



## RESILIENT TOURISM AND BLUE ECONOMY DEVELOPMENT PROJECT- IN CABO VERDE (PROJECT ID: P176981)

Development of a training program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling: Santo Antão, São Vicente, Sal and Santiago Islands

### TERMS OF REFERENCE

#### 1. Context and background

The fishing in Cabo Verde is a primary productive sector that encompasses a very important value chain, from catching to commercialisation and consumption, with great potential for the country's economic and social development. However, as Cabo Verde is an insular, oceanic and tropical ecosystem, it presents a series of environmental vulnerabilities that potentially influence the sustainability of fishing activity, if the right strategies are not successfully designed and implemented.

As such, the successive governments of Cabo Verde and other national institutions, with the support of international development partners, have been adopting and appropriating the principle that the sustainable development of fisheries in Cabo Verde should strategically continue, favouring the promotion of the quality of fish and fishery products, to the detriment of an exclusive focus on increasing catches.

Recently, the Government of Cabo Verde and the World Bank agreed to support this institution, the resumption of national economic development, resulting, among others, in the approval of the project Turismo Resiliente e Desenvolvimento da Economia Azul (*Resilient Tourism and Blue*

*Economy*). *Blue Economy Development Project – RTBED*). This project proposes an integrated development model that addresses the main constraints to unlocking Tourism and the potential of the Blue Economy, in selected islands and locations. This selection was made according to the potential impact, the investment needs, the readiness to diversify and increase the tourist demand, as well as the dynamics of the private sector, the engagement of local communities, and the integration of the corresponding environmental and social challenges.

Component 2 of the RTBED aims to support entrepreneurship and the development of SMEs in the tourism and fisheries value chains, combining technical assistance, capacity building and access to financial support, with the aim of increasing the quality, reliability and scale of services and products provided. The fisheries sector is considered a special focus of support throughout the supply chain, from capture, marketing and consumption of fish and fishery products.

Currently, the country is in the process of resuming the development dynamics after the COVID-19 Pandemic, still under the effects of the war in Europe, but with clear signs of reactivation of tourism, as well as the primary sectors and exports, with emphasis on fishing and fishery products.

In this recovery phase, fishing appears as one of the primary sectors in focus, with national tourism as one of the important targets as a market for fishery products with added value.

However, despite these conjuncture opportunities, the commercialization of fishery products in the national market, in the main centers of consumption in the islands of São Vicente and Santiago, as well as in the tourist islands of Sal and Boavista, are far from being in compliance with international hygiene and health standards. Such a finding, in addition to representing a risk to public health, also implies an economic and social loss that could represent the added value of marketing fishery products under the HORECA system.

A significant part of fishing operators, upstream and downstream, do not have training, nor are they aware of the economic opportunities that can result from good fishing practices, handling and conservation of fishery products. In order to gradually overcome this situation, it is important to increase the training of operators, including programs to make them aware of the positive impacts of a new way of being in the fishing business, which promotes greater environmental, economic and social sustainability. A series of interventions, which could enhance each other, is in progress (see project sheet). The intervention with this broad training program in Good Fishing Practices, Handling and Conservation of Fish, aims to recycle, train and awareness fishing operators (fishermen, shipowners, fish handlers, fish sellers) representing the missing complement so that, upstream and downstream of the sector, an environment effectively develops that enhances the positive impacts of a chain of values, in an environment of quality and health, in line with international standards and norms in the matter.

## **Description of service**

### **2.1 Objectives**

The Special Projects Management Unit (UGPE), with the overall objective of improving the sustainability of fishing practices and the sanitary conditions of seafood handling, intends to hire an individual consultant specialized in food engineering and transformation of the fish, or similar areas, to provide specialized technical assistance to the Escola do Mar (EMAR) toward

developing a training program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling.

The training program should be guided by the WASH guidelines of the World Bank and ensure alignment with international standards and aim at supporting fishing communities in better managing the resource they derive their livelihood from, reducing post-harvest losses, enhancing value addition in their activities, and increasing community benefits.

## **2.2 Expected results**

As a result of this intervention, the project expects to have:

- 1) An initial needs assessment of the current situation of hygiene and health in the fishing sector and seafood supply chain on specific project locations across the intervention islands of the RTBED project; and
- 2) A comprehensive, customized and well-designed training and capacity building program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling in specific project locations across the intervention islands of the RTBED project, covering all stages of the fishing value chain, i.e., from more sustainable fisheries to compliance with post-harvest sanitary and health standards, to sale to the consumer.

## **2.3 Tasks**

The expected results will be achieved based on carrying out the following tasks:

- 1) A rapid needs assessment, covering all stages of the fisheries value chain, to assess the severity of conditions, and understand the spectrum of needs and risks as well as existing capacities and resources in the fishing sector and seafood supply chain across the four islands under the RTBED project with exact project locations to be agreed on. This step should be based on the WASH guidelines and cover three major areas, including i) water supply and quality, ii) waste production and management, and iii) sanitation and hygiene. This will include the following sub-tasks:
  - a) Collect data/information on reference materials, including existing relevant documentation related to training/capacity building and impact assessments, local and national legislation and standards, international standards and best practices, health, gender and human resources, namely specialists in handling and processing of fish and fishery products, focusing on the main markets and commercialization centers for fish and fishery products, on the project intervention Islands;
  - b) Assess current needs using available laboratory test results, records and documentation, direct observations, interviews and discussions with key stakeholders, and gender analysis to identify specific gender challenges. Emphasis should be placed on: (i) to actors/users of fisheries resources; (ii) community associations and operator classes, directly and indirectly involved in artisanal fishing, upstream and downstream; (iii) the national, municipal and local institutional structure; (iv) the environment and

financial mechanisms needed to finance projects considered important in promoting the quality, hygiene and wholesomeness of fishery products, in the value chain;

- c) Analyze the results and recommend specific training/capacity building interventions, including operators' sensitization/awareness needs; and identify target audiences and target locations based on the above analysis and in consultation with the client.
- 2) Based on the needs assessment, develop a comprehensive and well-designed training and capacity building program, adapted to the local context and tailored to the specific needs of the target audience. The training and capacity-building program should be based on a participatory, on-the-job training format, and pay particular attention to gender dimensions. The program should detail the beneficiaries to be targeted, the scope, format, and delivery, training location (e.g., fishermen and fisherwomen may benefit from training taking place on boats or fishing ports, while processors and handlers may benefit from training that takes place at seafood processing plants or markets), the timeline and calendar for implementation, and include relevant and customized training or capacity building materials. The program should also specify the detailed costs and the necessary qualifications and experience of the trainers, for an effective and efficient implementation, monitoring and evaluation aspects, etc.

## 2.2 Products

The products to be elaborated by the individual consultant, as a result of the above tasks, are the following:

Nº	Description	Language	Term
1	Initial report containing a detailed planning of all phases of the consultancy's development, the methodological approaches and the delivery schedule of the products;	Portuguese	10 days from the contract start date.
2	Needs assessment of the current situation of hygiene and health in the fishing sector and seafood supply chain on the intervention islands of the RTBED project	Portuguese and English	60 days from the contract start date.
3	Comprehensive and well-designed training and capacity building program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling on the intervention islands of the RTBED project, covering all stages of the fishing value chain, i.e., from more sustainable fisheries to compliance with post-harvest sanitary and health standards, to sale to the consumer.	Portuguese and English	90 days from the contract start date.

## 3. Terms

The project will run for 90 days from the date of signature of the contract.

## Profile and requirements of the Consultant

The Consultant must present the following qualifications, skills and experience, both technical and professional and scientific.

Qualifications	Overall experience	Specific experience
<ul style="list-style-type: none"><li>• Master's degree, or equivalent, in food technology and food quality, food sciences, fish processing and fish products</li><li>• Food engineering and fish processing, or related areas.</li></ul>	At least 10 years of technical and professional experience with seafood value chains and food systems.	10 years of experience in assessing and developing technical and professional training programs in the field of fisheries management, seafood value chains and food systems.

**Annex 1: PROJECT FORM. Development of a training program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling: Santo Antão, São Vicente, Sal and Santiago Islands**

<b>Project Name:</b>	Development of a training program targeted at improving the sustainability of fishing practices and sanitary conditions of seafood handling: Santo Antão, São Vicente, Sal and Santiago Islands
<b>Expected project duration:</b>	Three (3) months
<b>Project Location:</b>	Intervention islands of the Project “Resilient Tourism and Development of the Blue Economy (RTBED)”, that is, Santo Antão, São Vicente, Sal and Santiago.
<b>Bidder:</b>	EMar – Escola do Mar.
<b>Type of Bidder:</b> (Public/Private/Tertiary Sector)	Public. Non-profit public business entity.
<b>Responsible person, task and address:</b>	Liliane Pimenta Aguiar – President of the Board of Directors. Campus do Mar, Cova de Inglesa. Telephone: (+238) 231 74 64/ 955 14 84. E-mail: <a href="mailto:lilian.aguiar@emar.cv">lilian.aguiar@emar.cv</a>
<b>Website/ Facebook:</b>	<a href="https://emar.cv/">https://emar.cv/</a>
<b>Address:</b>	Edifício Campus do Mar, Cova de Inglesa - Mindelo, São Vicente Island, Republic of Cabo Verde.
<b>Area of Intervention:</b>	Training of skills for carrying out professional activities in the field of the sea, the maritime economy and the like.
<b>Estimated cost:</b>	USD 20,000 (Twenty thousand dollars)

**1. Capacity of the Proponent to implement the project.**

Escola do Mar (EMAR) is a non-profit public business entity which, within the scope of its attributions and competences, promotes technical and professional training for the exercise of professional activities in the fields of the sea, the maritime economy and related areas, namely in Fishing, Merchant Marine, Water Sports, Blue Economy, Transformation and Aquaculture. It is an institution endowed with administrative, financial, patrimonial, pedagogical, technical and scientific autonomy, with legal capacity that covers all the rights and obligations necessary or convenient for the pursuit of its corporate purpose. EMAR is headquartered in Mindelo, a center in Santiago and operates throughout the national territory.

Being a newly created institution, it operates in all the islands of the country, with dozens of strategic partners in the various domains of training demand that make up EMAR's areas of intervention. As a result of its operations, it already has 58 technical and professional courses/training courses and 1251 professionals trained in the most diverse areas of its activity.

## 2. Description of the project, demonstrating its strategic importance and viability.

This training program aims, in line with the objectives of the RTBED Project, to promote improvements in the sustainability of fishing practices and sanitary conditions for handling and preserving fish, as a form of active collaboration in national efforts to develop a value chain for products of the sea, based on sanitary quality and food safety.

Indeed, at national level, there are several interventions by the government of Cape Verde, and its development partners, in areas of the blue economy, directly or indirectly related to fisheries and seafood. Hence, upstream and downstream of the sector, the need for development, and social and cultural rooting, of good fishing practices, handling and conservation of fish, in such a way that the fishery product has added value throughout the chain of production and marketing, based on food and health safety. It is in this context that the present program is inserted, seeking the existing synergies in the various interventions, preparing the direct beneficiaries and fishing operators in general, for the technical and professional challenges of a business environment in fisheries, sustainable and integrated with the domains related to the blue economy, namely tourism.

- (i) Among the most outstanding interventions that drive the need for a program of this nature are:
- (ii) Rehabilitation and modernization of the Fish Marketing Market in Mindelo on the Island of São Vicente (including the unloading annex) which, being the only market on the island, centralizes the essential marketing of fish, not only of the semi-industrial fishing mainly of the artisanal fishing in the communities of Salamansa/Baías das Gatas, Calhau and São Pedro (statistics);
- (iii) The rehabilitation and modernization of the Pontão de Santa Maria on Sal Island, with an essential vision of integrating artisanal fishing and tourism, creating conditions for the professional exercise of a considerable number of fishing operators, including fishermen, handlers and saleswomen of fish;
- (iv) The design and implementation of a Fish Auction System at the Praia Fishing Complex, Santiago island, within the framework of CFI-CF initiatives in Cabo Verde, where around operators will be carrying out their activities, including shipowners, fishermen, handlers and fish sellers;
- (v) The studies for the requalification of the coastal zone of Tarrafal de Monte Trigo, Santo Antão Island (RTBED Project), foreseeing fishing infrastructures, where the artisanal fishing activity should come to be supported by operators duly trained and trained in good -fishing practices, handling and conservation of fish.

The dynamics of development that will gradually result from these interventions, in their operational phases, demand that the market have duly trained operators, aware of the importance of a professional exercise based on good fishing practices, handling and conservation of the fish throughout the chain, from capture (fisherman) through handling and conservation (fish handlers) to marketing (fish vendors/sellers).

The project therefore foresees the elaboration, for subsequent implementation, of a training program in Good Fishing Practices, Handling and Conservation of Fish, which should cover all professional levels of operators involved in fishing, from capture to marketing, including theoretical and practical modules as well as on-the-job training sessions. In its design, all

technical and teaching materials and equipment should be inventoried, including the clothing necessary for the exercise of each profession, in certified sanitary conditions.

Its implementation should be foreseen for a period of 24 months, on the islands of Santo Antão, São Vicente, Sal and Santiago, in several sessions that include training, recycling and technical monitoring in real work, with periodic evaluations in terms of acceptability, image and health compliance.

### 3. Description of the current situation

Currently, the country is in the process of resuming the post-COVID-19 pandemic development dynamics, still under the effects of the war in Europe, but with clear signs of reactivation of tourism as well as the primary sectors and exports, with emphasis on for fisheries and fisheries products.

In this recovery phase, fishing appears as one of the primary sectors in prominence, with national tourism as one of the important targets in terms of the market for fishery products with added value.

However, despite these conjunctural opportunities, the commercialization of fishery products in the national market, in the main centers of consumption on the islands of São Vicente and Santiago, as well as on the tourist islands of Sal and Boavista, is far from being in compliance with international standards. of hygiene and health. Such a finding, in addition to representing a risk to public health, also implies an economic and social loss that could represent the added value of marketing fishery products under the HORECA system.

A significant part of fishing operators, upstream and downstream, do not have training, nor are they aware of the economic opportunities that can result from good fishing practices, handling and conservation of fishery products. In order to gradually overcome this situation, it is important to increase the training of operators, including programs to make them aware of the positive impacts of a new way of being in the fishing business, which promotes greater environmental, economic and social sustainability. A series of interventions that could leverage each other are in progress – as already mentioned in Section 2., on the one hand, there are currently several interventions in fishing infrastructures, on the other hand, there are management and control mechanisms for fishing activities and fishery products, which are constantly evolving, as is the case of the current auction system, which also will include new legal and regulatory provisions. This extended training program in Good Fishing Practices, Fish Handling and Conservation, aims to recycle, train and raise awareness among fishing operators (fishermen, shipowners, fish handlers, fish sellers) representing the complement in there is still a need for, upstream and downstream of the sector, to effectively develop an environment that enhances the positive impacts of a value chain, in an environment of quality and health in line with international standards and norms in the matter.

### 4. Project location and target groups

The Project will be located on the islands of Santo Antão, São Vicente, Sal and Santiago, benefiting operators from the communities to be selected based on a study and prior diagnosis. Among the pre-selected target communities, based on the intervention sites of



the RTBED Mother Project, include: Cruzinha and Tarrafal de Monte Trigo on the island of Santo Antão; Praia de Bote, São Pedro, Salamansa and Calhau, on the island of São Vicente; Palmeira, Santa Maria and Pedra de Lume on Sal Island; Beach and Tarrafal, on the Island of Santiago. The pre-selection of these communities, in the geographic spaces of intervention of the mother project RTBED comes, a priori, from the facilities of implementation and follow-up by the operational structures of the project but will be discussed in more detail with the consultants.

## 5. Objectives of the Project

The project intends to pursue national efforts to train and raise the awareness of fishing operators, upstream and downstream, in good fishing practices, handling and conservation of fish, as a complement and opportunity to optimize the value chain in fisheries and ensure health and food safety in fisheries. This objective will be achieved, gradually, through the massification of training and awareness actions and technical and professional training, the context in which the intended program fits. The project therefore aims at drawing up, for subsequent implementation, a broad program of good fishing practices, handling and training of fishing operators (owners, fishermen, fish handlers, fish sellers), strategically on the islands and target communities of the RTBED parent project, with a view to boosting a value chain based on the quality and healthiness of fishery products. This overall objective will be achieved, namely, through the following specific objectives:

- a) An initial diagnostic study of the current situation of hygiene and health in the markets and main commercialization centers for fish and fishery products, prior to the implementation of the program at national level, with emphasis on the intervention islands of the RTBED project;
- b) Elaboration of an extended Training Program in Good Fishing Practices, Handling and Conservation of fish and fishery products, in the intervention islands of the RTBED project.

## 6. Expected results (List of results and products)

- a) Preparation of a diagnostic study of the current situation of hygiene and health in the main markets and commercialization centers for fish and fishery products, at national level, with emphasis on the intervention islands of the RTBED project. The study should, among other aspects:
- b) Analyze the degree of technical knowledge and level of awareness of operators regarding hygiene and health issues in the exercise of their respective professions (owner, fisherman, fish handler and fish seller) and, depending on the analysis, design the necessary interventions in terms of training and awareness/sensitization;
- c) Work procedures and habits and routines, including the use of necessary means and equipment, adequate clothing and health certification for the profession, etc.; Analisar, e avaliar, o grau de engajamento das partes interessadas, e a sua contribuição potencial numa cadeia de valores baseada na qualidade e salubridade dos produtos da pesca.

- d) Elaboration of a broad training program in Good Fishing Practices, Handling and Conservation of fish and fishery products, in the intervention islands of the RTBED project, covering a period of 24 months. The program should, among other aspects, include:
- e) The identification of the courses and the detailed description of the contents, including duration, periodicity, theoretical load, practice and simulations, as well as the follow-up and evaluation processes;
- f) the profile of trainers and trainees;
  - i. The necessary equipment, teaching and learning manuals, including their respective costs and technical description, as well as market research for their acquisition in the operational phase;
  - ii. The sensitisation/awareness-raising actions that are necessary, and their implementation in line with the technical and professional backgrounds identified;
  - iii. A strategy to strengthen the link between operators and relevant partners/authorities, favouring communication, coordination and collaboration between the parties.

## 7. Planned activities

- a) The expected results will be achieved based, among others, on carrying out the following activities:
- b) Collection of documents on the commercialization of fishery products, their compilation, treatment and analysis (sanitary and environmental) at national level, with a focus on the main markets and centers of the project intervention islands;
- c) Meeting with operators, health and fishing authorities, those responsible for markets, including municipalities;
- d) Carrying out surveys in the field to collect data and information considered relevant for the initial diagnosis, setting up, monitoring and evaluation of the program, as well as awareness needs/awareness of the operators, integrating the perspective of the value chain;
- e) Assessment on the field, the main obstacles to be overcome as well as ways forward for the successful implementation of the programme. Emphasis will be given to, among others:
- f) the stakeholders/users of fisheries resources;
  - i. To community associations and class operators directly and indirectly involved in artisanal fishing, upstream and downstream;
  - ii. The national, municipal and local institutional structure;
  - iii. The environment and the necessary financial mechanisms for financing projects considered important in promoting the quality, hygiene and wholesomeness of fishery products in the value chain;

- iv. Elaboration/adaptation of a manual on Good Fishing Practices, Handling and Conservation of fish and fishery products;
- g) g) Research and market surveys to assess prices and costs of materials and equipment, including instruments, appropriate clothing and technical specifics;

## 8. Potential environmental and social impacts

- i) O The project represents an important initiative to promote the environmental, economic and social sustainability of artisanal fishing, promoting greater engagement and responsibility of operators in the development of their activities in the context of the fisheries value chain. Consequently, it will promote, in the long term, greater quality of fishery products, encouraging the development of fisheries for better quality rather than more quantity.;
- ii) The project is expected to have positive environmental, economic and social impacts, as a result of the impacts of a chain of values developing in an adequate context of hygiene and health (higher income, greater sustainability, stability and dignity of jobs, less pressure on resources
- iii) ii) A very positive social impact is also expected in terms of promoting a more proactive, engaged and responsible citizenry in terms of developing the fisheries value chain;
- iv) As is characteristic of the entire process of innovation/change of habits and customs in artisanal fishing, it is to be expected, at the beginning of the program, any resistance that, pedagogically and through awareness/sensitization, will be overcome, resulting in greater rooting of program results. However, social impacts must be properly studied and measured for each class of operator, so that equivalent mitigation measures can be foreseen.

## 9. Replicability of the Results

The results obtained in terms of implementation of the training program. As well as raising awareness in the target islands, they will be successively evaluated and replicated, with the necessary capitalization of local and municipal specificities, as well as lessons learned. The replicability could be extended to other islands, depending on initial diagnostic studies of the hygiene and health conditions of fishing, the treatment and conservation of fish and fishery products and their commercialization. In the medium/long term, the goal to be achieved, and consolidated, will be to be able to have, in the future, the entire value chain in fishing in certified hygiene and health conditions.

## 10. . Key partners in project implementation and their roles.

The main partners in the project's implementation are:

- i) Community and class associations, as legitimate representatives of communities and classes (Fish Sellers/Sellers, Divers, Fishermen, Shipowners, etc.);
- ii) City councils, as local government;
- iii) IMar, as a marine and fisheries research institution;

iv)	Maritime Port Institute (IMP) and respective captaincies of Barlavento and Sotavento, as the maritime authority responsible for fisheries inspection;
v)	Maritime Police;
vi)	Cabo Verde Fisheries Association (APESC));
vii)	All EMAR partner institutions, in terms of technical and professional training in fisheries and maritime activities: <a href="https://emar.cv/emar/">https://emar.cv/emar/</a>

## 11. 11. Main barriers and risks in implementation, and mitigation measures

Risks	Mitigation Measures
1. Insufficient mobilization of operators (fishermen, shipowners, fish handlers, fish sellers, etc.);	<p>1.1. Creation of a program monitoring committee, with representation of the main fishing communities and class associations;</p> <p>1.2. Carrying out meetings for dissemination and collection of information, comments/suggestions on Good Fishing Practices, Handling and Conservation of fish and fishery products..</p>
2. Resistance of the key stakeholders.	<p>2.1 Conduct a detailed stakeholder analysis and, depending on the results, develop and implement an awareness plan (Section 6.b, iv) of this project form;</p> <p>2.2 Promote exchanges between communities/class associations, for exchanges of experience and sensitisation/awareness raising.</p>
3. Financial difficulties on the part of certain classes of operators in joining the project.	Integrate in the initial diagnostic study, economic dynamization scenarios and program catalysis.
4. Discontinuity of interventions on the field.	Promote, from the beginning of the programme, a complete assimilation of the programme and its appropriation by EMAR and fisheries operators.