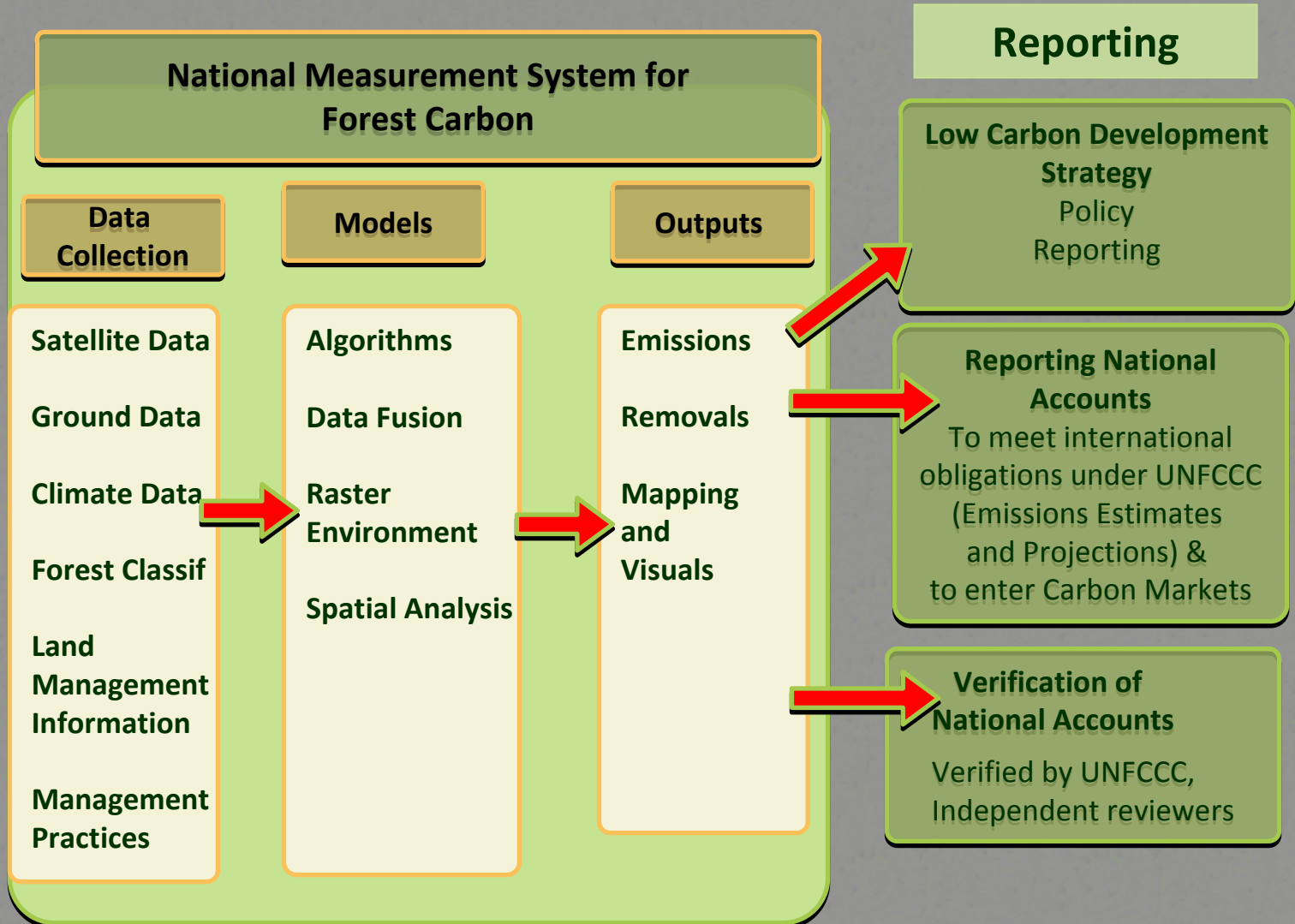# Review of Guyana MRVS Process and Approach
Enhancing Coordination of Capacity Building Efforts

Pradeepa Bholanath

Guyana Forestry Commission

Initial Workshop held on 15th Sept, 2009. General Framework drafted:

National Measurement System for Forest Carbon

Reporting

Data Collection	**Models**	**Outputs**
Satellite Data	Algorithms	Emissions
Ground Data	Data Fusion	Removals
Climate Data	Raster Environment	Mapping and Visuals
Forest Classif	Spatial Analysis	
Land Management Information		
Management Practices		

Low Carbon Development Strategy
Policy
Reporting

Reporting National Accounts
To meet international obligations under UNFCCC (Emissions Estimates and Projections) & to enter Carbon Markets

Verification of National Accounts
Verified by UNFCCC, Independent reviewers

Background

- The Government of Guyana has embarked on a national programme that aims to protect and maintain its forests in an effort to reduce global carbon emissions and at the same time attract resources to foster growth and development along a low carbon emissions path. Guyana has over 80% of its land area covered by forests, approximately 16 million hectares.

- While policy and compensations mechanisms for implementing REDD are still under discussion within the UNFCCC, the decision text on methodologies for REDD produced by SBSTA 31 in December 2009 makes it clear that not only reduced emissions from deforestation and degradation, but also forest conservation, sustainable forest management and forest enhancement are likely to be included in the post-2012 climate regime. Guyana's efforts are based on REDD+.

- LCDS, readiness preparation, bilateral cooperation, donor participation.

Developing an MRVS

- Requirements for the MRV system:

  - The accepted principles and procedures of estimation and reporting of carbon emissions and removals at the national level should meet criteria specified by the IPCC Good Practice Guidelines and Guidance for reporting on the international level;

  - The particulars of the national REDD implementation strategy that have been selected, since different activities have different MRV implications;

- Bridging the capacity gap through a detailed plan to establish sustained MRV capacities within the country:
  - Capacity gap assessment
  - Develop a road map

Roadmap Approach

- The outcomes of the initiative, as outlined in the MRV capacity development roadmap, are as follows:

- The overall goal is a capacity development process to establish a sustained MRV for implementing REDD policies and results-based compensation

- The development of a national REDD+ MRV system uses a phased approach along a roadmap that specifies near-term priorities & long-term targets;

- The MRV system evolution is directly linked with REDD+ policy development and implementation and contains a systematic national monitoring, reporting and verification system and a sub-national program to support MRV for local REDD+ activities;

- A strong institutional base and the establishment and maintenance of partnership and cooperation at all levels as enabling framework.

Focal Areas

Seven specific areas were identified where activities are recommended for the first phase and should start as soon as possible:

- Develop and implement a national mechanism and institutional framework
- Implement a comprehensive forest area change assessment for historical periods
- Build carbon stock measurement and monitoring capacities
- Develop MRV for a set of sub-national REDD demonstration activities
- Engagement with the international community
- Sustain an internal and national communication mechanisms
- Conduct and support research on key issues

	National strategy (2010/11) →
Objectives	**Gather and integrate information & fill data gaps for national REDD opportunities, scoping and policy development**
Key results and national capacities developed	1.Comprehensive MRV roadmap developed and national MRV steering body operational 2.Improved national capacities on LCDS, REDD, IPCC-LULUCF, and carbon dynamics 3.Framework and capacities to demonstrate REDD implementation and interim performance 4.All data available and accessible (including acquisition of new forest carbon data) on drivers and processes needed for developing a national REDD policy and interim implementation plan 5.Established communication and participation mechanism to involve relevant stakeholders nationally and internationally 6.Approaches for setting reference levels, linking MRV and policy, and MRV co-benefits and synergies are explored and defined

	Country readiness (2011/12) ➜
Objectives	**Develop capacities, conduct historical monitoring, and implement a (minimum) IPCC Tier 2 national forest carbon monitoring, establish the reference level and report on interim performance**
Key results and national capacities developed	1.Capacities in place for consistent and continuous acquisition and analysis of key data for Tier 2 nationally and Tier 3 for demonstration/activity sites including international reporting using IPCC LULUCF; uncertainty assessment MRV improvement plan developed 2.Reference level established based on historical data, and future developments using internationally accepted methods 3.All data available and accessible for an updated national REDD implementation plan 4.Regular reporting on REDD demonstrations and interim performance 5.Continued engagement with key national stakeholders for REDD implementation and assuring long-term sustainability of MRV capacities (i.e. universities) 6.Monitoring system explored to cover key variables for other ecosystem services

	Implementation (post 2012)➜
Objectives	**Establish consistent and continuous MRV supporting national REDD+ actions and international IPCC GPG-based reporting and verification**
Key results and national capacities developed	1.IPCC key category analysis and assessment for Tier 3 approaches completed and implemented (if desired) 2.Independent international review of full MRV system completed 3.Capacity in place and implementation to deliver verification and compliance assessment for REDD results-based compensation 4.National data infrastructure of forest greenhouse gas inventory and assessment in place for regular reporting 5.Implementation plan to use new and proven technologies to reduce uncertainties and increase efficiency of MRV system 6.Framework developed that links REDD into LCDS monitoring, reporting and verification system

Activities in Progress

- Terms of Reference
  - Technical work to be done
  - Identify resources and capacity needs
  - Identify institutional and operational requirements
    - MRVS Steering Committee
    - MRVS Technical Committee

- Start off with external inputs
- Build capacity with local resources

List of Activities
1. Develop and implement a national MRV coordination mechanism (1 year)
1.1 Establish Steering Body for the MRV system development
1.2 Coordinate and integrate national datasets (Technical subcommittee)
1.3 Participation, scientific advice and international coordination

2. Conduct a comprehensive forest area change assessment for historical period (1-1,5 years)

2.1 Build Capacity and Partnerships

2.2 Finalize definitions

2.3 Consolidate archive and existing data

2.4 Conduct Assessment on forest degradation

2.5 Conduct stratification, mapping and implement monitoring and assessment of (historical) change in forest area

2.6 Conduct independent accuracy assessment for forest maps

2.7 Prepare for reporting on interim, area-based performance indicators

Other Activities

- Definition
- Drivers of Deforestation and Forest Degradation
- Activity Data – Approach 3
- (Remote Sensing, Field Assessment, Degradation monitoring)
- Carbon Stock Assessment – Tier 2, 3
- Estimating CO_2 emissions – Stock difference method or combination of methods
- Reporting
- Verification

Reference Levels

- The estimate of emissions from deforestation and degradation requires assessing reference levels against which future emissions can be compared.

- These reference levels should represent the historical emissions from deforestation and forest degradation in "forested land" at national level. Given the rather low rate of deforestation in Guyana, the method of reference level will likely use future projected emissions levels.

- As such, assessments will be made of future reference scenario based which will be influenced on the outcome of the international climate change negotiation.

- This will look at the deforestation drivers and processes, areas of projected growth, planned activities in natural resources utilization and other forms of development.

- In this regard, various scenarios will be considered. The reference levels that will be used will be dependent on the outcome of the negotiations.

Barriers

- Barriers Overcome
  - Conceptual understanding of REDD+, MRVS and implications of land use decisions
  - Coordination and integration of efforts at all levels – Govt. NGO, International bodies
  - Roles and responsibilities
  - Large body of technical work to be undertaken
  - Policy coordination, multiple land use
  - Learning from experience
  - Appropriate system for Guyana

Challenges and Existing Gaps

- Bridging the capacity gap to undertake technical work on MRVS. Resources requirements.

- MRVS work is not a stand alone undertaking but needs to link into key activities like NFI, REDD+ Policy, Community Development Planning, Management of land use and multiple use of forests, and processes/drivers of deforestation and forest degradation.

- Striking the balance with building a robust MRVS and being sustaining these efforts that may be resource intensive.

- Addressing a varied, multi dimensional stakeholder environment that differ in interests, capacity, roles, mandate and responsibilities.

- Technical challenges – cloud cover, building in NFI into efforts of MRVS, etc

- Forest degradation

- Developing a framework in a still unconcluded environment of a financing mechanism for REDD+

- Understanding the implications of various REDD+ strategies and MRVS implications

Lessons Learned

- Existing work can feed into the process
- Equal importance of each stakeholder group – multi level, cross sectoral
- National context and appropriateness
- Sustainability of approach achieved through capacity building
- Efforts need to link to international processes, negotiation, bilateral arrangements, and international mechanisms
- Moving ahead in absence of full capacity and historic data.
- Priority setting and effective implementation strategies

Opportunities for Sharing Experiences

- GOFC-GOLD
- GEO
- FCPF
- Bilateral cooperation
- Cross border cooperation – Brazil, Suriname, French Guiana
- UNFCCC

Areas of Experience

- Approaches to building capacity at all levels.
- National coordination and local level engagement.
- Building an MRVS from initial stages in current dynamic environment of multiple land use, multiple stakeholder involvement and land owners.
- Approaches to overcoming technical challenges of addressing various processes of deforestation and forest degradation.
- Effectiveness of bilateral efforts in advancing efforts of MRVS in developing countries. How to make it work in the interim.
- Balancing development objective and REDD+ efforts