PMR Public Report

Operation Numb	er	BL-L1028			C	Chief of Operations Validat	tion Date	03/29/2	23			
Year- PMR Cycle		Second perio	od Jan-Dec 2022		Ι	Division Chief Validation D	ate	04/14/2	23			
Last Update		03/25/23				Country Representative Va	lidation Date	05/11/2	23			
PMR Validation S	Stage	Validated by	Representative									
Basic Data												
Operation Prof	ile											
Operation Name		Climate Vuln	nerability Reduction F	Program	L	Loan Number		4426/OC-BL				
Executing Agence	у	Ministry of V HOUSING	Works, MINISTRY OF	NFRASTRUCTURE DEVI	ELOPMENT AND	Sector/Subsector		ENVIRONMENT AND NATURAL DISASTERS-CLIMATE CHANGE ADAPTATION POLICY				
Team Leader		SAMAYOA JU	JAREZ, JORGE OMAR			Overall Stage			ing (From eligibility until	all the Operations ar	re closed)	
Operation Type		Loan Operat	ion			Country		Belize				
Lending Instrume	ent	Investment L	Loan		(Convergence related Opera	ation(s)					
Borrower		BELIZE										
Environmental	nvironmental and Social Safeguards											
Impacts Category B					Was/Were the objective(s) reformulated?	of this operation	NO					
Safeguard Perfor Rating	rmance	Satisfactory			ı	Date of approval						
Safeguard Perfor Rating - Rational			ere is room for impro uards is satisfactory.	vement regarding heal	th and safety issues an	nd pollution control, grievar	nces management ar	nd compe	ensation cases pending to	o be solved, the over	all compliance with the	
Financial Data												
				Total Cost and Source	e				Available Fund	ds (US\$)		
Operations	Origina	al IDB	Current IDB	Local Counterpart	Co-Financing / Coun	ntry Total Original Cost	Current IDB		Disb. Amount to Date	% Disbursed	Undisbursed Amount	
BL-L1028		10,000,000	10,000,000	0		0 10,000,000	10,00	00,000	9,013,372	90.13%	986,628	
Aggregated		10,000,000	10,000,000	0		0 10,000,000	10,00	00,000	9,013,372	90.13%	986,628	
Expense Categ	ories by Loa	n Contract (d	cumulative values)									
											sbursed Amount	
							On	disbursed				
Clmt Risk Rduction in Tourism 1												
Gvrnance Dst Risk Mgmt & CC 2												
Project Management 3												
			0%	20%	409	% 609	%	80%	100	%		

Please note that inactive indicators and outputs are not displayed; totals in the actual cost table may not match the sum of the cost of the outputs displayed, due to the cost of inactive outputs.



RESULTS MATRIX

General Development Objectives

General Development Objectives Nbr. 0: Climate vulnerability and risk reduced

Pro-Ethnicity No

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2023
0.0	Reduction of household annual economic losses caused by	% change	0	2018	2022	Р	100
	recurrent floods in the Orange St. area					Α	-
Details							

Means of Verification: Baseline and follow-up surveys for ex ante economic analysis and impact evaluation

Observations: Economic losses caused by floods represent the economic vulnerability to floods. They include the disaster effects on physical assets and economic flows and consider comparable recurrent events (1-5 years).

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

CRF indicator

	Indicator		Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2023
0.1	Reduction of household recurrent floods in Caye	caused by	% change	0	2018	2022	P A	100
Details	·							

Pro-Gender No

Means of Verification: Baseline and follow-up surveys for ex ante economic analysis and impact evaluation

Observations: Economic losses caused by floods represent the economic vulnerability to floods. They include the disaster effects on physical assets and economic flows and consider comparable recurrent events (1-5 years).

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator							
		·									
	Indicator			,	Unit o	f Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2023
0.2	Reduction of Belize City	on of projected losses of overnight visitor expenditures in City			% (change	0	2018	2022	P A	12
Deteile .											

Means of Verification: Risk assessment model for Belize City, adjusted with baseline and follow-up survey data for ex ante economic analysis and impact evaluation, and data from The Belize **Tourism Board**

Observations: The intervention will result in avoided visitor expenditure losses.

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator							
	Indicator				Unit o	f Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2023
0.3	Reduction of projected losses of overnight visitor expenditures in Caye Caulker				% (change	0	2018	2022	P A	12
Details						,					

Means of Verification: Risk assessment model for Caye Caulker, adjusted with baseline and follow-up survey data for ex ante economic analysis and impact evaluation, and data from The Belize

Observations: The intervention will result in avoided visitor expenditure losses.

2

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

CRF indicator

	Indicator		Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2023
0.4	Decrease in the annual disaster mo	ortality rate in Belize City	% change	0	2018	2022	Р	3
							Α	-
Dotoilo								

Pro-Gender No

Means of Verification: Statistical Institute of Belize and National Emergency Management Office

Pro-Ethnicity No

Observations: Expected decrease based on estimates by Guerrero, Salazar and Lacambra (2017).

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

RESULTS MATRIX

Specific Development Objectives

Specific Development Objectives Nbr. 0: Mitigation of risk for residents

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
0.0	Reduction of people affected by recurrent floods in the Orange St. area.	# of beneficiaries	0	2018	Р	-	-	7,079
					Α	-	-	-

Details

Means of Verification: Risk assessment model for Belize City, adjusted with baseline and follow up surveys information for ex ante economic analysis and impact evaluation

Observations: People affected by floods represent the human vulnerability to floods. People affected include injured, evacuated, relocated, with houses and its assets being damaged or destroyed, or requiring emergency assistance and considers comparable recurrent events (1-5 years).

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	2.20.a Beneficiaries of enhanced disaster and climate change resilience (# beneficiaries) (C)

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
0.1	Reduction of people affected by recurrent floods in Caye Caulker.	# of beneficiaries	0	2018	Р	-	-	144
					А	-	-	-

Dotoilo

Means of Verification: Risk assessment model for Caye Caulker, adjusted with baseline and follow-up surveys information for ex ante economic analysis and impact evaluation

Observations: People affected by floods represent the human vulnerability to floods. People affected include injured, evacuated, relocated, with houses and its assets being damaged or destroyed, or requiring emergency assistance and considers comparable recurrent events (1-5 years).

Evaluation Methodology: -

Pro-Gen	der No	Pro-Ethnicity	No	CRF indicator	2.20.a Beneficiaries of enhanced disaster and climate change resilience (# beneficiaries) (C)
		·			

Specific Development Objectives Nbr. 1: Enhanced tourism

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
1.0	Tourist satisfaction in Palapa Beach (Caye Caulker) and Goff's Caye	# of score	59	2018	Р	-	-	67
					А	-	-	-
D - 1 - 11 -								

Details

Means of Verification: Baseline and follow up surveys for the ex ante economic analysis and impact evaluation and Goff's Caye Visitor Satisfaction Survey Report

Observations: Score is the percentage of respondents who answered that the overall satisfaction of the site/reef is high.

Evaluation Methodology: -

F	Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 2: Improved government performance in disaster risk governance

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
2.0	Government agencies benefited by projects that strengthen technological and	# of governement	0	2018	Р	-	-	5
	managerial tools to improve public service delivery	agencies			Α	-	-	-

Details

Means of Verification: Semiannual progress reports

Observations: The Ministry of Works (MoW), the Ministry of Tourism and Civil Aviation (MTCA), the Climate Change Office (NCCO), the National Emergency Management Office (NEMO) and the Coastal Zone Management Authority and Institute (CZMAI) will be the target agencies. The MoW will execute the investments of Component 1, and the MoW, MTCA and CZMAI will be the users of the Climate Risk Information System, building codes and financial protection strategy.

Evaluation Methodology: -

4

	No	Pro-Ethnicity	No	CRF indicator							
										_	
	Indicator				Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
2.1	Improveme	nt in iGOPP Fina	ncial Protection co	mponent	% increase	0	2018	Р	-	-	12.5
								А	-	-	-
Details											
Means of Ver	rification: iGOPI	P report for Belize	e; follow-up iGOPF	estimation after completion of t	he program						
intervention.	ethodology: -	ni, agamsi alsasi	or nake, will be ful	filled and the sub-index will reac	in a value of 070 (inclease i	2.070). Improveme	an delives from delic	one not inianced b	y the project b	at attributable	
Pro-Gender	No	Pro-Ethnicity	No	CRF indicator							
					Unit of Measure	Baseline	Baseline Year		2022	2023	EOP 2023
	Indicator			Improvement in iGOPP's Risk Identification component			0040				
2.2		nt in iGOPP's Ris	sk Identification co	mponent	% increase	0	2018	Р	-	-	62.5
		nt in iGOPP's Ris	sk Identification co	mponent	% increase	U	2018	P A	-	-	62.5
Details	Improveme					U	2018		-	-	62.5
Details Means of Ver	Improveme	P report for Belize	e; follow-up iGOPF	estimation after completion of t	he program	0		Α	-	-	-
Details Means of Ver Observations	Improveme ification: iGOPI The current va	P report for Belize	e; follow-up iGOPF		he program s expected that the indicato		re regulations orderin	A ng the creation and	- d maintenance		- on Systems f
Details Means of Ver Observations Disaster Risk	Improveme ification: iGOPI The current va	P report for Belize	e; follow-up iGOPF	estimation after completion of t 8% and with the intervention it's	he program s expected that the indicato		re regulations orderin	A ng the creation and	- d maintenance		- on Systems f
Details Means of Ver Observations Disaster Risk Evaluation Me	Improveme ification: iGOPI s: The current va Management?) a ethodology: -	P report for Belize	e; follow-up iGOPF	estimation after completion of t 8% and with the intervention it's	he program s expected that the indicato		re regulations orderin	A ng the creation and	- d maintenance		- on Systems fo
Observations Disaster Risk	Improveme ification: iGOPI s: The current va Management?) a ethodology: -	P report for Belize alue of the risk ide against disaster r	e; follow-up iGOPF entification index is isk?) will be fulfille	estimation after completion of t 8% and with the intervention it's d and the sub-index reach a value	he program s expected that the indicato		re regulations orderin	A ng the creation and	- d maintenance		- on Systems fo

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Climate risk reduction in the tourism sector

				PHYSICAL PR	OGRESS	FINANCIAL I	PROGRESS
	Output	Unit of Measure		2022	EOP 2023	2022	EOP 2023
	Flood reduction investment works in Belize City, executed	# Project sites	Р	2	6	856,737	6,761,020
1.01			P (a)	2	6	2,238,085	5,835,282
			А	2	5	2,078,670	5,675,867
	Coastal protection hybrid and nature-based infrastructure in Caye Caulker, implemented	# of structures	Р	-	1	-	443,700
1.02			P (a)	1	1	443,700	443,700
			А	1	1	105,451	105,451
	Coastal protection intervention and tourism enhancement in Goff's Caye, implemented	# of structures	Р	-	1	-	617,700
1.03			P (a)	1	1	517,700	540,917
			А	-	-	665,342	688,559
	Management plans approved	Plans (#) approved	Р	-	2	-	417,341
1.04			P (a)	2	2	-	50,691
			А	-	-	76,036	126,727

Component Nbr. 2 Governance for disaster risk management and climate change adaptation

				PHYSICAL	PROGRESS	FINANCIAL	PROGRESS
	Output	Unit of Measure		2022	EOP 2023	2022	EOP 2023
	Climate Risk Information System in operation	accomplishment of	Р	-	1	-	478,241
2.01		milestone	P (a)	1	1	143,472	143,472
			А	1	1	211,623.43	211,623.43
	Tourism and land use building codes incorporating nature-based solutions approved	proposal document	Р	-	1	-	70,000
2.02		submitted	P (a)	-	-	-	18,009
			А	1	1	-	18,009
	Climate Risk Financial Strategy for the Agricultural and Tourism Sectors	proposal document and 5	Р	-	1	-	70,000
2.03		year operational plan submitted	P (a)	-	1	21,000	21,000
		Submitted	А	-	-	-	-

Other Cost				
	Technical Unit	Р	91,721	926,998
		P (a)	225,017	2,774,489
		А	135,860	644,583
	Annual Evaluations and Audits	Р	100,000	215,000
		P (a)	143,417	172,440
		А	12,423	41,446
Total Cost				
	Total Cost	Р	1,048,458	10,000,000
		P (a)	3,732,391	10,000,000
		А	3,285,405.43	7,512,265.43

CHANGES TO THE MATRIX									
Section	Name	Type of Change	Sub type	Modified By	Entered in System				
Output	Climate Risk Financial Strategy for the Agricultural and Tourism Sectors	Modify Output	Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	OMARS	3/25/2023				
	Flood reduction investment works in Belize City, executed	Modify Output	Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	OMARS	3/25/2023				

RISKS AND PLANNED RESPONSES

	ANNED RESPONSES		
Risk ID		Risk Status	Risk Taxonomy
		Active	Internal Processes
	Response Actions		
1	nesponse Actions	Management Strategy	Status
•	1.01	MITIGATE	ACTIVE
Risk ID		Risk Status	Risk Taxonomy
		Inactive	Human Resources
	Response Actions		
2		Management Strategy	Status
	2.01	MITIGATE	INACTIVE
Risk ID		Risk Status	Risk Taxonomy
		Inactive	Political Environment
	Response Actions		
3		Management Strategy	Status
	3.01	MITIGATE	INACTIVE
Risk ID		Risk Status	Pick Tayonamy
KISK ID		Inactive	Risk Taxonomy Environmental and Social Safeguards
		Пасиче	Elivirolimental and Social Saleguards
	Response Actions		
4		Management Strategy	Status
	4.01	MITIGATE	ACTIVE
		Risk Status	Risk Taxonomy
Risk ID		Active	Environmental and Social Safeguards
Risk ID			
Risk ID	Response Actions		
Risk ID	Response Actions	Management Strategy	Status

Risk ID		Risk Status	Risk Taxonomy
		Inactive	Governance Framework
	Response Actions		
6		Management Strategy	Status
	6.01	MITIGATE	INACTIVE
Risk ID		Risk Status	Risk Taxonomy
		Inactive	Environmental and Social Safeguards
	Response Actions		
7		Management Strategy	Status
	7.01	MITIGATE	ACTIVE
Risk ID		Risk Status	Risk Taxonomy
		Inactive	Internal Processes
8	Response Actions	Managamant Streets	Chabin
O	8.01	Management Strategy MITIGATE	Status INACTIVE
	8.01	WITIGATE	INACTIVE
Risk ID		Risk Status	Risk Taxonomy
MISK 12		Inactive	Environmental and Social Safeguards
	Response Actions		
9		Management Strategy	Status
9			
	9.01	MITIGATE	ACTIVE
	9.01	MITIGATE	ACTIVE
	9.01		ACTIVE
Risk ID	9.01	MITIGATE Risk Status	Risk Taxonomy
Risk ID	9.01		
Risk ID		Risk Status	Risk Taxonomy
Risk ID	9.01 Response Actions	Risk Status Active	Risk Taxonomy Sustainability
		Risk Status	Risk Taxonomy
	Response Actions	Risk Status Active Management Strategy	Risk Taxonomy Sustainability Status
	Response Actions	Risk Status Active Management Strategy	Risk Taxonomy Sustainability Status
	Response Actions	Risk Status Active Management Strategy	Risk Taxonomy Sustainability Status
10	Response Actions	Risk Status Active Management Strategy MITIGATE	Risk Taxonomy Sustainability Status ACTIVE
10	Response Actions	Risk Status Active Management Strategy MITIGATE Risk Status	Risk Taxonomy Sustainability Status ACTIVE Risk Taxonomy
10 Risk ID	Response Actions	Risk Status Active Management Strategy MITIGATE Risk Status Active	Risk Taxonomy Sustainability Status ACTIVE Risk Taxonomy Planning
10	Response Actions 10.01 Response Actions	Risk Status Active Management Strategy MITIGATE Risk Status Active Management Strategy	Risk Taxonomy Sustainability Status ACTIVE Risk Taxonomy Planning Status
10 Risk ID	Response Actions 10.01	Risk Status Active Management Strategy MITIGATE Risk Status Active	Risk Taxonomy Sustainability Status ACTIVE Risk Taxonomy Planning

Risk ID		Risk Status	Risk Taxonomy					
		Inactive	Environmental and Social Safeguards					
12	Response Actions	Management Strategy	Status					
12	12.01	MITIGATE	INACTIVE					
		·						
Risk ID		Risk Status	Risk Taxonomy					
		Inactive	Environmental and Social Safeguards					
	Domento Asticus							
13	Response Actions	Management Strategy	Status					
. •	13.01	MITIGATE	INACTIVE					
Risk ID		Risk Status	Risk Taxonomy					
		Inactive	Environmental and Social Safeguards					
	Danis and an							
14	Response Actions	Status						
	14.01	Management Strategy MITIGATE	ACTIVE					
Risk ID		Risk Status	Risk Taxonomy					
		Inactive	Internal Processes					
	Response Actions							
15	Response Actions	Management Strategy	Status					
	15.01	MITIGATE	ACTIVE					
Risk ID		Risk Status	Risk Taxonomy					
		Inactive	Environmental and Social Safeguards					
	Response Actions							
16	Nesponse Actions	Management Strategy	Status					
16								

IMPLEMENTATION STATUS AND LEARNING

	Lesson Learned - Categories
Project Management Capacity	
Acquisitions and Procurement - Bidding Stage	
Legal aspects and public processes	