



2022 Final Donor Report
Analysis of the Nutritional Status of Student Populations on the Caribbean Coast
NI-T1304

Basic Information			
Approval Year	: 2021	Region	: CID
Team Leader	: Naslund-Hadley, Emma Ingrid	Country	: Nicaragua
Taxonomy	: Client Support	Department	: SCL
Fund	: CTY,ORC-CTY	Sector	: ED - Primary Education
Approval Number	: ATN/OC-18594-NI	Sub Sector	: PRI
Execution Agency	: US-IDB		
Execution Status	: Closed		
Operation Objective	: The objective of the Technical Cooperation is to assess the nutritional status in vulnerable school populations in Nicaragua, affected in 2020 by the COVID-19 pandemic and two hurricanes. Resources from the TC will be used to finance a survey of beneficiaries of the Comprehensive School Nutrition Program (PINE) on Nicaragua's Northern Caribbean Coast (RACCN). The TC will support the design and development of a diagnostic of the nutritional status and practices of school-aged children beneficiaries of PINE.		
Financial Information			
NI-T1304			
ATN/OC-18594-NI:ORC	Original	Current	% of Current Amount Financed
Amount Financed	\$150,000.00	\$149,664.00	
Disbursed Amount	N/A	\$149,664.00	100.00 %
Commitments not yet disbursed Amount	N/A	-	0.00 %
Available Amount	N/A	-	0.00 %
Final Disbursement Date	May 4, 2023		
Status Update			

The TC has executed successfully, achieving its development objective of evaluating the nutritional status of children on the Caribbean Coast of Nicaragua. The survey provides information that will be essential in designing a policy response to improve the well-being of school-age children. The data helps understand the situation of school-age boys and girls in the municipalities of this department and provides inputs that will help guide the design of policies and/or initiatives in this sector. The TC was executed in close coordination with the Ministries of education and health to design and validate of the questionnaire; draw a representative sample of 2,500 students on the Caribbean coast of Nicaragua; collect, process and systematize data; and deliver the final report. During the field work phase, the IDB team and the consultancy firm Econometria met weekly with the ministries of health and education to coordinate the school visits of the week, ensuring compliance with COVID-19 safety protocols. Econometria surveyed 2,479 students from preschool levels 1 to 3 and grades 1 to 6 of primary school. The sample was distributed in 121 educational centers in 14 municipalities in the Caribbean Coast. The sample was collected through the implementation of a probabilistic sample design. The survey included measurement of nutritional status, anemia and child trauma, among other factors. The findings show that the prevalence of anemia is extremely high (42.7%), and the rate is higher in urban areas and among preschoolers. Between 11 and 14% of children have increased anxiety levels following the hurricanes ETA /IOTA. Around 35% of children in urban areas, and 47% of their rural peers, experience fear of rain and water. The IDB team has drafted a working paper based on the findings. Worldwide and in Nicaragua, studies of anemia typically focus on pregnant women and infants. This makes the contribution of the current study of nutrition and anemia in school children utmost importance.

Advance in the Achievement of Outcome and Outputs

Advance in the Achievement of Outcome

1 . The nutritional status of school children in the Northern Caribbean Coast of Nicaragua evaluated.

The outcome of assessing "the nutritional status of school children in the Northern Caribbean Coast of Nicaragua," has largely been achieved.

Advances in Execution

1. Diagnostic of nutritional status and feeding practices of school-age populations

Component Cost: \$130,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.1 ^s Surveys conducted	Survey of the nutritional status of school-age population in the Northern Caribbean Coast of Nicaragua (CTY)	Surveys (#)	0	2021	Consultancy report	Education	Physical			
							2021	0	0	1
							2022	1	0	0
							2023	0	0	
							EOP 2023	1	1	1
							Financial			
							2021	0	0	50000
							2022	50000	0	0
							2023	0	0	
							EOP 2023	50000	50000	50000

Advances In Execution: Data was collected in a representative sample of 2,500 students. About the school attended, data included: (i) Availability of basic services; and (ii) School lunch. About the household, data included for example: (i) Basic infrastructure of the household; (ii) ethnic groups; (iii) Type of dwelling; (iv) access to basic services; (v) economic income; and (vi) experience of the household as a result of the passage of those of ETA/IOTA. The student module included: (i) Perception of school performance; (ii) Perception of intelligence of the student; and (iii) Perception of the changes that the boys and girls could have had in the family environment after the passage of hurricanes Eta and Iota. The student's nutritional status included: (i) weight for height; (ii) Height for age; (iii) Body mass index (overweight and obesity); and (iv) Hemoglobin (prevalence of anemia).

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.2 ^s Supervision reports completed	Fieldwork report completed (CTY)	Reports (#)	0	2021	Consultancy report	Education	Physical			
							2021	1	1	1
							2022	0	0	0
							2023	0	0	
							EOP 2023	1	1	1
							Financial			
							2021	80000	80000	80000
							2022	0	0	0
							2023	0	0	
							EOP 2023	80000	80000	80000

Advances In Execution: Econometria is a responsible and hardworking firm. The fieldwork supervision report was detailed and described how the firm collaborated with the IDB, and the ministries of health and education to ensure compliance of all national health and safety protocols.

2. Analysis and Dissemination

Component Cost: \$20,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.1 ^s Social impact assessment completed	Survey analysis completed (CTY)	Assessments (#)	0	2021	Consultancy report	Education	Physical			
							2021	0	0	0
							2022	0	1	1
							2023	1	0	
							EOP 2023	1	1	1
							Financial			
							2021	0	0	0
							2022	0	10000	10000
							2023	10000	0	
							EOP 2023	10000	10000	10000

Advances In Execution: The data analysisi has been completed, combining the data from the Caribbean Coast with previous data from the Dry Corridor, eploring explore factors that predict the prevalence of anemia and primary school children's academic performance in two of Nicaragua's vulnerable regions. The combined sample is representative of the two regions based on 5,467 children attending primary schools in the area most severely affected by climate change (the Dry Corridor) and the Caribbean coast of the country (both covering 49 municipalities in 6 departments of Nicaragua).

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.2 ^s Discussion papers developed	Technical Note developed (CTY)	Papers (#)	0	2021	Discussion paper	Education	Physical			
							2021	0	0	0
							2022	0	0	1
							2023	1	1	
							EOP 2023	1	2	1
							Financial			
							2021	0	0	0
							2022	0	0	8000
							2023	8000	0	
							EOP 2023	8000	8000	8000

Advances In Execution: A duscussion paper has been developed combining the Caribbean Coast data with data from the Dry Corridor. We find that students who attend school more regularly are less likely to be anemic, which, we claim, is driven by the availability of the universal school lunch program across the country. We also found that students attending schools with precarious infrastructure for storing and preparing school lunches are likelier to be anemic than those attending schools with proper infrastructure for meal preparation. Results also show that students' academic performance correlates with their school attendance, their levels of anemia, whether they can follow teacher instructions, whether they are easily distracted, and whether their parents are involved in school activities.

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.3 ^s Presentations delivered	Presentation delivered (CTY)	Presentations (#)	0	2021	Presentation	Education	Physical			
							2021	0	0	0
							2022	0	1	5
							2023	1	0	
							EOP 2023	1	5	5
							Financial			
							2021	0	0	0
							2022	0	0	2000
							2023	2000	0	
							EOP 2023	2000	2000	2000

Advances In Execution: The IDB team has presented the findings through a series of workshops to: (i) the donor community locally in Nicaragua; (ii) HQ staff of the World Food Program; (iii) CONSOC; (iv) the US embassy in Nicaragua and USAID.