar with BlueDiversity terminology: 88% know about Marine Litter and Biodiversity, 94% recognize NIS and 70% are conscious of Ecosystem Services and its meaning.

% of Awareness of BlueDiversity Topics in Veneto Pilot Area

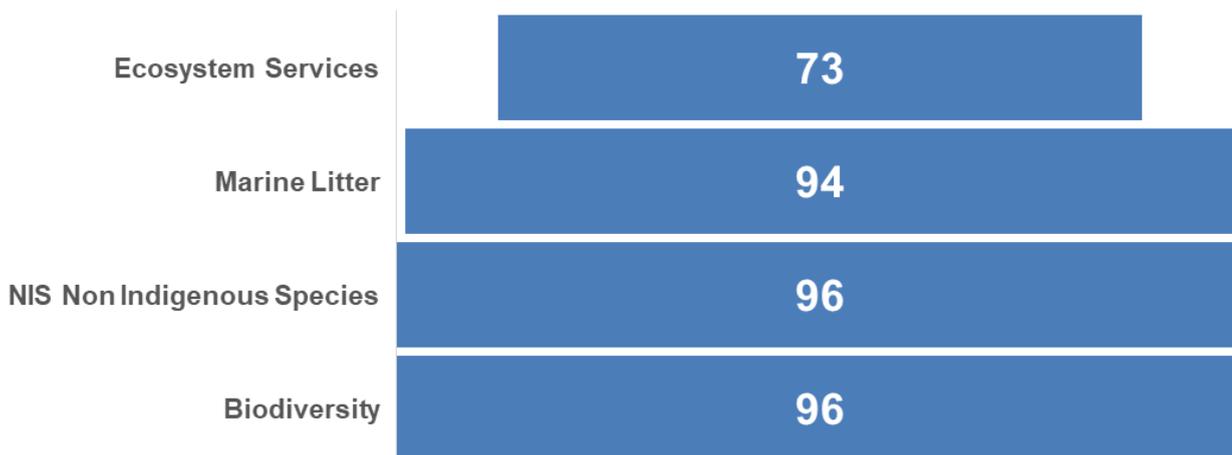| Topic	Value
Ecosystem Services	70
Marine Litter	88
NIS Non Indigenous Species	94
Biodiversity	88
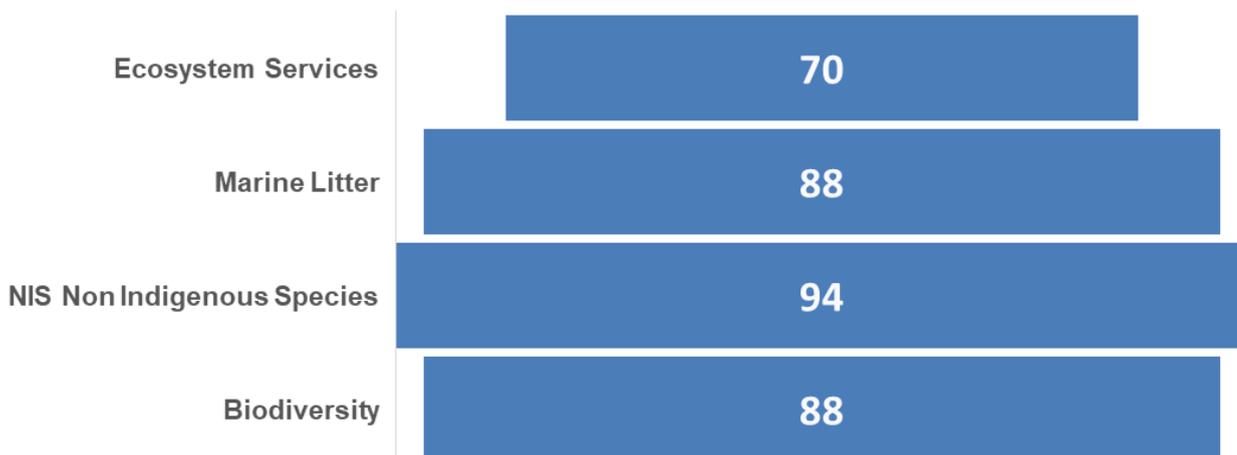
Respondents' knowledge of the BlueDiversity topics is assessed as: 73% are familiar with the meaning of Ecosystem Services, 94% Marine Litter and 96% are aware of NIS and Biodiversity.

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% of Awareness of BlueDiversity Topics in Croatia Pilot Areas

Topic	Value
Ecosystem Services	73
Marine Litter	94
NIS Non Indigenous Species	96
Biodiversity	96

The Adriatic Sea, shared by Italy and Croatia, faces escalating environmental pressures from climate change, pollution, and invasive species.

Determining the exact number of invasive marine species in the Adriatic Sea is challenging due to ongoing research and the continuous introduction of new species. A 2013 study identified 113 introduced species in Croatian waters, comprising 15 phytoplankton, 16 zooplankton, 16 macroalgae, 44 zoobenthic, and 22 fish species. Of these, 61 were classified as alien and 52 as introduced due to climate change.

In the past three decades, researchers have documented the arrival of 46 new fish species in the Adriatic Sea, which hosts over 460 fish species in total. Some of these newcomers are considered invasive, such as the devil fish (*Pterois miles*), first observed near Vis Island in 2021 and subsequently near Račišće on Korčula Island.

It's important to note that the number of invasive species can fluctuate due to factors like climate change, maritime activities, and ongoing scientific investigations. Continuous monitoring and research are essential to understanding and managing these species' impact on the Adriatic ecosystem.

One prominent example is the blue crab (*Callinectes sapidus*), a species that has a significant ecological and economic impact. This invasive predator disrupts local ecosystems and threatens native species, while its rapid population growth challenges traditional fishing practices.
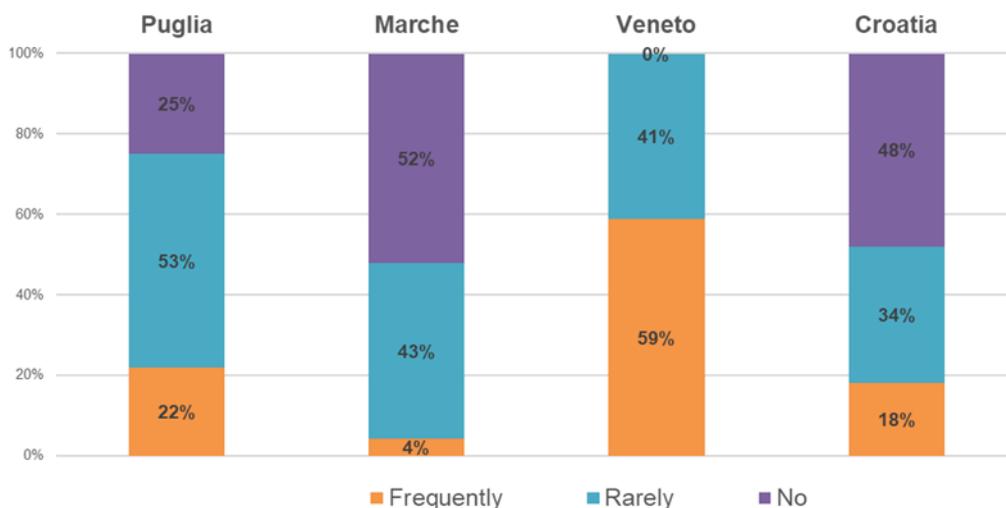
It is noteworthy to underline that the distribution of the Blue Crab is not uniform across the Pilot areas: in Venice Lagoon, located in the north Adriatic Sea, all respondents have encountered the Blue Crab; on the contrary, in central Italy Adriatic coast, in the Marche area, only one frequent spotting is reported.

Encounter with Blue Crab in BlueDiveristy Pilot Area

	Puglia	Marche	Veneto	Croatia
No	25%	52%	0%	48%
Rarely	53%	43%	41%	34%
Frequently	22%	4%	59%	18%

■ Frequently ■ Rarely ■ No

The attitude toward Blue Crab is generally negative, with the acknowledgement as a degrading factor for the local biodiversity scoring 66%, neutral opinion is highlighted by 22% and the consideration of the Blue Crab as a positive opportunity at a mere 11%.
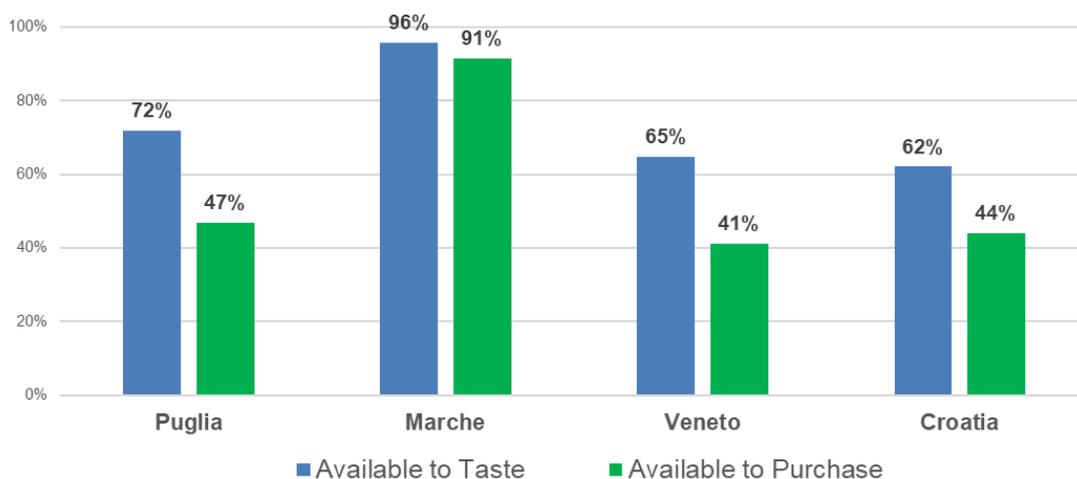
Accordingly, the availability of interviewees to taste this specific alien species at a local restaurant attest at 71%, while the option to buy commercially and cook first-hand the Blue Crab is feasible for half of the respondents (53%).

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Attitude toward Blue Crab in BlueDiversity Pilot Areas

Recent biodiversity data highlights additional invasive species, such as *Acanthophora nayadiformis*, an invasive algae impacting native habitats, and *Mnemiopsis leidyi*, a comb jelly destabilizing pelagic ecosystems, and many more. These species underline the need for adaptive management and sustainable solutions across the shared Adriatic Sea.

The general understanding is that visible marine debris, such as large plastic items, bottles, and other waste that floats on the surface, represents only a small fraction of the total marine pollution.

A significant portion of marine garbage is not visible to the naked eye, as it includes microplastics—tiny plastic particles smaller than 5 millimeters—that are often dispersed throughout the water column or buried in sediments. Some estimates suggest that visible debris (such as large plastic items) makes up about 10-20% of the total marine waste, while the remaining 80-90% could be in the form of microplastics or other non-visible materials.

These numbers can vary, but it is clear that non-visible pollution, especially microplastics, is a far more widespread problem in the oceans.

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CASE STUDIES

Several case studies serve as models for best practices that can be adapted to our pilot areas, demonstrating effective approaches to sustainable fisheries, coastal management, and marine conservation.

1. JAPAN'S SATOUMI APPROACH TO FISHERIES & COASTAL MANAGEMENT

Japan's Satoumi approach integrates human activities with ecosystem health, enhancing both biodiversity and local livelihoods. Unlike conventional conservation models that limit human intervention, Satoumi recognizes that well-managed human engagement can restore and improve marine productivity rather than degrade it.

Rooted in traditional Japanese coastal resource management, Satoumi principles are widely applied across Japan's fishing villages and coastal regions. Notable examples include:

Noto Peninsula, Ishikawa Prefecture – Community-led efforts restored seagrass beds, improving fish stocks.

Seto Inland Sea – Pollution controls and habitat restoration led to the revival of marine biodiversity.

Himi City, Toyama Bay – Seasonal fishing bans and self-regulated marine protected areas contributed to sustainable fisheries and increased fish populations.

Satoumi's success demonstrates the importance of local participation, adaptive governance, and blending traditional knowledge with modern science to achieve long-term sustainability in fisheries and coastal management.

2. CITIZEN SCIENCE FOR GREAT BARRIER REEF CONSERVATION, AUSTRALIA

Citizen science plays a crucial role in the protection and monitoring of the Great Barrier Reef, allowing for large-scale data collection while engaging local communities, tourism operators, and conservationists.

Key initiatives include:

Eye on the Reef (Great Barrier Reef Marine Park Authority – GBRMPA) – A long-term reef health monitoring program that collects data from scientists, marine tourism operators, and citizen scientists. Data on coral bleaching, marine debris, and invasive species is used for real-time conservation decisions.

CoralWatch (University of Queensland) – A global citizen science initiative where volunteers use Coral Health Charts to assess coral bleaching and submit observations via the CoralWatch app. This initiative increases public awareness while contributing valuable data for scientific research.

These programs highlight the power of community-driven conservation efforts, demonstrating how citizen engagement can strengthen biodiversity monitoring, reef restoration, and marine protected area management.

2. METHODOLOGY AND APPROACH

Considering the ecological characteristics of the area and the ecological preferences of the invasive blue crab species (Callinectes sapidus), we have selected six pilot zones to serve as the foundation for further research and the implementation of sustainable management practices. This process involved analyzing biological, physical, and socio-economic factors to ensure that the selected areas represent suitable habitats for this species and to facilitate effective monitoring of population dynamics and ecological impacts.

2.1. SELECTION OF PILOT ZONES

The selection of the six pilot zones was based on several key criteria: the presence of blue crab, the availability of suitable habitats such as shallow coastal waters and river estuaries, and the socio-economic significance of the area. The pilot zones encompass diverse ecosystems, providing insights into specific interactions between the blue crab and native species, as well as potential population management strategies.

BlueDiversity takes a multifaceted approach tailored to each pilot area's unique ecological characteristics. The methodologies applied across the six Adriatic pilot areas integrate sustainable ecosystem management, biodiversity monitoring, and stakeholder engagement.

2.2. INNOVATIVE TOOLS AND PRACTICES

Developing and implementing sustainable fishing gear and bio-based materials to reduce marine litter and mitigate the impact of invasive species. Project partners will develop new types of crab traps specially designed to catch blue crabs (*Calinectes sapidus*) to minimize their ecological impact. Traps will be spread to all pilot areas in which their efficiency will be tested. By using traps (in some areas with cooperation with fishermen) and ROUV (remote operating underwater vehicle) partners

will monitor the presence of invasive species in their pilot areas. Citizen science also plays a role in our project, empowering community members to actively participate in monitoring and understanding invasive species.

In applicable areas, best practices in mussel and fish farming, focusing on reducing plastic waste and optimizing biodiversity conservation are planned. Certain pilot areas don't have fish farms or mussel farms such as protected areas Neretva Delta and pilot areas around City of Split, so this part is not fully applicable in those areas.

2.3. EDUCATION AND SKILL DEVELOPMENT

Establishing "living laboratories" and training programs for biodiversity conservation and sustainable exploitation of invasive species to upskill local stakeholders, including SMEs, educational institutions, and community members.

By engaging and educating residents, tourists, and stakeholders in data collection and observation, we gain a more comprehensive picture of the ecosystem's dynamics. This collaborative approach not only enriches our knowledge base but also fosters a deeper connection with the natural environment, raising awareness about the impacts of invasive species and the importance of biodiversity conservation. Based on the results of the questionnaires it is visible that public opinion slightly differs from area to area. In the Marche region, people are more aware of the quality of blue crab as a good food resource and are more willing to taste and buy the product, so additional effort is needed to educate people in other regions in Italy and Croatia.

2.4. DATA-DRIVEN DECISION MAKING

Using molecular and ecological monitoring tools to track invasive species and their impacts, environmental DNA (eDNA) applications to track native and invasive species, particularly the blue crab (*Callinectes sapidus*).

Blue Crab chemical and biological analysis to assess to detect any form of possible pollution as well as the nutritional properties of the blue crab.

Using molecular and ecological monitoring tools (**Mussel Transcriptomic Analysis**) to assess environmental stressors like pollution and climate change effects. Sentinel organism used for research is *Mytilus galloprovincialis* where applicable. Based on the database, certain areas don't have developed populations of sentinel species.

Water quality testing to assess nutrient levels and prevent habitat degradation.

Promoting stakeholder data literacy to enable informed decision-making.

2.5. CROSS-BORDER COLLABORATION

Fostering partnerships between Italy and Croatia to co-develop replicable solutions addressing biodiversity challenges.

3. PROPOSED SOLUTIONS

3.1. COMBATING INVASIVE SPECIES

Innovative Fishing Techniques:

Innovative fishing techniques involve developing and disseminating specialized tools, such as sustainable traps, to manage blue crab populations effectively. These traps are designed to minimize bycatch, reduce environmental impact, and help control the spread of blue crabs. By using these sustainable trapping methods, fishers can support efforts to limit the negative effects of blue crabs on local ecosystems.

Commercialization Opportunities:

A sustainable ecosystem approach can also help localize the economy, bringing together local fishermen, restaurants, and locally based sustainable tourism. By sourcing seafood from responsible practices and incorporating blue crab management into local tourism efforts, communities can create a more resilient economy. Restaurants can feature dishes that raise awareness about invasive species while promoting the use of blue crabs in sustainable recipes. Tourism operators can develop eco-tours that educate visitors on the importance of controlling invasive species, all while supporting the livelihoods of local fishermen.

3.2. REDUCING POLLUTION AND MARINE LITTER

Promoting the adoption of circular economy principles in small-scale fishing.
Transitioning to biodegradable and recyclable materials in fishing and aquaculture gear.
In addition to supporting the local economy, these initiatives can also contribute to reducing pollution and marine litter. Sustainable fishing practices, coupled with active efforts to remove marine litter, can help protect local water bodies and reduce the amount of waste entering the sea.

Communities that prioritize both ecosystem health and economic development can create a cleaner, more sustainable environment, benefiting both people and wildlife.

3.3. UPSKILLING AND RESKILLING

To further strengthen the approach, upskilling and reskilling local communities through educational pathways are essential. These programs can integrate traditional knowledge with innovative practices, empowering local communities to adapt and thrive in a changing environment. Enhancing stakeholder awareness of sustainability and biodiversity conservation is also key, ensuring that everyone from fishermen to local policymakers understands their role in protecting the ecosystem. By fostering continuous learning and collaboration, communities can better manage natural resources while securing long-term environmental and economic benefits.

3.4. STRENGTHENING LOCAL ECOSYSTEMS

Establishing frameworks for monitoring biodiversity and preserving marine protected areas is crucial for tracking ecosystem health over time. These frameworks allow for data-driven decision-making, ensuring that interventions are timely and effective in maintaining marine and terrestrial biodiversity. Local communities, scientists, and policymakers can work together to create protected areas where ecosystems can thrive and be safeguarded from the pressures of overexploitation.
This holistic approach fosters economic growth while ensuring the protection and balance of local ecosystems.

4. EXPECTED IMPACT AND BENEFITS

4.1. ENVIRONMENTAL IMPACT

Mitigating the effects of invasive species, particularly *Callinectes sapidus* (blue crab), is essential for preserving the balance of the Adriatic ecosystem. As an invasive species, *Callinectes sapidus* competes with native marine species, disrupts local food webs, and can lead to biodiversity loss. By implementing targeted management strategies such as sustainable trapping and removal practices, we can significantly reduce the population of blue crabs, allowing native species to recover and thrive. Furthermore, reducing marine litter in these efforts will help to improve water quality and

decrease the environmental footprint of human activities. Promoting biodiversity preservation through habitat restoration will help safeguard the Adriatic's rich natural heritage and ensure its long-term ecological stability.

4.2. ECONOMIC IMPACT

The adoption of sustainable fishing practices offers an opportunity for small-scale fisheries to increase profitability. By diversifying their catch, including utilizing invasive species like Callinectes sapidus, fisheries can open new revenue streams. Sustainable practices, such as eco-friendly traps, can also improve the quality and marketability of seafood, attracting higher-value markets focused on sustainability. Additionally, the growing demand for eco-tourism provides new opportunities for local communities to tap into this market by offering educational tours about invasive species management, local biodiversity, and marine conservation. The commercialization of invasive species, in particular blue crabs, could further boost local economies by creating new products, such as specialty foods and byproducts that meet eco-conscious consumer preferences.

4.3. SOCIAL IMPACT

The collaboration between Italy and Croatia on managing invasive species like *Callinectes sapidus* strengthens cross-border cooperation, fostering shared responsibility for the Adriatic's health. This partnership can lead to more unified policies and initiatives, enhancing the region's sustainability efforts. Local communities benefit directly from these environmental initiatives through empowerment via education and job creation. Upskilling and reskilling programs can provide local fishermen and other stakeholders with the knowledge to adopt sustainable practices, while also creating new job opportunities in eco-tourism, biodiversity monitoring, and conservation efforts. This approach not only protects the ecosystem but also supports the livelihoods of people living in coastal and marine regions, creating a more resilient and sustainable local economy.

5. PILOT AREAS CHARACTERISTICS AND IMPACT ANALYSIS

There are 9 pilot areas selected by the partners on the project.

Aquatina di Frigole Pilot Area
Characteristics

Coastal lagoon, Natura 2000 site
Pressures
Local: Tourism, agriculture, small-scale fisheries
Regional: marine litter
Global: NIS, climate changes

Ionian Sea mariculture Pilot Area
Characteristics
Coastal lagoon, Natura 2000 site
Pressures
Local: Tourism, agriculture, small-scale fisheries, mariculture
Regional: marine litter
Global: NIS, climate changes

Pilot areas around the city of Split
Cetina River and Estuary
Characteristics
Marine area, transitional brackish waters, Natura 2000 sites
Pressures
Local: Tourism, agriculture, small-scale fisheries, coastal infrastructure
Regional: marine litter
Global: NIS, climate changes

Pantan Coastal lagoon
Characteristics
Transitional brackish waters, Coastal lagoon, Natura 2000 sites, Ornithological and Ichthyological Reserve
Pressures
Local: Tourism, agriculture
Regional: marine litter
Global: NIS, climate changes

Uvala Vrulja
Characteristics
Underwater freshwater spring, Natura 2000 sites
Pressures

Local: Tourism, small-scale fisheries
Regional: marine litter
Global: NIS, climate changes

Pilot area Neretva delta

Characteristics

Special nature reserve, aquaculture, Natura 2000 sites, Ornithological and Ichthyological Reserve

Pressures

Local: intensive agriculture, small-scale fisheries, urban wastewater management
Regional: marine litter, industry, hydroelectric dams
Global: NIS, climate changes

Pilot area Mali Ston Bay

Characteristics

Natura 2000 sites, Ornithological and Ichthyological Reserve, underwater freshwater springs

Pressures

Local: Tourism, agriculture, small-scale fisheries, aquaculture
Regional: marine litter
Global: NIS, climate changes

The Coast of San Benedetto del Tronto

Characteristics

strong interaction between natural factors and anthropogenic activities, River vicinity;

Pressures

Local: Anthropogenic activities, coastal infrastructure, sea traffic, industrial fishing, urban wastewater management, mariculture, Tourism
Regional: marine litter
Global: NIS, climate changes

Natural Reserve Sentina

Characteristics

Natural reserve, Natura 2000, salt meadows, brackish ponds, low and sandy coasts

Pressures

Local: Tourism, agriculture,

Regional: marine litter
Global: NIS, climate changes

is characterized by coastal and marine ecosystems that constitute essential biodiversity hotspots, supporting rich assemblages of endemic species and critical habitats. Local productive activities, such as mariculture and mussel farming, prioritize environmentally sustainable practices, aligning with global conservation objectives. However, the region is increasingly subjected to worldwide pressures extending beyond the local or macro-regional levels. Such pressures are mainly represented by non-indigenous species (NIS), climate changes, and marine litter, leading to long-term impacts on the species and habitat biodiversity that characterize this region.

6. CONCLUSION

The BlueDiversity Project aims to tackle environmental, economic, and social challenges in the Adriatic region, particularly in Italy and Croatia. It seeks to balance biodiversity conservation with sustainable economic practices. The project focuses on managing invasive species, such as the blue crab (*Callinectes sapidus*), reducing pollution, and promoting ecosystem preservation.

To create new economic opportunities for local fisheries, eco-tourism, and communities, the project involves developing sustainable fishing tools and commercializing invasive species. Educational programs that enhance the skills of local stakeholders are essential for empowering communities to actively protect their environment and adopt sustainable practices.

Additionally, the project promotes collaboration between Italy and Croatia, creating a shared approach to managing the Adriatic ecosystem.

Overall, the BlueDiversity Project supports local ecosystems, stimulates economic growth, and enhances community resilience. It offers a balanced solution that aids in protecting the Adriatic natural resources while ensuring sustainable livelihoods for local people. By combining innovation, education, and cross-border cooperation, the project transforms environmental challenges into opportunities for the future.

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7. CALL TO ACTION

To all stakeholders, decision-makers, and citizens: Join the BlueDiversity initiative by supporting educational programs, research efforts, and sustainable practices. Embrace opportunities within the blue economy to foster innovation and inclusivity in marine resource management.

8. REFERENCES

Pečarević, M., Mikuš, J., Bratoš Cetinić, A., Dulčić, J., & Čalić, M. Introduced marine species in Croatian waters (Eastern Adriatic Sea). Mediterranean Marine Science, 2013 14(1), 224–237. https://doi.org/10.12681/mms.383

Schmid C, Cozzarini L, Zambello E. A critical review on marine litter in the Adriatic Sea: Focus on plastic pollution. Environ Pollut. 2021 Jan 18;273:116430. doi: 10.1016/j.envpol.2021.116430. Epub ahead of print. PMID: 33497942.

Bošković N, Joksimović D, Peković M, Perošević-Bajčeta A, Bajt O. Microplastics in Surface Sediments along the Montenegrin Coast, Adriatic Sea: Types, Occurrence, and Distribution. Journal of Marine Science and Engineering. 2021; 9(8):841. https://doi.org/10.3390/jmse9080841

Fytianos G, Ioannidou E, Thysiadou A, Mitropoulos AC, Kyzas GZ. Microplastics in Mediterranean Coastal Countries: A Recent Overview. Journal of Marine Science and Engineering. 2021; 9(1):98. https://doi.org/10.3390/jmse9010098

Glamuzina, L., Pešić, A., Marković, O., Tomanić, J., Pećarević, M., Dobroslavić, T., … Grđan, S. (2023). Population structure of the invasive Atlantic blue crab, Callinectes sapidus on the Eastern Adriatic coast (Croatia, Montenegro). NAŠE MORE, 70 (3 Special issue), 153-159. https://doi.org/10.17818/NM/2023/SI3