

TERMS OF REFERENCE AND TECHNICAL SPECIFICATIONS

I. General information

Assignment name	International Training of Trainers (TOT) on Fish Farming and Aquaculture Value Chain
Beneficiary	Technical staff from public institutions
Country	Libya
Total estimated number of days	Up to 50 days

II. Context and justification of the need

Libya continues to face structural challenges in its labor market, characterized by a strong dependence on public sector employment, limited private sector absorption capacity, and a persistent mismatch between education outcomes and labor market needs. The public sector remains the dominant employer, accounting for the majority of jobs, while the private sector—globally responsible for creating nearly 90% of employment opportunities—plays a marginal role. This imbalance has resulted in a high public wage bill, placing significant pressure on public finances and limiting opportunities for sustainable job creation, particularly for youth and women.

At the same time, Libya's economic structure is heavily reliant on the oil and gas sector, which represents the primary source of national income but employs only a very small proportion of the workforce. This structural dependency, combined with long waiting periods for public sector employment, has contributed to persistently high unemployment rates among young people and new graduates. Despite relatively high enrollment rates in higher education and technical and vocational education and training (TVET), the quality and relevance of education remain insufficient to meet labor market demands.

The disconnect between educational institutions and productive sectors has resulted in significant skills gaps. Employers in the private sector frequently report difficulties in recruiting qualified and job-ready graduates, while graduates themselves lack exposure to practical training, internships, and career guidance. This misalignment undermines employability, limits private sector growth, and constrains economic diversification efforts.

Within this context, the EU4SKILLS program, funded by the European Union and implemented by Expertise France, aims to address these challenges through a comprehensive and integrated approach to skills development and employability. Component 3 of the program specifically focuses on

strengthening skills and employment opportunities in green and blue economy sectors, recognizing their potential to contribute to economic diversification, food security, and sustainable development. The fisheries and aquaculture sector represents a strategic opportunity within Libya's blue economy. Despite the country's nearly 2,000 km coastline, favorable environmental conditions, and longstanding fishing traditions, the sector remains underdeveloped and characterized by low productivity, limited value addition, weak technical capacities, and insufficient application of best management practices. A critical constraint is the shortage of skilled human resources capable of applying modern aquaculture techniques, quality standards, biosecurity measures, and value chain approaches.

In this context, capacity development through high-quality, practice-oriented training is essential. A Training of Trainers (TOT) approach is particularly relevant, as it ensures sustainability, institutional ownership, and scalability of skills development interventions. By strengthening the technical and pedagogical capacities of selected national professionals, the TOT model enables the multiplication of knowledge and skills within Libya, supports institutional capacity building, and contributes to the long-term development of a skilled workforce in the aquaculture sector.

This Terms of Reference is therefore designed to support the selection of an international service provider capable of delivering an advanced Fish Farming Training of Trainers program aligned with international best practices, while responding to Libya's specific development needs and the objectives of the EU4SKILLS program.

III. Objectives and desired results

1) General objective

To strengthen national capacities in Libya by developing a cadre of qualified trainers capable of delivering high-quality, practice-oriented training in fish farming and aquaculture value chain management in line with international standards.

2) Specific objectives

- Enhance participants' technical competencies in fish breeding, farming, nutrition, health management, and processing.
- Strengthen understanding and application of best management practices (BMPs), biosecurity, and quality assurance systems in aquaculture.
- Build trainers' capacities to design, deliver, and evaluate aquaculture training programs using a ToT methodology.
- Promote knowledge transfer and regional cooperation through exposure to successful aquaculture models and facilities.
- Support the replication of acquired skills and practices within Libyan institutions and production systems.
- Support the capacity building in entrepreneurial and business skills related to fish farming projects.

3) Anticipated results

Upon completion of the assignment, the following results are anticipated:

1. A pool of qualified national trainers with enhanced technical and pedagogical capacities in fish farming and aquaculture value chain management, capable of delivering high-quality training aligned with international best practices.
2. Improved institutional capacity of Libyan entities involved in fisheries and aquaculture to design, implement, and replicate practice-oriented training programs.
3. Increased adoption of best management practices, biosecurity measures, and quality-oriented approaches within aquaculture production systems.
4. Enhanced sustainability and scalability of capacity development efforts through the Training of Trainers model, ensuring long-term impact beyond the duration of the assignment.

IV. Description of the assignment

1. Preparatory Phase

- Coordination meetings with Expertise France and relevant Libyan stakeholders.
- Finalization of training agenda, modules, and learning outcomes.
- Selection and validation of participants based on agreed eligibility criteria.
- Preparation of training materials and practical tools.

2. Training of Trainers Phase (International)

The TOT will be conducted at an international aquaculture training center selected through a competitive process and will combine:

- **Theoretical sessions:** Covering aquaculture systems, hatchery design and operation, farm management, nutrition, fish health, processing, quality standards, and certification systems.
- **On-the-job practical training:** Hands-on activities in hatcheries, nurseries, grow-out systems, feed factories, and processing plants.
- **Field visits:** Exposure to integrated aquaculture facilities, feed manufacturing units, and fish processing and packaging plants.
- **Pedagogical components:** learning principles, training design, facilitation techniques, and assessment methods.
- **Business skills training:** Entrepreneurial competencies, market analysis, and resource management, etc.

3. Knowledge Transfer and Replication Planning

- Development of draft national-level training plans by participants.
- Identification of opportunities and constraints for applying acquired knowledge in Libya.
- Agreement on follow-up actions and potential reverse linkage or in-country replication activities.

Target Beneficiaries

The training will target a selected group of Libyan professionals (approximately 10–15 participants), including:

- Technical staff from public institutions involved in fisheries and aquaculture.
- Trainers and instructors from vocational and higher education institutions.
- Technical experts from aquaculture projects and related entities.

Trainings:

The Training of Trainers (TOT) program shall be designed to respond to clearly identified technical and institutional capacity gaps in the fish farming and aquaculture value chain. The methodology shall be practice-oriented, competency-based, and directly linked to real production systems, reflecting the full aquaculture cycle from brood stock management to final product quality.

The training methodology shall combine the following complementary components:

1- Structured Theoretical Learning:

The service provider shall include targeted theoretical learning sessions aimed at establishing a harmonized technical foundation among participants. At a minimum, the theoretical component must cover the following areas:

- Modern aquaculture systems and production models.
- Hatchery design, operation, and management principles.
- Fish nutrition, feed formulation, and feeding strategies.
- Fish health management, biosecurity measures, and disease prevention and control.
- Post-harvest handling, processing, and quality requirements.
- Introduction to quality standards, certification schemes, and best management practices applicable to aquaculture.
- Introduction to smart and digital tools application in aquaculture.
- The service provider must ensure that theoretical inputs are concise, problem-oriented, and clearly linked to subsequent practical and applied training activities.

2- On-the-Job and Hands-On Practical Training

The service provider shall be required to include a substantial on-the-job and hands-on training component conducted in fully operational aquaculture facilities. The technical proposal must clearly describe how participants will be actively engaged in practical tasks, including, but not limited to:

- Broodstock selection, handling, and reproduction techniques.
- Larvae collection, nursery management, and stocking procedures.
- Grow-out operations, density management, and production optimization.
- Feed manufacturing processes and associated quality control procedures and disease prevention and treatment.
- Application of biosecurity protocols and farm-level best management practices.

This component must aim to ensure that participants acquire operational and supervisory skills, in addition to theoretical knowledge.

3- Field Visits and Aquaculture Value Chain Exposure

The service provider shall include guided field visits to key facilities along the aquaculture value chain. At a minimum, the visits must include exposure to:

- Hatchery and grow-out production facilities.
- Feed production and supply facilities.
- Fish processing and packaging units.

The service provider must demonstrate how these visits will contribute to participants' understanding of value chain linkages, quality requirements, traceability, and market standards.

4- Training of Trainers and Pedagogical Skills Development

The service provider shall explicitly integrate Training of Trainers (TOT) competencies into the program design. The technical proposal must address how the following pedagogical elements will be delivered:

- Adult learning principles and participatory training methodologies.
- Training needs assessment and formulation of learning objectives.
- Design of training modules, session plans, and training materials.
- Facilitation techniques, group management, and learner engagement.
- Assessment of learning outcomes and trainee performance.

This component must enable participants to effectively replicate and cascade the training within their respective institutions and national contexts.

5- Case Studies, Problem Solving, and Group Work

The service provider shall incorporate practical case studies and problem-solving exercises derived from real aquaculture production challenges. Group work must be used to enable participants to:

- Analyze production bottlenecks, risks, and constraints.
- Propose technical, managerial, and operational solutions.
- Adapt international best practices to national and institutional contexts.

6- Continuous Assessment and Feedback

The service provider shall be required to implement a continuous assessment and feedback mechanism throughout the training program. The technical proposal must describe how learning progress will be monitored, including:

- Observation of practical performance during hands-on activities.
- Group presentations and facilitated discussions.

- Pre- and post-training assessments.
- Continuous feedback provided by trainers.

This approach must ensure that learning objectives are achieved and that participants are adequately prepared to function as national trainers and technical resource persons.

4. Anticipated deliverables

Deliverables	Submission date
1. Finalized training agenda and detailed program.	T0 + 1 Week
2. A detailed report of the aquaculture training farm, lab(s), and training materials (presentations, manuals, guidelines). The report template and assessment pillars will be agreed on in advance.	Up to 3 weeks after the start of the preparatory phase
3. For each training session, an agenda in Arabic and English, including the session objectives.	At least 1 weeks before the training
4. After each training session, a brief training report will be submitted to summarize the session's objective and whether they're met, a signed list of participants, and key recommendations (if any). All training material should be submitted to the participants and EF as well.	1 week after the training
5. Monitoring and Evaluation Monitoring and evaluation will be conducted in close coordination with EF and will include: • Pre- and post-training assessments. • Participant feedback and satisfaction surveys. • Trainers' observations and performance evaluation. • Submission of agreed reports according to the project timeline.	To be agreed
6. Final report This report will provide full details of the service provided during the contract. A template will be agreed upon with EF team before the submission date.	Up to 1 month after the end of the contract

5. Coordination

A launch meeting shall be held within 1 week after the contract awardee has been notified. Regular exchanges must take place with the chief of component to follow up on assignment progress and any difficulties that may be encountered. The service provider shall designate a single contact person for project implementation purposes.

Mrs Yosra Ben Nagi will be the service provider's sole contact person for Expertise France concerning Component 3 (Green and Blue Economy)

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V. Place, duration, and terms of performance

- 1) **Implementation period:** 12 months
- 2) **Start date:** 04/2026
- 3) **End date:** 04/2027
- 4) **Effective duration per assignment:** 50 days
- 5) **Location:** To be confirmed after the selection of the service provider

VI. Required expertise and profile

Number of Experts: Minimum 2

Profile of the Designated Expert(s)

The service provider shall mobilize qualified aquaculture trainers with strong technical, pedagogical, and applied operational experience. The profiles must clearly demonstrate the following:

1. Qualifications and Skills

- A university degree in **aquaculture, fisheries science, marine biology, veterinary medicine, aquaculture engineering, or a closely related field.**
(*Equivalent professional experience may be considered.*)
- Strong technical knowledge in:
 - Fish reproduction and hatchery operations
 - Nursery and grow-out management
 - Aquaculture systems (marine and/or freshwater)
 - Fish nutrition, feed formulation, and feeding programs
 - Fish health, disease management, and biosecurity
 - Post-harvest handling, processing, and quality requirements
- Proven ability to design and deliver **(ToT)** programs.
- Excellent communication, facilitation, and knowledge-transfer skills.
- Strong analytical and reporting capacities.
- Ability to identify operational problems and propose practical solutions.
- Familiarity with:
 - Aquaculture best management practices (BMPs)
 - Traceability and quality assurance frameworks
 - Basic business, entrepreneurship, and project management aspects related to aquaculture enterprises

2. General Professional Experience

- Minimum 7–10 years of professional experience in aquaculture production, hatchery work, farm management, or related value chain activities.

- Demonstrated experience conducting practical, hands-on aquaculture training in operational facilities (hatcheries, farms, feed plants, or processing units).
- Prior experience in designing or delivering capacity-building programs for public institutions, private sector operators, or training centers.
- Experience working in international, regional, or funded programs is desirable.

3. Specific Training and ToT Experience

The expert team must demonstrate:

- Experience in delivering ToT programs, including:
 - Training design
 - Facilitating group work, practical demonstrations, and field-based instruction
 - Assessing trainee performance
- Ability to mentor participants in preparing training modules for national replication.

4. Language Requirements

- Fluency in Arabic for training delivery and interaction with participants.
- Working proficiency in English for reporting and coordination purposes.

Proposal submission

The company must submit:

- A technical offer that describes in detail how it will deliver the requirements of this RFP, the technical offer must also include:
 - A detailed work plan in GANTT chart format.
 - A company profile highlighting previous similar experience.
 - A list of the experts who will carry out the mission, and their CVs.
 - A certificate of commercial registration.
- A financial offer with a detailed budget breakdown for each phase and activity (all prices should be presented in gross amounts in USD or EUR).
- Only costs related to the technical training (expertise, training material, etc) should be included. Expenses related to travel, accommodation, transportation, etc, must not be counted in the offer.
- Cost breakdown by component in the

Description	Unit Cost	Number of units	Total cost
Expert 1			
Expert 2*			
Training kits, materials, etc			
Venue (if applicable)			
Total cost of the implementation			

*For more experts, rows must be added accordingly.