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Report No: PAD5315

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT

IN THE AMOUNT OF SDR 7.6 MILLION
(US\$10.0 MILLION EQUIVALENT)

TO THE

REPUBLIC OF CABO VERDE

FOR THE

RESILIENT TOURISM AND BLUE ECONOMY DEVELOPMENT IN CABO VERDE PROJECT

February 16, 2023

Finance, Competitiveness and Innovation Global Practice
Western and Central Africa Region

This document is being made publicly available prior to Board consideration. This does not imply a presumed outcome. This document may be updated following Board consideration and the updated document will be made publicly available in accordance with the Bank's policy on Access to Information.

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2022)

Current Unit = Cabo Verde Escudos
(CVE)

CVE 103.55 = US\$1

US\$ 1 = SDR 0.751

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AM	World Bank Accountability Mechanism
ERR	Economic Rate of Return
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FM	Financial Management
GoCV	Government of Cabo Verde
GCRF	Global Crisis Response Framework
GRS	Grievance Redress Service
GRID	World Bank Group's Green, Resilient, and Inclusive Development
IDA	International Development Association
ISR	Implementation Status and Results Report
NPV	Net Present Value
PDO	Project Development Objective
PPSD	Project Procurement Strategy for Development
R&D	Research and Development
RPF	Resettlement Policy Framework
RQ	Research Quotient
RTBED	Resilient Tourism and Blue Economy Development in Cabo Verde Project
SEP	Stakeholder Engagement Plan
SME	Small and Medium Enterprise
UGPE	Unit for the Management of Special Projects (<i>Unidade de Gestão de Projetos Especiais</i>)

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**BASIC INFORMATION – PARENT (Resilient Tourism and Blue Economy Development in Cabo Verde Project - P176981)**

Country Cabo Verde	Product Line IBRD/IDA	Team Leader(s) Cristina Navarrete Moreno		
Project ID P176981	Financing Instrument Investment Project Financing	Resp CC EAWF1 (9277)	Req CC AWCF1 (6550)	Practice Area (Lead) Finance, Competitiveness and Innovation

Implementing Agency: Ministry of Culture and Creative Industries and Ministry of the Sea, Ministry of Finance and Business Development, Ministry of Infrastructure, Territorial Planning and Housing, Ministry of Tourism and Transports

Is this a regionally tagged project? No			
Bank/IFC Collaboration Yes	Joint Level Complementary or Interdependent project requiring active coordination		
Approval Date 31-May-2022	Closing Date 30-Jun-2027	Expected Guarantee Expiration Date	Environmental and Social Risk Classification Substantial

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach [MPA]	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input checked="" type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS)

**Development Objective(s)**

To increase diversity and resiliency in the tourism offering and small and medium enterprise (SME) participation in tourism-related value chains in targeted destinations.

Ratings (from Parent ISR)

	Latest ISR
	11-Oct-2022
Progress towards achievement of PDO	S
Overall Implementation Progress (IP)	S
Overall ESS Performance	MS
Overall Risk	M
Financial Management	MS
Project Management	S
Procurement	S
Monitoring and Evaluation	S

BASIC INFORMATION – ADDITIONAL FINANCING (Cabo Verde Resilient Tourism and Blue Economy Development AF - P179274)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P179274	Cabo Verde Resilient Tourism and Blue Economy Development AF	Cost Overrun/Financing Gap	No
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	10-Mar-2023	
Projected Date of Full Disbursement	Bank/IFC Collaboration	Joint Level	
13-Dec-2027	Yes	Complementary or	



	Interdependent project requiring active coordination
Is this a regionally tagged project?	
No	

Financing & Implementation Modalities

<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input checked="" type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS)
<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)	

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	30.00	3.02	26.48	10 %
Grants	5.00		5.00	0 %

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Cabo Verde Resilient Tourism and Blue Economy Development AF - P179274)

FINANCING DATA (US\$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	35.00	10.00	45.00



Total Financing	35.00	10.00	45.00
of which IBRD/IDA	30.00	10.00	40.00
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing

World Bank Group Financing

International Development Association (IDA)	10.00
IDA Credit	10.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Cabo Verde	10.00	0.00	0.00	0.00	10.00
National Performance-Based Allocations (PBA)	10.00	0.00	0.00	0.00	10.00
Total	10.00	0.00	0.00	0.00	10.00

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any other Policy waiver(s)?

Yes No



Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

INSTITUTIONAL DATA

Practice Area (Lead)

Finance, Competitiveness and Innovation

Contributing Practice Areas

Environment, Natural Resources & the Blue Economy
Transport
Urban, Resilience and Land

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

**PROJECT TEAM****Bank Staff**

Name	Role	Specialization	Unit
Cristina Navarrete Moreno	Team Leader (ADM Responsible)	Private Sector Development	EAWF1
Veruschka Schmidt	Team Leader	Fisheries, Environment	SAWE1
Ndeye Fatou Mbacke	Procurement Specialist (ADM Responsible)	Financial Management	EAWRU
Laurent Mehdi Brito	Procurement Specialist	Procurement	EAWRU
Seynabou Sarr	Financial Management Specialist (ADM Responsible)	Financial Management	EAWG1
Fatou Mbacke Dieng	Financial Management Specialist	Procurement	EAWG1
Fabienne Anne Claire Prost	Environmental Specialist (ADM Responsible)	Environment - Safeguards	SAWE1
Mame Safietou Djamil Gueye	Social Specialist (ADM Responsible)	Social - Safeguards	SAWS4
Anta Tall Diallo	Procurement Team	Procurement	AWCF1
Antonio Manuel Baptista	Team Member	Private Sector Development	EAWF1
Berengere P. C. Prince	Peer Reviewer	Fisheries and Environment	SCAEN
Bradley Lawrence Weiss	Team Member	Tourism	EAWF1
Diana Cristina Tello Medina	Team Member	Urban Development	SAEU2
Faly Diallo	Team Member	Financial	WFACS
Fatima Arroyo Arroyo	Peer Reviewer	Transport	IAWT4
Ganna Musakova	Team Member	Operations	EAWF1
Jandira Monteiro Dos Santos	Team Member	ACS/project support	AWMCV
Jessie F. McComb	Peer Reviewer	Tourism	ETIMT
Joao Marcos Campos Rampini	Team Member	Urban Development	IECT1
Louise D Twining-Ward	Team Member	Tourism	ETIMT
Matthieu Louis Bonvoisin	Counsel	Legal	LEGAM
Philippe Neves	Team Member	Transport	IAWT4



Extended Team

Name	Title	Organization	Location
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I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

1. **The Resilient Tourism and Blue Economy Development in Cabo Verde Project (RTBED, P176981)**, hereafter referred to as Parent Project, was approved on May 31, 2022, with an IDA Credit (No. 7126-CV) in the amount of SDR 21.8 million (US\$30 million equivalent) and a PROBLUE Grant (No. TF0B8414) in the amount of US\$5.0 million. The project became effective on June 30, 2022, with a closing date of June 30, 2027.
2. **The Parent Project supports the national vision and strategies of the Government of Cabo Verde (GoCV)**—the Tourism Operational Program and the National Investment Plan for the Blue Economy—to promote sustainable tourism and conservation of natural resources with benefit to local communities. Through a series of integrated and cross-sectoral project interventions in three priority geographical areas (Santiago Island, the northern Islands of São Vicente and Santo Antão, and Sal Island), the project seeks to catalyze tourism flows across more islands and market segments beyond the current core all-inclusive offering, thereby enabling greater participation of local communities in tourism-related value chains and supporting the small and medium enterprises (SMEs) sector to provide demand-driven and sustainable services for tourism.
3. **The Project Development Objective (PDO) is to increase diversity and resiliency in the tourism offering and small and medium enterprise (SME) participation in tourism-related value chains in targeted destinations.** The project includes the following four components:
 - (a) **Component 1** (US\$21.58 million equivalent): Development of integrated and resilient tourism and blue economy infrastructure, which focuses on the development of selected resilient tourism and blue economy infrastructure
 - (b) **Component 2** (US\$12.64 million equivalent, of which US\$5 million PROBLUE Recipient-Executed Trust Fund [RETF]): Enhancement of inclusive and sustainable management of tourism in a blue economy, which supports local SMEs to increase participation in the tourism and blue economy. This includes a better enabling environment and policies to stimulate additional private sector investment in these segments.
 - (c) **Component 3** (US\$0.78 million equivalent): Project Implementation Support, which provides support to the Unit for the Management of Special Projects (*Unidade de Gestão de Projetos Especiais*, UGPE) for the management and implementation of the project.
 - (d) **Component 4** (US\$0 million): Contingency Emergency Response Component (CERC) in accordance with IPF policy, paragraphs 12 and 13, for Situations of Urgent Need of Assistance and Capacity Constraints.
4. **The overall performance of the Parent Project is rated Satisfactory.** Six months after project effectiveness, important implementation progress has been achieved. Key progress includes the launching of procurement processes for more than 15 priority activities, the setting up of the institutional arrangements (that is, Project Steering Committee and Project Technical Committee), and hiring of required project implementation technical staff (that is, project manager, a tourism planning adviser for the Ministry of Tourism and Transport, a tourism marketing specialist to support the Tourism Board, and a civil engineer to support the UGPE). In addition, the project has prepared the annual work plan and



budget for 2023, which has been approved by the Steering Committee and the World Bank. As of February 2023, the total disbursement rate was 10 percent and the progress toward achieving the PDO and the implementation progress are rated Satisfactory. The project is in compliance with key loan covenants which were to (a) customize the accounting software to include the bookkeeping of the Project; (b) include (the Project in the internal auditor scope of intervention; and (c) recruit a Project manager, an engineer and an external auditor with qualifications, experience and terms of reference satisfactory to the Association. The procurement is rated Satisfactory, and the financial management (FM) and environmental and social performances are rated Moderately Satisfactory.

5. **The Parent Project supports the economic recovery phase, aiming at investments, policies, and institutions that will enable a resilient and sustainable recovery.** The operation supports the national strategies—expressed under the umbrella of the *Ambição 2030* Vision, POT, and National Investment Plan for the Blue Economy—to provide the enabling environment for more private investment and diversification in and outside of the tourism sector. The project also aligns with the World Bank Group’s Country Partnership Framework (CPF) 2020–25 for Cabo Verde (report number 127164) Objective 4 on improving the foundations for private sector growth. In addition, Parent Project is consistent with the World Bank Group’s Green, Resilient, and Inclusive Development (GRID) framework and Global Crisis Response Framework (GCRF). In line with GRID and GCRF, this project systemically and simultaneously addresses the challenges of urban poverty and climate change through targeted investments in sustainable urban development works to increase the quality of life of the most vulnerable urban residents supporting as such pillars 2, 3 and 4 of GCRF.

6. **One of the Parent Project’s key and largest investments includes the financing of the rehabilitation of a section of the Espargos-Santa Maria Road on Sal Island.** The national road (EN1-SL-01 Espargos-Santa Maria) is the main transport infrastructure connecting the two main urban areas on the island, Santa Maria (12,000 inhabitants) and Espargos (17,000 inhabitants). Most of Sal’s touristic resorts are in Santa Maria, while most of the tourism industry’s workers live in Espargos. The road is also the main access gateway to the port of Palmeira and to and from the Amílcar Cabral International Airport (the largest airport in the country). Built 20 years ago, this road needs to be rehabilitated to accommodate the rapid increase in traffic (from 2,000 vehicles per day in 2012 to 4,000 in 2020) and offer a better level of service. It is estimated that 72 percent of the pavement surface is cracked (more than 35 percent are low severity cracks and 37 percent are already medium to high severity levels) with a high number of potholes (over 50 reported). The deteriorated condition coupled with a lack of lighting have led to a heightened occurrence of accidents. The 2022 rainy season has further accentuated the precarious condition of the road and the need for urgent rehabilitation.

7. **The full rehabilitation of the Espargos-Santa Maria Road will bring improved accessibility and mobility of the population, tourist operators, and visitors to the main urban centers of the island, as well as to the airport, port, and tourism sites.** Road rehabilitation will contribute to improving the living conditions of local populations, particularly regarding the enhancement of accessibility conditions and the promotion of economic activities (for example, tourism), also facilitating their lives in terms of the flow of products (fish products). It will improve the conditions of accessibility for the communities of the most important cities of the island, directly benefiting the inhabitants of the cities of Santa Maria, Murdeira, Vila Verde, Fátima, and Espargos. In addition, it will ensure enhanced mobility and safety for tourist operators (travel agencies and hotels), who promote excursions to the island; tourist guides; tourists; economic operators (for example, vegetable and fish, fishermen, and divers); and visitors to the island.



8. **Due to constraints on the IDA19 envelope at project preparation and approval, it was decided that the project financing would only contemplate funds for the rehabilitation of the most damaged section of the road and an additional financing (AF) would be prepared as soon as IDA20 funds were made available.** The original financing covers approximately 7.2 kilometers (km) of the northern stretch from the airport down to Murdeira. The full length of the road is 14.6 km, comprising two lanes in each direction and six traffic circles. Overall, the pavement and drainage structures are deteriorated, signage and guardrails are lacking, bicycle lanes are missing, and there is no speed control system.

II. DESCRIPTION OF ADDITIONAL FINANCING

9. **To be able to work on the full rehabilitation of the road, the GoCV requested an AF for the rehabilitation of the remaining 7.4 km of the Espargos-Santa Maria Road.** On April 18, 2022, the GoCV sent an official request for an AF of US\$10 million to cover the remaining road stretch, highlighting the urgency and importance of working on both phases of the road simultaneously.

10. **Based on revised estimates sent by the Government, the estimated funding gap for the remaining stretch of the road is US\$10 million.** During the last months, the GoCV developed the technical specifications' documents for the full rehabilitation of the road, which have received 'no objection' from the World Bank, and are currently under the procurement process. In addition, the procurement process related to the supervision of the works is in progress.

11. **The proposed AF will exclusively focus on the funding gap for the remaining 7.4 km of the Espargos-Santa Maria Road.** The AF will support the development objectives of the Parent Project with no changes to the PDO, components, institutional arrangements, or closing date. The only changes proposed are those related to the description of the related activity (that is, the rehabilitation of the Espargos-Santa Maria Road and other selected roads), the cost of the road (that is, increasing total cost of Component 1 by US\$10 million), disbursement estimates and the Results Framework to reflect the additional number of kilometers to be rehabilitated (that is, the end target of the intermediate results indicator on roads rehabilitated will be increased from 7.4 km to 14.6 km). The Parent Project will also be restructured to update the description of activities and align them with those of the AF.

12. **The AF will apply the World Bank's environmental and social instruments prepared for the Parent Project.** The Parent Project has already developed and disclosed¹ the following instruments: an Environmental and Social Management Framework (ESMF), an Environmental and Social Commitment Plan (ESCP), a Resettlement Policy Framework (RPF), and a Stakeholder Engagement Plan (SEP). For the rehabilitation of the Espargos-Santa Maria Road, an Environmental and Social Management Plan (ESMP) was developed for the entire 14.6 km to be rehabilitated.

¹ *Resilient Tourism and Blue Economy Development in Cabo Verde Project in Cabo Verde - UGPE (gov.cv); Pesquisa - Ministério das Finanças (gov.cv); Orçamento - Ministério das Finanças (gov.cv); Rehabilitation Improvements of the Road EN 1-SL-01, Espargos Santa Maria (Ilha do Sal) - UGPE (gov.cv).*



III. KEY RISKS

13. **The overall risk of the project, including the AF, is rated Moderate.** This follows an assessment of the residual risk to the development outcomes of the AF operation and the expectation that all mitigation measures are enacted. . Since the AF is only an addition of funding to make up the shortfall in the initial amount needed to fully rehabilitate the Espargos-Santa Maria Road, with no additional activities, the environmental and social risks and anticipated impacts related to this rehabilitation have already been identified during the preparation of the Parent Project. As such, the environmental and social risk for the AF have been rated Moderate. Macroeconomic and institutional capacity for implementation risks have been rated Substantial. The Though the AF is adding funding to a project design that is complex and involves multiple actors and locations, it is not adding any additional risk in terms of technical design, institutional capacity for implementation, or environmental and social risks. Due to the recent volatile and inflationary trends of international prices of goods and raw materials, there is the risk that the financial proposals for the execution of the road works may exceed the estimated total budget of US\$15 million calculated in 2019 by the GoCV. Based on calculations conducted by the task team, it is likely that there could be a cost overrun of 20 percent over the initial cost estimates of the road of US\$15 million, bringing the total estimated amount for the full road rehabilitation to approximately US\$18 million (US\$8 million allocated under the Parent Project plus US\$10 million under this AF).

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

14. **The original economic analysis conducted as part of the Parent Project preparation was updated to incorporate the cost and timeline for this AF, along with expected additional benefits.** The original economic analysis was based on increased revenues for SMEs and individual beneficiaries through the activities and investments under the project, along with increased revenues in Cabo Verde from tourist spending. The total net present value (NPV) is estimated at US\$440.6 million at a 12 percent discount rate, and the economic rate of return (ERR) is estimated at 48 percent based on the total project investments including the AF.²

15. **Based on the updated analysis, the NPV for Component 1 is estimated at US\$572.3 million with an ERR of 54 percent.** The economic analysis of this Component is based on growth projections for the tourism sector, including longer stays and higher spending per tourist as a result of the project.

16. **The estimate for the Component 2 NPV remains the same at US\$1.3 million with an ERR of 16 percent as estimated during the original analysis.** This component's analysis includes increased revenues for SME beneficiaries within the tourism and fisheries sectors as a result of project support. Since the AF contributes only to Component 1, this analysis remains the same as calculated at project outset.

² The total NPV of the Parent Project was estimated at US\$404.1 million at a 12 percent discount rate, and the ERR was estimated at 42 percent. Component 1 NPV was estimated at US\$402.1 million with an ERR of 43 percent.



B. Technical

17. **The AF operation will follow the Project Operational Manual developed for the Parent Project with no modifications required.** The AF will build on the existing Project Operational Manual including institutional aspects, internal controls and procedures, procurement methods and procedures, disbursement and payments, file and inventory management, accounting organization, environmental and social instruments, and financial audits.

C. Financial Management

18. **The FM arrangements for the project will rely on the existing fiduciary arrangements in place for the Parent Project with the UGPE responsible for FM aspects.** The UGPE’s overall FM performance is Satisfactory. The fiduciary arrangements in place include keeping books of accounts and supporting documents kept for all expenditures. The UGPE’s FM team, which is familiar with the World Bank’s FM requirements, is currently managing the Parent Project.

19. **The FM performance of the Parent Project was rated Moderately Satisfactory during the last implementation support mission completed in September 2022 and the FM risk was Moderate.** The Project Operational Manual had been developed and validated by the World Bank. In addition, the accounting software has been customized and the internal auditor included the project in his scope of work. The procurement process of the external auditor has also been completed.

D. Procurement

20. **All works, goods, and services will be procured according to the procurement arrangements of the Parent Project, with the UGPE responsible for procurement aspects.** The UGPE prepared the Project Procurement Strategy for Development (PPSD), which describes how fit-for-purpose procurement activities will support project operations for the achievement of the PDO and deliver value for money. The PPSD has been updated to reflect the additional kilometers to be rehabilitated through this AF.

21. **The procurement performance of the Parent Project was rated Satisfactory during the last implementation support mission,** and the procurement risk was rated Moderate.

E. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

F. Environmental and Social

22. **The overall environmental and social risk rating for the AF is Moderate.** Since the AF is only an addition of funding to make up the shortfall in the initial amount needed to fully rehabilitate the Espargos-



Santa Maria Road, with no additional activities, the environmental and social risks and anticipated impacts related to this rehabilitation have already been identified during the preparation of the Parent Project.

23. **Environmental risk rating.** The anticipated environmental risk for the Parent Project was Substantial, and for the AF it is Moderate. The Espargos-Santa Maria Road traverses peri-urban land and the renovation works will be undertaken within the existing road easement. The potential environmental risks and anticipated impacts are limited to those associated with the civil works required for the rehabilitation of the Espargos-Santa Maria Road: potential pollution from fuel/lubricant spills; noise and dust impacts from construction activities; and community and worker health and safety risks associated with vehicle and pedestrian traffic, mobile plant operation during construction, and materials sourcing activities. The Moderate environmental risk rating is justified as these risks are considered predictable and are expected to be temporary and/or reversible given the nature of the civil works activities proposed. The risks and impacts are of low magnitude and are confined to existing footprints apart from noise and air quality risks that may temporarily affect adjacent residential receivers (few). Civil works may require clearing of vegetation along the road, but these will not be located near sensitive biodiversity areas or other areas of environmental interest. Scarce vegetation is limited to a few trees (acacias) and bushes along the sides of the road, which will need to be replanted or compensated for if they have to be cut down for road renovation (as required by Cabo Verdean regulations and the Environmental and Social Framework [ESF]). There is a low probability of serious adverse effects to human health and the environment given the low hazard of the construction works. Therefore, the risks and impacts can be readily mitigated in a predictable manner using standard methods and techniques associated with civil works activities. The environmental risk associated with the operational phase of the project is expected to be low.

24. **The current ESMP that was prepared and disclosed for the Parent Project remains valid³.** The AF will be implemented by the UGPE, which has experience in the implementation of World Bank projects and in the management of environmental and social impacts and risks in accordance with ESF provisions.

25. **Social risk rating.** The social risk remains Substantial like the Parent Project. All social risks were already identified in the Parent Project and are still considered relevant in the AF. Key risks from project activities, particularly during the construction/rehabilitation, include (a) resettlement and socioeconomic impact; (b) unequal employment opportunity; (c) harassment, intimidation, and/or exploitation, including addressing gender-based violence risks; (d) destruction of cultural heritage during the rehabilitation of cultural sites, lack of consultation and citizen engagement, and lack of communication; and (e) sexual abuse of minors, such as prostitution as well as rape and sexual exploitation of children, especially in the tourist islands of Sal. Mitigation measures have been put in place in the Parent project to address this and also cover the AF activity.

26. **The social and environmental performance of the Parent Project was rated Moderately Satisfactory during the last implementation support mission.** The mission noted that the ESCP and SEP

³ *Pesquisa - Ministério das Finanças (gov.cv)*

Orçamento - Ministério das Finanças (gov.cv)

Rehabilitation Improvements of the Road EN 1-SL-01, Espargos Santa Maria (Ilha do Sal) - UGPE (gov.cv)



were beginning to be implemented⁴. In addition, the mission noted that the UGPE had already established the grievance redress mechanism at the central level; however, at the time of the last mission, efforts were still needed to ensure full deployment at the local level.

27. **Gender. The Parent project was designed to specifically address gender gaps and constraints faced by women across the tourism value chain.** To address the identified gender gaps, the project embedded gender-sensitive solutions across interventions which do not change with the AF. Both the Parent Project and the AF are gender tagged.

V. WORLD BANK GRIEVANCE REDRESS

28. **Grievance redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>.

⁴ ESCP and SEP for the AF have been disclosed by the Client and World Bank on January 26, 2023. These can be found at <https://documents.worldbank.org/en/publication/documents-reports/documentlist?qterm=P179274>

**VI SUMMARY TABLE OF CHANGES**

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Implementing Agency		✓
Project's Development Objectives		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
Procurement		✓
Implementation Schedule		✓
Other Change(s)		✓

VII DETAILED CHANGE(S)**COMPONENTS**

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Component 1: Development of integrated and resilient tourism and blue economy infrastructure	21.58	Revised	Component 1: Development of integrated and resilient tourism and blue economy infrastructure	31.58
Component 2: Enhancement of inclusive and sustainable management of tourism in a	12.64		Component 2: Enhancement of inclusive and	12.64



blue economy			sustainable management of tourism in a blue economy	
Component 3: Project Implementation Support	0.78		Component 3: Project Implementation Support	0.78
Component 4: Contingent Emergency Response Component (CERC)	0.00		Component 4: Contingent Emergency Response Component (CERC)	0.00
TOTAL	35.00			45.00

Expected Disbursements (in US\$)

Fiscal Year	Annual	Cumulative
2022	0.00	0.00
2023	5,820,000.00	5,820,000.00
2024	11,040,000.00	16,860,000.00
2025	16,990,000.00	33,850,000.00
2026	9,470,000.00	43,320,000.00
2027	1,680,000.00	45,000,000.00
2028	0.00	45,000,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	● Low	● Low
Macroeconomic	● Substantial	● Substantial
Sector Strategies and Policies	● Low	● Low
Technical Design of Project or Program	● Moderate	● Moderate
Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial
Fiduciary	● Low	● Low
Environment and Social	● Substantial	● Substantial
Stakeholders	● Moderate	● Moderate



Other	● Low	● Low
Overall	● Moderate	● Moderate

LEGAL COVENANTS – Cabo Verde Resilient Tourism and Blue Economy Development AF (P179274)

Sections and Description
No information available
Conditions



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Cabo Verde

Cabo Verde Resilient Tourism and Blue Economy Development AF

Project Development Objective(s)

To increase diversity and resiliency in the tourism offering and small and medium enterprise (SME) participation in tourism-related value chains in targeted destinations.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Increase diversity in the tourism offering							
Increase in average daily tourist spending at destination islands (Percentage)		0.00	5.00				15.00
Increase in total tourist overnight stay in destination islands (Percentage)		0.00	3.00	7.00	12.00	16.00	20.00
Increase SME participation in tourism-related value chains							
Share of beneficiary SMEs with new or expanded contracts to the hospitality value chain (disaggregated by gender and sector) (Percentage)		0.00	20.00	40.00	50.00		60.00
Increase resilience in the tourism offering							
Infrastructure rehabilitated, upgraded or established		0.00	0.00	2.00	4.00	8.00	8.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
integrating climate resilience practices (Number)							

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	

Component 1: Development of integrated and resilient tourism and blue economy infrastructure

Share of local tourism and other ocean-economy value chain beneficiaries satisfied with the project interventions (disaggregated by gender) (Percentage)		0.00	40.00				65.00
Infrastructure rehabilitated, upgraded or established integrating sustainable practices (disaggregated by type) (Number)		0.00	0.00	2.00	4.00	8.00	8.00
Roads rehabilitated (CRI, Kilometers)		0.00	4.00	8.00	14.60		14.60
Action: This indicator has been Revised							
Share of fish from fisheries under improved management, landed or handled according to improved practices at project-supported sites (Percentage)		0.00	40.00	60.00			80.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
National inter-modal transport strategy drafted and submitted for adoption (Yes/No)		No	No	Yes			Yes
Component 2: Enhancement of inclusive and sustainable management of tourism and in a blue economy							
SMEs with improved access to finance supported by the project (Number)		0.00	10.00	30.00	60.00	100.00	150.00
Women-owned/ managed SMEs with improved access to finance supported by the project (Number)		0.00	3.00	10.00	25.00	40.00	68.00
Beneficiary SMEs adopting climate smart practices (disaggregated by gender) (Percentage)		0.00	0.00	0.00	5.00	10.00	15.00
Policies or legal instruments that integrate blue economy principles and climate change adaptation measures drafted and submitted to Cabinet (Number)		0.00	1.00	3.00	6.00	7.00	8.00
Action Plan for Gender Mainstreaming in Tourism is updated and adopted, including GBV standard guidelines (Yes/No)		No	No	Yes			Yes



Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Increase in average daily tourist spending at destination islands		Baseline, mid-term, and end[bw1]	National Statistics Office (INE)	Reported data compiled by National Statistics Office through survey data collection	UGPE through National Statistics Office
Increase in total tourist overnight stay in destination islands		Annual	National Statistics Office (INE)	Reported data compiled by INE	UGPE through INE
Share of beneficiary SMEs with new or expanded contracts to the hospitality value chain (disaggregated by gender and sector)		Baseline, mid-term, and end.	Survey data by UGPE with support from Pró-Empresa, Programante and Procapital	Annual survey with beneficiary firms	UGPE/Pro-Empresa
Infrastructure rehabilitated, upgraded or established integrating climate resilience practices		Annually	Data from relevant beneficiaries	Confirmation of completion of infrastructure incorporating climate resilience practices confirmed by relevant project beneficiaries (eg. Ministry of the Sea, Estradas de Cabo Verde, etc).	UGPE



Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Share of local tourism and other ocean-economy value chain beneficiaries satisfied with the project interventions (disaggregated by gender)		Baseline, mid-term and end	Community Satisfaction Survey	Survey	UGPE
Infrastructure rehabilitated, upgraded or established integrating sustainable practices (disaggregated by type)		Annual	Project M&E system	Collection from project monitoring and & evaluation system, including bi-annual implementation reports.	UGPE
Roads rehabilitated		This indicator measures the cumulative number of kilometers of national roads rehabilitated integrating sustainable practices under the Project	Bi-Annual	Project M&E system	UGPE with data from ECV



Share of fish from fisheries under improved management, landed or handled according to improved practices at project-supported sites		Bi-Annual	Collection from Directorate General of Maritime Resources	Direct data collected by Directorate General of Maritime Resources	
National inter-modal transport strategy drafted and submitted for adoption		Bi-Annual	Project M&E system	Collection from project monitoring and & evaluation system, including bi-annual implementation reports. Information on the completion and adoption of the strategy should be provided by the Ministry of Tourism and Transport and Ministry of the Sea.	UGPE with support of MTT
SMEs with improved access to finance supported by the project		Bi-Annual	Pró-empresa	Data generated by Pró-empresa	UGPE with support from Pro-empresa
Women-owned/ managed SMEs with improved access to finance supported by the project		Bi- Annual	Pró-empresa	Data generated by Pró-empresa	UGPE with support from Pró-empresa
Beneficiary SMEs adopting climate smart practices (disaggregated by gender)		Annual	Annual survey conducted to supported firms in	Data collected directly by UGPE	UGPE



Annex 1: Economic and Financial Analysis

1. The original economic analysis conducted as part of the Parent Project preparation was updated to incorporate the cost and timeline for this AF, along with expected additional benefits. The original economic analysis was based on cost of infrastructure and increased revenues for SMEs and individual beneficiaries through the activities and investments under this project, along with increased revenues in Cabo Verde that result from tourist spending. The total NPV is estimated at US\$440.6 million at a 12 percent discount rate,⁵ and the ERR at 48 percent based on the total project investments including the AF.

2. In reference to this valuation estimate, several points are worth noting. First, this calculation is indicative, using expected average parameters for the component beneficiaries and the resulting impact of the component activities. While these assumptions are based on the project team's discussions with potential beneficiaries along with results of other projects and economic literature, they are not precise representations of the impact that the project will have. The exercise of financially modelling projected impacts helps ensure that project funds are being allocated to investments and activities that will provide a return to the local population, along with helping identify key risks and thresholds for the project to achieve its desired impact. Additionally, international development projects often target regions and sectors where the risk is high since these types of projects can specifically take on higher risk investments because of the social good that could result from them. Financial valuations of these investments may not be as high as those in other regions, yet the social and/or environmental value of such investments could be considerably higher.

3. That said, the methodology used (detailed on paragraph 8 below) accounts only for the project's impact on direct beneficiaries rather than using a broader multiplier approach which would encompass positive externalities and spillover effects, along with overall growth of the tourism and business ecosystems. The value of such externalities is difficult to estimate; project investments could result in larger-scale private and public investments. The social rate of return could be even higher because private sector investment could reduce over time without this project and other development initiatives addressing key bottlenecks on the ground.

4. The details on the analysis for each component are as follows.

Component 1: Develop integrated and resilient tourism and blue economy infrastructure

5. Based on the analysis, the NPV for Component 1 (including the US\$10 million in AF) is estimated at US\$572.3 million with an ERR of 54 percent.

6. The economic analysis of this component is based on increased tourism revenues due to the impact of the project investments. The infrastructure investments under this component will upgrade key areas within the tourism and coastal economy; improve accessibility to tourism sites; improve planning for future accessibility; and rehabilitate trails, cultural centers, and other tourism sites. As a whole, these investments are expected to increase Cabo Verde's attractiveness to potential tourists and increase

⁵ The team estimates a 12 percent discount rate as the risk-adjusted opportunity cost of capital. Additional NPV estimates at other discount rates have also been provided as a measure of the sensitivity of the analysis.



spending. Given that the marketing campaign supported and budgeted under Component 2 is also expected to attract additional tourists, the impact of this activity has been incorporated into the analysis for this component.

7. The cost portion of the analysis for this component includes the anticipated disbursement schedule for both the original project and the current AF.

8. Economic analysis estimates for this component are based on the following parameters:

- **Arrivals**

- **Number of arrivals.** Before the pandemic, in 2019, national tourist arrivals were 758,000. Due to the impacts of the pandemic, tourist arrivals in 2020 reduced by over 50 percent. Anticipating a return to pre-pandemic levels in 2024, the analysis uses 2019 arrivals as the arrivals baseline. However, project interventions are estimated to target only 19 percent of these arrivals as the portion that visit without a tour group package, based on a recent market diagnosis for the Strategic Tourism Marketing Plan.
- **Growth rate in arrivals.** The analysis uses a growth rate estimate of 9 percent annually based on pre-pandemic growth levels for the country. However, for the target segment noted above, the original analysis estimated that the project will contribute a 3 percent additionality for a total 12 percent growth rate, while the current analysis including the AF estimates an additional 4 percent.
- **Length of stay.** The analysis estimates that the average length of stay per tourist will grow from six to eight days, as laid out in the Results Framework targets. This assumption was not changed as part of the AF analysis.
- **Tourism (non-accommodation) spending.** The analysis projects that tourism spending will increase at 10 percent annually, with an additional 5 percent (original analysis) increase as a result of the project's investments and activities. The AF analysis assumes an additional 6 percent increase in non-accommodation tourism spending. These growth rates are applied to the daily non-accommodation spending rate of US\$46 per day.⁶
- **Timeline of impact.** The original analysis assumed that the additional impacts noted above would be observed starting in Year 5. With the contribution of the AF, the additional tourist arrivals and spending are expected to begin in Year 3.

9. A number of studies support these assumptions:

- The FAO studies also note that climate-smart policies improve efficiency in the use of natural resources to produce fish and aquatic foods, counter climate vulnerability, and build resilience across the intervened countries that promote sustainable development.⁷ Such investments use an ecosystem approach to fisheries and aquaculture management; strengthen the local knowledge base on sustainable practices; reduce overfishing; and

⁶ Based on recent market diagnosis for the Tourism Strategy Marketing Plan, joint World Bank and Ministry of Tourism effort.

⁷ FAO (2013). Climate-Smart Agriculture: Sourcebook. Module 10: Climate-smart fisheries and aquaculture. <http://www.fao.org/3/i3325e/i3325e.pdf>.



promote integrated aquaculture and agriculture systems, including using flooded/saline land and water bodies.⁸ Evidence from the Caribbean region indicates that investments in coastal infrastructure can create and enhance beaches' amenity value for local and tourist use.⁹ Conservation investments of coastal zones are of significant importance to allow for growth of sustainable and resilient tourism.¹⁰

- A number of research studies examine the varied impact of transport investments across multiple facets of economic development. Transport investments connect potential labor markets with employers, connect buyers, sellers, and their products; have the potential to transform local land markets; and can facilitate other sectors such as capital markets, tourism, education, government, and so on.¹¹ Such benefits are generally not accounted for in traditional cost-benefit analyses for transport investments (Barrett 1999).¹²
- Corral et al. (2016)¹³ highlight the positive economic impact of improvements in coastal infrastructure based on panel data from Barbados in addition to their environmental impacts. Although it is difficult to precisely estimate the economic impact per location, the study indicates that improved coastal infrastructure leads to an increase in residential permits and real estate values and increased night light intensity (which indicates greater economic activity). These increases correlate with a 10 to 20 percent increase in local economic activity.
- Sotelo (2020)¹⁴ examines the relationship between trade, productivity, and welfare in Peru based on high internal and external trade costs. The study demonstrates that paving roads to reduce transport time and improve access to markets improves agricultural productivity by over 4 percent and improves farmer welfare by 2.7 percent.
- Research showed that in East and South Africa, losses due to poor transport conditions ranged from 14 to 17 percent each year from 2003 to 2009 (weighted average of all cereals) (Hodges, Rembold, and Bernard 2014).¹⁵
- A model from the International Food Policy Research Institute simulating the effects of market access and transport improvements, along with improvements in productivity, find

⁸ IFAD (International Fund for Agricultural Development). *Guidelines for Integrating Climate Change Adaptation into Fisheries and Aquaculture Projects*. <https://www.ifad.org/documents/38714170/39135645/fisheries.pdf/17225933-cea1-436d-a6d8-949025d78fbd>.

⁹ Corral, L., and M. Schling. 2017. "The Impact of Shoreline Stabilization on Economic Growth in Small Island Developing States." *Journal of Environmental Economics and Management* 86. <https://doi.org/10.1016/j.jeem.2017.06.001>.

¹⁰ Phillips, M. R., and A. L. Jones. 2006. "Erosion and Tourism Infrastructure in the Coastal Zone: Problems, Consequences, and Management." <https://doi.org/10.1016/j.tourman.2005.10.019>.

¹¹ World Bank. 2005. "Economic Evaluation of Transport Projects: Projects with Significant Expected Restructuring Effects." *The World Bank, Transport Note* No. TRN-19.

¹² Barrett, G. 1999. *Review of the Methodology for Assessing the Economic Development Impact of New Highway Infrastructure. Report to SACTRA*. London: DETR.

¹³ Corral, L., et al. 2016. "The Impact of Coastal Infrastructure Improvements on Economic Growth; Evidence from Barbados." Inter-American Development Bank.

¹⁴ Sotelo, S. 2020. "Domestic Trade Frictions and Agriculture." *Journal of Political Economy* 128 (7).

¹⁵ Hodges, R., F. Rembold, and M. Bernard. 2014. "APHLIS - Post-Harvest Cereal Losses in Sub-Saharan Africa, their Estimation, Assessment, and Reduction." Natural Resources Institute, European Commission, Joint Research Centre, Institute for Environment and Sustainability.



that better market access increases smallholder farmers’ income growth to 1.4 percent annually instead of 0.3–0.4 average growth currently observed in low-income Africa.¹⁶

10. A summary of component assumptions is provided in table 1.1.

Table 1.1. Tourism Assumptions

Arrivals	Original Analysis	AF Analysis
Baseline arrivals	758,000	758,000
Percentage targeted by project interventions	19	19
Baseline arrivals, segment targeted by project	144,020	144,020
Annual growth, percentage of tourist increase	9%	9%
Project additionality	3%	4%
Number of years	1	2
Year additionality applies	5	3
Spending		
Baseline, per day (US\$)	46	46
Annual growth, daily spend, non-accommodation	10%	10%
Project additionality, non-accommodation	5%	6%
Number of years	1	2
Year additionality applies	5	3
Length of stay		
Baseline, # of days	6	6
Annual growth, length of stay	0%	0%
Project additionality	30%	30%
Number of years	1	1
Year additionality applies	5	5

11. With the assumptions noted above, the component valuation and other key metrics are estimated as follows:

- NPV at a 15 percent discount rate: US\$419.0 million
- ERR: 54 percent
- NPV at a 12 percent discount rate: US\$572.3 million

12. Sensitivity analysis

- Reducing the estimated growth rate additionality by 50 percent reduces the component ERR to 42 percent.
- Increasing the estimated growth rate additionality by 20 percent increases the component ERR to 51 percent.

¹⁶ Fan, S., J. Brzeska, M. Keyzer, and A. Halsema. 2013. “From Subsistence to Profit: Transforming Smallholder Farms.” International Food Policy Research Institute.



- Reducing the project impact on length of stay by 50 percent (target of seven days instead of eight days per tourist) reduces the component ERR to 38 percent.

13. **Additional impacts.** The analysis for this component was based on estimated tourism impacts. The road investments supported under this component could also have considerable positive impacts by reducing vehicle operating costs and travel time due to the improved road conditions. Such road investments can also contribute toward improved drainage and reduced flood risk, safety (through better street lighting), reduced property damage, improved metropolitan services, increased property values, sanitation improvements, commuter safety, reduced incidence of water-borne diseases, and so on.

Component 2: Enable Inclusive and Sustainable Management of Tourism and Blue Economy Developments

14. Based on the analysis, the NPV of Component 2 is estimated at US\$1.3 million with an ERR of 16 percent. Since the AF contributes only to Component 1, this analysis remains the same as calculated at project outset.

15. This estimate is based on the following parameters.

- **Number of beneficiaries.** The team estimates the number of SME beneficiaries receiving support as 50 SMEs within the fisheries sector and an additional 100 tourism SMEs based on the team's estimates of project pipeline.
- **Channels of impact.** The primary assumption in the analysis of SME impacts is that project beneficiaries will demonstrate additional growth above that without the project investments. Additionally, the team assumes that project investments will result in a lower failure rate among beneficiaries.
- **Additional growth rate.** The team estimates a steady state revenue growth rate of 3 percent for entrepreneurs without the project investments, with an additional revenue growth totalling at 10 percent for beneficiaries receiving project support.

16. The above-mentioned assumptions are supported by a wide range of studies in different regions on the impact of different types of support services for SMEs. A summary of the different supporting studies is as follows:

- A series of studies finds significant impacts from training programs on profits or sales in developing countries based on evidence from rural Mexico,¹⁷ Colombia,¹⁸ and other

¹⁷ Calderon, G., J. Cunha, and G. de Giorgi. 2012. "Business Literacy and Development: Evidence from a Randomized Trial in Rural Mexico." Mimeo. Stanford University, Stanford, CA.

¹⁸ Attanasio, O., A. Guarin, C. Medina, and C. Meghir. 2015. "Long-Term Impacts of Vouchers for Vocational Training: Experimental Evidence for Colombia." NBER Working Paper Series 1–38.



economies.¹⁹ This impact applies across various types of beneficiaries, including micro-enterprises.²⁰

- Supporting climate-related upgrades in fisheries SMEs, such as climate-smart fisheries and aquaculture, can both increase revenues and boost adaptive capacity and resilience both of communities and the ecosystems on which they depend.²¹
- The Sarder et al. (1997)²² finds a 5–16 percent increase in employment, sales, and productivity with technology adoption support provided to SMEs.
- Tan and Lopez-Acevedo (2005)²³ look at the impact of SME programs in Mexico using panel data and find that 9–14 percent improvement in training and 9 percent improvement in technology absorption have been achieved. Various SME programs—Business Advisory Services, Technology Development, Credit, Supplier Development (1992–2000)—in Chile presented similar results.
- Lopez-Acevedo and Tan (2011)²⁴, “Impact Evaluation of SME Programs in Latin America and Caribbean,” found 8 percent increase in wages and 9 percent increase in productivity as a result of these programs.
- Bloom et al. (2013)²⁵ demonstrate the importance of supporting firm managerial capabilities to improve firm productivity and growth based on evidence from India. In a similar vein, Bruhn, Karlan, and Schoar (2013)²⁶ document the impact of this type of support based on a randomized trial conducted in Mexico. Evidence from Colombia shown in Iacovone, Maloney, and McKenzie (2019)²⁷ also supports this underlying thesis on the impact of improving firm managerial capabilities. Based on a cross-country review, business training programs also help increase SME profits and sales (McKenzie 2020).²⁸
- A Harvard Business Review Study conducted by Anne Marie Knott calculates the impact of research and development (R&D) and equipment investments in the United States by estimating a Research Quotient (RQ), which defines a relationship between firm inputs

¹⁹ Ibarraran, P., J. Kluge, L. Ripani, and D. Rosas. 2015. “Experimental Evidence on the Long-Term Impacts of a Youth Training Program.” IZA Discussion Paper Series 9136.

²⁰ Berge, Lars Ivar Oppedal, Kjetil Bjorvatn, and Bertil Tungodden. 2011. “Human and Financial Capital for Microenterprise Development: Evidence from a Field and Lab Experiment.” NHH Discussion Paper Sam 1. Valdivia 2012.

²¹ Olawale, O., and O. Oluniyi. 2016. “Climate Smart Aquaculture: A Sustainable Approach to Increasing Fish Production in the Face of Climate Change in Nigeria.” *International Journal of Fisheries and Aquatic Studies* 2 (1): 012-017. doi: 10.17352/2455-8400.000013.

²² The Sarder et al. 1997. “The Importance of Support Services to Small Enterprises in Bangladesh”.

²³ Tan, Hong; Lopez Acevedo, Gladys. 2005. Evaluating Training Programs for Small and Medium Enterprises: Lessons from Mexico. Policy Research Working Paper; No. 3760. World Bank, Washington, DC.

²⁴ Lopez-Acevedo, Gladys; Tan, Hong W. 2011. Impact Evaluation of Small and Medium Enterprise Programs in Latin America and the Caribbean. World Bank.

²⁵ Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, D. and J. Roberts. 2013. “Does Management Matter? Evidence from India.” *The Quarterly Journal of Economics* 128 (1): 1–51.

²⁶ Bruhn, M., D. Karlan, and A. Schoar. 2013. “The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico.” Policy Research Working Paper 6508.

²⁷ Iacovone, L., W. Maloney, and D. McKenzie. 2019. “Improving Management with Individual and Group-Based Consulting: Results from a Randomized Experiment in Colombia.” Policy Research Working Paper 8854, World Bank, Washington, DC.

²⁸ McKenzie, D. 2020. “Small Business Training to Improve Management Practices in Developing Countries: Reassessing the Evidence for ‘Training Doesn’t Work’.” Policy Research Working Paper 9408.



(capital, labor, and R&D investments) and firm outputs (revenues) based on regression analysis of American firms. Their analysis estimates that a 10 percent increase in RQ results in an increase in market value of 1.1 percent, which can translate to a 10–20x multiples in firm revenues. Since this analysis is based on R&D investments in established firms rather than start-ups, the team has increased revenue growth assumptions for the project’s start-up beneficiaries.

- **Reduction in failure rate.** The analysis assumes a 20 percent reduction in the failure rate of SMEs due to the assistance provided by the project.
- **Time frame of impact.** The team estimate a two-year delay for impact of the activities and investments under this project.

17. Additional assumptions are provided in table 1.2.

Table 1.2. Additional Assumptions

SME Assumptions	Tourism SMEs	Fisheries
Number of entrepreneurs	100	50
Failure rate without project intervention	50%	50%
Failure rate with project intervention	30%	30%
Average income (US\$, annual)	20,000	20,000
Job creation rate (per additional US\$ in income)	0.000119	0.000119
Average salary	3,000	3,000
Annual revenue growth (without project)	3%	3%
Additionality to growth rate	12%	12%
Number of years that additionality applies	2	2

18. With the assumptions noted above, the project valuation and other key metrics are estimated as follows:

- NPV at a 15 percent discount rate: US\$253,6000
- ERR: 16 percent
- NPV at a 12 percent discount rate: US\$1.3 million

19. Sensitivity analysis

- Reducing the estimated number of SME beneficiaries by 50 percent reduces the component ERR to 3 percent.
- Increasing the estimated number of SME beneficiaries by 50 percent increases the component ERR to 26 percent.