

Initiative for Climate Action Transparency - ICAT



CONCLUSION AND WAY FORWARD TO THE IMPLEMENTATION OF THE DESIGNED NATIONAL MRV SYSTEM FOR TRANSPORT SECTOR IN SRI LANKA



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OF THE DESIGNED NATIONAL MRV SYSTEM FOR TRANSPORT
SECTOR IN SRI LANKA**

Deliverable 4

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According to the Sri Lankan Nationally Determined Contributions (NDCs) submitted by the Government of Sri Lanka to the United Nations Framework Convention on Climate Change (UNFCCC) in 2016, and Sri Lanka's Readiness Plan for Implementation of Intended Nationally Determined Contributions (INDCs) in 2016, the establishment of a national MRV (Measuring, Reporting & Verification) system is considered as a national priority. Sri Lanka also has to present the status of achieving the NDC goals by 2020. In this context, Sri Lanka has been looking for assistance from various parties in order to establish its national MRV system in the transport sector.

This report on conclusion and way forward to the implementation of the designed national GHG MRV system for transport sector in Sri Lanka is the fourth deliverable of the assignment on developing a national MRV System for Transport Sector in Sri Lanka under the project Initiative for Climate Action Transparency (ICAT). This report was produced under the direct guidance and supervision of Climate Change Secretariat (CCS) of Ministry of Mahaweli Development and Environment (MMDE), Ministry of Transport and Civil Aviation (MTCA), and UNEP DTU Partnership.

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Climate Smart Initiatives (Pvt) Ltd.

Sri Lanka.



List of Acronyms

CCS	Climate Change Secretariat
GHG	Greenhouse Gas
ICAT	Initiative for Climate Action Transparency
IPCC	Intergovernmental Panel on Climate Change
INDC	Intended Nationally Determined Contribution
MMDE	Ministry of Mahaweli Development & Environment
MMWD	Ministry of MegaPolis & Western Development
MoF	Ministry of Finance
MoH	Ministry of Highways
MoPRE	Ministry of Power & Renewable Energy
MoPS	Ministry of Petroleum Resources Development
MTCA	Ministry of Transport & Civil Aviation
MRV	Monitoring, Reporting, and Verification
NAMA	Nationally Appropriate Mitigation Action
NDC	Nationally Determined Contribution
NTC	National Transport Commission
SNC	Second National Communication
UNFCCC	United Nations Framework Convention on Climate Change
VERRA	Voluntary Carbon Standard
WRI	World Resource Institute



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1. Introduction

1.1. Background

Sri Lanka's transport sector emissions reached to 5 MtCO₂e in the year 2000 contributing to 35% of Sri Lanka's net total GHG emissions (MERE, 2011). Road transport sector represents nearly 90% of total transport sector GHG emissions (MERE, 2011). The MERE predicted that the rapidly growing transport sector GHG emissions will be 11.4 MtCO₂e by 2020, indicating the necessity of implementing MRV system to regulate transport sector GHG emissions.

In regarding MRV of national emissions, Sri Lanka has developed two national communications (Initial National Communication and Second National Communication) accomplishing the obligations under the UNFCCC as a Non-Annex I party recognized by the Convention. The Climate Change Secretariat (CCS) under Ministry of Mahaweli Development and Environment, who is responsible for preparing the previous two national communications, is currently leading the preparation of the Third National Communication (TNC), which will be completed by the end of 2019. All three national GHG inventories are developed based on the IPCC Tier 1 approach. With respect to MRV of policy and action, Sri Lanka still does not have any national level MRV system while MRV of actions are limited to developing BRT NAMA project when it comes to the transport sector.

For the purpose of meeting the international reporting requirements for the transport sector, Initiative for Climate Action Transparency (ICAT) with the technical support from UNEP DTU Partnership have agreed to facilitate developing a national MRV system for Sri Lanka transport sector.



1.2.Objective

This report on designing an implementation plan for the establishment of the transport sector MRV in Sri Lanka is the fourth deliverable report in a series of reports prepared to achieve the objectives of the ICAT and its assistance in developing national MRV system for the transport sector in Sri Lanka.

The initiative for Climate Action Transparency or ICAT facilitates developing a national MRV system for Sri Lankan transport sector with the primary objectives of

- a) Strengthening institutional and human capacities in countries to develop and implement a domestic system to MRV mitigation policies and actions (MPAs); and
- b) Developing tools and guidance that can be used for an effective system for MRV MPAs implementation.

1.3.Scope

Scope of this report which is the fourth of reports on building national MRV system for transport sector of Sri Lanka is to design an implementation plan for the transport sector MRV.



2. Conclusion and way forward for the implementation of the designed MRV system

2.1. Implementation approach

Approaches that will be selected for the objective of implementing an MRV system should follow several qualitative criteria. Such as, the selected approach should have the capability to apply under different conditions, the approach should have high relevance for the development and general operation of the system.

i. Legal Framework

Sri Lanka currently has a data sharing policy enacted within the country. The website, 'Open Data Portal of Sri Lanka', which is maintained by the ICT Agency of Sri Lanka gives access to the data. However, the policy does not specify a path or a system for sharing climate change or MRV relevant data with the MMDE and MTCA. Therefore, communicating relevant data among Ministries and institutes according to MRV will be complicated.

As such, there is a critical need for establishing a legal framework that will improve the accessibility of the data among relevant authorities. Having a robust legal framework will be the basis for the development of a successful national MRV system.

ii. Technical Technological Support

Adopting an internationally available tool or a domestic tool in national circumstances can potentially increase the efficiency of data collection, management and storage, as well as review for quality, evaluation and dissemination to the desired levels in MRV systems.



The tool can be,

- a. Excel-based tool for integrated data management system
- b. Web-based tool for integrated data management system

iii. Capacity building

To support MRV implementation, additional capacity will be needed to build in a range of areas. Capacity-building may include the following activities.

- Analyze the capacity building requirement of the country and stakeholders
- Conduct a capacity building need assessment.
- A strategy that will be developed relevant to the capacity building may ensure to meet immediate and long-term capacity-building objectives.
- Training and awareness programs can be conducted relevant to data collection, management and computation.
- Explore emerging practices, common challenges and questions on the implementation of MRV through observing other countries.

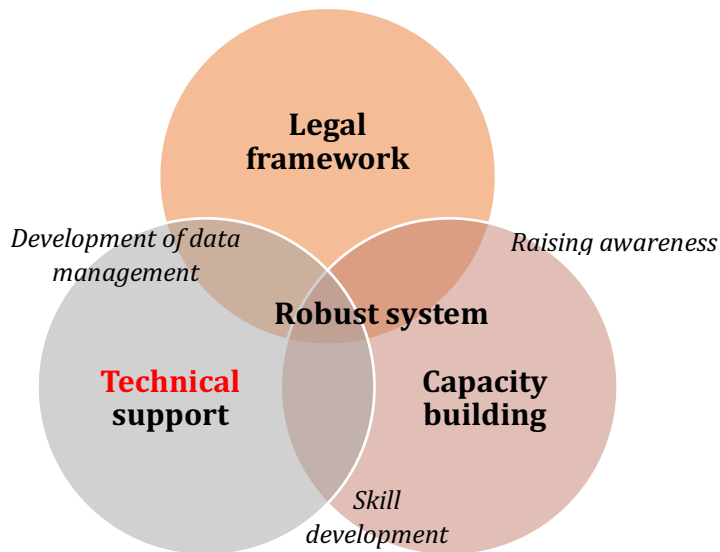


Figure 1: Implementation approach



2.2. Organizational structure

2.2.1. Existing Institutional Arrangement in Transport Sector

The existing institutional arrangement of the transport sector for data collection, management and project implementation is relatively disorganized and scattered among several ministries and departments. However, the Ministry of Transport and Civil Aviation (MTCA) is responsible for developing policies, projects and programs for the transport sector as the main institution under the sector. As listed below, there are nine departments under the MTCA to carry out the developed policies, projects and programs.

- a.* Department of Sri Lanka Railways – (Policies and projects relevant to Railway);
- b.* Sri Lanka Transport Board – (Policies and projects relevant to public bus transport);
- c.* National Transport Medical Institute;
- d.* Department of Motor Traffic – (Policies and projects relevant to private vehicles);
- e.* National Transport Commission – (Mainly focus on private buses);
- f.* Civil Aviation Authority;
- g.* Lakdiva Engineering company (Pvt) Ltd – (Primary objective is to repair SLTB buses);
- h.* Airport and Aviation Services (Sri Lanka) Ltd
- i.* National Council for Road Safety.

In addition to MTCA, there are few other ministries (Ministry of MegaPolis and Western Development, Ministry of Power, Energy and Business Development, Ministry of



Petroleum Resources Development, Ministry of Finance, Ministry of Provincial Council and Local Authorities, Ministry of Highways and Road Development etc) that have been involving with the transport sector.

The provincial councils are empowered with legislative and executive powers in relation to the transport sector according to the thirteen amendments to the sector. In consideration of the amendment, separate transport ministries were established under each provincial council.

Another problem of the current transport sector institutional arrangement is its' lack of connections to climate change operations in Sri Lanka. Climate change related operations in Sri Lanka are managed by Climate Change Secretariat (CCS) under the Ministry of Mahaweli Development and Environment (MMDE). CCS established three committees to enhance stakeholder engagements in the subject of addressing climate change.

- a. The Inter-Agency Committee on Climate Change – (Ensure climate-related policies are aligned with the national development);
- b. The National Expert Committee on Climate Change Mitigation – (Provide guidance in the development of climate mitigation policies)
- c. The National Expert Committee on Climate Change Adaptation – (Rise the awareness of the country's vulnerability to climate change)

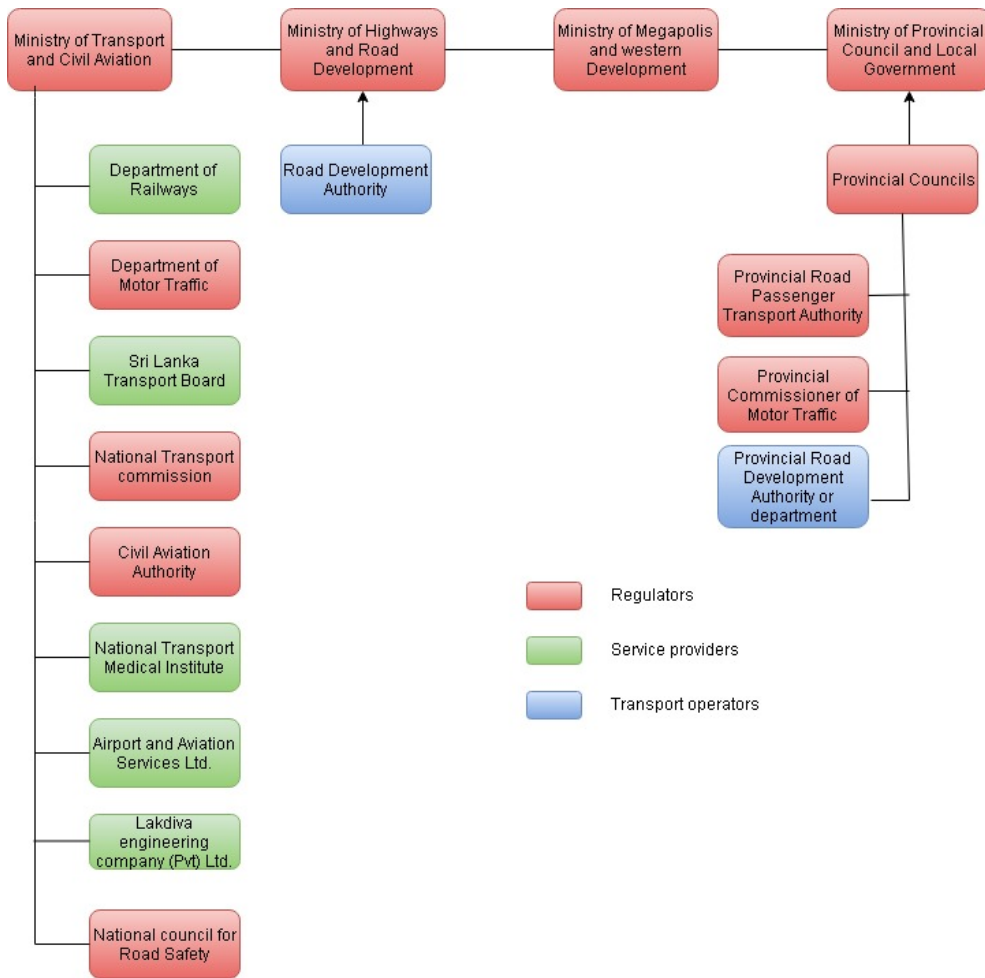


Figure 2: Existing institutional arrangement in the transport sector

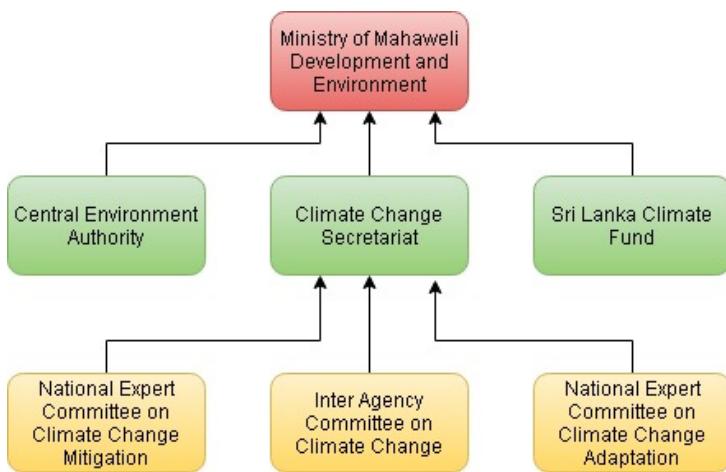


Figure 3: Existing institutional arrangement for addressing climate change

2.2.2. Proposed Institutional Arrangement for MRV of Transport Sector

The robust institutional arrangement is essential for the effective implementation of the transport sector MRV system. Due to the unavailability of robust inter-relationship between MTCA and other related institutions which are required to provide data to quantify the GHG effects of transport sector NDCs, new institutional arrangement was developed in consultation with the relevant stakeholders. Extensive and effective stakeholder consultations, which involves all relevant ministries and institutions, were very useful in developing new institutional arrangement for the transport sector MRV system. The developed institutional arrangement was endorsed by the relevant stakeholders before it was finalized for the implementation.

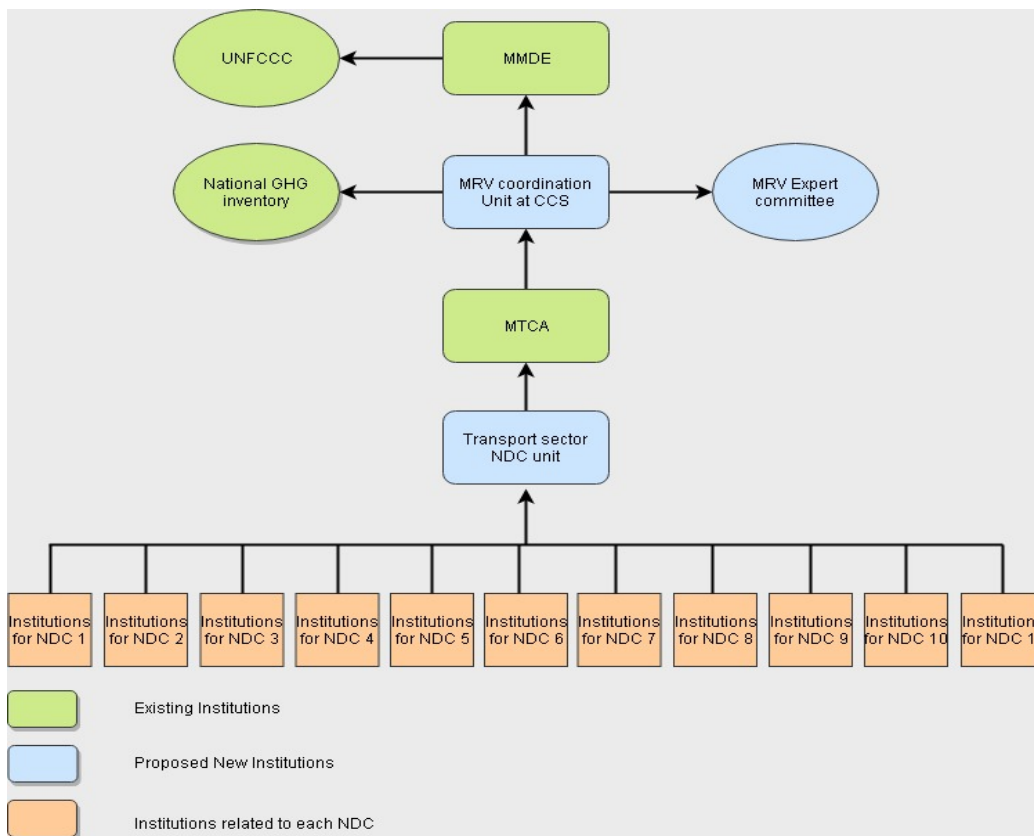


Figure 4: Proposed MRV institutional arrangement for the transport sector

2.3. Roles and Responsibilities

The following figure illustrates the roles and responsibilities of each institution while implementing the transport sector MRV system.

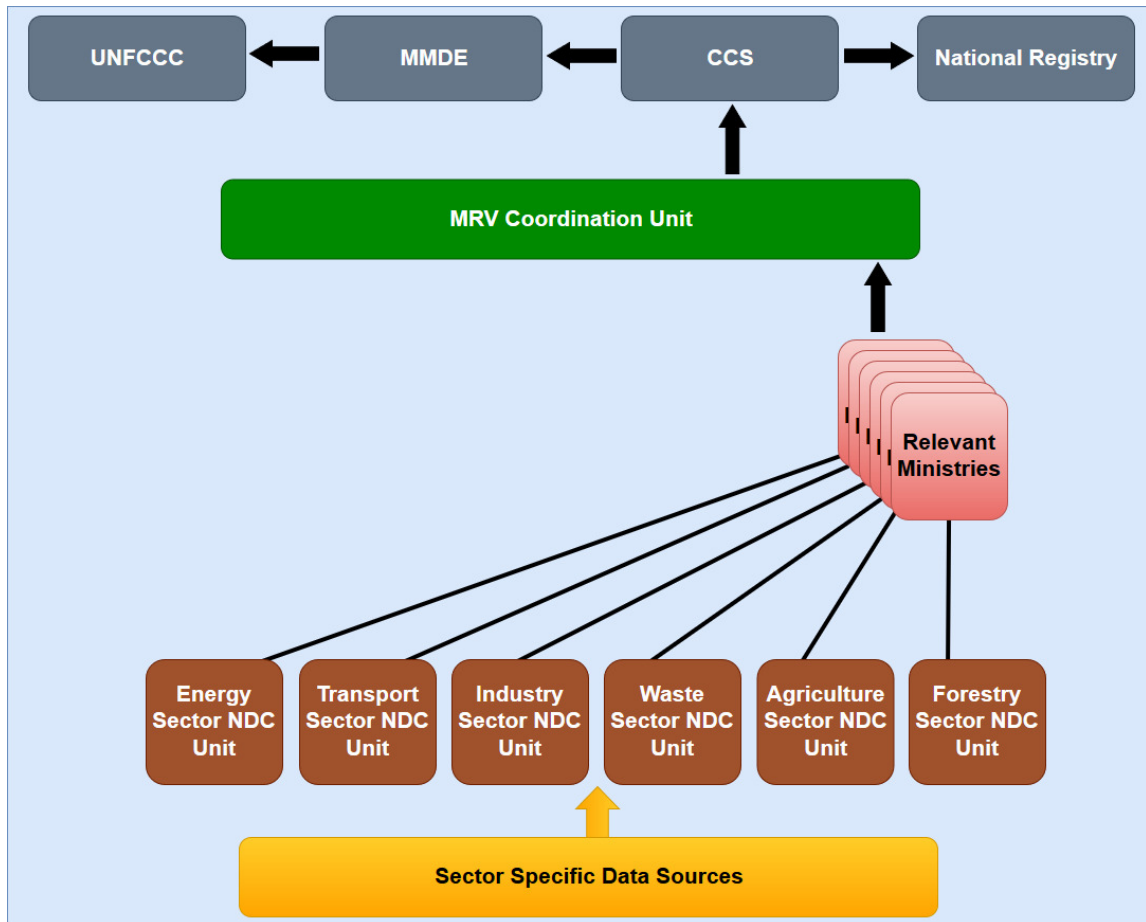


Figure 5: MRV coordination unit-main institutional elements and interrelations

Ministry of Mahaweli Development and Environment (MMDE) is responsible for reporting the progress of NDC implementation to UNFCCC as the national focal point. CCS under MMDE is the national operational focal point. Separate MRV Coordinating Unit will be established within the CCS to monitor the progress of achieving NDCs in the country. The MRV



coordination unit¹ which will be headed by the director of CCS will refer the emission reduction calculations to the MRV expert committee² which will be consisting of sectoral experts and MRV experts for verification. Then sectoral NDC unit³ will be established under each sector, which is responsible to report emission reductions from the policies and actions to MRV coordination unit.

¹ For further information please refer the “MEASUREMENT, REPORTING AND VERIFICATION FRAMEWORK FOR TRANSPORT SECTOR IN SRI LANKA” report, page number 206, subtopic “**MRV Coordination Unit at CCS**”

² For further information please refer the “MEASUREMENT, REPORTING AND VERIFICATION FRAMEWORK FOR TRANSPORT SECTOR IN SRI LANKA” report, page number 208, subtopic “**MRV Expert Committee**”

³ The unit will be established by the secretary of each relevant sectoral ministry and will be provided trained staff and the necessary infrastructure. For further information please refer the “MEASUREMENT, REPORTING AND VERIFICATION FRAMEWORK FOR TRANSPORT SECTOR IN SRI LANKA” report, page number 209, subtopic “**Transport sector NDC unit**”



Table 1 Responsibilities of the MRV coordination unit

Responsibilities of the MRV coordination unit
1. Provide guidance and training to stakeholders for accurate data collection, data recording, data reporting, data analysis, and calculations of the impact of policies or actions on GHG emission
2. Channeling technical and financial support for MRV of NDCs;
3. Establishment of extensive and effective communication with the stakeholders.
4. Plan and conduct all coordination and consultation activities with governmental and if appropriate non-governmental stakeholders in relation to MRV of policies, strategies and mitigation actions
5. Capacity building and keep track of capacity-building efforts, domestic (unilateral) as well as international
6. Conducting an evaluation exercise to identify key lessons learned and areas for improvement.
7. Compiling and integrating all the sectoral MRV reports and transform into a cohesive document to be submitted to UNFCCC
8. Incorporation of reporting from all line ministries and their regulatory bodies and keeping an updated registry of relevant actions (e.g. policies and projects);
9. Collection and aggregation of information on new mitigation actions and directing those to the MRV process
10. Maintaining and updating the registry of all the mitigation actions in the country
11. Reflection on the progress of NDC implementation and adjustment to new circumstances;
12. Keeping the MRV expert committee informed of progress and emerging issues;
13. Establishing guidelines for quality control and the quality assurance of collected data and developing and overseeing the implementation of a quality assurance/quality control strategy for the entire MRV process
14. Mediate between parties when concerns surface, for example, over a disagreement in terms of responsibilities or potential conflict of interest



Table 2 Roles and responsibilities of MRV expert committee

Roles and responsibilities of MRV expert committee
1. Verification of the emission reduction calculations done by sectoral NDC units.
2. Provide necessary guidance and feedback to sectoral NDC units on calculations and selected methodologies.
3. Make recommendations for improving the process for data collection
4. Provide recommendations on suitable methodologies to calculate the impact of the mitigation actions
5. Establishing systems and procedures for the verification of reported impacts of NDCs

Table 3 Responsibilities of the transport sector unit

Responsibilities of the transport sector NDC unit.
1. Coordination of the flow of information from individual institution and ministries for a collective assessment of impacts and multiple benefits of policies, strategies and actions.
2. Calculation GHG impacts of transport sector policies strategies and actions
3. Quality assurance and quality control of data
4. Identify all institutions that will be involved in data collection
5. Allocate responsibilities for all institutions ensuring that there is a clear lead for each institution, and establish an institutional level formal approval process;
6. Develop and monitor a time frame and schedule for the preparation and submission of necessary data including specific dates for a deliverable.
7. Documenting systematically, as appropriate, all the assumptions, data and methods used;
8. Store and safekeeping of data and calculations.



2.4. Implementation period and schedule

- *This section will explain the required tasks in chronological order, with the beginning and end dates of each task*

The implementation of an MRV system should be carried out according to a well organized plan. The implementation task depends on budget, technical consideration of data collection and management, institutional arrangement and capacity building. It is important to focus on the most relevant MRV tasks to effectively manage the available budget. However, it is adequate to obtain the optimization of system functions while synchronizing the implementation tasks to the available budget.

Following points are necessary for comprehensive planning.

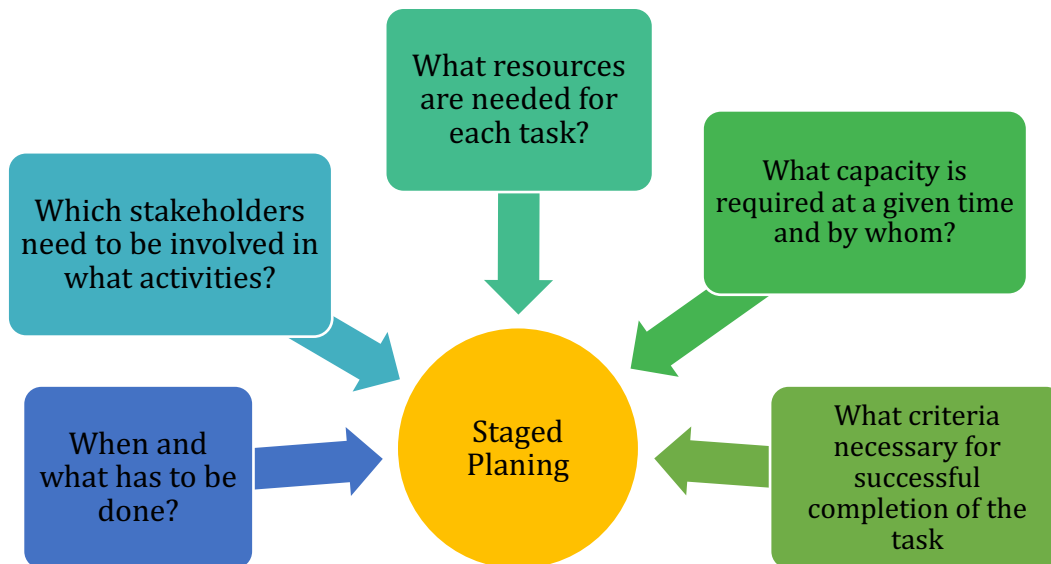
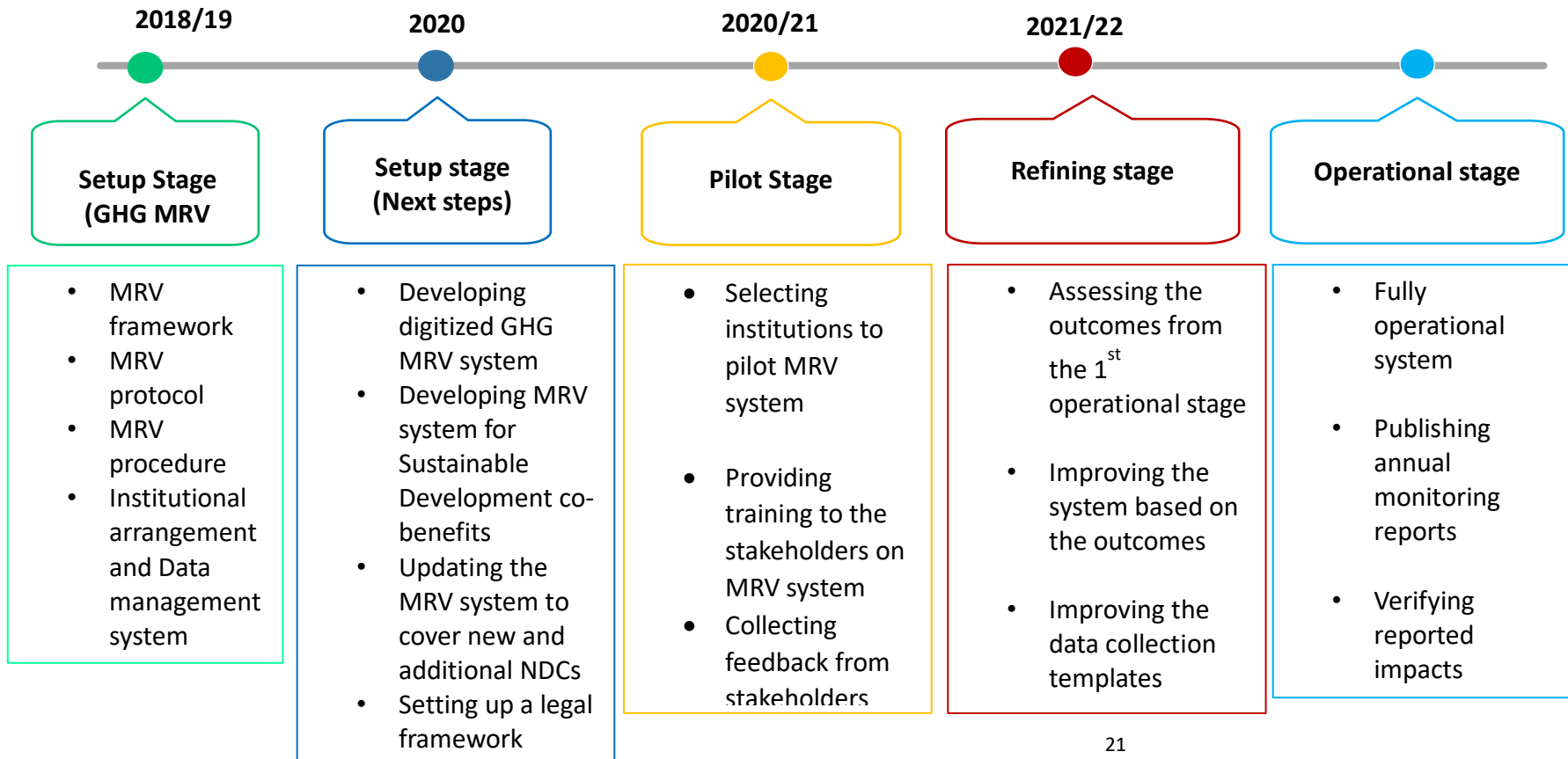


Figure 6 Points consider for planning



The roadmap for implementation of the transport sector MRV system can be categorized under five stages: setup (GHG MRV system); setup (next steps); pilot; refining; and operational.

Table 4 Schedule for implementation of transport sector MRV system





After achieving the full operational stage of MRV system, the annual emission reduction of transport NDC related mitigation actions will be calculated, monitored and reported by the NDC unit and delivered to the MRV expert committee through MRV coordination unit for the verifications. Then verified sectoral MRV reports will be collected by the MRV coordination unit and will be compiled together to prepare a cohesive document which will be submitted to CCS. Finally, the CCS will be communicated the outcomes of sectoral NDCs with the UNFCCC. As a developing country, Sri Lanka needs to provide information on financial, technology transfer and capacity-building support needed and received to UNFCCC for the transparency framework (Paris Agreement – Article 13.10)(United Nations, 2015). Furthermore, Sri Lanka can easily communicate the stock of the implementation of the Paris Agreement to the global stock-taking, which will be started in 2023 and thereafter held in every five years (Paris Agreement – Article 14)(United Nations, 2015), due to the proper management of MRV system.

References

United Nations (2015) 'Paris Agreement'. Available at:
https://unfccc.int/sites/default/files/english_paris_agreement.pdf (Accessed: 26 September 2019).



Annex 1: Additional tasks to be carried out before the implementation of the MRV system.

In addition to the roadmap for implementation of MRV system, the following tasks need to be carried out before implementing the MRV system to achieve a successful implementation. Following tasks are not within the scope of our assignment. As such, these tasks can be carried out at the early stage of the implementation.

1. Implementation support
 - Financial support (Budget and funding for the implementation)
 - Technological and material support (Hardware, software, facilities, and materials required for the implementation)
 - Documentation support (Additional documentation needed to support the deliverable system)
 - Personnel support (Describes proposed staffing requirements and training for the implementation staff)

2. Implementation impact and issues
 - Brief any known issues or problems relevant to implementation planning
 - Describes how the implementation is expected to impact the network infrastructure, support staff, user community, etc.



3. The success of the implementation

- Identify the most vital aspects of the implementation and describe how aspects will be used to help to determine if the implementation is successful.

4. Escalation Plan

Acceptance

- Identify the exit or acceptance criteria
- Whether the implementation team should discontinue a rollout.
- Initiate the contingency plan or continue with the implementation, based on any risk identified during execution.

Contingency Plan

5. Post Implementation

- Progress of the implementation
- Barriers faced and how to resolves those
- O & M cost
- Organizational structure for O & M
- Documentation and data management