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1 INTRODUCTION

The NOVAFOODIES project aims to enhance workforce skills through a comprehensive training program focused on deepening knowledge of the aquaculture industry. This program targets both professionals and unemployed individuals, providing them with the hard and soft competencies needed to support the growth of this rapidly expanding sector.

The methodology is highly adaptable to all employment contexts and participants, including both professionals and unemployed individuals within a specific sector. To this end, Vocational Education and Training (VET) focuses on enhancing both hard and soft skills through a combination of group sessions and personalized support. This flexible approach fosters the development of essential habits for acquiring these skills, using a person-centred methodology that emphasizes individual processes. Additionally, the synergy between this methodology and the local community ensures that the training provided is relevant, up-to-date, and clearly aligned with the goal of improving the labour market. All of this contributes to fostering greater social and territorial cohesion. The methodology also considers the territorial dimension by implementing projects aimed at revitalizing rural areas and incorporating a gender perspective, ultimately striving to achieve greater equality among all genders.

The NOVAFOODIES Training Handbook explores the various approaches that underpin this methodology, including capacity-building to enhance both technical and soft skills; a participatory and experiential approach to guide participants through the curriculum; and coaching to foster self-awareness and help participants identify limiting beliefs and behaviours. Additionally, the handbook provides detailed guidance on how to train and develop technical skills, entrepreneurship competencies, and soft skills, offering practical approaches and learning activities tailored to the needs of participants in the aquaculture sector. Furthermore, it outlines the profiles of the selected trainers, including social workers, professional coaches, and aquaculture experts, who will support participants throughout the learning process.

In conclusion, the NOVAFOODIES Training Handbook is designed to support trainers in planning and delivering training sessions using innovative and effective pedagogical methods. It provides guidance on structuring activities that align with modern teaching approaches. By using this handbook, trainers will be able to incorporate the content and learning objectives of the training courses, focusing on both technical, entrepreneurial and soft skills development.

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1.1. Who is this Training Handbook for?

This Training Handbook has been developed to support the effective delivery of the NOVAFOODIES training programmes. It is intended for professionals involved in the preparation, coordination, and implementation of training activities aimed at strengthening employability and skills development within the aquaculture sector.

The handbook provides guidance on the training methodology, learning approach, participant support mechanisms, and practical recommendations for facilitating both technical and transversal skills development. While it has been developed within the context of the NOVAFOODIES project, the guidance and tools presented can also be adapted and used in other training initiatives focused on workforce inclusion and sector-specific skills development.

1.1.1. Social workers

Social workers play a key role in supporting participants throughout the training journey, particularly those facing social, economic, or personal barriers to employment. Their contribution focuses on ensuring equal access to learning opportunities, promoting participant engagement, and providing individualized support when needed.

Within the training programme, social workers may:

- Identify and address barriers that could affect participation and learning.
- Support participant motivation and retention throughout the course.
- Facilitate access to additional social or employment support services.
- Encourage participants to develop confidence and career aspirations.
- Contribute to the creation of an inclusive and supportive learning environment.

1.1.2. Professional coaches and employability advisors

Professional coaches and employability advisors support participants in identifying their strengths, defining professional goals, and developing career action plans. They help learners build confidence, improve self-awareness, and strengthen the soft skills required for successful integration into the labour market.

Their role within the training programme may include:

- Facilitating self-assessment and goal-setting activities.
- Supporting career planning and job-search strategies.
- Strengthening participants' communication, teamwork, and problem-solving skills.

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- Providing individualized guidance and feedback.
- Encouraging participants to apply acquired skills to real employment opportunities.

1.1.3. Aquaculture and industry experts

Industry experts are responsible for delivering the technical content of the training programme. Drawing on their professional experience and sector-specific knowledge, they provide learners with practical insights into aquaculture operations, technologies, sustainability practices, and emerging industry trends.

Their contribution may include:

- Delivering specialised technical training sessions.
- Sharing real-world examples, case studies, and industry best practices.
- Supporting practical exercises and problem-solving activities.
- Providing insights into current labour market needs and sector opportunities.
- Helping participants understand the skills and competencies required for different professional roles within the aquaculture value chain.

1.1.4. Trainers and Training Providers

This handbook is also intended for trainers, facilitators, vocational education providers, and organisations responsible for delivering training activities. It offers practical guidance on implementing the NOVAFOODIES methodology, adapting content to different learner profiles, and creating engaging and inclusive learning experiences.

These users can apply the handbook to:

- Plan and deliver training sessions effectively.
- Adapt learning activities to diverse participant needs.
- Monitor participant progress and learning outcomes.
- Facilitate active and learner-centred training approaches.
- Ensure consistency in the implementation of the training methodology.

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2 DESCRIPTION OF THE METHODOLOGY

2.1 Objectives of the methodology

The objectives of the methodology are described below:

- Strengthening the competences and diversity of workforce: The methodology focuses on developing key technical and soft skills such as communication, teamwork, adaptability, and emotional intelligence, which are essential for success in the workplace.
- Fostering networks and synergies through participants' talents and teamwork: Participants are encouraged to collaborate and share their skills, fostering strong networks and synergies. This collective approach helps create a supportive community where individuals can learn from each other and grow together.
- Promoting economic and social integration: The development of sector-specific technical and soft skills of participants is closely tied to economic and social integration. It also encourages personal growth, helping participants build self-esteem, set goals, and take proactive steps towards achieving them.
- Capacity building of local partners, along with company visits and industry events: In addition to training participants, the program builds the capacity of local partners to enhance their ability to support employment and integration. Participants also visit companies and attend industry events, gaining practical insights and expanding their professional networks.

2.1 Methodological approaches

This methodology features a comprehensive framework that includes training in both technical competences and soft skills. This ensures that individuals not only gain access to a job but are also able to retain it over time or quickly find another one.

The methodology is implemented in a semi-presential format, allowing participants to take part in both in-person and online sessions. This flexible approach is designed to promote work-life balance, as it allows individuals to manage their professional, personal, and educational commitments more effectively. Additionally, it helps avoid long commutes, reducing the time and financial costs that might otherwise discourage participation.

This format also allows participants to engage in high-quality training and development while accommodating their own schedules and responsibilities, making it easier for them to stay consistent and committed throughout the entire intervention. Moreover, by offering this flexibility, the methodology ensures that individuals from various geographic locations, backgrounds, and personal circumstances can access the program, thus reaching a larger number of people and increasing the program's inclusivity and impact.

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2.1.1 Capacity building

In an increasingly changing and evolving world, long-life learning and the continuous development of skills become particularly important as a key driver for accessing employment and ensuring optimal performance in any job. To undertake a role, it is no longer enough to acquire specific technical knowledge; it is also necessary to possess a range of transversal knowledge, skills, and aptitudes that are required in the business environment, regardless of the specific job position. These skills allow individuals to solve professional problems autonomously and flexibly. These competencies enable individuals to integrate into the workforce successfully and increase their chances of success in performing their duties. They also bring benefits both at the personal level and for companies:

- At the individual level, these key skills improve the ability to secure and maintain a job, meet personal expectations, feel valued by the company, and engage in continuous learning.
- At the company level, these key skills mean that employees are better equipped to respond to changes in the workplace, can learn more quickly, and perform more effectively.

Therefore, this methodology, beyond the teaching of technical skills, focuses on improving these transversal competencies of professionals and unemployed people, so that, beyond the specific professions they may develop, they acquire all the necessary skills and competencies for any job.

2.1.2 Participatory and experiential

The methodology follows a participatory approach where participants are the main drivers, shaping the development and the content to be worked on. The trainer/s will guide the pace and balance perceived needs with actual needs but always involving the team and making them aware of the reasons behind the work on different topics.

The methodology adopts an experiential approach of "learning by doing," meaning that adult participants learn and acquire skills and competencies through the practical application of knowledge, as theoretical content alone does not lead to real learning. This methodology provides an ideal space for developing this approach, as participants feel safe to "experiment" and improve their skills before applying them in the labour market. Therefore, group dynamics, challenges, and testing are key tools used to help participants enhance their competencies.

2.1.3 Coaching approach

The coaching approach in this methodology enables to support individuals in a process of personal and professional empowerment, which enables them, in a realistic and conscious way, to achieve their set goals. Coaching provides self-awareness and the identification of beliefs and thoughts that block their actions. The project focuses on training and empowering the individual to

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achieve their professional goal, helping them discover multiple options and make their own decisions. More than directing, the coaching methodology is about accompaniment, and this is precisely the approach used in this methodology.

2.1.4 Group sessions

Group sessions are the cornerstone of this methodology as they occupy most of the time and provide the ideal space for generating the processes needed to help individuals achieve their professional goals. The group sessions will primarily be practical. These sessions will work on building group cohesion, teamwork, self-awareness, self-confidence, among others. Depending on the phase the team is in, their life stage, and the skills they possess, the methodology will facilitate group sessions tailored to the specific objectives planned. During the group sessions:

- Trainers will teach new content adapted to the local context, ensuring relevance and practical application for the participants.
- Local partners' staff will participate to offer advice based on their expertise in the sector, providing participants with valuable insights and guidance.
- Feedback and evaluation of each training activity will be promoted to identify potential areas for improvement and ensure continuous development of the program.

The methodology incorporates a variety of interactive activities, such as group dynamics, games, and videos, to create an experiential learning environment where participants can develop new skills, think creatively, and build confidence. Some topics are presented through structured presentations, while others are led by participants themselves, boosting engagement and motivation. Towards the end of the project, autonomous working sessions allow participants to work independently or in subgroups on specific tasks or challenges, enhancing their overall experience and skills.

2.1.5 Individual sessions

The methodology, although focused on group sessions, offers an individual-level complement that aims to further enhance personal change and the achievement of results for everyone. The objectives of the personalized sessions are:

- To focus on specific personal goals.
- To offer a comprehensive approach to personal development.
- To provide emotional support.
- To address specific topics that cannot be covered in group sessions.

According to the context and project characteristics, the individual sessions allow the participant to reinforce elements discussed in the group sessions, address sensitive topics, and follow up on each participant's action plan to achieve their goals. These actions cannot be addressed

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in group sessions due to confidentiality reasons or other methodological aspects that require individualized attention.

The individual sessions are a key point for better understanding the person and creating a climate of trust. These sessions will begin from the first contact with the individual. No specific number of individual sessions is proposed, as each person has unique needs. Therefore, a personalized adaptation will be made, considering the individual's life stage at each phase of the pathway.

Individual sessions can be conducted either online or in person, depending on the participants' needs. Although personalized sessions carry more weight, this section also includes other options, such as sessions with a reduced number of participants who need to reinforce specific content, as well as telephone support sessions or videocalls, offering additional flexibility for engagement.

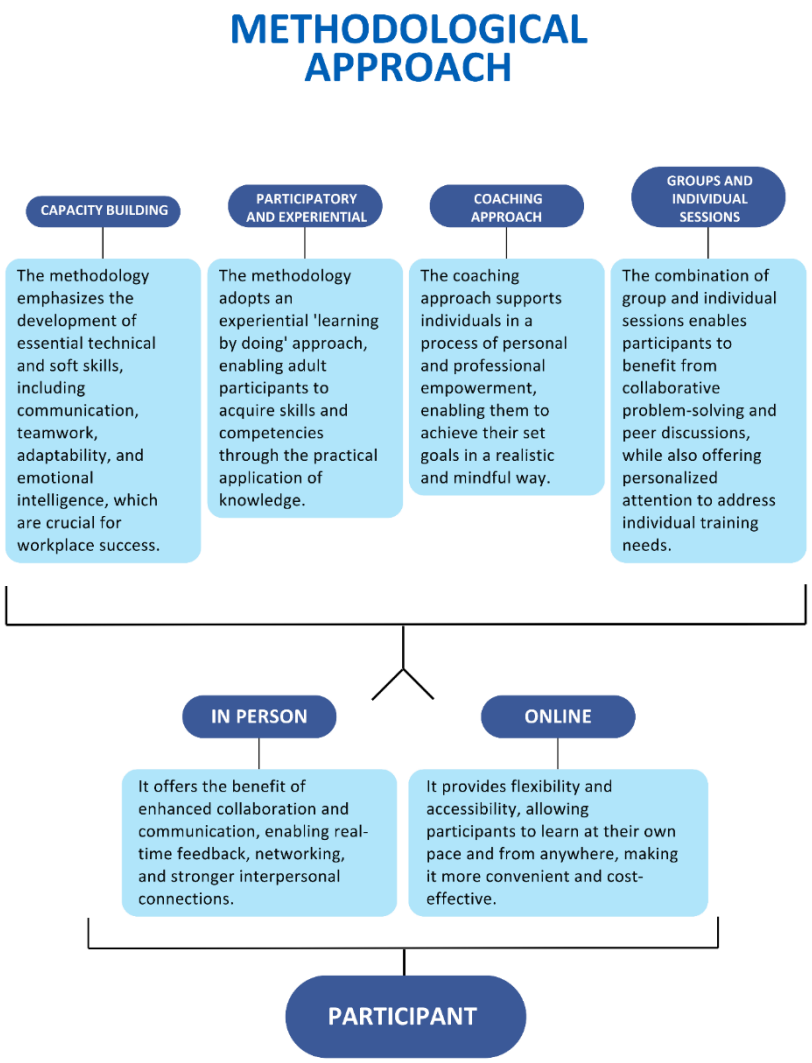

FIGURE 1 METHODOLOGICAL APPROACH

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3 TRAINING IN TECHNICAL SKILLS

As a trainer delivering technical training within the NOVAFOODIES framework, your role is not only to transfer knowledge but also to facilitate the development of practical competencies that participants can apply directly in real-world aquaculture, algae production, processing, and sustainable food systems contexts. Technical training should help learners understand complex concepts while building confidence in performing tasks, solving problems, and making informed decisions in their future professional activities.

The NOVAFOODIES training programme covers a broad range of technical topics, including sustainable production of marine and freshwater biomass, algae cultivation, processing technologies, food safety, quality management, environmental sustainability, biosecurity, regulatory requirements, and data-driven decision-making. These subjects require a training approach that combines scientific and technical knowledge with practical application and active participation.

Technical training is most effective when participants can connect theory with practice. Adult learners, whether professionals seeking to update their knowledge or unemployed individuals entering the sector, learn best when they understand the practical relevance of the content and have opportunities to apply newly acquired skills through exercises, demonstrations, discussions, case studies, and hands-on activities. The following sections provide guidance for trainers on how to effectively deliver technical training within the NOVAFOODIES programme.

3.1 Creating an effective learning environment

Technical subjects can sometimes appear complex or intimidating, particularly for participants with limited prior experience. Trainers should therefore create a supportive learning environment in which questions are encouraged, and mistakes are viewed as learning opportunities.

At the beginning of each session:

- Clearly explain the learning objectives.
- Relate the topic to real-world aquaculture or food production challenges.
- Assess participants' previous experience and expectations.
- Encourage active participation and exchange of experiences.
- Establish a respectful atmosphere where diverse perspectives are valued.

Professionals often bring substantial practical experience, while unemployed participants may contribute fresh perspectives and strong motivation to learn. Both groups can benefit greatly from sharing their experiences and knowledge.

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3.2 Connecting theory with practice

Technical knowledge should never be delivered exclusively through lectures. Whenever possible, trainers should connect theoretical concepts to practical examples and real-life situations.

For example:

- When discussing aquaculture systems, use diagrams, videos, photographs, and examples from existing facilities.
- When teaching biosecurity or disease management, use realistic scenarios and case studies.
- When covering environmental impacts and sustainability, encourage participants to analyse and discuss real operational challenges.
- When addressing food safety and quality management, present examples of common industry risks and mitigation measures.

The NOVAFOODIES training content has already placed a strong emphasis on these aspects. The goal is to help learners understand not only *what* a concept is, but also *why it matters* and *how it is applied in practice*.

3.3 Using experiential and participatory learning approaches

The NOVAFOODIES methodology is based on participatory and experiential learning. Trainers should therefore actively involve participants throughout the learning process.

Effective approaches include:

- Group discussions.
- Problem-solving exercises.
- Practical demonstrations.
- Case study analysis.
- Collaborative projects.
- Peer-to-peer learning.
- Reflection exercises.
- Company visits and field observations.

Instead of providing all answers immediately, trainers should encourage participants to analyse situations, explore alternatives, and develop their own solutions. This approach strengthens both technical understanding and critical thinking skills.

3.4 Using case studies and real-world examples

Real-world examples make technical concepts easier to understand and remember.

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Whenever possible, trainers should:

- Use local examples from the aquaculture sector.
- Present successful innovations and best practices.
- Discuss challenges encountered in production systems.
- Analyse failures and lessons learned.
- Invite industry experts to share experiences.

Motivate participants to talk about their own work experiences, which problems they encounter or which lessons they learned. Participants are often highly motivated when they see clear connections between training content and professional realities.

3.5 Encouraging innovation and continuous improvement

Technical expertise should not be viewed as static knowledge. The aquaculture and sustainable food sectors are continuously evolving through technological innovation, changing regulations, and emerging environmental needs.

Trainers should encourage participants to:

- Stay informed about industry developments.
- Evaluate new technologies critically.
- Consider sustainability implications of innovations.
- Seek opportunities for continuous professional development.
- Develop a problem-solving mindset.

This approach helps prepare participants for long-term careers in dynamic and rapidly evolving sectors.

3.6 Adapting technical training to participant needs

Participants may enter the training programme with very different educational backgrounds, professional experiences, and learning needs.

Therefore, trainers should:

- Assess prior knowledge early in the training process.
- Adapt explanations to participant experience levels.
- Use clear, accessible language.
- Avoid unnecessary technical jargon.
- Provide additional support where needed.
- Create opportunities for advanced learners to contribute their expertise.

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Flexibility is essential to ensure that all participants remain engaged and can benefit from the training experience.

The primary objective of technical training is not simply to transmit information but to develop competence. Effective trainers help participants understand concepts, apply knowledge in practical situations, solve industry-relevant problems, and build confidence in their technical abilities. By combining scientific knowledge, practical examples, active participation, and continuous reflection, trainers can create engaging learning experiences that prepare participants for future employment, career progression, and innovation within sustainable aquaculture and aquatic food production systems.

4 TRAINING IN ENTREPRENEURSHIP

As a trainer working with professionals and unemployed individuals in the aquaculture sector, your role extends beyond transferring knowledge—you are also a motivator, a guide, and a catalyst for change. One of the key pillars of the training curriculum is to inspire participants to view entrepreneurship not only as a viable employment option but as an empowering career pathway with the potential to generate innovation, economic independence, and community impact.

In the aquaculture sector, which is evolving rapidly due to global food security needs, sustainability goals, and technological advancements, entrepreneurial thinking is essential. Many participants may not initially see themselves as entrepreneurs or may lack confidence in their ability to start something on their own. Others may associate entrepreneurship with high risk or with business-only backgrounds. Your challenge and opportunity is to demystify the concept and make it accessible, practical, and relevant to their lived experiences.

The following sections are designed to equip you with the knowledge and tools needed to inspire entrepreneurial thinking and introduce entrepreneurship as a rewarding, realistic, and empowering career direction.

4.1 Understanding motivations and entrepreneurial profiles

When introducing entrepreneurship, begin by helping participants reflect on the “why.” People are motivated to start businesses for different reasons. Some seek autonomy—the chance to be their own boss. Others are driven by a passion for sustainability or a desire to apply their technical aquaculture skills creatively. For unemployed individuals, entrepreneurship can be a means of regaining control over their careers. For professionals, it may be a way to transition from employee to innovator. As a trainer, you can foster engagement by exploring various entrepreneurial profiles, making it easier for participants to identify with the path:

- Opportunity-driven entrepreneurs: These individuals identify gaps or unmet needs in the market and act on them. They are often motivated by the potential for growth, innovation,

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and financial success. For example, someone who notices a demand for eco-friendly fish farming solutions may start a business to meet that need.

- Necessity entrepreneurs: This group starts businesses primarily because they lack other viable employment options. Entrepreneurship here is a survival strategy—often seen in unemployed individuals or those facing economic hardship. The business might begin small but can grow into a sustainable venture with the right support.
- Social entrepreneurs: Focused on creating positive social or environmental impact, social entrepreneurs tackle challenges such as sustainable aquaculture practices, community development, or rural employment. Their goal is not just profit but also making a meaningful difference in society.
- Intrapreneurs: These entrepreneurs innovate from within an existing organization. They apply entrepreneurial skills to develop new products, services, or processes, benefiting the company while fulfilling their drive for creativity and change. This path suits professionals who want to innovate without leaving their current employment.

You can motivate learners by emphasizing that there is no single "entrepreneurial type." People from diverse backgrounds—whether unemployed youth or seasoned technicians—can become successful entrepreneurs if they are supported and prepared.

4.2 Support structures for entrepreneurs

A common barrier for aspiring entrepreneurs is the perception that starting a business means “going it alone.” One of your tasks as a trainer is to highlight the ecosystem of support that exists to help them. Discuss with participants the range of resources available, including:

- Incubators and accelerators: These programs provide vital support such as mentoring from experienced entrepreneurs, access to affordable or free office space, and technical assistance. Incubators often focus on early-stage startups, while accelerators help businesses scale quickly through intensive programs. Highlight examples relevant to aquaculture or the blue economy to make this tangible.
- Funding opportunities: Access to capital is critical. Discuss different sources such as public grants (like EMFAF—the European Maritime, Fisheries and Aquaculture Fund), microfinance options for small loans, and startup competitions that provide both prize money and visibility.
- Business development services: Many local authorities, chambers of commerce, and NGOs offer business support services including training, market research, and regulatory guidance. These organizations can help entrepreneurs navigate the practical steps of setting up and running a business, which can often feel overwhelming at first.
- Professional networks and cooperatives: Encourage participants to connect with networks of entrepreneurs, industry groups, or cooperatives. These communities offer collaboration opportunities, build credibility through association, and often facilitate access to new

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markets or joint ventures. Being part of a network also provides emotional support and shared learning, helping to break the “going it alone” myth.

It’s essential to help learners see that successful entrepreneurship is not only about personal effort but also about building relationships and seeking support. Sharing examples of local or regional aquaculture entrepreneurs who received support from these structures can be especially motivating.

4.3 Intrapreneurship: fostering innovation within organizations

For participants currently employed or with previous work experience, the concept of intrapreneurship can be particularly engaging. Intrapreneurs act like entrepreneurs—but inside existing companies or institutions. They develop new products, improve services, optimize systems, or address environmental challenges. This is especially relevant in aquaculture, where innovation is key to improving sustainability, biosecurity, and market competitiveness. Encourage professionals to view their roles not just as workers, but as change agents who can bring new ideas forward and lead internal initiatives. Framing intrapreneurship this way shows participants that entrepreneurial impact is not limited to startups. It also allows learners to connect entrepreneurship with their current job, making the concept more tangible and relevant.

4.4 Entrepreneurship: a career choice for employees

It is important for trainers to normalize and legitimize entrepreneurship as a career path. For many learners, particularly those who are unemployed or from underrepresented communities, the idea of starting a business may feel too distant or intimidating. Use success stories, real-world examples, and peer discussions to show that entrepreneurship can be a practical and fulfilling option. Emphasize its advantages such as independence and flexibility, purpose-driven work, financial potential, community and environmental impact

Participants in the aquaculture sector are uniquely positioned to contribute to global challenges—such as sustainable food systems and rural development—through entrepreneurship. Framing entrepreneurship as not just a job, but a mission-driven profession, can be highly motivating.

4.5 Business idea development

As a trainer, you will guide participants in identifying and developing their own business ideas. This step is critical, especially for those who doubt their creative abilities or don’t yet see clear opportunities. Start by encouraging observation: What problems do they see in their community or industry? What needs are unmet in the aquaculture value chain? Good business ideas often arise from lived experiences—such as difficulty accessing fingerlings, or the lack of sustainable feed solutions. Ideas can also come from local resources, technical skills, or consumer trends (e.g.,

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interest in organic or traceable seafood). Encourage learners to think broadly and not self-censor early-stage ideas. Once ideas are on the table, support participants in refining them. Use tools like brainstorming sessions, SWOT analysis, or simple business model templates. Stress that ideas don't need to be perfect—they need to be viable, relevant, and responsive to a real problem or opportunity.

4.5.1 Develop your idea with Design Thinking

Design Thinking is a way to come up with and improve ideas by focusing on the people you want to help—the customers or users. Instead of guessing what people want, Design Thinking encourages you to learn from them, test your ideas quickly, and keep improving based on feedback. For trainers new to this, think of Design Thinking as a simple process with five easy steps: understanding the people you want to serve by talking and listening to them, defining the problem clearly, coming up with many ideas without worrying about perfection, creating simple examples or prototypes, and trying them out while listening carefully to feedback.

As a trainer, your role is to guide participants through these steps gently and supportively. Help them ask the right questions about their customers' needs, encourage creativity without fear of mistakes, and create a safe space where testing and learning from feedback is welcomed. Your encouragement and clear explanations will help learners feel confident using this process to develop strong, user-focused ideas.

4.5.2 Conduct a market research

Market research helps participants move from speculation to evidence-based thinking. Teaching this skill builds critical thinking and market awareness. Guide learners to ask key questions: Who are my potential customers? What do they need? What are they already buying? What do competitors offer, and how could I do it differently or better?

Encourage hands-on techniques, such as: Conducting informal interviews with potential clients, visiting local markets or aquaculture operations, reviewing social media discussions and trends, etc. By showing participants how to validate their ideas through real-world data, you help them gain confidence and reduce fear of failure. It also reinforces the idea that businesses must respond to customer needs—not just founder desires.

4.5.3 Prepare your value proposition

A value proposition is the core of any business—it explains clearly what the product or service offers, to whom, and why it matters. As a trainer, your goal is to help learners think from the customer's perspective. Using the value proposition canvas, guide participants through a structured process: Understand the customer's jobs, pains, and gain; Match those with your product's features, pain relievers, and gain creators. For example, a participant might design a business providing pre-

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cleaned, ready-to-cook shellfish to urban consumers. Their value proposition might be: “We deliver locally farmed, eco-certified shellfish to busy professionals who want healthy, hassle-free seafood—sustainably harvested and ready to eat.” Work with participants to refine these statements and ensure they can clearly articulate the benefit of their idea to a customer. This clarity is essential for pitching the idea, attracting partners, or seeking funding.

4.5.4 Elaborate your elevator pitch

An elevator pitch is a short, clear, and engaging way to explain a business idea or project to someone in a very limited time—usually about 30 to 60 seconds, like the duration of an elevator ride. The goal of an elevator pitch is to quickly capture interest and make the listener want to learn more. It’s not about sharing every detail but focusing on the most important parts: what the business does, who it serves, and why it matters.

As a trainer, your role is to help participants express their ideas simply and confidently. Guide them in choosing clear and easy-to-understand language, encourage them to focus on the value their idea offers, and provide plenty of opportunities to practice their pitch. Through supportive feedback and role-playing exercises, you help learners build the confidence and communication skills they need to share their business ideas effectively with others.

4.5.5 Final note

Your role is to inspire, guide, and empower. Not every participant will become an entrepreneur immediately—but every participant can benefit from entrepreneurial thinking. By demystifying the journey, connecting it to real opportunities in aquaculture, and fostering practical skills, you can help learners take meaningful steps toward greater autonomy, employability, and impact. Support them to see themselves not only as job seekers or employees, but as active creators in a growing and essential global industry.

5 SOFT SKILLS TOOLKIT

In order to implement the methodology in the NOVAFOODIES project, the first essential step was to identify the specific hard and soft skills relevant to the sector, which would guide the content of the training programmes. The results of this process enabled us to design a comprehensive and balanced training curriculum that integrates both technical and soft skills that are most in demand in the sector.

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Below, the soft skills identified through the needs analysis are presented, together with a group-based activity designed to support their development. These practical dynamics aim to foster participant engagement, reflection, and the application of transversal competencies in real-life professional contexts.

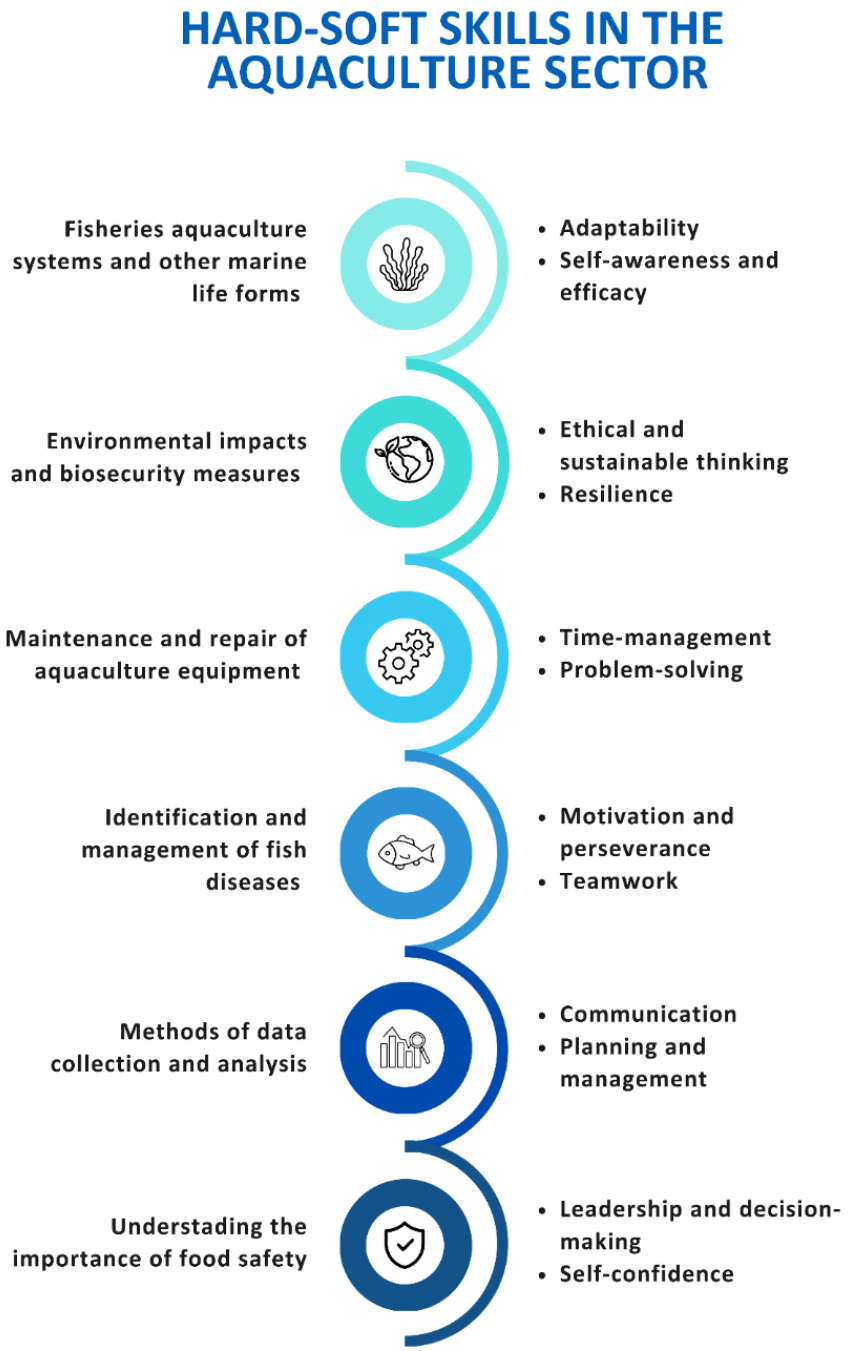

FIGURE 2 HARD-SOFT SKILLS IN THE AQUACULTURE SECTOR

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5.1 Adaptability

Adaptability is crucial in the aquaculture industry because the environment, technology, and research continuously evolve. This skill involves adjusting quickly to new information, practices, or changes in aquaculture systems, whether it is adopting new technologies, adjusting to environmental changes, or applying new research findings to improve aquaculture practices.

Section	Description
Title	Flexibility in Unexpected Situations
Objective	Help participants understand the importance of flexibility and adaptability when facing unexpected changes in professional situations.
Duration	10 minutes
Method	Role-play and group discussion
Scenario	A young entrepreneur receives a last-minute request from a potential client to change the location of an important meeting.
Activity Instructions	1. Divide participants into pairs. 2. Ask one pair to act out a situation where the entrepreneur reacts negatively to the change. 3. Ask another pair to act out a situation where the entrepreneur responds constructively and proposes solutions. 4. Invite the remaining participants to observe and compare the outcomes.
Reflection Questions	• Which response was more effective and why? • What behaviours demonstrated flexibility? • How might each reaction affect future opportunities? • How can flexibility support success in the workplace?
Key Learning Outcome	Participants recognise that flexibility helps individuals adapt to unexpected situations, maintain positive professional relationships, and identify constructive solutions to challenges.

5.2 Self-awareness and efficacy

Self-awareness and efficacy are about understanding one's strengths and limitations in managing aquaculture systems. It involves recognizing the impact of your work and having the confidence to make decisions, knowing when to seek additional support, and how to effectively manage aquaculture operations.

Section	Description
Objective	Help participants recognise different emotional reactions and identify appropriate strategies for self-control in everyday situations.

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Duration	10–15 minutes
Method	Interactive exercise and group discussion
Activity Instructions	1. Introduce the Traffic Light Technique: Red (Stop), Yellow (Think), and Green (Act). 2. Place the three traffic-light signs in different areas of the room. 3. Read aloud several workplace-related situations and reactions. 4. Participants move to the colour they believe best represents the reaction described. 5. Discuss the answers as a group.
Reflection Questions	• Why did you choose that colour? • Which reactions help resolve conflicts effectively? • How can pausing before reacting improve decision-making? • How can the Traffic Light Technique be applied in the workplace?
Key Learning Outcome	Participants learn to identify emotional responses, manage impulses, and adopt more constructive behaviours when facing challenging situations.

5.3 Ethical and sustainable thinking

Ethical and sustainable thinking involves making decisions that prioritize both the environment and long-term sustainability. In aquaculture, ethical thinking means considering the welfare of marine organisms, minimizing environmental impacts (e.g., water quality, biodiversity), and adopting sustainable practices (e.g., responsible feed sourcing, waste management). It includes being aware of the broader social and environmental consequences of aquaculture practices.

Section	Description
Objective	Encourage participants to reflect on how their decisions and actions can affect other people, their communities, and the environment.
Duration	10 minutes
Method	Individual reflection and group discussion
Activity Instructions	1. Ask participants to think of a recent or upcoming task from their personal, educational, or professional life. 2. Invite them to analyse the task considering its social, ethical, and environmental implications. 3. Encourage participants to reflect on stakeholders involved, resources used, potential impacts, and their level of commitment. 4. Facilitate a group discussion where volunteers share their reflections and insights.

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Reflection Questions	• How did your actions affect other people or the environment? • What ethical or sustainability considerations influenced your decisions? • What challenges did you encounter when balancing personal and collective interests? • How could you improve the sustainability or ethical impact of similar tasks in the future?
Key Learning Outcome	Participants develop greater awareness of the ethical and sustainability implications of their actions and recognise the importance of responsible decision-making in everyday and professional contexts.

5.4 Resilience

Resilience in aquaculture refers to the ability to withstand and recover from challenges, such as changes in environmental conditions or disease outbreaks. It means maintaining sustainable practices and operations despite setbacks, staying focused on long-term goals, and finding ways to overcome difficulties without compromising on quality or sustainability.

Section	Description
Objective	Help participants understand the concept of resilience and reflect on strategies for overcoming personal and professional challenges.
Duration	5 minutes
Method	Video analysis and guided group discussion
Activity Instructions	1. Introduce the concept of resilience as the ability to adapt to adversity, recover from setbacks, and continue pursuing goals. 2. Show a short video explaining resilience and its importance in everyday life. 3. Encourage participants to reflect on examples of challenges that may arise in personal or professional contexts. 4. Facilitate a group discussion based on participants' observations and experiences.
Reflection Questions	• What types of obstacles or challenges can people face in their personal or professional lives? • What qualities help individuals overcome difficult situations? • Can challenges sometimes create opportunities for growth and learning? • What strategies can help build resilience in the workplace?
Key Learning Outcome	Participants recognise resilience as an essential life and employability skill that enables individuals to cope with challenges, adapt to change, and continue progressing towards their goals.

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5.5 Time-management

Time management is essential in ensuring all tasks are completed in a timely manner without sacrificing quality. In aquaculture, time management might involve balancing maintenance schedules for equipment, managing regular water quality tests, and ensuring that organisms care activities like feeding and health monitoring are performed on time to maintain high standards of production.

Section	Description
Objective	Help participants recognise their personal strengths and understand how individual and team skills contribute to achieving goals.
Duration	20 minutes
Method	Team challenge and group reflection
Activity Instructions	1. Divide participants into small teams of 3–4 people. 2. Provide each team with a different challenge to complete within a limited time. 3. Encourage teams to organise themselves, identify their strengths, and develop a strategy. 4. After 10 minutes, invite each team to present the outcome of their challenge to the group.
Reflection Questions	• How did your team approach the challenge? • What strengths or skills helped you achieve the goal? • What obstacles did you encounter and how did you overcome them? • How did teamwork influence the final result? • What did you learn about your own abilities?
Key Learning Outcome	Participants reflect on their personal and collective strengths, recognise the value of teamwork, and understand how different skills can contribute to successfully achieving objectives.

5.6 Problem-solving

Problem-solving is key in the aquaculture industry, where unexpected challenges, such as equipment failures, water quality issues, or organisms' health problems, can arise. It involves critical thinking to identify the root causes of issues and develop effective solutions to resolve them quickly.

Section	Description
Objective	Develop mathematical reasoning skills by solving practical numerical problems based on real-life situations.
Duration	5–15 minutes

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Method	Individual or small-group problem-solving activity followed by discussion.
Activity Instructions	1. Present participants with one or more numerical challenges based on everyday scenarios, such as shopping offers or calculating quantities for an order. 2. Ask participants to complete the calculations individually or in small groups. 3. Review the solutions together and discuss the reasoning used to reach the answers. 4. Encourage participants to explain their calculations and compare different approaches.
Reflection	• What strategies did you use to solve the problems? • Which calculations were the most challenging and why? • How can mathematical reasoning help in everyday situations? • Can you think of examples from work or daily life where these skills are useful?
Key Learning Outcome	Participants strengthen their ability to analyse numerical information, perform calculations, and apply mathematical reasoning to practical situations commonly encountered in daily and professional life.

5.7 Motivation and perseverance

Motivation and perseverance are about staying committed to ensuring the well-being of organisms and maintaining high standards in aquaculture operations. It involves having a strong drive to consistently deliver optimal care, even in the face of difficulties such as disease management, unpredictable weather, or operational challenges. It's about being persistent and dedicated to achieving long-term success.

Section	Description
Objective	Help participants identify their strengths, weaknesses, opportunities, and threats to support personal and professional development.
Duration	10 minutes
Method	Self-assessment and individual reflection
Activity Instructions	1. Provide participants with a Personal SWOT Analysis template. 2. Ask them to reflect on their personal and professional situation and complete each section of the template. 3. Encourage participants to identify internal factors (strengths and weaknesses) and external factors (opportunities and threats). 4. Invite participants to reflect on actions they can take to build on their

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	strengths, address weaknesses, seize opportunities, and manage potential threats.
Reflection Questions	• What are your main strengths and how can they help you achieve your goals? • Which areas would you like to improve? • What opportunities could support your personal or professional growth? • What external challenges might affect your progress and how could you address them? • What actions can you take based on the results of your SWOT analysis?
Key Learning Outcome	Participants gain greater self-awareness by identifying their strengths, weaknesses, opportunities, and threats, enabling them to make informed decisions about their personal, educational, and professional development.

5.8 Teamwork

Teamwork in aquaculture requires collaboration among different specialists, such as veterinarians, biologists, environmental scientists, and farm workers. Teamwork is about effectively working with others, sharing knowledge, and contributing to collective problem-solving efforts. Good teamwork ensures that organisms health and farm sustainability are managed holistically and efficiently.

Section	Description
Objective	Strengthen collaboration among participants and explore the characteristics that distinguish a team from a group.
Duration	15–20 minutes
Method	Team-building exercise and group reflection
Activity Instructions	1. Divide participants into small groups of four. 2. Provide each group with a marker attached to several pieces of string. 3. Ask the group to write a word related to teamwork (e.g., trust, cooperation, motivation, communication) without touching the marker directly. 4. Participants must coordinate their movements by holding and guiding the strings together. 5. Once completed, invite each group to present their result and explain their approach.
Reflection Questions	• How did you feel during the activity? • What challenges did your team encounter? • How did communication influence the outcome? • What differences did you observe between working as a group and working as

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	a team? • What strategies helped improve coordination and cooperation?
Key Learning Outcome	Participants experience the importance of communication, coordination, trust, and shared responsibility, gaining a better understanding of how effective teamwork differs from simply working alongside others.

5.9 Communication

Communication effectiveness is critical for sharing information, findings, and concerns with colleagues, stakeholders, or other professionals. In the context of aquaculture, it involves conveying data analysis results, maintenance updates, or health management strategies clearly to ensure everyone involved understands the status and needs of the operations, contributing to informed decision-making.

Section	Description
Objective	Reflect on how punctuation, intonation, and message structure influence communication and meaning.
Duration	10 minutes
Method	Language exercise and group discussion
Activity Instructions	1. Write an ambiguous sentence on the board. 2. Ask participants to add different punctuation marks and read the sentence aloud using the corresponding intonation. 3. Compare the different interpretations generated from the same words. 4. Discuss how punctuation, tone of voice, and context can change the meaning of a message.
Reflection Questions	• How did the meaning of the sentence change with different punctuation marks? • What role did intonation play in conveying the message? • Can misunderstandings occur when messages are not communicated clearly? • How can we improve clarity in written and verbal communication? • Why is effective communication important in professional environments?
Key Learning Outcome	Participants recognise that communication is influenced not only by the words used but also by punctuation, tone, and context. They understand the importance of expressing messages clearly to reduce misunderstandings and improve interpersonal and professional communication.

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5.10 Planning and management

Planning and management skills are necessary for organizing tasks, resources, and personnel to ensure smooth operations. This includes overseeing data collection, conducting regular assessments, and implementing quality management processes to maintain consistency and compliance with industry standards. Good planning ensures all activities are aligned with the overall objectives and that resources are efficiently used.

Section	Description
Objective	Help participants understand the importance of planning and identify the key characteristics of an effective plan.
Duration	15 minutes
Method	Video analysis and group discussion
Activity Instructions	1. Show participants a short video illustrating the value of planning and perseverance in achieving personal and professional goals. 2. Introduce the concept of the 5 Cs of Planning: Clear, Concise, Consistent, Convincing, and Committed. 3. Invite participants to reflect on how these principles can be applied to their own goals and plans. 4. Facilitate a discussion on the importance of structured planning for success.
Reflection Questions	• What are the key characteristics of an effective plan? • Why is it important for a plan to be clear and realistic? • How can commitment influence the success of a plan? • What challenges can arise when planning goals and actions? • How can planning help achieve personal and professional objectives?
Key Learning Outcome	Participants understand the value of planning and recognise that effective plans require clear objectives, consistency, commitment, and realistic actions to support the achievement of personal and professional goals.

5.11 Leadership and decision making

Leadership and decision-making (with a gender approach) in the context of food safety emphasize the importance of guiding teams, making informed choices, and setting clear priorities to ensure the highest standards of safety and quality. Effective leaders are responsible for creating an environment where food safety practices are prioritized, while also fostering a culture of accountability, responsibility, and continuous improvement within the aquaculture sector. Additionally, gender awareness is crucial in leadership and decision-making to ensure that all team members, regardless of gender, are equally involved and supported in the process, promoting an inclusive and collaborative work environment.

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Section	Description
Objective	Encourage participants to reflect on how they approach future challenges and the importance of adopting a proactive attitude when planning and making decisions.
Duration	20 minutes
Method	Self-reflection exercise and group discussion
Activity Instructions	1. Ask participants to identify an important challenge, decision, or goal they expect to face in the coming weeks. 2. Introduce three behavioural approaches: Tourist (avoids action and remains in the comfort zone), Lookout (observes and analyses without acting), and Sailor (plans, takes responsibility, and acts proactively). 3. Invite participants to place their challenge under the category that best reflects how they are currently approaching it. 4. Ask participants to explain the reasons for their choice and discuss factors influencing their behaviour. 5. Facilitate a reflection on how different attitudes affect goal achievement and decision-making.
Reflection Questions	• Which category best describes your current approach to challenges? • What factors influence whether you take action or postpone it? • How does a proactive attitude contribute to achieving goals? • What steps could help you move from observation to action? • How can planning increase confidence when facing new challenges?
Key Learning Outcome	Participants recognise the difference between proactive and reactive behaviours and understand the importance of taking responsibility, planning ahead, and actively working towards their personal and professional goals.

5.12 Self-confidence

Self-confidence is about taking pride in your work, especially in areas such as food safety and environmental sustainability. It involves believing in your abilities to implement practices effectively and upholding high standards, while also recognizing the positive impact your work ha s on ensuring quality and safety throughout the aquaculture system.

Section	Description
Objective	Help participants understand the stages of the decision-making process and how they can be applied to everyday and professional situations.
Duration	15 minutes
Method	Video analysis, sequencing exercise, and group discussion

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Activity Instructions	1. Show participants a short video that illustrates a problem-solving situation. 2. Present the key stages of the decision-making process: Problem Identification, Problem Analysis, Evaluation of Alternatives, Selection of the Best Option, Implementation of Actions, and Evaluation of Results. 3. Ask participants, individually or in small groups, to arrange the stages in the order they believe best represents the decision-making process. 4. Review the correct sequence and discuss how each step contributes to effective decision-making.
Reflection Questions	• What steps did the character follow to solve the problem? • Which stages of the decision-making process are most important and why? • Do you usually follow a structured process when making decisions? • Which steps do you tend to overlook? • How could applying all the stages improve your personal or professional decisions?
Key Learning Outcome	Participants understand that effective decision-making involves a structured process, including identifying problems, evaluating alternatives, taking action, and reviewing outcomes. They recognise how applying these steps can lead to more informed and successful decisions.

6 CONCLUSIONS

In conclusion, the NOVAFOODIES Training Handbook provides a comprehensive framework for designing and delivering high-quality training programmes that respond to the current and future needs of the aquaculture sector. By integrating technical expertise, entrepreneurial mindsets, and essential soft skills, the methodology supports the development of a skilled, adaptable, and resilient workforce capable of contributing to the sector's sustainable growth. Through a learner-centred, participatory, and experiential approach, the handbook promotes not only knowledge acquisition but also personal development, employability, innovation, and social inclusion. Furthermore, by strengthening collaboration among stakeholders, fostering local capacity building, and encouraging the creation of professional networks, it contributes to broader economic and territorial development objectives. Ultimately, the NOVAFOODIES methodology serves as a practical and transferable model for supporting workforce development, entrepreneurship, and lifelong learning within the blue economy.

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7 REFERENCES

Acción contra el Hambre. (2017). *Employment Shuttle.* Retrieved from https://www.actioncontrelafaim.org/en/publication/employment-shuttle/

Acción contra el Hambre, Departamento de Acción Social. (2021). *Schools for Employment Methodology.*

Budzich-Tabor, U., Veronesi, M., van de Walle, G., & Brosei, P. (2017). Social inclusion for vibrant fishing communities. European Commission, Directorate-General for Maritime Affairs and Fisheries, Director-General. Retrieved from https://lasr-feral.si/wp-content/uploads/2024/06/Social-inclusion-en_farnetguide_13-1.pdf

EPALE. (2021). *European catalogue of soft skills references.* Retrieved from https://epale.ec.europa.eu/en/erasmus/soft-skills-20-erasmus/european-catalogue-soft-skills-references

European Parliament. (2021). *Fishers for the future: Attracting a new generation of workers to the fishing industry and generating employment in coastal communities (2019/2161(INI)).* Retrieved from https://www.europarl.europa.eu/doceo/document/TA-9-2021-0386_EN.html

European Parliament. (2022). *Resolution of 3 May 2022 toward a sustainable blue economy in the EU: The role of the fisheries and aquaculture sectors (2021/2188(INI)).* Retrieved from https://www.europarl.europa.eu/doceo/document/TA-9-2022-0135_EN.html

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