India's Progress of MRP

Government of India
Ministry of Environment, Forest & Climate Change

27 April 2016

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1. Policy context: Domestic Mitigation Objectives

1.1 India's INDC – Mitigation Commitment

- To reduce the emissions intensity of its GDP by 33% 35% emissions by 2030 from 2005 levels
- To achieve about 40% cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF)
- To create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030

Domestic Policy Context in the long term

1.2 India's Economic and Developmental Priorities

- In the 2000-2013 period
 - ☐ GDP of the Indian economy grew at 7.3% p.a.
 - ☐ Total primary energy supply grew at 5.8% p.a.
 - ☐ Electricity supply alone grew at 5.6% p.a
- Economy is expected to grow at 8-10% by 2030
 - ☐ Due to the growth in manufacturing which would result in a greater demand for energy
- Economic growth will result in
 - Doubling of per capita income every 10 years
 - ☐ Per capita electricity supply will be more than 2,500 kWh per year compared to 1010 kWh per year in 2014

2. India's MRP Components

2.0 India proposes the following Market Readiness Components

The objective is to create an effective centralized data management and registry system to capture GHG emissions data and enable implementation of MBMs which support issuance, transfer, and cancellation of credits

Components

Component 1

Creation of a national registry to which various Market Based Mechanisms (MBMs) and a national GHG inventory management systems (NIMS) can be linked

Component 2

Design framework for new MBMs activities and exploring the linkages of new and existing MBMs with registry

Component 3

Possible linkages of the registry to a national GHG inventory management system (NIMS)

2. India's MRP Components – National Registry

2.1 Creation of a National Registry

- Developing a framework for national registry
- Two-fold objectives:
 - Robust domestic GHG reporting and management system
 - ☐ Backbone for the design and implementation of existing and future MBMs
- Implementation plan including
 - ☐ Identification of key roles and responsibilities of various actors, legal and infrastructural requirements
 - Estimated cost of implementing the registry

2. India's MRP Components – National Registry

2.2 Linkages of the registry with existing and new MBMs

- Potential opportunities for market linkages and synergies between carbon markets
 - Existing MBMs
 - New MBMs can be designed, e.g. voluntary mechanism
- The proposal will assess:
 - Status of existing MBMs
 - Explore the potential of new voluntary MBMs;
- The proposal will estimate the cost of implementing new MBM and/ or expansion of existing MBMs

2. India's MRP Components – National Registry

2.3 Linkages of the registry with NIMS

- Designing a National Inventory Management Systems (NIMS)
 - ☐ Meeting the transparency framework requirements of the Paris agreement
 - Linking with GHG accounting of MBMs under the registry
- The proposal will assess:
 - Status of existing data management system
 - Explore the potential of designing a coordinated NIMS
- The proposal will estimate the cost of implementing the NIMS

2. India's MRP Components - NIMS

2.4 National Inventory Management System (NIMS)

- Preparing information to cater to UNFCCC reporting requirements is a continuous process. Therefore, creating a national system is imperative.
- NIMS would establish a long-term institutional structure for periodic and continuous flow of GHG inventory for Bienial Update Report (BUR) and National Communications reporting, along with QA and QC (quality analysis and quality control) arrangements
- This would ensure that inventory and mitigation action data flows in a time-bound manner

2. India's MRP Components - NIMS

2.5 Purpose of NIMS

- The GHG mitigation implications of each policy measure would be reported in BURs. A robust and comprehensive arrangement is required for strengthening a national GHG inventory management system (NIMS) to enhance accuracy of GHG inventory estimations by "riding the tier ladder" for key categories of emissions
- The uncertainty associated with activity data and emission factors will be reduced with improved methodologies for data gathering and archiving arrangements
- Tracking of GHG emission reductions and to inform future policy decisions

2. India's MRP Components – NIMS

2.6 Components of NIMS

- There could be 5 major components of NIMS:
 - Institutional arrangements to create a sustainable implementation structure
 - ☐ Establishing methods and data documentation common reporting formats, data flow, and protocol
 - Quality assurance/ quality control including key category analysis
 - Archiving system
 - National inventory improvement plan

2. India's MRP Components – NIMS

2.7 Gaps and constraints in GHG inventory to be addressed by NIMS

Gaps and constraints	Description	Possible solutions Under NIMS
Data organization	Published data not available in IPCC friendly formats for inventory reporting	Design consistent reporting formats
	Inconsistency in top-down and bottom-up data sets for same activities	Data collection consistency required
	Mismatch in sectoral details across different published documents	Design consistent reporting formats
Non-availability of relevant data	Time series data for some specific inventory sub-categories, e.g. municipal solid waste sites	Generate relevant data sets from now onwards
	Data for various Medium, Small and Micro Enterprises (MSME) sectors and various informal sectors of the Indian economy	Involve concerned stake holders, Conduct data surveys
	Data for refining inventory to higher tier levels for the key sources of GHG inventory	Data depths to be improved

2. India's MRP Components – NIMS

2.8 Gaps and constraints in GHG inventory to be addressed by NIMS

Data non-accessibility	Proprietary and trade secret data for inventory reporting at tier III level	Involve industry and monitoring institutions
	Data not in electronic formats	Identify critical data and convert
	Security concerns	
	Devise protocols to access data	
Technical and institutional capacity needs	Training the activity data generating institutions in GHG inventory methodologies and data formats	Arrange extensive training programmes for all sectors
	Institutionalise linkages of inventory estimation with broader perspective of climate change research	Wider dissemination activities
Non-representative emission co-efficients	Inadequate sample size for representative emission coefficient measurements in many sub-sectors	Conduct more measurements for emission factors, especially for key sources of GHG inventory

3. Next steps

Next steps for MRP

- Stakeholder management
- Formalization of key features and design elements of the central Registry
- Presentation of the Final MRP in PA-15

Thank You

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