

PMR Public Report

Operation Number	HA-L1097	Chief of Operations Validation Date	10/22/21
Year- PMR Cycle	First period Jan-Jun 2021	Division Chief Validation Date	
Last Update	09/28/21	Country Representative Validation Date	
PMR Validation Stage	Validated by Chief of Operations		

Basic Data

Operation Profile			
Operation Name	Natural Disaster Mitigation Program II	Loan Number	3622/GR-HA
Executing Agency	MINISTERE DE L'AGRICULTURE DES RESSOURCES NATURELLES ET DU DEVELOPPEMENT RURAL	Sector/Subsector	AGRICULTURE AND RURAL DEVELOPMENT-SUSTAINABLE AGRICULTURAL DEVELOPMENT
Team Leader	ALBARET, GERAUD	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Grant Financing Product	Country	Haiti
Lending Instrument	Investment Loan	Convergence related Operation(s)	HA-G1031
Borrower	REPUBLIQUE D'HAITI		

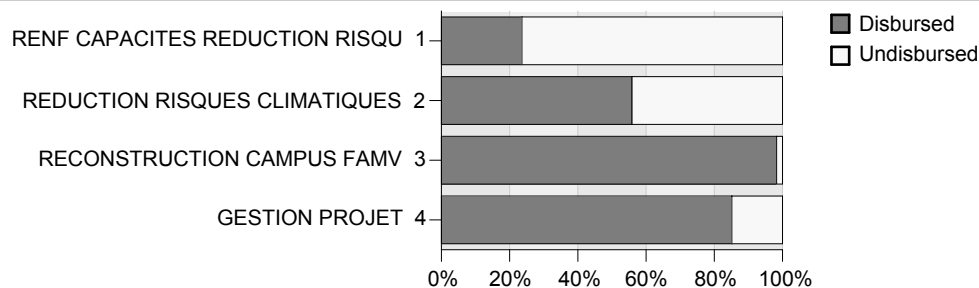
Environmental and Social Safeguards

Impacts Category	B	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	Partially Satisfactory	Date of approval	
Safeguard Performance Rating - Rationale	L'AE maintient les spécialistes environnementaux et sociaux dans les 3 régions (Nord-Nord 'Est, Boucle centre Artibonite et Sud), ces derniers élaborent un PGES avant le démarrage de chaque projet. L'AE a organisé des séances de formations aux chefs de chantiers en guise de préparations concernant les travaux qu'ils auront à exécuter. Malgré les problèmes liés à la pandémie de la COVID-19, à l'insécurité grandissante qui affectent les projets, l'AE continue de supporter la supervision sur le chantier avec son personnel sur le terrain, et de rédiger les rapports mensuels.		

Financial Data

Item	Total Cost and Source					Available Funds (US\$)			
	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disb	Undisbursed Amount
HA-G1031	0	4,500,000	0	0	4,500,000	4,500,000	2,297,115.1	51.05%	2,202,884.9
HA-L1097	0	42,000,000	750,000	0	42,750,000	42,000,000	33,461,954.4	79.67%	8,538,045.6
Aggregated	0	46,500,000	750,000	0	47,250,000	46,500,000	35,759,069.5	76.90%	10,740,930.5

Expense Categories by Loan Contract (cumulative values)



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.

PMR Public Report

RESULTS MATRIX

General Development Objectives

General Development Objectives Nbr. 0: Increased agricultural productivity in targeted watersheds.

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
0.0	In selected gullies, where check-dams are built (upper watershed), difference in average annual gross value-added per plot between beneficiaries of check-dams and control group	US\$	0.00	2015	2022	P	1,215.00
						A	

Details

Means of verification: Impact Evaluation Report, based on a randomized selection of beneficiaries in the agro-forestry area.

Observations: Data source for baseline and EoP: Ex Post Economic Analysis of PMDN I (2015). Other comments: Gross value added = Value of Production – Intermediate Consumption. Annual gross value-added will not be calculated by individual crop but at the level of the plot as a whole since farmers in these areas typically implement complex mixed-crop systems.

Pro-Gender No **Pro-Ethnicity** No

The General Development
bjective indicator target is
expected to be observed by
the operation's "Fully
Justified" date
in Convergence (CO)

No

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
0.1	In selected areas, difference in average annual gross value-added per farm between beneficiaries of research program and control group	US\$	0.00	2015	2022	P	1,442.00
						A	

Details

Means of verification: Same as Impact Indicator 1 above.

Observations: 910 direct beneficiaries of research program (25% of which will be women) Data source for EoP: Chand et al. (2012)

Pro-Gender No **Pro-Ethnicity** No

The General Development
bjective indicator target is
expected to be observed by
the operation's "Fully
Justified" date
in Convergence (CO)

No

PMR Public Report

RESULTS MATRIX

General Development Objectives

General Development Objectives Nbr. 1: Decreased crop, livestock and infrastructure losses caused by floods in targeted watershed.

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
1.0	Reduction of losses caused by a one year return period flood event in the targeted watersheds	US\$	0.00	2015	2022	P	1,351,414.00
						A	

Details

Means of verification: Follow up panel surveys in the lower watersheds (using AECOM and ARTELIA methodologies).

Observations: The total estimated losses for the prioritized watersheds for a 1-2 year return period are US\$34,429,835 (Aecom, 2015 and Artelia, 2013). Losses include agricultural production, infrastructure and personal property. Baseline values will be recalculated at the beginning of project execution. The reduction of annual losses is a combination of the reduction attributed to mitigation works and EWS. The indicator only considers losses by floods and not erosion because erosion will not impact the irrigation channels before the evaluation. Data source for baseline and EoP: AECOM 2015 / ARTELIA 2013.

Pro-Gender	No	Pro-Ethnicity	No
The General Development objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO)			

PMR Public Report

RESULTS MATRIX

Specific Development Objectives

Specific Development Objectives Nbr. 0: Outcome 1. Increased capacity for adaptation to climate change and DRM in the agriculture sector

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.0	Indicator 1.1. Number of climateproof agricultural techniques disseminated through MARNDR's technological transfer program.	Number	0.00	2016	P				5.00	5.00	10.00
					A						

Details

Means of verification: Field visits and monitoring reports.

Observations: MARNDR's technological transfer programs are programs such as PTTA (HA-L1059), RESEPAG (financed by the World Bank) and other similar ones.

Pro-Gender	No	Pro-Ethnicity	No
-------------------	----	----------------------	----

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.1	Indicator 1.2. Agricultural techniques adoption rate among farmers.	Percent	0.00	2016	P		75.00	75.00	75.00	75.00	75.00
					A						

Details

Means of verification: Field visits and monitoring reports. Other comments: This outcome indicator refers to new technologies being promoted.

Observations: This is a core indicator for PPCR This indicator refers to the adoption rate among beneficiaries of the applied research program as well as MARNDR's technological transfer program. It will be disaggregated by gender (75% of the 25% women participants in the research program are expected to adopt the techniques). Data source for EoP: PTTA monitoring document (GAFSP); Impact Evaluation of 2223/BL-BO; Bentley et al. (2011)

Pro-Gender	No	Pro-Ethnicity	No
-------------------	----	----------------------	----

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.2	Indicator 1.3. iGOPP-FP subindex.	Percent	0.51	2016	P	0.51	0.51	0.51	0.51	0.51	3.60
					A						

Details

Means of verification: iGOPP endline report.

Observations: Details on the iGOPP methodology can be found at: <https://publications.iadb.org/handle/11319/6717> Data source: Index of Governance and Public Policy in Disaster Risk Management (iGOPP). National Report, Haiti. <https://publications.iadb.org/handle/11319/6875>

Pro-Gender	No	Pro-Ethnicity	No
-------------------	----	----------------------	----

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.3	Indicator 1.4. iGOPP-RC subindex.	Percent	5.00	2016	P	5.00	5.00	5.00	5.00	7.00	7.00
					A						

PMR Public Report

RESULTS MATRIX

Specific Development Objectives

Details										
Means of verification: iGOPP endline report.										
Observations: Data source: Same as Indicator 1.3 above.										
Pro-Gender		No			Pro-Ethnicity			No		

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.4	Indicator 1.5. Share of MARNDR mitigation works design based on climate risk analysis information system in the selected watersheds	Percent	0.00	2016	P				40.00	80.00	
					A						

Details										
Means of verification: Field visits and monitoring reports.										
Observations: Data source for EoP: Discussion with senior MARNDR management.										
Pro-Gender		No			Pro-Ethnicity			No		

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
0.5	Indicator 1.6. Queries to the risk information system registered through the web page.	Number	0.00	2016	P			200.00	300.00	500.00	
					A						

Details										
Means of verification: monitoring reports.										
Observations: Data source for EoP: Estimated based on data of other countries where iGOPP is measured.										
Pro-Gender		No			Pro-Ethnicity			No		

Specific Development Objectives Nbr. 1: Outcome 2. Improved water and sediment conservation in selected gullies of priority watersheds.

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
1.0	Indicator 2.1.: Total volume of sediment contained by checkdams	m3	0.00	2016	P	2,800.00	18,500.00	28,400.00	7,000.00	0.00	56,700.00
					A						

Details										
Means of verification: Field visits and monitoring reports.										
Observations: Data source for baseline and EoP: Estimations are based on PMDN I monitoring data, which show that the average volume of sediments contained by check-dam is 100 m3.										
Pro-Gender		No			Pro-Ethnicity			No		

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
-----------	--	-----------------	----------	---------------	--	------	------	------	------	------	----------

PMR Public Report

RESULTS MATRIX

Specific Development Objectives

1.1	Indicator 2.2.: Cultivable area created by check dams in the gullies	Ha	0.00	2016	P	14.00	92.50	142.00	35.00	0.00	283.50
					A						

Details

Means of verification: Field visits and monitoring reports.

Observations: Data source: Estimations are based on the Ex Post Economic Evaluation of PMDN I, which shows that check-dams create on average an additional 0.5 Ha of cultivable area.

Pro-Gender	No	Pro-Ethnicity	No
------------	----	---------------	----

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
1.2	Indicator 2.3.: Total volume of water contained by checkdams that is available during the dry season	m3	0.00	2016	P	297.00	1,944.00	2,970.00	729.00	0.00	5,940.00
					A						

Details

Means of verification: Field visits and monitoring reports.

Observations: Data source for EoP: Estimations are based on PMDN I data which shows that the average volume of check dams' water retention tanks is 13.5 m3. Out of the 567 check dams that are going to be built, 440 are going to be equipped with water retention tanks.

Pro-Gender	No	Pro-Ethnicity	No
------------	----	---------------	----

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
1.3	Indicator 2.4.: Farmers who benefit from new cultivable area created by check-dams.	# of farmers	0.00	2016	P	28.00	185.00	284.00	70.00	0.00	567.00
					A						

Details

Means of verification: Field visits and monitoring reports.

Observations: This is a core indicator for PPCR. It will be disaggregated by gender. Data source: It corresponds to the number of microdams that are going to be built (the hypothesis is that, on average, there is one farmer cultivating one check-dam).

Pro-Gender	Yes	Pro-Ethnicity	No
------------	-----	---------------	----

Specific Development Objectives Nbr. 2: Outcome 3. Reduced risk of economic losses due to floods and erosion in targeted watersheds.

Observation:

Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
2.0	Indicator 3.1. Reduction of expected average annual economic losses due to floods in targeted watersheds	US\$	0.00	2016	P			1,738,539.00	1,738,539.00	1,738,539.00
					A					

Details

Means of verification: Results of climate risk modelling (output 1) considering the effects of the project mitigation works, and final reception report of the mitigation works.

PMR Public Report

RESULTS MATRIX

Specific Development Objectives

Observations: Reduction in economic losses comes from both EWS and infrastructures. Data sources for baseline and EoP: AECOM 2015 and Artelia 2013. The total average loss for the prioritized watersheds between 2 a 100 year return period is US\$ 28,575,996 (Aecom, 2015 and Artelia, 2013).

Pro-Gender		No	Pro-Ethnicity					No			
Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
2.1	Indicator 3.2. Reduction of expected average annual economic losses due to erosion affecting the irrigation canals in Artibonite	US\$	0.00	2016	P				13,242,090.00	13,242,090.00	13,242,090.00
					A						

Details

Means of verification: Results of climate risk modelling (output 1) considering the effects of the project mitigation works, and final reception report of the mitigation works.

Observations: Data sources for baseline and EoP: AECOM 2015 and Artelia 2013.

Pro-Gender		No	Pro-Ethnicity				No				
Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
2.2	Indicator 3.3. Community based early warning systems functioning in targeted watersheds	System	0.00	2016	P				5.00		5.00
					A						

Details

Means of verification: Practical drill evaluated by external expert.

Observations: Early warning systems (EWS) will be installed in the targeted watersheds. The EWS will be considered to be “functioning” if the results of a practical drill are satisfactory.

Pro-Gender		No		Pro-Ethnicity		No	
-------------------	--	----	--	----------------------	--	----	--

Specific Development Objectives Nbr. 3: Outcome 4. Educational capacity of the FAMV campus restored

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
3.0	Indicator 4.1. Annual number of research papers published by FAMV on disaster risk management, and climate-proof agriculture.	research paper	0.00	2016	P	6.00	6.00	6.00	8.00	12.00	12.00
					A						

Details

Means of verification: field visits and monitoring reports.

Observations: Data source for baseline: FAMV

Pro-Gender		No		Pro-Ethnicity		No	
-------------------	--	----	--	----------------------	--	----	--

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	EOP 2022
3.1	Indicator 4.2. Reduction of expected loss of human lives due to collapse of FAMV buildings	Person	0.00	2016	P					122.00	122.00

PMR Public Report

RESULTS MATRIX

Specific Development Objectives

3.1	Indicator 4.2. Reduction of expected loss of human lives due to collapse of FAMV buildings	Person	0.00	2016	A						
Details											
Means of verification: The Ministry of Public Work (MTPTC) will verify the infrastructure's compliance with the Code national des bâtiments publics (2011)											
Observations: Data source for baseline: Structural evaluation of the FAMV (2015)											
Pro-Gender		No			Pro-Ethnicity			No			

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Component 1. Capacity Building to Reduce Climate Risk

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2021	EOP 2022	2021	EOP 2022
1.1	Produit 1. Modèles d'analyses de risques climatiques développés	Etude	P		4		800,000
			P(a)	0	4	285,179	671,430.27
			A	0	0	28,079.89	214,331.16
1.2	Produit 2. Système d'information sur les risques climatiques en agriculture développé	Système	P	1	1		300,000
			P(a)	0	1	0	0
			A	0	0	0	0
1.3	Produit 3. Programme de recherche&formation agricole/resilience CC/dynamique BV mis en oeuvre	Programme	P	3	3	556,377.5	2,750,000.04
			P(a)	2	5	870,261	2,203,896.1
			A	0	0	1,138,042.37	1,971,677.47
1.4	Produit 4. Programme de formation en gestion de risques climatiques dans l'agriculture développé et mis en oeuvre	Programme	P		1	110,000	300,000
			P(a)	0	1	100,000	300,000
			A	0	0	0	0
1.5	Produit 5. Formation conduite sur l'évaluation des pertes et dommages dus aux désastres naturels dans l'agriculture	Formation	P		1		50,000
			P(a)	0	1	0	60,754
			A	0	1	0	60,754
1.6	Produit 6. Plan national de contingence dans le secteur agricole en cas d'événement climatique extrême élaboré et diffusé.	Plan	P		0		0
			P(a)	0	1	0	42,172.15
			A	0	1	0	42,172.15
1.7	Produit 6. Formation conduite sur l'évaluation des pertes et dommages dus aux désastres naturels dans l'agriculture	Plan	P		3		150,000
			P(a)	0	0	0	0
			A	0	0	0	0
1.8	Produit 7. Comités de Gestion de Bassins Versants (CGBV) renforcés	CGBV	P		0		350,000
			P(a)	0	0	0	0
			A	0	0	0	0

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 2 Component 2: Climate Risk Reduction

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2021	EOP 2022	2021	EOP 2022
2.1	Produit 8. Systèmes communautaires d'alerte précoce aux inondations développés	Comites	P		3	326,000	1,500,000
			P(a)	0	0	0	10,800
			A	0	0	0	10,800
2.2	Produit 9. Infrastructures de protection de bassins versants - Amont (Nord et Sud)	Ouvrage	P	495	3,303	329,152	3,170,000.44
			P(a)	43	2,961	383,391	1,519,045.05
			A	3	2,921	40,079.44	1,175,733.49
2.3	Produit 10. Infrastructures de protection de bassins versants - Amont (St Raphael / St Michel)	Ouvrage	P	258	1,717	321,000	2,100,000.75
			P(a)	0	1,061	3,646	1,249,895.6
			A	0	1,061	115,776.6	1,362,026.2
2.4	Produit 11. Infrastructures de protection de bassins versants - Aval	Ouvrage	P	1	5	5,573,949	19,429,999.8
			P(a)	2	8	4,043,641	17,345,292.54
			A	1	6	1,510,304.45	12,811,955.99
2.5	Produit 12.-Subvention aux agriculteurs du Sud	# of farmers	P		0		0
			P(a)	0	2,650	0	497,928.91
			A	0	2,650	0	497,928.91
2.6	Produit 13.-Curage et nettoyage du perimetre irrigue de Dubreuil et réparation et construction de 4 km de canaux primaires et secondaires	Metres	P		0		0
			P(a)	0	52,035	0	0
			A	0	52,035	0	0
2.7	Produit 13.1-Curage et nettoyage du perimetre irrigue de Dubreuil	Metres	P		0		0
			P(a)	0	48,000	0	200,000
			A	0	48,000	0	200,000
2.8	Produit 13.2-Réparation et construction de 4 km de canaux primaires et secondaires	Metres	P		0		0
			P(a)	0	4,035	0	30,257
			A	0	4,035	662	30,919

Component Nbr. 3 Component 3: Reconstruction of Faculty of Agronomics and Veterinary Medicine (FAMV)

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2021	EOP 2022	2021	EOP 2022
3.1	Produit 12. Faculté d'Agronomie et Médecine Vétérinaire construite et équipée	Faculte	P		1	1,121,579	9,999,999.59
			P(a)	0	1	5,273,630	17,461,691.65
			A	0	0	390,365.24	10,278,426.48

Other Cost

	Gestion / Audit / Evaluation / Imprevus	P			1,654,902.75	5,599,999.79
		P(a)			807,872	4,906,837.14
		A			519,381.57	4,218,159.74

Total Cost

	Total Cost	P			9,992,960.25	46,500,000.41
		P(a)			11,767,620	46,500,000.41
		A			3,742,691.56	32,874,884.59

CHANGES TO THE MATRIX

No information available for this section

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
1	Active		Natural Environment
	Response actions		
	1.0	Management Strategy	Status
		-	

Risk ID	Risk Status		Risk Taxonomy
2	Inactive		Goods, and Services
	Response actions		
	2.0	Management Strategy	Status
		-	

PMR Public Report

IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories

Acquisitions and Procurement - Provider Performance and Supervision