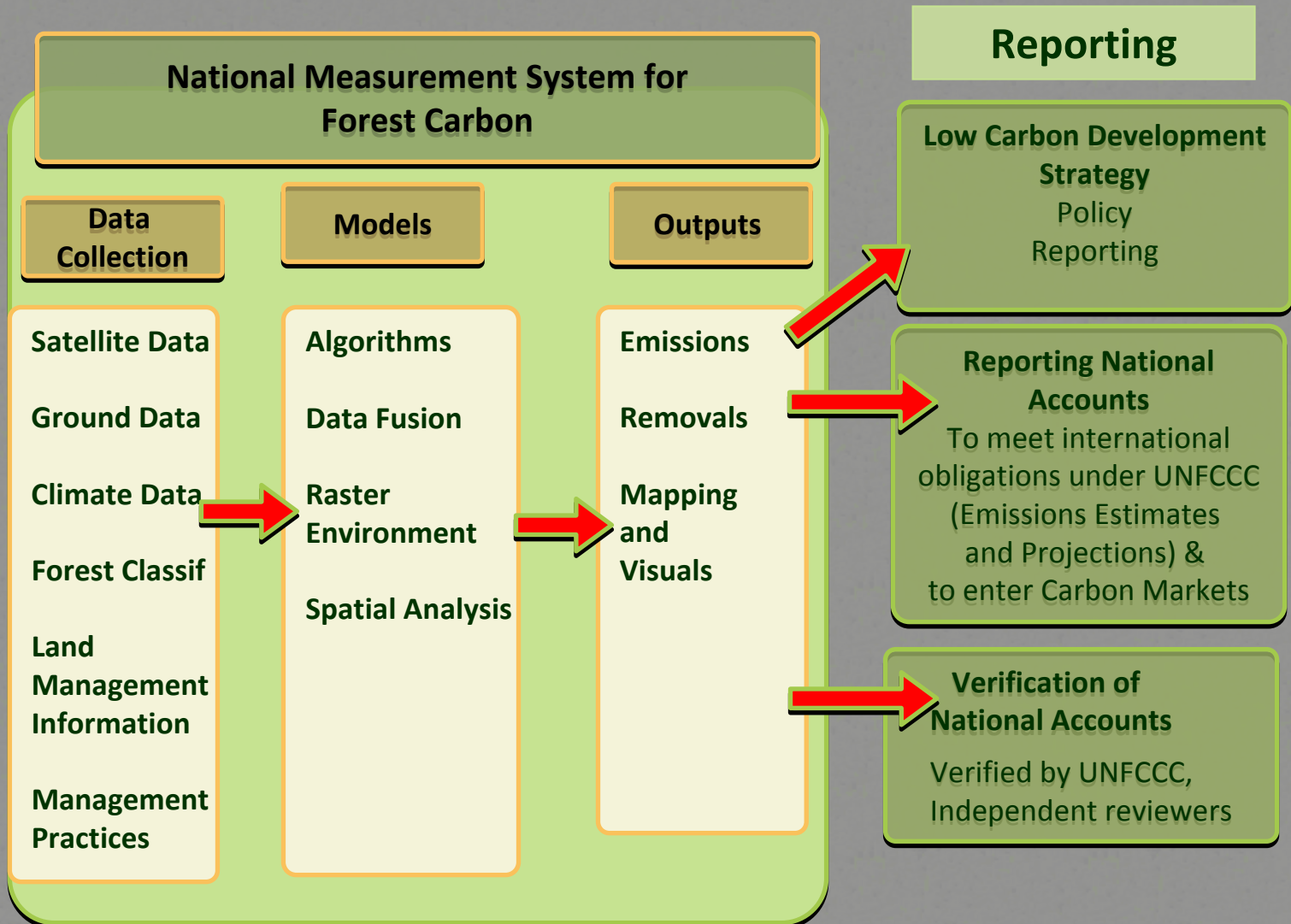


Review of Guyana MRV Process, Current Plans and Status & Reference Levels

*Guyana Forestry Commission
January 27, 2010*

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






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.
- While policy and compensations mechanisms for implementing REDD are still under discussion within the UNFCCC, the draft text on methodology for REDD produced by SBSTA 30 in June 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 agreement which will be finalized at the climate summit in Copenhagen in December 2009. These three elements are jointly referred to as 'REDD +'.



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




Key Activities and Outputs

- Develop and implement a national mechanism and institutional framework:
 - Steering body for the MRV system development (Office of climate change as coordinator of activities)
 - Coordination and integration of national datasets through a high-level national technical committee accompanied by a related legislative reform and development of a national data management system and infrastructure
 - Participation, scientific advice and international partnering, i.e. through the establishment of a technical and scientific advisory group

- Conduct a comprehensive forest area change assessment for a historical period:
 - Processing and interpretation of historical archived satellite datasets at national level for forest area change, benchmark forest map and exploration of the monitoring of forest degradation
 - Capacity building component included from the beginning

- Build carbon stock measurement capacities:
 - Design a national and sub-national stratification
 - Design protocols and implement measurements in all carbon pools
 - Targeted sampling and surveys to establish national conversions/expansion factors

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- Develop MRV for a set of REDD demonstration activities
 - Focus on key drivers/processes and engagement with implementation actors (i.e. land owners, communities)
 - Conduct detailed monitoring at demonstration sites

 - Engagement with international community:
 - Explore the possibility of the GEO Task to help in satellite data acquisition from 2009 onwards
 - Partner with international organizations and research partners
 - Seek further advise/coordination with international activities

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- Sustained internal communication mechanism on MRV:
 - Development communication plan and outreach materials
 - Conduct a series of regional workshops and consultation to inform about REDD and MRV

 - Conduct/support research on key issues
 - Scoping exercise for linking policy and MRV (actions, transactions)
 - Detailed national driver assessment and methods for reference level projection
 - Co-benefits of MRV (i.e. to support LCDS) and tools for decision-support in the context of integrated natural resources management



MRV road map – objectives and expected key results for different phase



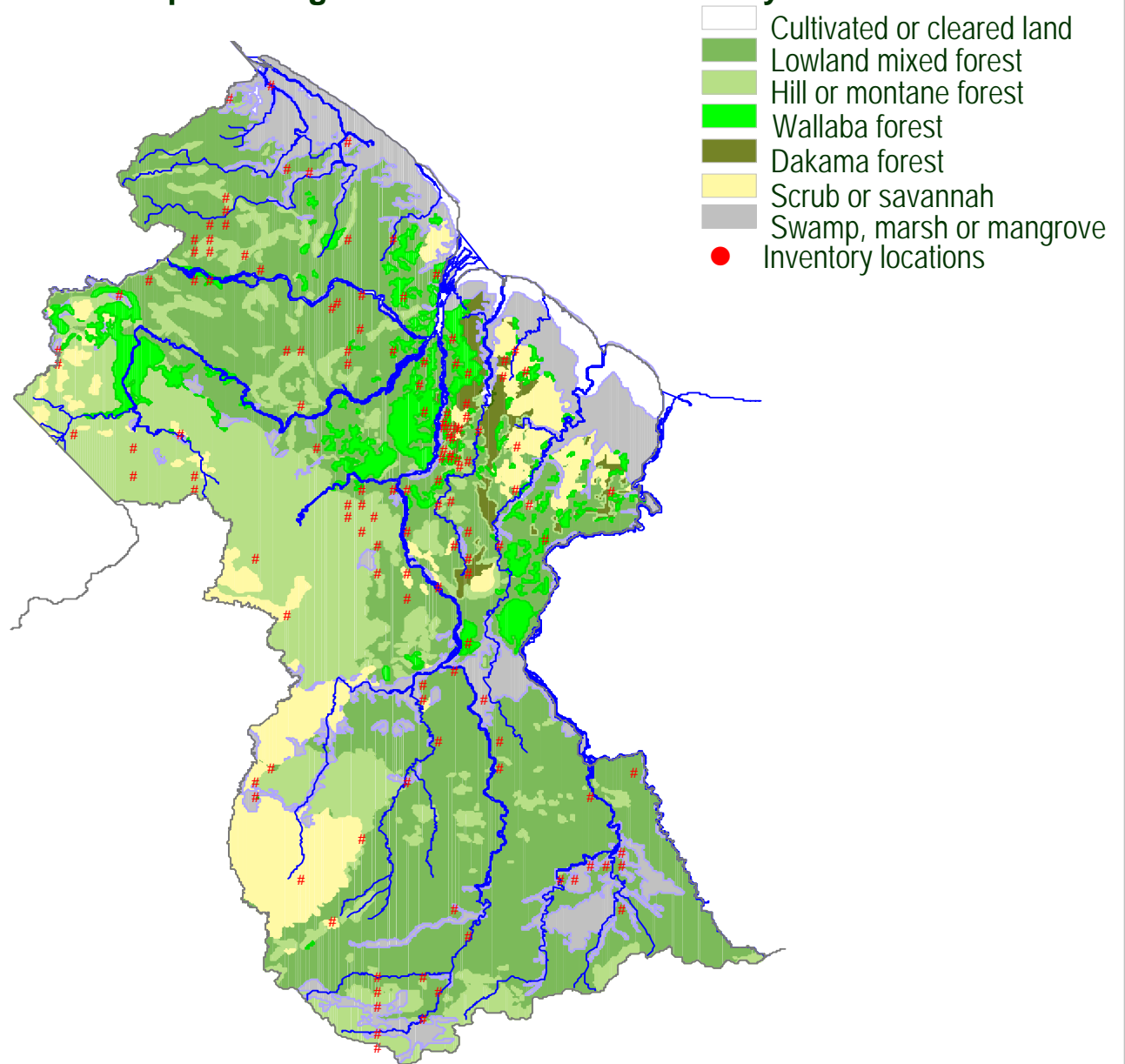
	National strategy (2010/11) →	Country readiness (2011/12) →	Implementation (post 2012) →
Objectives	Gather and integrate information & fill data gaps for national REDD opportunities, scoping and policy development	Develop capacities, conduct historical monitoring, and implement a (minimum) IPCC Tier 2 national forest carbon monitoring, establish the reference level and report on interim performance	Establish consistent and continuous MRV supporting national REDD+ actions and international IPCC GPG-based reporting and verification
Key results and national capacities developed	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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



Preliminary work on Forest Carbon Stock Assessment and Baseline Establishment

- Institutional structure - REDD Secretariat established
- Establishment of biomass measurement and monitoring plots (135)
- Soil and necromass data collected for some plots.
- Training commenced for root and tree sampling.

Simplified vegetation classes and inventory areas





Preliminary work in forest cover mapping and monitoring

- In Guyana, as part of its Readiness Preparation Proposal to the FCPF, an initial, national level quick assessments were done on the drivers of deforestation and forest degradation: a qualitative assessment based on national sectoral analysis and a quantitative assessment based on GIS and Remote Sensing Data.
- LANDSAT Images at national wall to wall coverage
- Change detection employed
- Hot spot spatial assessment at high resolution, aerial surveys and ground truthing also executed



Ministry/Agency	Tentative Role in MRVS
Office of the President	Strategic guidance and directives
National Climate Committee	Networking, coordination and technical support
Ministry of Agriculture	Data on agriculture activities, scale, scope, occurrences, plans and projections
Ministry of Amerindian Affairs	Amerindian Lands data: scale, number of titles, coverage, etc
Ministry of Finance	Strategic Guidance on policy and planning
Guyana Forestry Commission.	Key coordinating agency, support field work for MRVS and RS activities, consultation and networking among relevant agencies and stakeholders.
Guyana Geology and Mines Commission	Key support agency for mining sector information including RS and GIS capabilities and resources.
Guyana Lands and Surveys Commission	Key support agency for land use planning sector information including RS and GIS capabilities and resources.
Environmental Protection Agency	Support to aspect relating to environmental monitoring and management
REDD Secretariat	Support the execution of MRVS activities
Hydrometeorological Service	Assist in provision of weather data
University of Guyana	Support to research and assessments



Entity	Tentative Role in MRVS
Amerindian Communities	Support the implementation of MRVS activities especially in areas of consultation and information sharing/gathering exercises.
Community-based NGOs	Support to process in technical and research aspects of monitoring.
International NGOs and multi-lateral institutions	Support to process in technical and research aspects of monitoring.
Private Sector	Support to overall implementation
Other Forest based Communities	Support the process and advice on impact on communities. Assist in consultation and information sharing.
Civil Society	Support to overall implementation



Activities in Progress


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

- Secure suitable provider/s for execution of outputs to work in collaboration with GoG.

- Execute and monitor activities



List of Activities	Responsible Agency	Potential international Partner(s)
<i>1. Develop and implement a national MRV coordination mechanism (1 year)</i>		
1.1 Establish Steering Body for the MRV system development	OCC	
1.2 Coordinate and integrate national datasets (Technical subcommittee)	GFC, GGMC, GLSC	FAO/UN-REDD, GIS-SDI experts
1.3 Participation, scientific advice and international coordination	GFC	UNFCCC, IPCC, UN REDD, World bank FCPF, CCI, GOFC-GOLD, INPE, GEO, NGO's, research organizations, ...



<i>2. Conduct a comprehensive forest area change assessment for historical period (1-1,5 years)</i>		
2.1 Build Capacity and Partnerships	GFC	INPE, GOFC-GOLD, GEO, IPCC, CCI
2.2 Finalize definitions	OCC and GFC	IPCC, FAO
2.3 Consolidate archive and existing data	GFC, GGMC, GLSC	INPE, Space Agencies
2.4 Conduct Assessment on forest degradation	GFC	UN REDD, IPCC, CIFOR, GOFC-GOLD
2.5 Conduct stratification, mapping and implement monitoring and assessment of (historical) change in forest area	GFC, GGMC, GLSC	GEO, GOFC-GOLD, INPE, IPCC, WUR, CCI, Woods Hole
2.6 Conduct independent accuracy assessment for forest maps	GFC	IPCC, GOFC-GOLD
2.7 Prepare for reporting on interim, area-based performance indicators	GFC, GGMC, GLSC	Government of Norway, UN-REDD, GOFC-GOLD



Other Activities

3. Build carbon stock measurement capacities (1.5 - 2 years)

3.1 Design and Implement Carbon Measurement System

3.2 Establish Carbon Conversion, Expansion Factors, Wood Density and Root/Shoot Ratio

3.3 Assess Drivers/Processes of change and their carbon impact

3.4 Develop long-term carbon measurement and monitoring plan to implement REDD



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 CO₂ 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.



Next Steps

- Tenders
- Activity Implementation
- Collaborate with other technical partners
 - CI
 - KfW
 - CCI
 - WWF
 - ITTO
 - FAO
 - Other NGOs
 - Other Government Partners
 - Etc