

PROJECT IMPLEMENTATION REPORT

Project ID:	9860
Project Name:	Creation of Additional Biosafety Capacities that Lead to A Full Implementation of the Cartagena Protocol on Biosafety in Cuba
Countr(ies):	Cuba
Implementing Agency:	UNEP

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I. Overview

A. Description

Project name

Creation of Additional Biosafety Capacities that Lead to A Full Implementation of the Cartagena Protocol on Biosafety in Cuba

Country

Cuba

GEF ID

9860

Implementing Agency

UNEP

Executing Entity

National Centre of Biological Safety (CSB)

Trust Fund

GET

Project Type

MSP

PIR Submission

9/11/2026

Fiscal Year , PIR Number

FY 2026 , Final PIR

Objective

To further complete the process of implementation of the Cartagena Protocol on Biosafety (CPB) through the creation of additional capacities in the areas of monitoring, detection, liability and redress, and education.

B. Ratings and Disbursements

Implementation Progress

Highly Satisfactory

Development Objective

Highly Satisfactory

Overall risk

Low Risk

Project Financing

2,000,000.00

Cumulative Disbursement

1,703,072.00

C. Key Dates

CEO Endorsement/Approval

7/17/2017

Agency Approval

7/17/2017

Implementation Start 4/3/2020	First Disbursement 6/8/2020
Expected MTR 1/16/2024	Actual MTR 1/31/2024
Expected Completion 6/30/2026	Actual Completion 6/30/2026

II. PROGRESS STATUS AND ISSUES

A. Progress: Information on progress and outcomes of project implementation activities

Despite prolonged power outages that intensified in the first half of 2026, the project advanced steadily towards its outcome targets. Under Outcome 1.1, the accreditation process for the CICDC and CENSA laboratories reached its final phase: both completed validation of the qualitative test for corn event TC 1507 and are now awaiting the National Accreditation Body's (ONARC) Decision Committee ruling, expected for CENSA in August. A validation article on soybean event GTS 40-3-2 is scheduled for publication in the journal Applied Biotechnology. Under Outcome 2.1, the national Monitoring and Surveillance system became fully operational, with a second stage of post-harvest environmental monitoring completed in Calimete, Matanzas, and a Field Monitoring Workshop where CENATOX presented ecotoxicological results and a GIS tool for mapping new release areas. Customs capacity was strengthened through review of the national tariff classification system (SACLAP) and border-sampling training with MINAG's Plant Health Directorate, surpassing the target of training at least 50% of designated customs officers. At output level, deliverables under Components 1 and 2 were completed or are near completion. Both reference laboratories (Output 1.1.1) received the reagents and equipment needed to sustain testing, the ORSA-CENSA-CICDC collaboration MoU (1.1.2) remains in force, and the harmonized detection protocols and SOPs (1.1.3) were approved by the national competent authority. Detection thresholds (1.1.4) were finalized following the validated GTS 40-3-2 soybean assay, the TC 1507 corn validation now underway, and satisfactory results in an external FAPAS proficiency test; laboratory accreditation (1.1.6) is 90-100% complete, pending only ONARC's Decision Committee rulings. The field-detection strategy, border-sampling guides and related workshops (2.1.1-2.1.4) were fully delivered. Under Component 3, the public communication campaign was launched with a December 2025 press conference for about 25 journalists, and an audiovisual on the project's results and community impact premiered at the 30 June closing workshop, subsequently broadcast nationally and shared with the CBD Secretariat. On project management, all reports were delivered on time, two Steering Committee meetings were held (October 2025 and June 2026), and, following the concluded Mid-Term Review, the Terminal Evaluation is scheduled to begin in September.

B. Challenges: Information on challenges of project implementation activities

The project's most critical challenge during the reporting period was the country's worsening energy crisis: power outages exceeding 12 hours a day and four national grid failures within five months, combined with fuel shortages limiting mobility, forced the repeated rescheduling of field and laboratory activities (rated Moderate under the Implementation Schedule risk). Closely linked to this, the sharp rise in service and input prices required constant budget re-adjustment ahead of each activity (rated Moderate under the Budget risk). Cuba's broader economic and social context continues to be monitored as a Moderate risk affecting the

enabling environment for project execution, though it has remained stable without escalation during the period.

C. Stakeholder Engagement

One of the strengths of this initiative has been precisely the involvement of national actors from national entities (research centers, universities, national authorities from the Ministry of Agriculture, Foreign Trade, the National Accreditation Body of the Republic of Cuba, the General Customs Office of the Republic, among others), private producers, the pig farm located in one of the localities, and the community in general. Perhaps the most important aspect to highlight during this period has been the discovery of the possibilities and the connections that have been established between the universities of Villa Clara and Ciego de Ávila and producers, companies, and regulatory agencies. At the university's Venezuela campus, training activities aimed at agricultural workers, farm managers, and decision-makers have been essential for a better understanding of these issues: this has been one of the main demands, as it helps increase the general public's knowledge and awareness of the benefits of these biotech crops. Furthermore, the Marta Abreu de las Villas Central University has formed working groups with producers and the Placetas Swine Trade Association, and has developed regional projects funded by CITMA's Environmental Fund, which has enabled them to expand research on the impact of these crops on the soil's physicochemical indicators; they have also evaluated the quality of seeds and grains, and have even set out to evaluate the feed mixtures used, linking them to the animals' feed conversion efficiency. Undoubtedly, this constitutes a significant achievement that provides a stronger scientific basis for the production of genetically modified crops in Cuba and supports the decisions of the National Biosafety Authority.

D. Gender Equality

Does the project have a gender action plan? No

Gender mainstreaming: Nevertheless, the project team is mostly integrated by women, both within the National Executing Agency and in the entities participating in this initiative with ORSA; hence, both the training activities and the presentation of results in scientific events have a significant participation of women. Moreover, the participants in the workshops held to date, have the representation of women as more than 60 % of the total number of attendees.

Environmental and social safeguards management: The issue at the heart of this initiative is a priority for the Cuban government, as it is closely linked to achieving the long-awaited goal of food sovereignty. During the period under review, two meetings of the National GMO Commission were held with the participation of the relevant authorities: the Ministry of Public Health, the Ministry of Agriculture, and the Ministry of Science, Technology, and Environment. Representatives from the National Standardization Office and technology developers also participated. In both forums, the functioning of the GMO commissions at the territorial level was discussed, highlighting the main results and the difficulties that remain. Once again, emphasis was placed on the need for integration between authorities and the need for training at all levels on the benefits and risks of using this technology. At the meeting held in December, progress in the implementation of the international biosafety project was presented, emphasizing the potential and national capacities that it brings to the country at the present time. At this Commission's recent meeting held last June, the results of the socioeconomic studies conducted in Placetas, Villa Clara, were presented. These studies clearly demonstrated the impact of these crops' production on the communities, as well as the reported benefits in terms of yields, income, wages, job creation, and the participation of women and the entire family in the process: as well as the collaboration with the university to conduct scientific research on these crops, closing the cycle with the pig farming enterprise, since the feed mixtures produced from genetically modified corn and soybeans constitute the primary source of feed for this species. Therefore, it is vital to continue communicating the results of this project to the public; its fundamental message is that our country now has the necessary tools to affirm that these products are safe and comply with biosafety standards.

E. Knowledge Management

Knowledge activities and products

During the period covered by this report, a training session was held in a release area for HAmE 15 hybrid corn—which is resistant to the corn earworm and tolerant to herbicides—with the participation of project

team members and ORSA regulators in Sancti Spiritus. Also participating were plant protection specialists, workers, and an agricultural producer—the farm manager of the visited area—with the aim of verifying compliance with the environmental permit requirements, collecting grain samples for shipment to laboratories, and using test strips to assess the adjacent areas, thereby evaluating compliance with biosecurity measures. Furthermore, virtual meetings have been held, to the extent possible, through a WhatsApp group created for this purpose, with ORSA specialists in all provinces to follow up on the procedures developed in Component 2 (Monitoring and Surveillance) and to update the release areas for biotech crops, information on which is presented at the two annual meetings of the National GMO Commission. Another outcome of this Component was the drafting of an article outlining Cuba’s strategy and Monitoring and Surveillance System for publication; it was submitted to the journal **Ambiente y Sustentabilidad**, has already been accepted, and is currently under review.

In addition, the following article is scheduled to be published shortly: “Validation of the qualitative real-time PCR assay for the specific event of transgenic soybean GTS 40-3-2.” Madeline Blanco de Armas, María Karla Castro Montes de Oca, Adriana Mesa Delgado, Liuber Machado Zaldívar, Maylin Pupo Arias, María Teresa Pérez Guevara, Arsenio Betancourt Bravo, Yodaimys Bacallao Salcedo, Tanya Romay Fernández. Applied Biotechnology (Approved—next publication). ISSN: 1027-2852.

As part of the training of a fourth-year student in the Faculty of Biology at the University of Havana, a research project was conducted in which the results of the maize validation formed part of her diploma thesis titled: “Validation of the Real-Time PCR Assay for the Detection of the TC 1507 Maize Event,” which yielded satisfactory results and received the highest grade of 5 points.

Main learning during the period

This was yet another year that demonstrated the resilience and perseverance of the team, as well as the commitment of the institutions participating in the project alongside ORSA to achieving results. For this final period, there were relatively few activities left to complete, but the challenges were even greater when, in January 2026, the country’s electricity crisis worsened even further, with power outages lasting more than 12 hours a day; the fuel crisis prevented mobility even within the city; and, finally, the National Electric System suffered four outages in just five months. We’ve had to move forward and assess the situation almost daily to ensure we could complete our activities and replan our tasks. It has been extremely difficult this time, but when we look at the results and the tasks we’ve accomplished, we rejoice at how much we’ve grown. This shows us that if we can achieve these results in the face of adversity, just imagine the wonders we could accomplish and share when conditions are favorable.

III: Minor Amendments

CONTEXT	
Result Framework	
Components and Cost	
Institutional And Implementation Arrangements	
Financial Management	
Implementation Schedule	Original PCA: Signed/Approved by UNEP: 2020-03-24; Entry Into Force (last signature Date): 2020-04-03; Agreement Expiry Date: 2026-

	04-30; Main changes introduced in this revision: NA Amendment 01: Amendment & Extension: 2025-03-28; Entry Into Force (last signature Date): 2025-07-07; Agreement Expiry Date: 2027-07-31; Main changes introduced in this revision: non-cost extension; workplan
Executing Entity	
Executing Entity Category	
Minor Project Objective Change	
Safeguards	
Risk Analysis	
Increase of GEF Financing up to 5%	
Co-Financing	
Location of Project Activity	
others	

IV: Geographic Coordinates of Project Activities

Location Name	Latitude	Longitude	GeoName ID
Office for Environmental Regulation and Safety.	23.11985	-82.42371	

Location Description:

The Office for Environmental Regulation and Safety is located in a residential area.

Activity Description:

Executing Agency

Location Name	Latitude	Longitude	GeoName ID
National Agricultural Health Center (CENSA)	22.99694	-82.15306	

Location Description:

The National Agricultural Health Centre (CENSA) doesn't have nearby settlements. It is located near the national highway and surrounded by green and cultivation areas.

Activity Description:

Identification and detection of GMO.

Location Name	Latitude	Longitude	GeoName ID
Center for Scientific Research for the Civil Defense (CICDC)	22.99833	-82.155	

Location Description:

The Center for Scientific Research for the Civil Defense (CICDC) doesn't have nearby settlements. It is located near the national highway and surrounded by green and cultivation areas.

Activity Description:

Identification and detection of GMO.

Location Name	Latitude	Longitude	GeoName ID
National Toxicology Center (CENATOX)	23.13639	-82.72306	

Location Description:

The National Toxicology Center (CENATOX) is located in a residential area.

Activity Description:

Monitoring and surveillance of possible adverse effects of GMOs.

Location Name	Latitude	Longitude	GeoName ID
Enterprise Jesus Sablon Moreno. Calimete. Matanzas province	22.57303	-80.92077	

Location Description:

Activity Description:

GM crop release area

Location Name	Latitude	Longitude	GeoName ID
Placetas, Villa Clara Province	22.1901	-79.3912	

Location Description:

Activity Description:

Socioeconomic studies

Location Name	Latitude	Longitude	GeoName ID
Venezuela municipalily, Ciego de Avila	21.4451	-78.4719	

Location Description:

Activity Description:

Socioeconomic studies

Location Name	Latitude	Longitude	GeoName ID
Sanguily, Ciego de Avila province	21.4557	-78.5217	

Location Description:

Activity Description:

Socioeconomic studies

Location Name	Latitude	Longitude	GeoName ID
Farm Renacer, CCS Enrique Villegas Martínez, Sancti Spiritus province	21.4415	-79.1496	

Location Description:

Project partner producer

Activity Description:

GM crop release area

V. ANNEX

Uploaded Document

Document Category	Title
M and E Document	9860_PIR_UNEP_2026-Cuba Biosafety