

**Biosafety in the Caribbean:
Creating capacities through a regional GEF
project**

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Presentation

1). **Building Capacities** – what we do



2). **National Biosafety Frameworks** – what they consist in, progress made

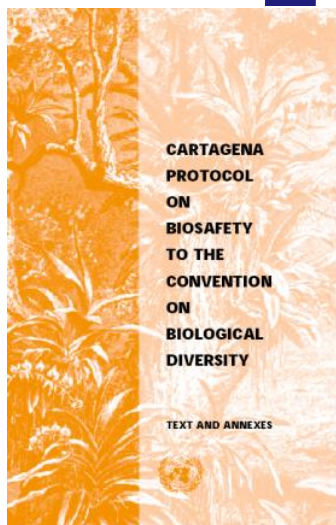


3). **Regional Project** – what is coming up, what the project is about



4). **Key challenges** – what needs close attention

Capacity Building



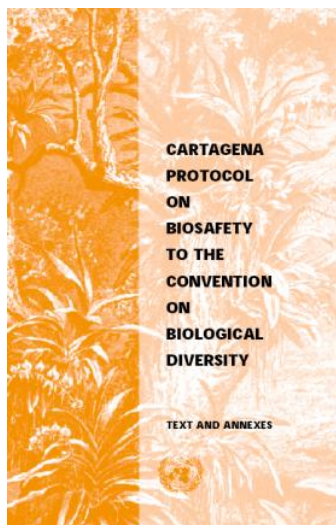
Cartagena Protocol



Caribbean: **14 Parties**. Antigua & Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, St Kitts & Nevis, St Lucia, St Vincent & the Grenadines, Suriname, Trinidad & Tobago.

Haiti and, Jamaica are NOT Parties.

Capacity Building



Cartagena Protocol



The involvement of UNEP in capacity building in biosafety began even before the **Cartagena Protocol** existed (1995, 1996) ... and has since progressed step-by-step

UNEP with financial support from GEF has worked with nearly **130 developing countries** in developing and in some cases implementing National Biosafety Frameworks (NBF) and in using the Biosafety Clearing House (BCH)

National Biosafety Frameworks

What is a National Biosafety Framework? (NBF)



A national biosafety framework is a combination of **legal**, **policy**, **administrative** and **technical** instruments that a country sets up in order to contribute to greater environmental and human safety in the use of modern biotechnology = Living Modified Organisms.

National Biosafety Frameworks

Why are NBFs necessary?



Caribbean Single Market and Economy (CSME)

Highly vulnerable island biodiversity

Region-driven and “imported” modern biotechnology is on the rise

Responsible use

National Biosafety Frameworks

How is a NBF built?

1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (admin, risk assessment and risk management, decision making, information management)
4. Follow-up actions (monitoring, inspections, supervision, etc.).
5. Public awareness and participation



National Biosafety Frameworks

How is a NBF built?

1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (admin, risk assessment and risk management, decision making, information management)

Technical capacity is low



Political will is uneven



National priority is low

National Biosafety Frameworks

Progress made

1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (admin, risk assessment and risk management, decision making, information management)

POLICIES:

Jamaica is the only country with a National Policy on Biotechnology in place.

The majority (12 countries) has prepared a national policy on biosafety but it remains in draft form (ie. is not official).

National Biosafety Frameworks

Progress made

1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (admin, risk assessment and risk management, decision making, information management)

REGULATIONS:

There are draft biosafety regulations not yet approved, and many requiring updating. National Competent Authorities have been designated in 7 countries : Antigua & Barbuda, The Bahamas , Barbados , Grenada , Jamaica , St Lucia ,Trinidad & Tobago

National Biosafety Frameworks

Progress made

1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (admin, risk assessment and risk management, decision making, information management)

STRUCTURES:

There are biosafety commissions in place:

The Bahamas and Jamaica have Scientific Advisory Panels

6 countries have established a National Biosafety Committee for coordination purposes

Regional Project

What is coming up?



1. Policy on Biosafety
2. Regulatory regime
3. System for handling applications (administration, risk assessment and risk management, **decision making, information management**)
4. Follow-up actions (monitoring, inspections, supervision, etc.).
5. Public awareness and participation

Regional effort to harmonize NBFs and set up a support system for biosafety management and for capacity building

Regional Project

What is coming up?

3 institutions work with LMOs: the University of Guyana, the University of the West Indies - Biotechnology Centre (Jamaica) and St. Augustine (Trinidad & Tobago).



The region also has institutions that import/export transgenic organisms/ foods/ food components that are used for research and contained use.

There are developments in certain ornamental plants such as genetically modified carnations, poinsettia, and chrysanthemums.

Regional Project

Biotechnology Processes Applied	Country	Research	Validation	Pre-commercial	Commercial	Approval of LMO
Transgenic Papaya (resistant to papaya ringspot virus)	Jamaica	yes	yes	Yes	no	no
Transgenic Sea Island Cotton	Jamaica	yes	no	No	no	no
Transgenic citrus	Jamaica	yes	no	No	no	no
Transgenic hot pepper	Jamaica	yes	no	No	no	no
Somatic embryogenesis Ackee	Jamaica	yes	yes	No	no	no
Shoot-tip Grafting -Citrus	Jamaica	yes	yes	No	no	no
Plant Tissue Culture	Jamaica	yes	yes	Yes	Yes	no
Bio-inoculants -Plant Growth Promoting Bacteria	Jamaica	yes	yes	No	no	no
Transgenic anthuriums	Trinidad & Tobago	yes	yes	Yes	no	no
Soil bioremediation	Guyana	yes	yes	No	no	no
Plant Tissue Culture	St. Vincent & Grenadines	yes	yes	Yes	Yes	no
Plant Tissue Culture	St Kitts & Nevis	yes	yes	Yes	Yes	no
Plant Tissue culture	Barbados	yes	yes	Yes		no

Regional Project

What will the Project offer?

FULLY FUNCTIONAL NATIONAL SYSTEMS + SERVICES AVAILABLE FOR:

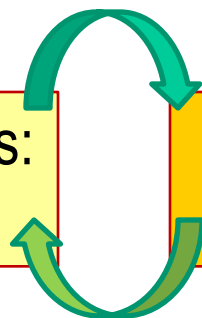
- (a) handling requests, performing risk assessment, detecting LMOs, decision-making and performing administrative tasks;
- (b) monitoring environmental effects and enforcement;
- (c) biosafety information management and stimulating public awareness, biosafety education, and participation in the decision-making process.

Regional Project

What will the Project offer?

This project has the additional task of seeking agreement amongst participating countries on how best to establish institutional mechanisms and strategies that will make biosafety operational, **integrated and sustainable** in the region, through cooperative coordination and execution of common and delegated biosafety functions.

Certain tasks and responsibilities:
National



Certain services and roles:
Regional

Regional Project

What will the Project offer?

1. Policy on Biosafety
2. Regulatory regime

Component 1

Frameworks will make provisions for:

the formulation/implementation of a national biosafety and biotechnology **policy** with the associated biosafety/biotechnology **legislation**; the establishment and effective **operations** of National Competent Authority(ies); **coordination mechanisms and support structures** for scientific assessments and monitoring of biosafety/ biotechnology issues, and if relevant, biosafety research; and legislative procedures to ensure the right of the public to **participate** in decision-making in biosafety management

Regional Project

What will the Project offer?

3. System for handling applications
4. Follow-up actions

Component 2

Will deliver:

training programs and manuals, training workshops and short-term attachments for scientists and technical personnel; validated standards and protocols for biosafety risk assessment and risk management, including if relevant, identification of LMO shipments; monitoring services and standards for biosafety management, with a view to creating laboratory accreditation schemes (national and eventually regional); laboratory equipment, supplies and reagents required for LMO testing

Regional Project

What will the Project offer?

3. System for handling applications
4. Follow-up actions

Component 2

As part of this component, countries will look into potentially establishing a **region-wide harmonized risk management system** as a pioneer model for regional harmonization of biosafety standards and protocols and LMO identification, and for pooling management and laboratory capacities.

Achieving such a harmonized system is contingent on political support and evident cost-efficiency savings, as well as on first fulfilling national capacity gaps.

Regional Project



**Biosafety
measures?**

Regional Project

What will the Project offer?

5. Public awareness and participation

Component 4

Aims to:

boost quality and availability of relevant biosafety information in the region to benefit both the general public and decision-makers; set up a regional node for the BCH with a data management system and links to national nodes (nBCH) in each participating country; design and implement a public education and outreach (PEO) strategy to promote awareness, public participation and communication in biosafety issues relevant to decision-making.

Regional Project



What else will the Project offer?

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Component 3

Regional Project

What else will the Project offer?

6. Human Resources Development

Component 3

Training:

biosafety training targeted, and orientated at the development of **national capacity**, and on a secondary level, to the formation of biosafety **specialists** able to serve the region; biosafety training **program**, manuals and workshops; short term attachments for scientific and technical personnel involved in coaching and risk management of LMOs, and **means for sustaining** the biosafety training program beyond GEF support

Regional Project

What else will the Project offer?

7. Regional support mechanisms

Component 5

This component will:

Determine the most appropriate means to maintain the Regional BCH Node; deliver targeted training and access to appropriate technical and human resource capability; and foster the establishment of biosafety regional support mechanisms for participating countries, potentially through CARICOM.

An initial viability assessment will look into options and self-financing mechanisms (eg. for centralizing biosafety applications through a "gatekeeper").

Key challenges

What needs special attention?

Partnerships must be synergistic, opportune and win-win orientated

Coordination is paramount

University of the West Indies → *Executing agency*

Formal Partners: University of Guyana, IICA, CARICOM

Potentially: CARDI, CAHFSA, CROSQ, FAO, USGS

System is only as strong as its weakest link

Progress must be concomitant across countries

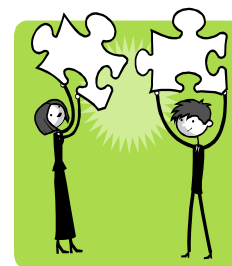
Consensus seeking is key



Key challenges

What needs special attention?

Is it correct to assume that technical needs are similar?
Are constraints the same? Are priorities the same?



- environmental risk analysis
- risk analysis food safety
- socio-economic considerations
- bioethics
- GMO international law
- risk communication (as part of risk analysis)
- handling of confidential information
- feasibility and cost-effectiveness of containment measures
- monitoring, sampling and detection

Key challenges

What needs special attention?

Sustainability (financial) of the capacity being built

Human resources development

Government duties

Regional support

Mainstreaming as a means of increasing sustainability

Biosafety should not be managed in isolation

Learning from other islands (eg. Cuba)



End

Thank you

<http://www.cbd.int/biosafety>

<http://bch.cbd.int/database/>

<http://www.unep.org/biosafety>

