



Biodiversity Conservation in Agriculture

The Guyana Experience

Introduction to Guyana



- **Only English speaking country in South America**
- **215,000km² in size**
- **Population \approx 747,883**
- **Low middle income country. Considered a SIDS**
- **Agriculture and natural resource based economy**

Agriculture in Guyana

- **Most agricultural production occurs on the coast.**
- **Contributes to 20% of our economy**
- **Contributes to 33% of employment**
- **Contributes to \approx 40% of export earnings**
- **Accounts for \approx 11% of national budget estimates**
- **Guyana has identified food security as a way to end poverty and hunger by 2025 and agriculture as the vehicle to achieve this.**



International Agreements

- **FAO**

- **International Treaty on Plant Genetic Resources for Food and Agriculture**

- **UNCBD**

- **Cartagena Protocol on Biosafety**



National Acts related to Agriculture



No one overarching legislation for Agriculture

- **Slaughter Of Cattle (Control) Act**
- **Guyana Rice Development Board's Act**
- **Guyana Rice Producers Act Chapter**
- **National Agricultural Research and Extension Institute Act**
- **Pesticide and Toxic Chemicals Control Board Act**
- **Fisheries Act**

Legislative Framework for Biodiversity Conservation in Agriculture

No specific legislation for Biodiversity Conservation in Guyana

- **Plant Protection Act, 2011**
- **Seed Act**
- **Environmental Protection Act, 1996**
- **Protected Areas Act , 2011**
- **Wildlife Management and Conservation Regulations**
- **The Biosafety Bill and regulations (draft)**



Institutional Framework

- **Ministry of Agriculture**
 - **Overarching body for management of the agricultural sector**
 - **NAREI, GLDA, GRDB**
- **Other Agricultural Stakeholders**
 - **GuySuCo**
- **Environmental Management**
 - **EPA**



Challenges and Threats to Sustainable Agriculture



- **Absence of a specific law on biodiversity conservation.**
- **Lack of baseline biodiversity data in Guyana and all sectors.**
- **No streamlined assessment of biodiversity significance of an area prior to development of the area with the exception of EMP/EIA projects.**
- **Institutional fragmentation and conflicting legislation**
- **Poor coordination and integration among institutions**
- **Climate change**
- **Shifting weather patterns leading to crop loss**
- **Use of agro-chemicals**
- **Inadequate management and control of crop diseases**
- **Indiscriminate land use practices**
- **Soil Erosion**



Environmental Management for Sustainable Agriculture

- **Environmental Authorization from the EPA is required for farms >5000 acres, all integrated farms, and those in sensitive areas.**
- **Authorization may require submission of Environmental Management Plans.**
- **Projects with significant potential environmental impact undergo the Environmental Impact Assessment.**
- **MoA is working along with the EPA in requiring environmental authorization for large/integrated farms prior to issuance of development consent.**



Strategies and Plans

National Strategy for Agriculture 2013-2020



- **Vision: “Agriculture as our Vehicle for Sustained Economic and Social Prosperity”**
- **Priority Area 18 addresses environmental sustainability throughout the agricultural sector.**
- **Specific areas:**
 - **Safeguarding plant genetic resources**
 - **Establishing health through utilization of biological, chemical and physical methods in an ecosystem agronomic approach**
 - **Mapping agricultural land based on current and future demand**



Strategies and Plans (cont'd)

National Biodiversity Strategy and Action Plan 2012-2020

- **Outlines priority actions to attain UNCBD Goals and Aichi Biodiversity Targets.**




UNCDB Goals and Aichi Targets	Strategic Objectives	National Priority Actions
Goal C: Target 11 Goal D: Targets 14 and 15	Improve the status of biodiversity by conserving ecosystems, species and genetic diversity and by restoring biodiversity and ecosystem services in degraded areas.	Conduct a mangrove species mapping and inventory.
		Rehabilitate, restore and protect mangrove belts.
		Explore new models to combine ecological restoration and the creation of small businesses in mangrove areas.
		Promote soil health through the prudent utilization of biological, chemical and physical methods in an eco-system agronomic approach.
		Strengthen Agriculture In house and Field Germplasm Facility (Gene Bank) to FAO Germplasm Standards.



UNCDB Goals and Aichi Targets	Strategic Objectives	National Priority Actions
Goal A Target 2	Consolidate/harmonize policy, legal, regulatory, and administrative frameworks that support the sustainable use, protection and management of biodiversity resources.	Review existing legislation to determine the need for further provisions to conserve/use biodiversity sustainably.
		Conduct an independent review of the outcomes of Environmental Impact Assessments (EIAs) and their role in protecting biodiversity.
		To ensure all developers and operators in the agriculture sector are included in the EPA's environmental authorization process.
		Develop and improve national standards to guide environmental compliance.



UNCDB Goals and Aichi Targets	Strategic Objectives	National Priority Actions
Goal B Target 7	Promote conservation, sustainable use and value of biodiversity into key productive sectors used for growth, expansion and diversification of the economy.	Promote integrated tourism, hinterland development and biodiversity conservation strategies, where there is potential for these interests to coincide.
Goal B Target 5 Goal A Target 4	Improve substantially biodiversity monitoring at the national level and within key productive sectors as well as the private sector.	Implement better coordinated arrangements to monitor changes in state of biodiversity.
		Increase in self-monitoring and reporting by operators.
Goal E Target 17	Improve national implementation, monitoring and reporting for Multilateral Environmental Agreements (MEAs) and other bilateral commitments.	Implement the actions related to the Biosafety Protocol through development of Biosafety Legislation.
		Establish a committee by 2015 to guide implementation of MEAs in all sectors.



THANK YOU