

# SKILLS4WATER

# Skills4Water Final Conference: I International Conference on Soft Skills for Water

25<sup>th</sup> June 2025, CÁDIZ, SPAIN







# Proceedings of the I International Conference on Soft Skills for Water

25th June 2025, CÁDIZ, SPAIN

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### Skills4Water

The Skills4Water project, funded by the Erasmus+ Programme (project number: 2023-1-RO01-KA220-HED-000160511), addresses one of the key challenges facing the water sector in Europe: the mismatch between the technical qualifications of recent graduates and the growing need for well-developed soft skills. As the sector evolves in response to complex environmental, social, and technological challenges, there is an urgent need for professionals who are not only technically competent but also collaborative, adaptable, and effective communicators.

Skills4Water brings together a multidisciplinary consortium of higher education institutions and industry partners—Universitatea Dunarea de Jos din Galati (UGAL), University of Niš, (UNI), Universidad de Cádiz (UCA), H2O People B.V., and the Accreditation Council for Entrepreneurial and Engaged Universities (ACEEU)—to develop and implement strategies for integrating soft skills into water-related higher education programmes. Through surveys, focus groups, and the collaborative development of a standardized framework, the project has identified priority soft skills in three main categories: personal (responsibility, motivation), interpersonal (teamwork, communication), and situational (problem-solving, adaptability).

The Final Conference, held on 25 June 2025 in Cádiz, Spain, was the culmination of this collaborative effort. The I International Conference on Soft Skills for Water gathered stakeholders from academia, industry, and student communities to reflect on the project's achievements, discuss the importance of soft skills in education and employment, and share best practices and personal experiences.















This book of proceedings presents the key contributions from the conference, including:

Reflections on the soft skills needs in the water sector;

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A consortium roundtable on project outcomes;

Presentations from students across partner institutions;

A hands-on networking workshop;

And a final round table debate involving employers, professors, and students.

Together, these contributions highlight the importance of empowering the next generation of water professionals with not only knowledge but also the human competences necessary for sustainable and inclusive water management.

I International Conference on Soft Skills for Water organizing committee















# Agenda of Skills4Water Final Conference

📍 Venue: Aulario La Bomba, University of Cádiz, Cádiz, Spain

June 25, 2025, 09:00 - 17:00

#### **Morning Session:**

Arguelles room

09:00 - Welcome and Opening - Maria de Andrés, General Director of International Degrees and Continuing Education, University of Cádiz

09:15 - Skills4water introduction (Nina Lazăr, UGAL)

09:30 - Keynote: Needs for soft skills (Naomi Timmer, H2O-People)

09:50 - Consortium round table: Skill4water achievements, moderated by Nina Lazăr (UGAL)

10:30 - 11:30 - Participants presentations: Students

11:30 - 12:00 - Coffee Break

12:00 - 13:30 - Workshop on networking (Naomi Timmer, H2O-People)

13:30 - 14:30 Lunch at Baluarte de los Mártires, Cádiz: Venue

#### **Afternoon Session:**

15:00 - 16:00 - Round table

Moderator: Naomi Timmer, H2O-People

Speaker: Irene Laiz, Professor, University of Cádiz

Speaker: Alejandro Centeno, Vice Dean of Students and International Affairs,

Faculty of Marine and Environmental Sciences, University of Cádiz

Speaker: Erik Malta, Chief Scientific Officer, Aquaculture Technology Centre,

CTAQUA

16:00 - 16:30 Awards and closing ceremony and network opportunities













### Needs for soft skills

Naomi Timmer, Director of H2O People, The Netherlands

#### Soft Skills, Strong Impact: Empowering the Water Sector's Future

As someone deeply connected to the water sector, and especially the development of young professionals in it, I've always believed that our greatest strength lies not only in our technical expertise, but in our ability to collaborate, communicate, and adapt. Inspired by Yuval Noah Harari's reflections in 'Unstoppable Us', I opened my keynote at the final SKILLS4WATER conference in Cádiz with a simple yet powerful idea: humans became the most powerful species through storytelling and working together—two soft skills that remain underutilized in today's water education and professional environments.

#### The Challenge We Face

The water sector is facing unprecedented complexity—climate change, urbanization, digital transformation, and diverse stakeholder demands. While technical skills are essential, they are no longer sufficient. Employers increasingly seek professionals who can communicate effectively, collaborate across disciplines, and lead with empathy. These are the skills that truly make a water professional effective in today's world.

#### What Are Soft Skills?

Soft skills encompass abilities, traits, and behaviors that help us relate to and collaborate with others. In the SKILLS4WATER context, we define them across three domains: personal (self-awareness, resilience), interpersonal (communication, teamwork), and situational (adaptability, leadership). These skills enable professionals to navigate uncertainty, build trust, and drive innovation.

#### The SKILLS4WATER Approach

SKILLS4WATER was built on the EJWP model—experiential, community-driven, and interdisciplinary. Over four training weeks in Serbia, Belgium,















Germany, and Romania, we created a learning journey that integrated personal and professional development, knowledge exchange, and community building. Participants engaged in field visits, peer coaching (InterVision), stakeholder engagement, and collaborative sprints, applying their soft skills in real-world contexts.

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#### **Impact Stories**

The transformation was visible. Participants shared how they grew in confidence, leadership, and collaboration. One young professional described the programme as a 'working family', a community that supports knowledge sharing and creation. Institutions reported improved teaching practices, stronger networks, and a culture of innovation. Together, we contributed to a more resilient and sustainable European water sector.

#### Why This Matters Now

The urgency for transformation in the water sector is real. We need agile, empathetic, and visionary professionals. Soft skills are the catalysts that bridge the gap between knowledge and action. They are not optional, they are essential.

#### Call to Action

To educators: integrate soft skills into curricula and assessments. To institutions: support lifelong learning and cross-sector collaboration. To young professionals: embrace growth, seek feedback, and lead with purpose.

To policymakers: invest in programmes like SKILLS4WATER and EJWP.

#### Closing

In a world of rising complexity, soft skills are not soft, they are essential. They form the foundation of our society, our work, our environment, and our human potential. Let's continue to build a future where these skills are recognized, nurtured, and celebrated.









Co-funded by





# Consortium round table: Skill4water achievements

Moderated by Nina Lazăr, University of Galati

This roundtable addressed the multifaceted world of soft skills, exploring their definition, impact, and the practicalities of their development and transfer. The panelists, Naomi (H2O-People), Tamara (UNI), Irene (UCA), Milan (UNI), and Federica (ACEEU), all members of the Skills4water project, provided invaluable insights from various perspectives.

The discussion kicked off with Naomi, who elucidated the essence of soft skills, how they can be defined, and their profound impact on professional life.

The conversation then shifted to Tamara, who shed light on a recent survey conducted as part of the project in which the data collection extended beyond Europe to a broad international audience and, more importantly, to uncover the survey's main conclusions, particularly identifying which soft skills emerged as top priorities for young professionals.

Irene offered a unique perspective from the teaching staff, sharing her perceptions on the transfer of these crucial skills to students. Her insights into whether this process was seamless or challenging were particularly enlightening.

Returning to Naomi, in her role as programme trainer, the highlights of the training programs and how the target audience responded to them were explored.

The conversation then moved to the collaborative efforts of Milan and Tamara. focusing on the multiplier event organized in Serbia with several stakeholders and on the strategies employed to bring them together. A key question posed was their belief in the importance of soft skills for developing and maintaining relationships.















Naomi then provided an overview of the multiplier event within the Water Europe Conference, specifically how it raised awareness about the need for soft-skills development among young professionals in the water sector. She also explained how the project's message resonated with European officials.

Finally, Federica shared crucial feedback from the students and young professionals who actively participated in the soft-skills development activities, offering a direct insight into the impact of these initiatives.

This roundtable underscored the undeniable importance of soft skills in today's professional landscape, highlighting both the successes and challenges in their cultivation and dissemination.













# Participants presentations: Students

#### What the Sea taught us

Belkis Carolina Montalván, University of Cádiz

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#### **Growing through Science**

Yada Trapletti Lanti, University of Cádiz

#### Navigating adversity with Nature

Débora Gutierrez, University of Algarve

#### Science against the Odds: lessons from coastal research in Mozambique

Eva Pavo-Fernández, Polytechnic University of Catalunya

#### Gradual but intentional steps

Thet Oo Mon, University of Cádiz

#### **Growing beyond borders**

Estela Lalueza Broto, University of Cádiz















#### "What the Sea taught us"

#### Belkis Carolina Montalván, MSc Student in Oceanography, University of Cádiz, Spain

Coming from Honduras, I joined the MSc in Oceanography at the University of Cádiz with a strong academic focus, eager to build technical skills in marine science. I believed that mastering tools such as data analysis, GIS, and field sampling would be key to making a meaningful contribution to ocean conservation. However, this journey revealed that success in the marine sector also requires strong soft skills- particularly communication, teamwork, and empathy. These are essential for the interdisciplinary and collaborative nature of oceanographic work.

At the beginning of my studies, I approached group work with caution, often prioritizing task completion over interaction. Over time, especially through hands-on experiences with classmates, I began to understand the real value of soft skills. A key moment was collaborating with Raquel, Jack, and Rosapeers with whom I shared values and academic curiosity. Together, we built a team based on mutual trust, where feedback, encouragement, and active listening were part of our daily dynamic.

Projects like the XBeach coastal modeling task challenged us to combine technical and ecological knowledge. The most transformative experience, however, was our oceanographic campaign aboard the UCADIZ. Faced with real-time challenges, we had to coordinate quickly, solve problems together, and adapt to dynamic conditions-all of which sharpened my communication and leadership skills.

This process has shown me that while technical skills may open the door to scientific work, it is our human ability to connect, collaborate, and grow with others that sustains it. In marine science, soft skills are not optional extrasthey are foundational.

As "The little Prince" says, "What is essential is invisible to the eye". Some of the most meaningful lessons were not in textbooks, but in friendships formed through science, sea, and shared purpose.











#### "Growing through Science"

#### Yada Trapletti Lanti, PhD Student, University of Cádiz, Spain

My background in marine and environmental sciences has provided me with a range of academic and research experiences, from my Bachelor's and Master's degrees to my current position as a PhD student. Throughout this journey, it has become clear that scientific knowledge alone is insufficient; soft skills are essential for effective communication and collaboration in this field.

At the beginning of my academic journey, I considered myself as an organized and responsible individual, able to work independently and manage my time efficiently. These fundamental soft skills proved instrumental in successfully navigating the initial stages of my academic journey. However, it was during my Master's thesis and the beginning of my PhD that I truly began to develop critical competencies such as teamwork, adaptability, and science communication.

Working in interdisciplinary teams within European research projects has strengthened my ability to collaborate with people from a wide range of academic and cultural backgrounds. For instance, presenting scientific results at national and international conferences has enhanced my public speaking skills and enabled me to engage with a broader audience.

Furthermore, participating in outreach events and educational activities has taught me how to communicate complex scientific information for non-specialist audiences, an increasingly vital skill in today's world.

These experiences have shown me that soft skills are not only complementary to scientific expertise; they are fundamental to making science more impactful, inclusive, and accessible. While I have made progress, I am aware that developing these competencies is an ongoing process. I believe that continuous improvement in this area should be an integral part of scientific training. This will help bridge the gap between science and society.

















#### "Navigating adversity with Nature"

#### Débora Gutierrez, PhD student, University of Algarve, Portugal

As a student in the Erasmus Mundus WACOMA programme, specialising in marine water management, I have witnessed the essential role of soft skills such as adaptability, resilience, and effective communication in the water sector. While technical abilities are essential, the dynamic and multidisciplinary nature of marine science demands a complementary set of soft skills to navigate unexpected challenges and to collaborate across diverse teams. These competencies are increasingly valued by employers and impact the ability to contribute to sustainable solutions in the sector.

At my Masters journey in 2020, I possessed a foundational sense of responsibility and motivation, eager to engage in practical fieldwork and lab-based learning. However, the abrupt closure of our university due to the COVID-19 pandemic shifted all activities online, disrupting both academic routines and social connections. This challenge became a catalyst for developing adaptability and problem-solving. Regular yoga practice helped maintain emotional balance, while exploring surfing offered an avenue to recharge and build perseverance—skills essential for adapting to new circumstances.

As restrictions eased, I enrolled in Spanish language courses, which not only broadened my social network in Spain but also significantly improved my communication abilities. Today, I am fluent in Spanish and able to present academic work confidently across various professional and travel contexts. Additionally, elective courses in scientific communication and parallel studies in design enabled me to enhance my presentation skills, particularly in creating accessible and engaging visual materials for diverse audiences.

Reflecting on this period, I recognise my growth in teamwork, flexibility, and effective communication. Nevertheless, I continue to seek improvement in problem-solving and leadership, understanding their critical importance for a successful professional future in marine science. In sum, my journey underscores how adapting to adversity and embracing extracurricular opportunities can drive both personal and professional development in the water sector.











# "Science against the Odds: lessons from coastal research in Mozambique"

# Eva Pavo-Fernández<sup>1</sup>, Joan Puigdefabregas<sup>1</sup>, Gorka Solana<sup>2,1</sup>, Vicente Gracia<sup>1</sup>, Manel Grifoll<sup>1</sup>

<sup>1</sup>Universitat Politècnica de Catalunya - BarcelonaTech (UPC), Barcelona, Spain <sup>2</sup>Universidade Save, Inhambane, Mozambique

The coast of Mozambique is an underexplored area, presenting an opportunity for scientific research. Mozambique provides a good example of facing challenges and adaptability, given the lack of oceanographic equipment and the need for continuous oceanographic monitoring. At the beginning of my career, I was mainly focused on the teamwork aspect, as during my Bachelor's and Master's there was a great number of tasks that needed to be done in groups. However, my PhD research in Mozambique deepened my flexibility, adaptability, and problem-solving skills, which became essential for fieldwork. During field campaigns, we used Do-It-Yourself (DIY) devices to collect oceanographic data, which consisted of an echosounder, a pressure meter, a Lagrangian drifter, and a sediment trap. Also, we faced extreme weather conditions (Cyclone Freddy in 2023) and equipment malfunction caused by high temperatures and humidity conditions. These challenges required rapid adaptation of the team to reschedule the field campaign to these conditions and buy replacement components (e.g. batteries). These situations reinforce the role of soft skills in overcoming logistical limitations. Ultimately, this work highlights that adaptability and problem-solving are not supplementary traits but fundamental competencies for conducting research in resource-limited environments. Acquiring these skills will be crucial for scientists working in regions such as Mozambique.















#### "Gradual but intentional steps"

#### Thet Oo Mon, PhD Student, University of Cádiz, Spain

I am a PhD student at University of Cádiz. My thesis focuses on coastal risk assessment regarding coastal flooding and erosion along the beaches of Cádiz Province under different climate change scenarios. The objective of my study is to provide necessary information for decision support in improving resilience of coastal communities and ecosystems. Managing and adapting coastal areas demands strong interpersonal skills due to its multidisciplinary nature, requiring collaboration with diverse experts and stakeholders in their decision-making processes and its application happens at the local community level.

I studied my Bachelor's in Port and Harbour Engineering in Myanmar and worked for three years as a Project Engineer at an environmental consultancy. I am a quick learner, and through involvement in numerous water projects plus dedicated soft skills training, I also got a chance to improve my other skills as self-assessment, communication, team work, flexibility and change management. My subsequent Master's in Water and Coastal Management (Cadiz, Bologna, Faro) and current PhD further encouraged this growth.

For example, studying in a different continent has significantly enhanced my ability to communicate with diverse individuals, broadening my perspectives and intercultural communication. My second year of Masters, when my internship planned in Faro was canceled and turned into online, it was a test to apply my flexibility and change management skills. Though working with limited conditions, but with support from supervisors, I learned how to interpret geomorphology of beaches because of this experience. During my PhD, I intentionally choose to do presentations, in place of posters, to keep improving my public speaking and communication skills. My thesis results are presented mainly in maps, and it motivates me to enhance my creativity and story-telling skills. All these seemingly little steps I believe have immediate, tangible reward being that each step builds confidence for the next.











#### "Growing beyond borders"

#### Estela Lalueza Broto, University of Cádiz, Spain

Throughout my academic path in marine sciences, I've learned that soft skills are not just desirable but essential to grow and adapt in a competitive and constantly evolving sector.

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Initially, I was driven by a passion for orcas, which led me to pursue a Bachelor's degree in Marine Sciences at the University of Cádiz and complete an academic exchange in the Canary Islands. There, I carried out an acoustic study at Loro Parque Foundation.

At first, my focus was on acquiring scientific and technical skills. However, true growth began when I stepped out of my comfort zone. I moved to Canada with a Working Holiday visa to improve my English and test my potential abroad. I worked as a field assistant at Bamfield Marine Sciences Centre and later joined Canadian Kelp, where I participated in the collection of wild kelp and the creation of kelp spools for offshore farms. These experiences developed my teamwork, autonomy, and problem–solving abilities in dynamic and unpredictable field settings. I became confident in the setup and operation of offshore kelp farms, requiring coordination, adaptability, and clear communication.

Returning to Spain during the COVID-19 pandemic, I pursued a digital marketing master's degree and became CMO of a startup, enhancing leadership and communication skills. I eventually returned to marine science and currently work in seagrass restoration at the University of Cádiz.

My journey taught me that speaking English, staying mobile, and showing initiative— even as a volunteer—are key to opening doors. Academic training lays the foundation, but self-confidence, along with the ability to connect, adapt, communicate and a not being afraid of failure are what enable real growth in the profesional world.













# Workshop on networking

Naomi Timmer, Director of H2O People, The Netherlands

#### **Networking: The Skill of Connection**

As part of the innovative training programme within SKILLS4WATER, the workshop "Networking: The Skill of Connection" offered participants of the conference a hands-on experience in developing one of the most essential soft skills for water professionals—networking. Led by Naomi Timmer, Director of H2O People, the session explored how building meaningful professional relationships can empower individuals and strengthen the sector as a whole.

#### **Workshop Highlights**

Participants learned to:

- Understand the importance of networking in career and personal development.
- Identify and map their current, future, and personal development networks.
- Practice communication techniques to build confidence and influence.
- Reflect on their personal brand and how to promote their value authentically.

Interactive exercises encouraged attendees to step outside their comfort zones—whether by initiating conversations with unfamiliar colleagues or sharing personal interests and resources. The workshop emphasized that networking is not transactional, but rather "people helping people."

#### **Kev Lesson Learned**

The most powerful takeaway was that networking is a skill that can be learned and practiced. By reframing it as a tool for mutual support and growth, participants discovered new ways to connect, collaborate, and lead. In a sector facing complex challenges, the ability to build trust and relationships is not just beneficial—it's essential.













# Round table: Debate on soft skills importance and implementation

Moderated by Naomi Timmer, Director of H2O People, The Netherlands

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This round table brought together stakeholders from academia, industry, and the student body to explore the importance of soft skills in education and professional development. The session was moderated by Naomi Timmer, who guided the discussion with targeted questions addressed to each group represented: employers, faculty members, professors, and students. The conversation explored current deficiencies, pedagogical approaches, and shared responsibilities in fostering these essential competencies.

#### Speakers:

Alejandro Centeno, Vice Dean of Students and International Affairs, Faculty of Marine and Environmental Sciences, University of Cádiz.

Erik Malta, Chief Scientific Officer, CTAQUA.

Irene Laiz, Professor, University of Cádiz.

María del Mar Gomila, BSc student in Marine Science, University of Cádiz

The questions discussed addressed the different perspectives of the participants.

#### Employer Perspectives: Identifying the Gaps and Shared Responsibilities

From the employer's perspective, a key area of focus was identifying which specific soft skills are most lacking in recent graduates. The discussion aimed to uncover how universities can better align their pedagogical approaches to meet these pressing industry demands. Employers were also asked to pinpoint specific roles where the soft skills gap is most pronounced. A crucial part of the conversation revolved around the level at which soft skills development requires lifelong learning input and support, prompting employers to consider their own responsibility and role in this ongoing process.













#### Faculty's Role: Prioritizing and Valuing Soft Skill Acquisition

The faculty representative delved into the institutional role of universities in fostering an environment where soft skill acquisition is not just implicitly expected but explicitly prioritized and valued. The discussion aimed at exploring concrete strategies for creating such an environment.



#### Professor's Challenges: Overcoming Obstacles in Teaching Soft Skills

The professor offered insights into the challenges they face in teaching soft skills. The conversation sought to identify these obstacles and explore effective strategies for overcoming them, thereby enhancing the delivery of these crucial competencies within the curriculum.

#### Student Voices: Assessing Preparation and Suggesting Improvements

Finally, the students' perspective provided invaluable feedback. She was asked to assess how well her current higher education experience is preparing them with the soft skills necessary for their future careers and personal lives. Importantly, students were invited to suggest specific improvements or opportunities for enhancement. The discussion also addressed whether there are specific soft skills students feel are overlooked or undervalued in their current courses, and how they actively practice developing these skills outside of formal assignments.

This comprehensive roundtable highlighted the shared commitment across all stakeholders to effectively address the soft skills gap, ultimately preparing students for success in an ever-evolving professional world.















## **Awards for Student Presentations**

In recognition of the students' effort, creativity, and the quality of their presentations, awards were granted to the six participants. The awards were granted by the UCA through another project ("Aplicación práctica de los resultados obtenidos en el proyecto SEA-EU DOC") that also participated in the Skills4water final conference. These prizes were distributed based on the jury's evaluation, considering both the technical content and the clarity and originality of each presentation. The jury was formed by representatives of the partner institutions that participated in the conference, namely, UCA, UGAL, H2O People, and ACEEU.

The awards were granted as follows:

First prize: Yada Trapletti Lanti, University of Cádiz - 800 €

Second prize: Estela Lalueza Broto, University of Cádiz - 600 €

Third prize: Débora Gutierrez, University of Açores (Portugal)- 400 €

Honourable mention: Thet Oo Mon, University of Cádiz - 300 €

Honourable mention: Eva Pavo-Fernández, Universitat Politècnica de Catalunya (Barcelona, Spain)- 300 €

Honourable mention: Belkis Carolina Montalván, University of Cádiz - 300€

Detailed instructions were given to the awarded students on how they could use the prize money for their academic or professional development, following the UCA's legislation. More specifically, they were informed that they could enrol in training courses or attend conferences that support their continuous learning in their field of research.













#### I International Conference on Soft Skills for Water











