



INITIATIVE FOR CLIMATE ACTION TRANSPARENCY – ICAT



**Existing MRV systems and institutional governance structure of the
Transport sector in Cambodia**



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Initiative for Climate Action Transparency - ICAT –

MEASUREMENT, REPORTING AND VERIFICATION FRAMEWORK FOR THE TRANSPORT SECTOR IN CAMBODIA

Deliverable 3: Report on MRV assessment of the existing national MRV system and report on designing an institutional governance structure for the Transport sector as a part of a unified national MRV System in the country for NDCs and providing recommendations on how best to remove the most significant visible barriers documented

September 2021

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Acknowledgement

The Royal Government of Cambodia (RGC) ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1996 and the Paris Agreement in 2017. The country submitted her Intended Nationally Determined Contribution (INDC) in 2015 and the Updated NDC in 2020 to the UNFCCC.

The transport sector plays a significant role in GHG emissions reduction. As such, several mitigation actions related to the transport sector were submitted to the UNFCCC through the updated NDC. Tracking progress made in implementing and achieving NDCs is a requirement of the Enhanced Transparency Framework (ETF). Therefore, having a Measurement, Reporting, and Verification (MRV) system in place is essential for Cambodia to achieve these targets in a standard and transparent manner.

The UNEP-DTU Partnership is providing technical assistance to the RGC under this ICAT project, which aims to design an MRV system for selected mitigation actions in the transport sector of Cambodia. A Team of National Experts, and International Experts of Climate Smart Initiatives (Pvt) Ltd (ClimateSI), were selected to support the Cambodian Team for this project.

Appreciating the invaluable contribution extended from all stakeholders related to the assignment, we would like to extend our sincere thanks and gratitude to (a) Dr. Tin Ponlok, Secretary of State of the Ministry of Environment;(b) H.E. Dr. Vann Monyneath, Secretary-General, the General Secretariat of the National Council for Sustainable Development; (c) Dr. Hak Mao, Director of the Department of Climate Change, the General Secretariat of the National Council for Sustainable Development; and the Ministry of Public Works and Transport, and other relevant key stakeholders for cooperating and assisting with this assignment by granting necessary approvals making relevant officers available for participation for the discussions, and providing necessary information. We appreciate the contributions and continued support extended by the participants and other key stakeholders. We would also like to appreciate senior researchers of the UNEP-DTU Partnership for their kind contribution in supervising, reviewing, editing, and providing valuable inputs to improve the quality of this report.



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List of Acronyms

BURs	Biennial Update Reports
CCAP	Climate Change Action Plan
CCCSP	Cambodia Climate Change Strategic Plan
CCTT	Climate Change Technical Team
CCTWG	Climate Change Technical Working Group
CDC	Council for Development of Cambodia
CDM	Clean Development Mechanism
COP	Conference of the Parties
CPEIR	Climate Public Expenditure and Institutional Review
DCC	Department of Climate Change
DNA	Designated National Authority
GEF	Global Environment Facility
GHG	Greenhouse gas
GSSD	General Secretariat of the National Council for Sustainable Development
ICA	International Consultation and Analysis
IPCC	Intergovernmental Panel on Climate Change
JCM	Joint Crediting Mechanism
M&E	Monitoring and Evaluation
MEF	Ministry of Economy and Finance
MoC	Ministry of Commerce



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MoE	Ministry of Environment
MoP	Ministry of Planning
MPWT	Ministry of Public Works and Transport
MRV	Measurement, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Actions
NCCC	The National Climate Change Committee
NC	National Communication
NCSD	National Council for Sustainable Development
ODA	Official Development Assistance
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RGC	Royal Government of Cambodia
SNEC	Supreme National Economic Council
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reductions



Glossary of Terms

- Adaptation** Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- Capacity building** In the context of climate change, the process of developing the technical skills and institutional capability in developing countries and economies in transition to enable them to address effectively the causes and results of climate change.
- Carbon market** A popular (but misleading) term for a trading system through which countries may buy or sell units of greenhouse gas emissions in an effort to meet their national limits on emissions, either under the Kyoto Protocol or under other agreements, such as that among member states of the European Union. The term comes from the fact that carbon dioxide is the predominant greenhouse gas, and other gases are measured in units called "carbon-dioxide equivalents."
- CDM** Clean Development Mechanism. A mechanism under the Kyoto Protocol through which developed countries may finance greenhouse gas emission reduction or removal projects in developing countries, and receive credits for doing so which they may apply towards meeting mandatory limits on their own emissions.
- COP** Conference of the Parties. The supreme body of the Convention. It currently meets once a year to review the Convention's progress. The word "conference" is not used here in the sense of "meeting"



but rather of "association". The "Conference" meets in sessional periods, for example, the "fourth session of the Conference of the Parties."

Deforestation	Conversion of forest to non-forest.
Designated National Authority (DNA)	An office, Ministry, or other official entity appointed by a Party to the Kyoto Protocol to review and give national approval to projects proposed under the Clean Development Mechanism.
Global Environment Facility (GEF)	The GEF is an independent financial organisation that provides grants to developing countries for projects that benefit the global environment and promote sustainable livelihoods in local communities. The Parties to the Convention assigned operation of the financial mechanism to the GEF on an ongoing basis, subject to review every four years. The financial mechanism is accountable to the COP.
Greenhouse gases (GHGs)	The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxide (N ₂ O). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF ₆).
ICA	International consultation and analysis, a form of review currently being negotiated and designed in the UNFCCC intergovernmental process.
Intergovernmental Panel on Climate Change (IPCC)	Established in 1988 by the World Meteorological Organization and the U.N. Environment Programme, the IPCC surveys worldwide scientific and technical literature and publishes assessment reports that are widely recognised as the most credible existing



sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the Convention's subsidiary bodies.

Least Developed Countries (LDCs)

The world's poorest countries. The criteria currently used by the Economic and Social Council (ECOSOC) for designation as an LDC include low income, human resource weakness and economic vulnerability. Currently, 46 countries have been designated by the U.N. General Assembly as LDCs.

Mitigation

In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

MRV

Measurable, reportable and verifiable. A process/concept that potentially supports greater transparency in the climate change regime.

National communication

A document submitted in accordance with the Convention (and the Protocol) by which a Party informs other Parties of activities undertaken to address climate change. Most developed countries have now submitted their fifth national communication; most developing countries have completed their first national communication and are in the process of preparing their second.

Nationally appropriate mitigation

At COP 16 in Cancun in 2010, Governments decided to set up a registry to record nationally appropriate mitigation actions seeking international support, to facilitate the matching of finance,



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**actions
(NAMAs)**

technology and capacity-building support with these actions, and to recognise other NAMAs.

NDC

According to Article 4 paragraph 2 of the Paris Agreement, each Party shall prepare, communicate, and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

**Non-Annex I
Parties**

Refers to countries that have ratified or acceded to the United Nations Framework Convention on Climate Change that are not included in Annex I of the Convention.

**1-digit national
road**

National roads represented by 1 digit number connect Phnom Penh Capital to the municipality of a province, except national road numbers 7 and 8.

Party

A state (or regional economic integration organisation such as the European Union) that agrees to be bound by a treaty and for which the treaty has entered into force.

**Technology
transfer**

A broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders

**2-digit national
road**

The national roads represented by 2 digit numbers and separated from the 1-digit national road on the left and right-hand sides. If the road is separated from the right-hand side, it has an even number. If the road is separated from the left-hand side, it has an odd number.

Vulnerability

The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate



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variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.

Source: UNFCCC 2021, *Glossary of climate change acronyms and terms*



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1 Introduction

1.1 Country context

Cambodia is highly vulnerable to the adverse effects of climate change, particularly rising sea levels and increases in the frequency and intensity of disasters (especially droughts and floods). According to the Global Climate Risk Index, 2021, Cambodia's Climate Risk Index (CRI) rank was 14 out of 180 countries, for 2000-2019 period, indicating high vulnerability to extreme weather events (Eckstein et al., 2021). Beyond extreme weather events, climate change also results in slow-onset events that could cause significant negative implications for the most vulnerable populations and sectors such as agriculture, industry, forestry, water resource, tourism and infrastructure, etc.

As per the first Biennial Update Report (BUR), the GHG emissions of Cambodia in the year 2016 were estimated at around 163.6 MtCO₂e, which is 285% higher than that of in 1994. Figure 1.1 illustrates the GHG emissions from each sector in 2016. The main driver for this increase in GHG emissions is the deforestation reflected in the emissions of the FOLU sector (GSSD, 2020).

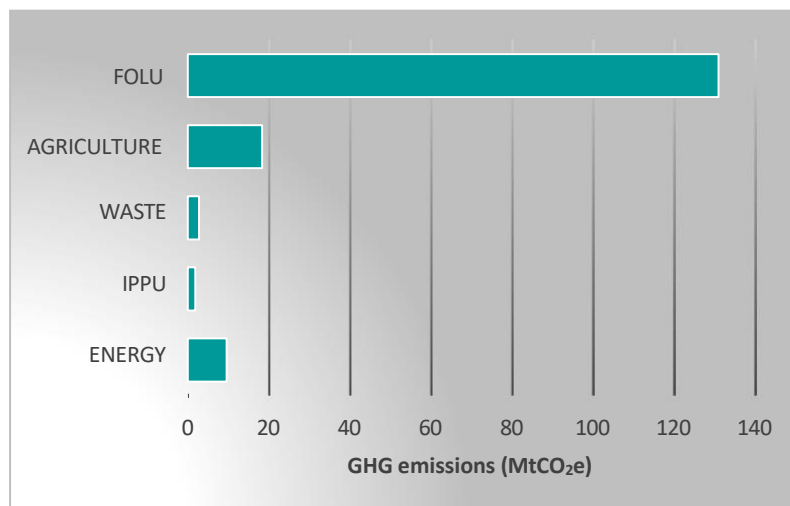


Figure 1.1 GHG emissions by sector in 2016

Source: GSSD, 2020



According to World Resource Institute (WRI), global GHG emissions were 49.4 GtCO_{2e} in 2016 (WRI, 2020). As such, it can be concluded that Cambodia is a low GHG emitting country with high vulnerability to the adverse effects of climate change. However, Cambodia's Nationally Determined Contributions (NDC) include both adaptation and mitigation actions based on national circumstances.

According to Cambodia's updated NDC, the estimated emissions reduction, including from the FOLU, are expected to be approximately 64.6 MtCO_{2e}/year by 2030 under the NDC scenario. Emissions from the energy sector, which includes sub-sectors such as Electricity, Transport, and Building sectors, are planned to be reduced by 13.7 MtCO_{2e} by 2030.

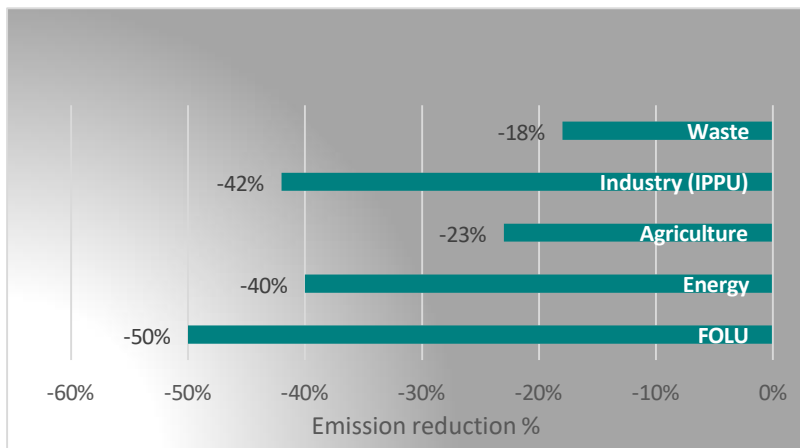


Figure 1.2 Emissions reduction estimation by year 2030

Source: GSSD, 2020

1.2 Objectives

1.2.1 Objectives of the project

- Develop an MRV Framework for the Transport Sector in Cambodia; and
- Develop capacity on the use of transparency-related tools, ICAT SD assessment tool, and GACMO.

1.2.2 Objectives of the deliverable

- Assess existing MRV /M&E systems and institutional arrangements of the transport sector;



- Identify gaps and barriers of the transport sector; and
- Provide recommendations to overcome barriers.

2 Methodology

Existing MRV/M&E systems, institutional arrangement, barriers, and gaps in the transport sector were assessed through comprehensive desk review and expert consultation. Data collection templates were developed to gather data from publicly available sources and experts.

Following data were collected related to each MRV/M&E system

Template 1 – Existing MRV/M&E systems

1. Name of the project
2. Type of MRV
3. Objectives
4. Description of MRV
 - a. Measurement process
 - b. Reporting process
 - c. Verification process
5. Description of institutional arrangement
 - a. Coordination agency
 - b. Data providers
 - c. Type of data provided
 - d. Availability of MoU and data sharing agreements
6. Barriers and gaps
 - a. Type of barrier
 - b. Description of barriers and gaps

Details of institutional arrangement of the transport sector were collected under the following categories.

1. Name of the Ministry
2. Name of the Department
3. Respective roles and responsibilities



3 Transport sector

Cambodia currently has four drivers of growth: agriculture, tourism, manufacturing (mainly garments for export), and commercial and residential construction. Efficient transport is critical for the development of all these sectors. Road, rail, water, and air are the major transport modes of the country.

At present, the Cambodian road network covers approximately 61,533 km of paved and unpaved roads, including 7,261 km of national/international roads (both 1-Digit and 2-Digit national roads), 9,031 km of provincial roads, and about 45,241 km of rural or tertiary roads (MPWT, 2020). Road transport is the largest subsector, with an estimated modal share of more than 90% for passenger and freight. The number of registered vehicles has increased at a double-digit rate each year and was more than 5 million in 2020. The number of registered motorcycles has increased by more than 10% per year since 2005, and they accounted for about 85% of all registrations in 2020 (ADB, 2019).

Cambodia's railway system consists of two single-track main lines with a length of 652 km. The northern line, which connects Cambodia's capital city of Phnom Penh and Thailand's boundary region of Poipet city, is 386 km long, while the southern line, which connects Phnom Penh and Cambodia's international seaport Sihanoukville, is 266 km long. Railway transport is important considering its eco-friendliness and the potential for making greater use of existing railway assets. However, the modal share of railways for passengers and freight is negligible (MPWT, 2020).

The inland waterways in Cambodia are 1,750 km long. The Mekong River, which makes up 30% of the entire inland waterways in Cambodia, is the main inland waterway. The Tonle Sap River and the Bassac River make up 15% and 5%, respectively, and all other rivers make up the remaining 50%. Inland waterway between Phnom Penh and the border of Cambodia and Vietnam accounted for a length of 102 km (MPWT, 2020).

Cambodia operates three international airports. Phnom Penh International Airport can accommodate about 5 million passengers a year and can simultaneously handle ten aircraft. Similarly, Siem Reap International Airport can host nearly 5 million passengers per year and handle eight aircraft at a time, while Sihanoukville International Airport can host about 0.5 million passengers per year and simultaneously handle four aircraft (ADB, 2019).



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4 Measurement, Reporting and Verification Systems

4.1 Introduction

The United Nations Framework Convention on Climate Change (hereinafter referred to as the Convention) provides the foundation for the intergovernmental response to climate change and its impacts on humanity and ecosystems. In order to collectively address climate change and achieve the objective of the Convention and the purpose and goals of the Paris Agreement, countries need to mobilise actions. Furthermore, all the Parties are obliged to communicate to the Conference of the Parties (COP), through the secretariat, information on the actions they have taken or envisage they will take to implement the Convention. This is seen as a key implementation aspect of the Convention, as it allows Parties to inform one another of their national-level actions and serves as a basis for the COP to assess the implementation of the Convention by Parties.

The regular collection, analysis, and use of reliable information on climate action and support to reduce GHG emissions and increase resilience, and data on GHG emission trends, both historical and projected, is essential for evidence-based decision-making and information-sharing, which in turn build trust and understanding and promote stakeholder engagement. This data collection and reporting activity forms a critical component of what is commonly known as 'MRV' under the Convention and has recently been encapsulated by the term 'transparency' under the Paris Agreement (UNFCCC,2020).

The arrangements for national reporting have evolved throughout the history of the Convention and its Kyoto Protocol into a more comprehensive measurement, reporting and verification framework. Figure 4.1 illustrates the evolution of MRV arrangements for developing country parties.

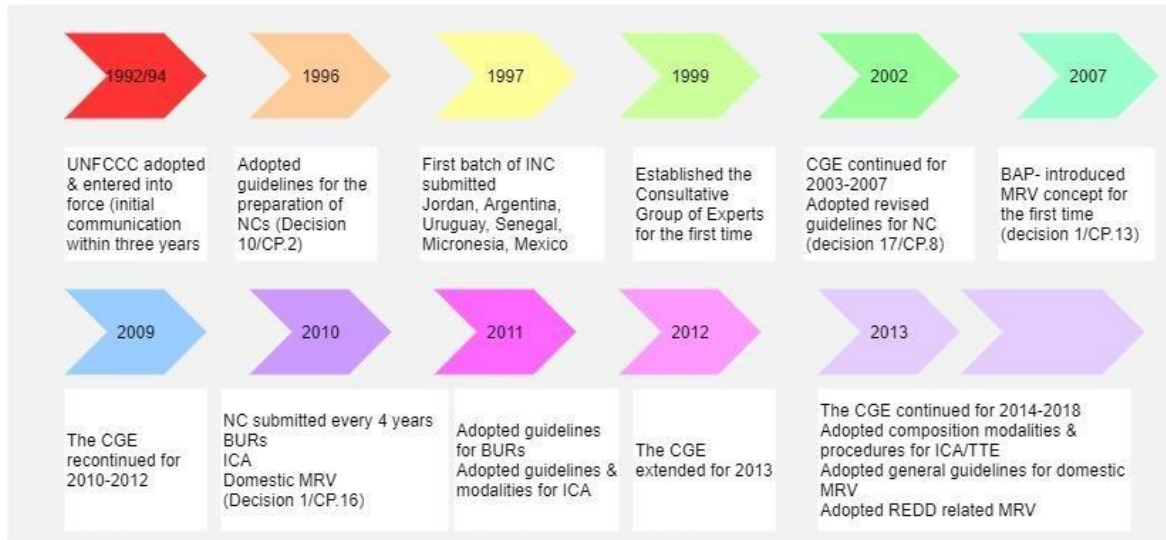


Figure 4.1 Evolution of MRV arrangements for developing country parties

Source: UNFCCC 2014, Handbook on Measurement, Reporting and Verification for developing country parties

Several elements were introduced to the MRV framework through a set of decisions taken by COP over the years. Some of these elements are implemented at the international level and others at the national level. Figure 4.2 illustrates the key elements of the MRV framework.

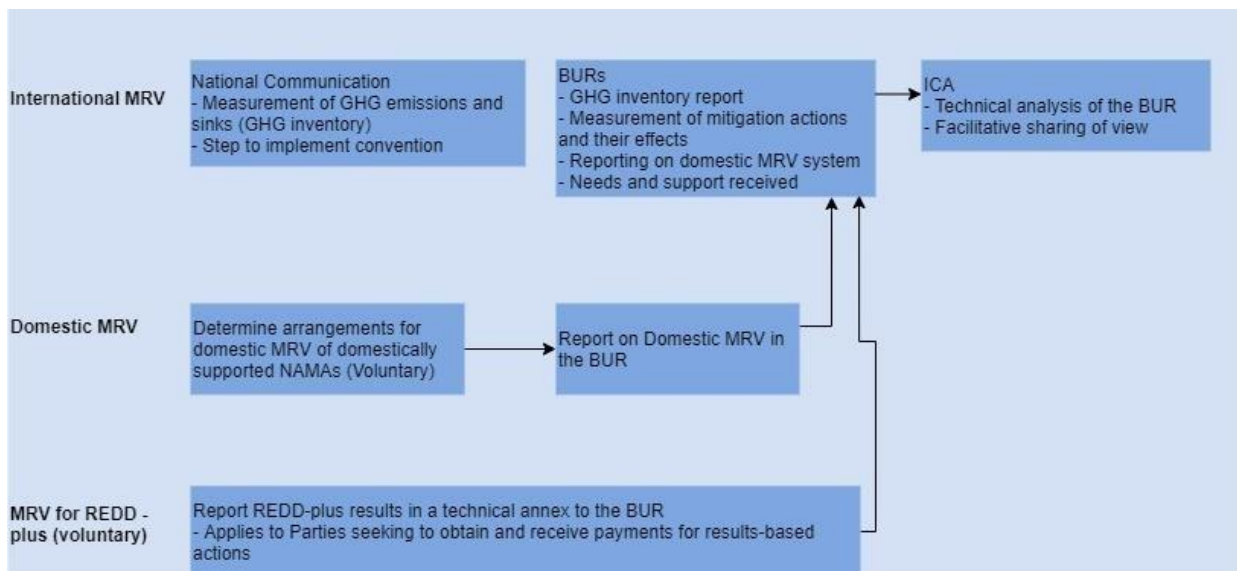


Figure 4.2 Key elements of the MRV framework

Source: UNFCCC 2014, Handbook on Measurement, Reporting and Verification for developing country parties



4.2 International MRV

Measurement

Measurement for non-Annex I Parties applies both to efforts to address climate change and to the impacts of these efforts, including the level of GHG emissions by sources and removals by sinks, emission reductions, and other co-benefits.

Reporting

Reporting for non-Annex I Parties is implemented through the National Communications (NC) and Biennial Update Reports (BURs). Parties are required to report on their actions to address climate change in their national communications, which include information on the GHG inventories, adaptation, mitigation actions and their effects, constraints and gaps, support needed and received, and other information considered relevant to the achievement of the objective of the Convention. NCs are to be submitted every four years and prepared following the guidance contained in the revised guidelines for preparing NCs from non-Annex I Parties contained in the annex to decision. BURs are to be submitted every two years, providing an update of the information presented in national communications, in particular on national GHG inventories, mitigation actions, constraints and gaps, including support needed and received.

Verification

Verification is addressed at the international level through International Consultation and Analysis (ICA) of BURs, which is a process to increase the transparency of mitigation actions and their effects, and support needed and received.



4.2.1 National Communication (NC)

Each Party to the Convention prepares NC periodically following the guidelines developed and adopted by COP. Non-Annex I Parties are required to submit their first NC within three years of entering the Convention and every four years thereafter.

The NC serves as a medium for presenting information in a consistent, transparent, comparable, and flexible manner. As per Article 4, paragraph 1, of the Convention, Non-Annex I parties need to provide the following information in their NCs (UNFCCC, 2009).

- (a) A national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the COP;
- (b) A general description of steps taken or envisaged by the Party to implement the Convention; and
- (c) Any other information that the non-Annex I Party considers relevant to the achievement of the objectives of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends.

4.2.2 Biennial Update Report (BUR)

The scope of the BURs is to provide an update of the most recently submitted national communication and provide additional information about mitigation actions taken or envisaged to undertake and their effects and support needed and received. Non-Annex I Parties, consistent with their capabilities and the level of support provided for reporting, should submit their first BUR by December 2014 and every two years thereafter. The least developed country Parties and small island developing States may submit BURs at their own discretion. The BURs shall be prepared following the guidelines contained in decision 2/CP.17 (decision 2/CP17).



4.3 Domestic MRVs

At the national level, Parties are expected to implement the international guidelines for domestic MRV frameworks and to prepare and report information according to the guidance on reporting through national communications and BURs. Domestic/national MRV systems include three elements: 1) MRV of emissions; 2) MRV of NAMAs; 3) MRV of support.

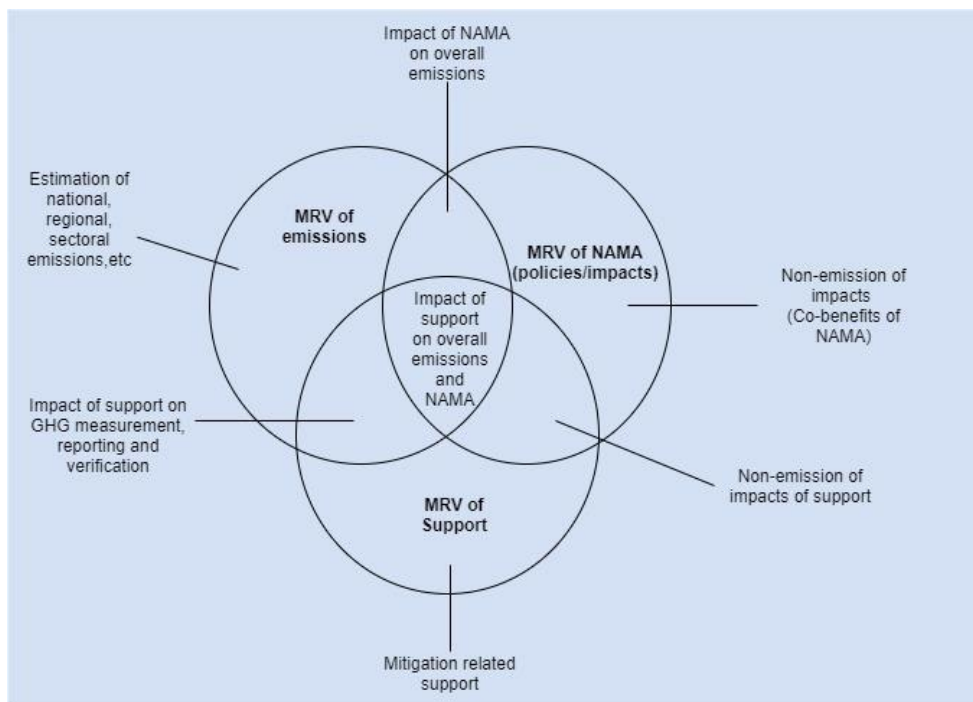


Figure 4.3: Elements of National MRV framework

Source: UNFCCC 2014, *Handbook on Measurement, Reporting and Verification for developing country parties*

4.3.1 MRV of emissions

MRV of GHG emissions refers to estimating, reporting, and verifying actual emissions over a defined period. This type of MRV can be performed at the national level or by regional and sectoral levels.



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4.3.2 MRV of Nationally Appropriate Mitigation Actions (NAMAs) /Mitigation actions

MRV of mitigation actions involves assessing (ex-ante or ex-post) GHG emissions reductions and/or sustainable development (non-GHG) effects of policies, projects, and actions, as well as monitoring their implementation progress. It also involves assessing progress toward mitigation goals.

4.3.3 MRV of Support

MRV of support focuses on monitoring the provision and receipt of financial flows, technical knowledge, and capacity building and evaluating the results and impact of support.

4.4 MRV for REDD+ activities

Developing country Parties are encouraged to contribute to mitigation actions in the forestry sector by undertaking REDD+ activities: i) reducing emissions from deforestation; ii) reducing emissions from forest degradation; iii) conservation of forest; iv) sustainable management of forests; v) enhancement of forest carbon stocks. These activities should be country-driven, correspond to national development priorities, circumstances and capabilities, and should respect sovereignty. Furthermore, they should be implemented in phases and evolve into a results-based payment that should be fully measured, reported and verified.



4.5 MRV /M&E frameworks in Cambodia

All aforementioned MRV types are available in Cambodia. These MRVs are designed at different levels (project, sector, national). Figure 4. 4 summarises the existing MRV systems of Cambodia. However, this study will focus on the MRVs related to the Transport sector.

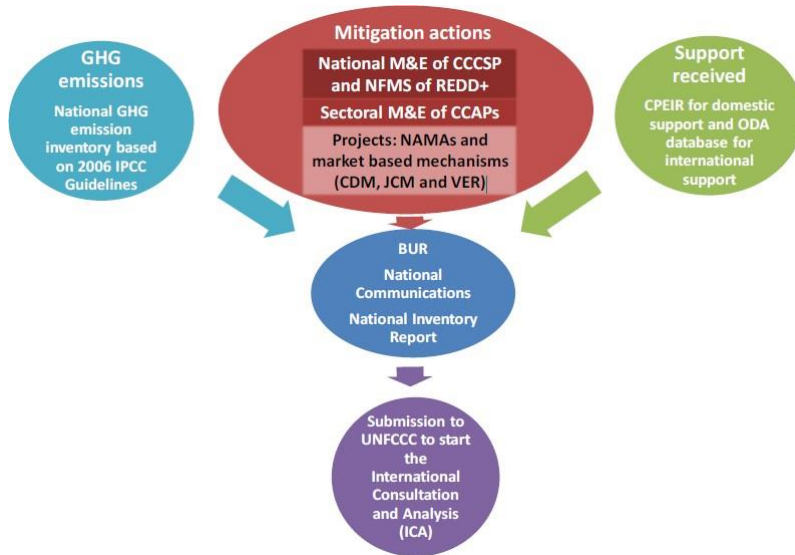


Figure 4.4 Existing MRV systems of Cambodia

Source: GSSD 2020, *First BUR of Cambodia*

4.5.1 International MRVs

Cambodia has been a Party to the Convention since 1996, the Kyoto protocol since 2002, and the Paris Climate Agreement since 2017. Therefore, Cambodia has committed to submitting National Communication every four years, Biennial Update Report every two years, and Nationally Determined Contributions every five years.

National Communications

Cambodia has submitted her first and second national communications in 2002 and 2015 to provide GHG emissions by sources and removals by sinks for 1996 and 2000, respectively.

Second National Communication (SNC) was prepared under Articles 4 and 12 of the Convention. It has presented information on national circumstances; national GHG inventory for the year 2000 and GHG emission projections; impacts and vulnerability to climate change; the situation concerning the implementation of climate change response



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in the country, including measures to mitigate and adapt to climate change and related plans, programmes and projects in these areas; financial commitments, technology transfer and international cooperation; systematic research and observation; education, training and public awareness; and constraints, gaps and related financial, technical and capacity needs.

GHG inventory was prepared based on Revised 1996 IPCC Guidelines and the UNFCCC software (Version 1.3.2, 28 January 2007). This was complemented by the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories and the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry. Emissions/removals from Energy, Agriculture, Land Use Change and Forestry, and Waste sectors were estimated using Tier 1 approach. Emissions were only estimated considering CO₂, CH₄, and N₂O gases. Cambodia's GHG emission in the year 2000 was estimated as 47.7 MtCO_{2e}, and removal was 48.2 MtCO_{2e}. As such, Cambodia remains a carbon sink accounting for net emission for -0.4 MtCO_{2e}.

The energy sector accounts for 6% of the total emissions. The transport sector has been the second-highest contributor to the energy sector (26%), with 0.7 MtCO_{2e} emissions. The transport sector included Civil aviation, Road transportation, and Railways.

SNC was prepared with the financial support of GEF and the active participation of line ministries and agencies.

Biennial Update Report

The first biennial update report of Cambodia was submitted to the UNFCCC in 2020, including emissions by sources and removals by sinks from 1994 to 2016.

The report was prepared following the guidelines contained in decision 2/CP.17 of the COP. It included information on National circumstances, National Greenhouse gas inventory, Mitigation actions and other effects, Domestic measurement, reporting and verification, and need and support.

The GHG inventory has been developed following the 2006 IPCC Guidelines. Emissions from Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry and Other Land Use (AFOLU), and Waste sectors were recorded as CO₂, CH₄, N₂O, and HFC



emissions. Tier 1 approach was used to estimate the emissions for all the sectors except for the followings which estimated based on Tier 2;

- Cement production, CO₂ emissions for the years 2007-2015, as plant-specific data on clinker production is available; and
- Land CO₂ emissions for the years 1994-2016, as the calculations for the lands, are based on comprehensive monitoring of the land use and a country-specific estimate for each type of land.

GHG emissions of Cambodia in the year 2016 was 163.6 MtCO_{2e}. The energy sector was identified as the third-highest contributor to emissions (5.9%). The transport sector is the second-highest contributor (53%) to the energy sector accounting for 5.1 MtCO_{2e}. The transport sector included emissions attributed to Civil aviation and Road transportation.

4.5.2 Domestic MRVs

Cambodia Climate Change Strategic Plan (CCCSP) includes a climate change Monitoring and Evaluation (M&E) framework. Domestic MRV systems are proposed to be integrated into the existing M&E system to mobilise resources efficiently (GSSD, 2020).

Domestic MRV systems of Cambodia aims to:

- i) Report on a) GHG Inventories, b) mitigation actions and their effects, c) support needed and received in a complete, transparent and timely manner; and
- ii) Assure that existing sectoral and national climate change M&E systems integrate all MRVs at all levels in order to measure and monitor:
 - a. GHG emissions trends
 - b. GHG emissions or reductions attributed to a specific mitigation action (policy, programme, measure, or project) including the sustainable development benefits; and
 - c. Climate-related support provided by the Royal Government of Cambodia or received from donors or the market in the form of finance to enable implementation of a certain action or as a result of an action taken in a specific sector of the economy.



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MRV of NAMA/Mitigation action

Currently, Cambodia has three different types of MRV of mitigation actions 1. MRV of NAMA; 2. MRV of Carbon market-based mechanism projects (CDM, JCM, VERs); and 3. MRV of Renewable Energy Policy

However, none of the above MRV systems was developed for transport sector mitigation actions. Even though transport sector mitigation actions do not have a proper MRV system in place, environmental assessment, including measuring GHG emissions, has been done for the project “promoting green mobility through electric motorcycles in Cambodia”. The project aims to contribute to sustainable transport by promoting the adoption of electric motorbikes in Cambodia. The main objective of this project is to remove key barriers to the scale-up of two-wheel electric motorbikes in Cambodia, including regulatory and awareness barriers. Among others, the project measures the GHG emissions reduction of electric motorbikes compared to gasoline motorbikes (125cc). The project's key players are the climate change working group of the MPWT, GGGI, and related provincial municipalities. The process is legally supported by the Letter of Agreement signed between the NCSD and the MPWT (GGGI & NCSD, 2021)

MRV of support

Official Development Assistance (ODA) database and the Climate Expenditure and Institutional Review (CPEIR) are the key elements of the Cambodian MRV of support. Cambodia measures, report and verify data on climate finance and the ODA through these elements (GSSD, 2020).



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4.5.3 Monitoring and Evaluation (M&E) systems

Climate Change Strategic Plan¹

M&E system of the CCSP has been developed based on five principles, namely: i) use national systems and procedure; ii) mainstream M&E of climate change into national, sectoral and sub-national development planning; iii) strengthen accountability, equity and transparency; and iv) promote participatory learning; and v) address gender issues.

This M&E system aims to i) measure to what extent adaptation efforts have been effective in keeping development on track in a changing climate; ii) monitor climate change mitigation actions and low-carbon development policies; iii) generate evidence and lessons as a basis for future policy development; iv) facilitate the coherent integration of M&E of climate change in national development planning and key sectors; and v) provide the information required to fulfil the reporting obligations towards the UNFCCC and development partners.

The system includes two sets of indicators. Upstream indicators track the effectiveness of climate risk management, while downstream indicators track changes in the development situation, emissions, and climate vulnerability of communities and ecosystems, considering the year 2014 as the baseline.

Technical Inspection administration system for Vehicles

Technical inspections of vehicles ensure the safety of vehicles and prevent environmental pollution. As such, all private vehicles of Cambodia need to be inspected once every two years and commercial vehicles once every year in order to prove their roadworthiness. Under this programme, all vehicle owners have a liability to bring vehicles to vehicle inspections. If a vehicle owner does not receive a proper inspection, they will be subjected to a fine (MPWT & JICA, 2018).

¹ https://www.cambodiaip.gov.kh/DocResources/ab9455cf-9eea-4adc-ae93-95d149c6d78c_007729c5-60a9-47f0-83ac-7f70420b9a34-en.pdf



The technical inspection administration system for vehicles was modernised with the support of JICA. According to this system, the vehicle owners may create an account in the given online system by including personal information, a copy of the vehicle document, tax paper, I.D. card, or residency book (or the family book) of the vehicle owner. Payment also can be made with the WING counter or Ly Hour or via your personal account at selected banks (MPWT, 2021a).

Technical Inspection either can be done in technical inspection centres or at mobile units. The vehicle will be inspected under nine categories: i) appearance inspection; ii) speedometer tester; iii) exhaust gas tester; iv) sound level meter; v) headlight tester; vi) underbody inspection; vii) side slip tester; viii) weight scale; and ix) brake tester. A certificate will be offered for the roadworthy vehicles while others directed to repair. Repaired vehicles need to be re-inspected to obtain the certificate (MPWT & JICA, 2018).

Department of Land Transport of the MPWT will monitor the details of registered vehicles, details of pass/fail vehicles and the number of vehicles with expired certificates through the online system. Figure 4.5 indicates the M&E system established for technical inspection centres.

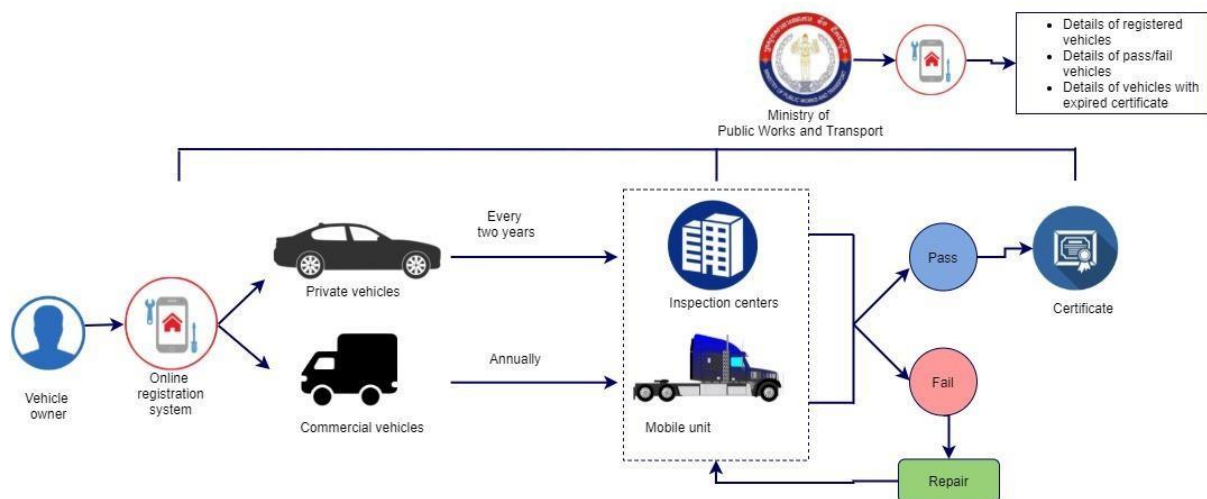


Figure 4.5 M&E system of the vehicle inspection programme



Evaluation of proposed projects for the improvement of Transport capacity of public buses in Phnom Penh

Phnom Penh Capital Administration (PPCA) currently operates three bus routes with 57 vehicles. Even though the number of passengers only accounts for 7,000 to 8,000 per day, the bus system has not reached the point where it contributes to mitigating traffic congestion as such JICA plans to improve the traffic environment of Phnom Penh Capital City through the grant of buses (80) that enables to expand the routes and reinforce the bus transportation capacity (JICA, 2016).

As part of the project following quantitative and qualitative indicators were developed to evaluate the project. Table 4.1 gives the qualitative indicators.

Table 4.1 Evaluation indicators - qualitative

Indicator	Reference (2016)	Target (2021)
The number of bus routes	3	5
Operation rate ² (%)	67.5	100
Bus travel distance (vehicle- km/day)	4,386	8,830
Bus transport capacity (10,000 pax-km/day)	21.9	40.3
Working rate of bus vehicle (%)	75	90
Ridership (pax-day)	8,133	40,000

Source: JICA 2016, *Preparatory Survey Report on the Project for Improvement of Transport Capacity of Public Bus in Phnom Penh*

² Operational rate of vehicle = the number of operating vehicles / the number of vehicle possessed (avg.)



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Qualitative indicators

- 1) Mitigation of traffic congestion on the bus routes;
- 2) Raised awareness about public transport among the citizens with the improved public bus service;
- 3) City Bus Authority (CBA) is able to provide inexpensive and safe public transport; and
- 4) Scope of activities of the mobility-impaired poor and elderly by the availability of inexpensive and safe public transport and expansion of service area.

The project for comprehensive urban transport plan in Phnom Penh capital city

This project is a continuation of "The Urban Transport Master Plan in the Phnom Penh Metropolitan Area". Objectives of the project are to 1) formulate a comprehensive urban transport plan targeting 2035; 2) formulate the implementation plan of priority projects; 3) promote the transfer of technology to Cambodian counterparts through the project in line with the record of the discussion.

This project includes a two-fold approach to urban transport planning, namely: (1) reorientation of transport mode from private to public; and (2) introduction of traffic demand management, which is an attempt to balance the increase in demand and supply within the environmental limitations such as urban land and financial constraints. Altogether twenty-nine programs, integrated from 68 projects, are proposed for the city.

The necessity of a monitoring plan and the revising system has also been acknowledged in the plan itself. As such, it has indicated that the progress of implementation of the master plan needs to be monitored by the Phnom Penh City Hall and other stakeholders. In addition, revisions to the plan every 5 or 10 years also are recommended. It also has suggested following the Plan>Do> Check> Action method for evaluation.



4.5.4 MRV for REDD+

National Forest Monitoring System (NFMS)

Cambodia's National Forest Monitoring System (NFMS) was developed under the REDD+ strategy 2017-2026. A phased approach that incorporates improved methods, data and opportunities from strengthened capacity and evolving technology was followed to establish NFMS. As such, it will provide timely, reliable and accurate information to the policymaker to address deforestation and forest degradation drivers in Cambodia. The conceptual design of Cambodia's NFMS aims to perform two broad functions of MRV and monitoring. In the MRV, measurement activity will focus on GHG inventories, the Satellite Land Monitoring System (SLMS), and the National Forest Inventory (NFI). As such, this was developed to comply with the IPCC guidelines and relevant COP decisions. SLMS has been producing national forest cover maps every four years from 2002 onwards. Development of the NFI has already started with completing the design and ongoing capacity building and training. The first cycle of the NFI will be conducted during the period 2018-2021 once assurance of adequate quality control has been achieved. The NFI will generate accurate data on biomass volumes of forests of different types, ages, densities, and locations that will be used to calculate emissions and removals of forest carbon (FCPF & UNDP, 2017).



5 Institutional Arrangements

The national institutional arrangements will facilitate individual Parties in ensuring that nationally appropriate procedures for collecting, processing, reporting, and archiving required data and information are established and operational in a sustainable manner on a continuous basis. These can facilitate effective coordination among all relevant stakeholders from the public and private sectors in meeting the reporting requirements under the Convention, as well as addressing the broader issue of climate change at the national level. In particular, institutional arrangements can assist Parties to:

- Meet reporting requirements under the Convention;
- Further, build national capacities and ensure the sustainability of reporting processes;
- Inform national and international policymakers at different levels; and
- Assist in institutionalising activities relating to reporting on climate change.

However, it is critical to note that there is no one-size-fits-all model for institutional arrangements. Systems should be designed and tailored such that they will be sustainable under the respective national circumstances. Figure 5.1 illustrates key components of an institutional arrangement.



Figure 5.1 Key components of an institutional arrangement

Source: UNFCCC 2020, *Handbook on institutional arrangements to support MRV/transparency of climate action and support*



5.1 Institutional Arrangement – Climate Change Management

The National Council for Sustainable Development (NCSD) is responsible for climate change management and national response. Figure 5.2 illustrates the overall institutional arrangement of Cambodia for climate change management and national responses.

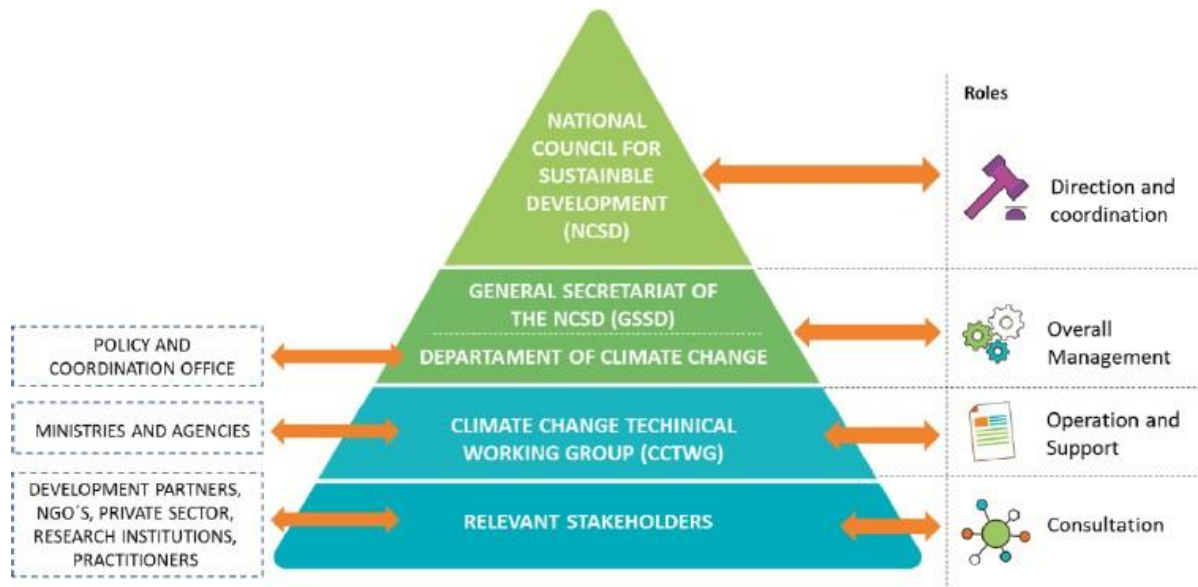


Figure 5.2 Institutional arrangement for climate change management and national responses

Source: GSSD 2020, *First Biennial Update Report of Cambodia*

National Council for Sustainable Development

The National Climate Change Committee (NCCC) was established in 2006 with a mandate to prepare, coordinate and monitor the implementation of policies, strategies, legal instruments, plans, and programmes of the RGC. The NCCC was created as an inter-ministerial mechanism, cross-sectoral and multi-disciplinary, to coordinate climate change response. The National Council for Sustainable Development (NCSD) took over functions since its establishment in May 2015. The Council is composed of high-level representatives (Secretaries and Under-Secretaries of State) of key government ministries and agencies, with the Prime Minister as its Honorary Chair and the Minister of Environment as its Chair. Council membership has increased compared to the NCCC, covering a greater number of ministries and agencies, including provincial governors.



The development of NCs and BURs also fall under the purview of the NCSD to provide the basis for institutional continuity at both the policy-making and technical levels across a comprehensive range of government stakeholders. Figure 5.3 illustrates the institutional arrangement of the NCSD.

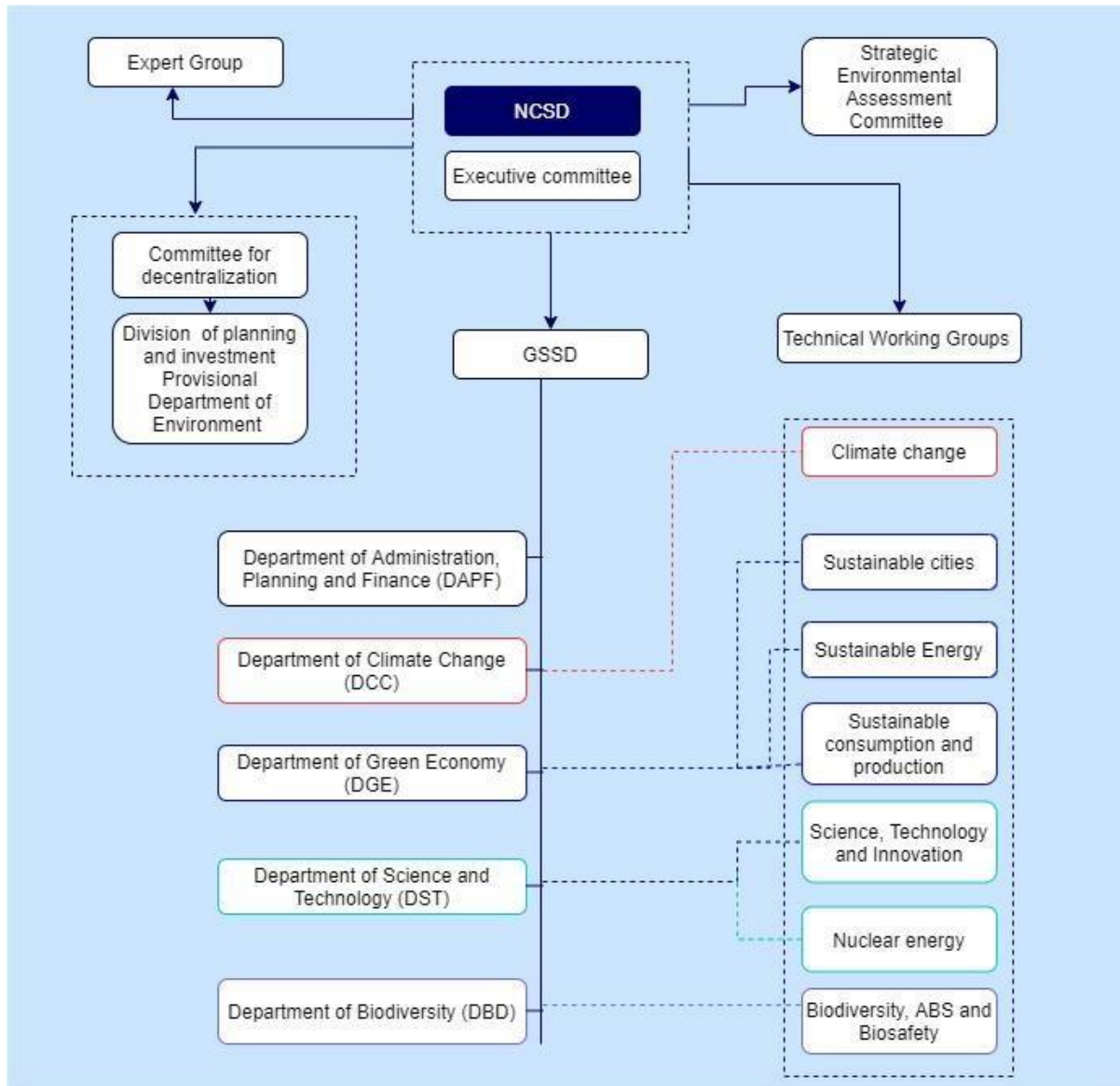


Figure 5.3 Institutional Arrangement of NCSD

Source: NCSD, 2021



General Secretariat of the National Council for Sustainable Development (GSSD)

Department of Climate Change (DCC) serves as the secretariat of the Climate Change Technical Working Group (CCTWG) and convenes and coordinates the CCTWG to discuss key priorities: the update and review of national institution indicators, which are part of the National Monitoring and Evaluation (M&E) Framework; the Review of the Implementation of Cambodia's Climate Change Strategic Plan 2014-2023 (CCCSP); and Cambodia's Nationally Determined Contributions (NDC).

Climate Change Technical Working Group

The Climate Change Technical Team (CCTT) was restructured to be a Climate Change Technical Working Group (CCTWG), including representatives of the GSSD and line ministries. The CCTWG's mandate and priority program are to support the NCS for strengthening Cambodia's capacity to respond to climate change. The CCTWG is an integral part of the NCS structure coordinated by the GSSD, and it facilitates the review, formulation, and implementation of policies, strategies, action plans, and programs to enhance climate change response. The CCTWG is used to coordinate and facilitate the preparation and development of the BUR.

5.2 Institutional Arrangement – Mitigation actions

The Ministry of Environment (MoE) has acted as the Designated National Authority (DNA) for Clean Development Mechanism (CDM) since July 2003. To date, the MoE is the national implementing agency for numerous projects that aim to generate broad understanding and develop institutional and human capacity to fully participate as an equal partner with developed countries in the formulation and implementation of potential CDM projects in Cambodia. The Cambodian DNA is responsible for assessing proposed CDM projects against national sustainable development criteria and is authorised to provide written approval for proposed CDM projects following these criteria.



To do so, Cambodia uses a sustainable development matrix as a tool for assessing the contribution of CDM projects in four aspects of sustainable development: economic, social, environmental, and technology transfer.

The GSSD acts as the Secretariat of Cambodia's DNA for the CDM, while selected members from CCTWG relevant to mitigation activities create the Board of the Cambodian DNA. Board activities include technical and institutional capacity strengthening, CDM awareness-raising, CDM project identification and facilitation of host country approvals following the requirements of the Kyoto Protocol of the UNFCCC.

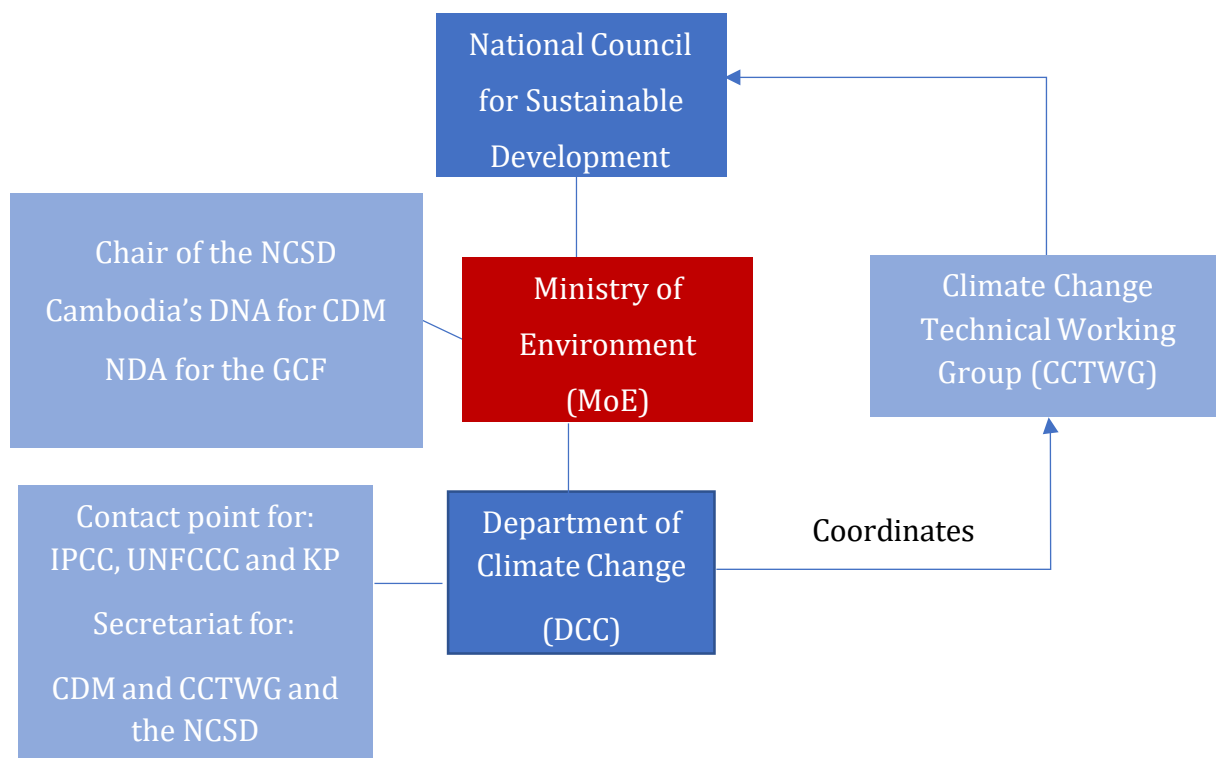


Figure 5.4 Institutional arrangement for mitigation action

Source: GSSD 2020, *First Biennial Update Report of Cambodia*

The designated NAMA focal point at the GSSD is responsible for approving all individual NAMAs before being recorded in the NAMA Registry. The MoE and Chair of the National Council for Sustainable Development are authorised to approve NAMA. The MRV of NAMAs is defined in the specific NAMA measurement plan and generally lies on the NAMA implementer. Government entities responsible for collecting statistics could also be involved in collecting data by integrating data collection formats in their regular data collection activities.



Two entities are involved in the development of NAMA's measurement plans:

- The national socio-economic and environmental data collection entity; and
- The entity responsible for preparing national GHG inventories.

These entities provide information on data already collected. As such, it is easy to identify the data that need to be collected under NAMA.

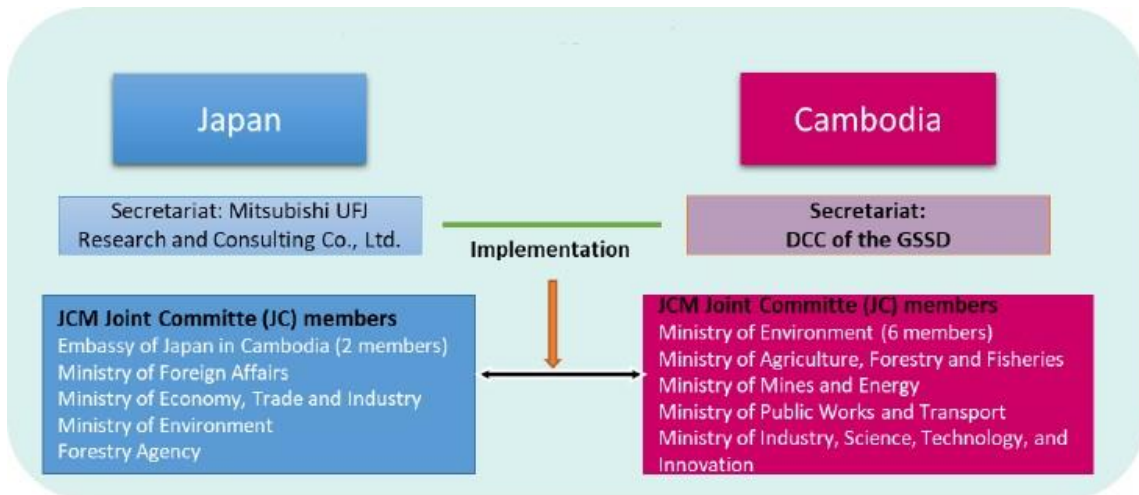


Figure 5.5 Institutional arrangement of JCM mechanism

Source: GSSD 2020, *First Biennial Update Report of Cambodia*

The Joint Committee (JC), which includes representatives from Japan and Cambodia, is responsible for implementing and administering JCM projects.

A Draft Sub-Decree on Rules and Procedures for Participation in GHG Emissions Reduction Mechanisms has been prepared to be approved in the near future. The main purpose of the Sub-Decree is to establish a permanent National Authority and provide the rules and procedures regarding the participation in all GHG emissions reduction mechanisms, including but not limited to CDM, NAMA, REDD+, VCS, and JCM.



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5.3

Institutional arrangement – The Transport sector of Cambodia

The Ministry of Public Works and Transport

This Ministry is responsible for public works and Transport in Cambodia. The Ministry is mandated to "build, maintain, and manage all the transport infrastructure such as roads, bridges, ports, railways, waterways and buildings" in the nation. As such, it governs the Department of land transport, the Department of railways, and the Department of waterway transport, etc. Please see Figure 5.6 for more details. Please see Annex I for more information about the roles and responsibilities of the Ministry.

Public services of the Ministry include, among other things, vehicle registration, vehicle technical inspection, driver's license, railway services, and Transport licensing.

Logistics master plan

Logistics master plan 2015-2025 was developed to create integrated and highly effective multimodal transport and logistics system. It focuses on connecting the major economic poles and the three economic corridors – Phnom Penh – Sihanoukville, Phnom Penh – Bavet and Phnom Penh – Poipet – to become key national economic corridors through the construction of internationally standards highways and the setup of an effective logistics system.

Providing legislative backstopping national institutional framework was established under Royal Decree on the Establishment and Functioning of NLC and NLSC No. NS/RD/1117/1092 dated 24 Nov 2017 (MPWT, 2017). Figure 5.2 indicates the proposed framework.

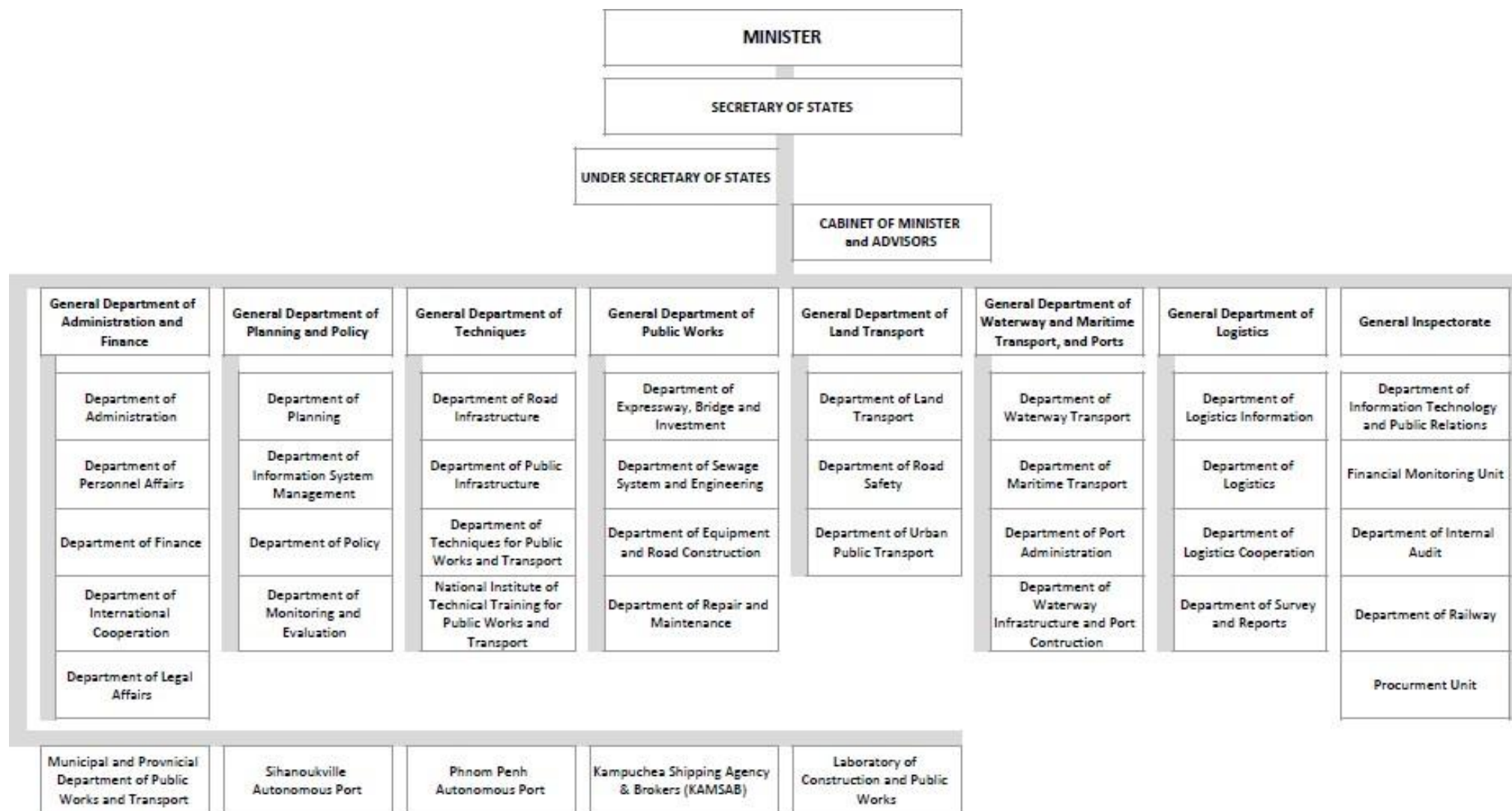


Figure 5.6 Organization chart of Ministry of Public Works and Transport, Source: MPWT, 2021

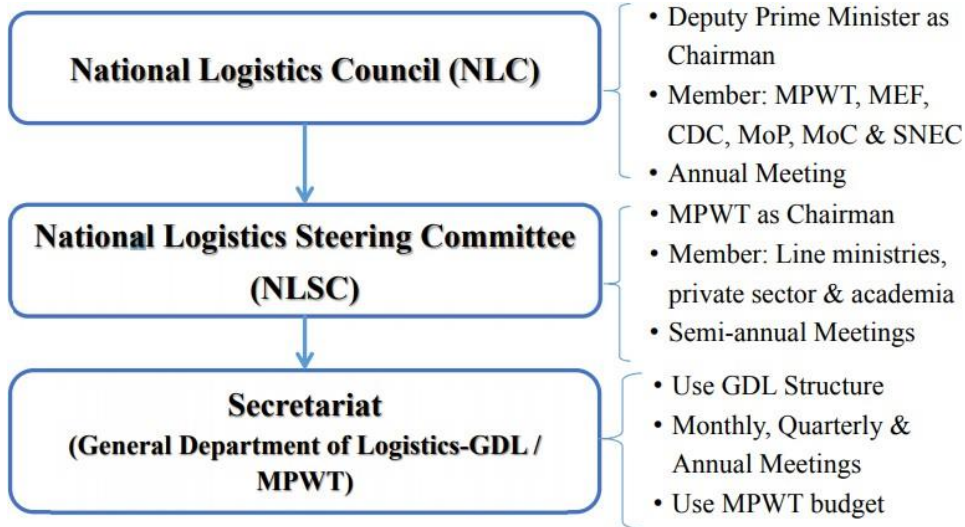


Figure 5.7 National institutional arrangement for logistics

Source: MPWT, 2017

MPWT: Ministry of Public Works and Transport; MEF: Ministry of Economy and Finance; MoC: Ministry of Commerce; MoP: Ministry of Planning; CDC: Council for Development of Cambodia; SNEC: Supreme National Economic Council.



6 Identification of Barriers and gaps

6.1 Barriers and gaps in Transport Sector

A country study by ADB on the "Transport sector assessment, Strategy and Road map" of Cambodia in 2019 (Transport sector assessment by ADB) has identified low connectivity and inefficiency as the core problem of the transport sector. As per the study, this problem was caused due to: (i) lack of all-weather connectivity throughout national, rural, regional, and international road networks; (ii) lack of competitiveness resulting in high logistics costs; and (iii) unsafe and unsustainable transport infrastructure. As illustrated in Figure 6.1, these sector impacts have led to insufficient support for national socio-economic development and integration into the sub-regional and international economy (ADB, 2019).

Followings were the key problems identified by the study:

1. Lack of refined sector policy and effective legislative implementation;
2. Lack of selective infrastructure investment to meet national and regional needs; and
3. Lack of sustainability in social, environmental, and financial aspects.

Lack of refined sector policy and effective legislative implementation

Followings are the policies, plans and strategies developed by Cambodia with the support of international entities but have not been implemented yet due to lack of policy and legislative support.

Table 6.1 List of pending policies, plans, strategies

Sub-sector	Project/plan/strategy
Road	Road Development Policy by the MPWT with the support of JICA and PRC
	Expressway development plans by JICA and PRC



	Road sector master plan and a development strategy, including for rural roads under Cambodia multi-transport and logistics master plan.
	Road Law by the MPWT with the support of the World bank
Railway	Railway sector master plan supported by KOICA
Urban	Urban transport plan in Phnom Penh Capital City with the support of JICA
Logistics	Strategy for logistics with the support of JICA and the world bank

Source: ADB 2019, *Transport sector assessment, Strategy and Road map*

Lack of selective infrastructure investment to meet national and regional needs

The transport sector receives a significant amount of investment both from government and development partners. Most of these investments are directed to road improvements. However, the transport sector assessment has identified that border national and regional issues cannot be addressed due to the lack of diversification of investment portfolios. Key areas for effective investment will be (i) Urban transport infrastructure to make cities more livable; and (ii) logistics to better manage the flow of materials and goods within the GMS and with the economies of the ASEAN were identified as key areas that investment could be directed (ADB, 2019).

Lack of sustainability in social, environmental, and financial aspects

Even though the road sector is significantly funded, maintenance of them tends to be underfunded. Controlling overloading remains a significant issue in maintaining reasonable road maintenance costs. Road safety has become a critical issue with the continuous growth of motorcycles. Road transport fatality remains high, though the rate is decreasing. Although improved roads will positively impact women, spurring significant transformative changes in gender relations and job creation for women in the male-dominated road construction industry is challenging. Many provinces of Cambodia are vulnerable to flood. As such, more attention needs to be given to climate change adaptation and disaster reliance on transport facilities.

Figure 6.1 below describes the problems associated with the Transport sector of Cambodia.

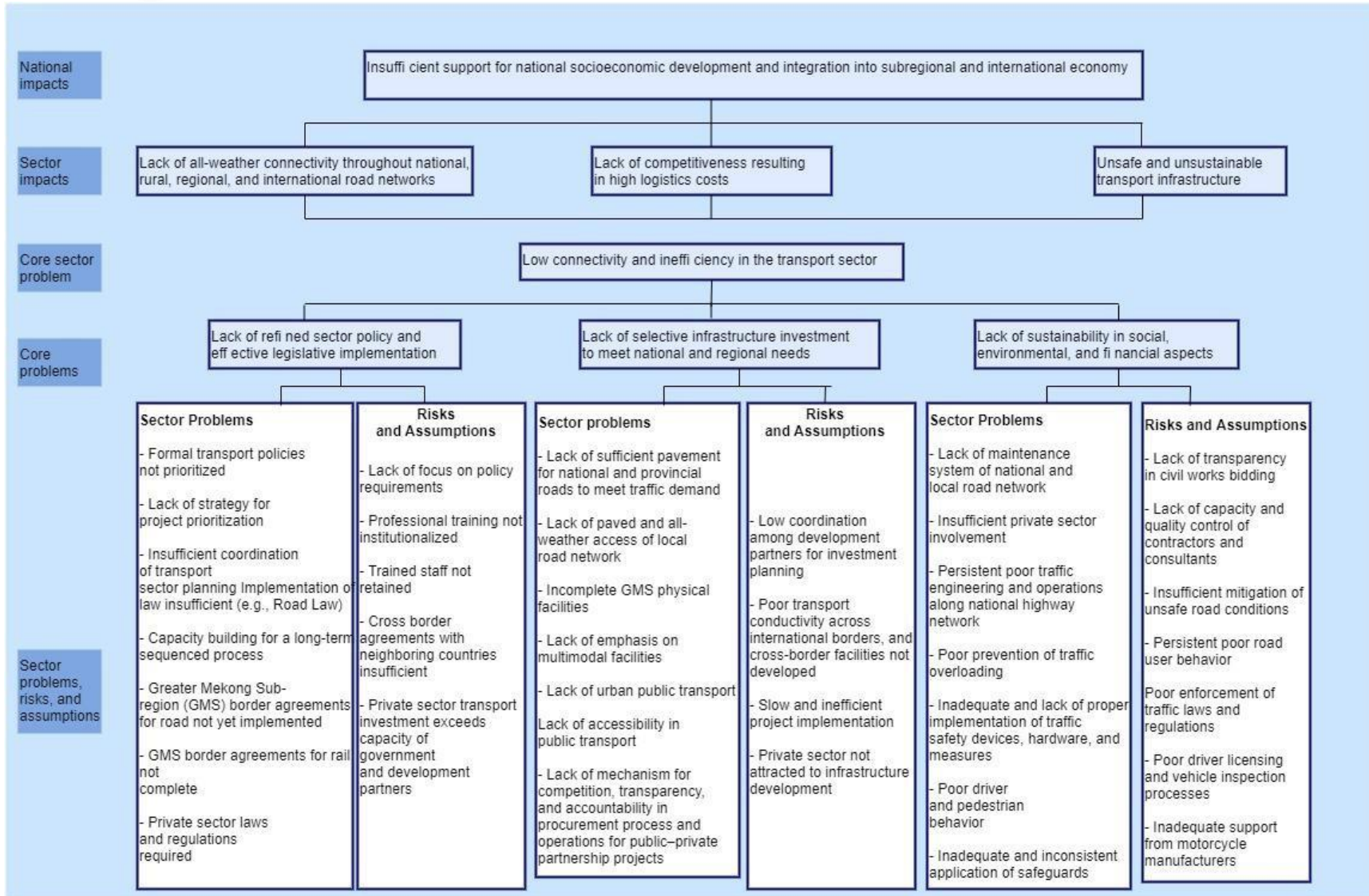


Figure 6.1 Problem tree for the transport sector, Source: ADB 2019, Transport sector assessment, Strategy and Road map



6.2 Barriers and gaps in MRVs

6.2.1 Common gaps

Gaps in capacity building

Cambodia has received numerous capacity-building support since 2000. However, experts and researchers in the fields of GHG inventory and mitigation, climate vulnerability assessment and adaptation measures, climate change and energy, climate agronomists, climate economists, etc., are still limited. Lack of capacity and expertise remains the key challenge in successfully implementing climate change projects (GSSD, 2020).

Financial gaps

Cambodia has received grants and loans from development partners and donor countries to design and implement climate change projects. The proportion of climate change expenditure to GDP is 1.1% on average during 2009-2017. However, Cambodia still faces financial constraints to ensure the effective implementation of adaptation and mitigation actions (GSSD, 2020).

Lack of coordination among institutions

The National Institute of Statistics used to periodically publish data compiled from all other line ministries in an annual compendium of statistics. This source of national statistics was available in print for 2003, 2005, 2006, and 2008. The NIS has ceased publication of the annual compendium of Cambodia's statistics for a decade. This has created a challenging situation to collect data from different institutions.



6.2.2 Gaps for continuous development of GHG inventory

The following constraints were identified in developing the GHG inventories.

- Limited activity data and national emission factors;
- The scope of the data and its categorisation is not aligned with the IPCC methodologies, particularly for the AFOLU sector;
- The absence of an inventory system in place to develop the compilation of the inventory; and
- Limited national experts on GHG emission inventories and the IPCC guidelines and good practice.

6.2.3 Gaps in implementing NAMA

Up to date, Cambodia has only developed two NAMAs. i) Energy Efficiency NAMA in the Garment Industry in Cambodia in 2015, which aims to improve efficiency in the industrial sector and to build capacity in the field of energy efficiency (MIH, 2015), and ii) Sustainable Charcoal Value-Chains of the Groupe Energies Renouvelables, Environment et Solidarités (GERES). Other sectors such as Transport, energy, waste, etc., should be considered under NAMA. However, due to the following constraints, Cambodia could not implement the above NAMAs or extend to other sectors

- Limited understanding of the NAMAs framework;
- Inadequate national and sectoral policies to develop and implement the NAMA;
- Line ministries, academia, research institutes, and private sectors faced limited; capacity in applying environmentally sound technologies and implementing the NAMA;
- Limited effective coordination mechanism among line ministries and other key stakeholders to develop and implement inter-sectoral NAMAs; and
- NAMA developers face difficulties in accessing financial sources from both domestic and international donors.



6.3 Barriers and gaps related to mitigation actions subjected to the proposed MRV system

Introduction of vehicle inspection centres to enhance the maintenance and inspection of the vehicles and introduction of public buses to promote integrated public transport systems in main cities were selected to develop the Transport sector MRV system of Cambodia. There are specific barriers and gaps related to these mitigation actions, in addition to the common gaps described above. Those gaps and barriers will become clear once MRV is developed (in Deliverable 5). Detailed descriptions of those will be included in the MRV framework.

7 Recommendations

Chapter 6 has identified barriers and gaps in the transport sector and existing MRVs. In order to develop and implement the Transport sector MRV system in a successful manner above gaps and barriers need to be overcome. This chapter provides recommendations to address the identified barriers and gaps.

Establishment of detailed implementation plan with proper legislative backstopping

As described above, lack of required human, financial, technical resources were major barriers in the existing MRV system as well as transport sector projects. Therefore, it is recommended to establish a comprehensive implementation plan for the proposed transport sector MRV system.

The implementation plan needs to include the following information, which will ensure successful means to monitor the progress of the identified mitigation actions.

Definition of goals/objectives - defines the goals to be accomplished, who will be impacted, and how the plan will improve operations and efficiency.

Allocation of resources – Identify the resources needed. Ensures availability of adequate resources, including time, finances, and staffing, to successful implementation. During this stage, resources need to be defined, and gaps need to be identified and addressed.



Planning milestone - Identify tasks, dependencies, and outcomes required

Designation of responsibilities - Assign roles and tasks to staff members

Identification of contingencies - Backup plans allow the team to act quickly when issues arise at any phase

Define success - The first component is the definition of goals. The final is knowing what a successful outcome looks like.

The legislative framework will provide certainty, continuity to the implementation plan, which will ultimately ensure the successful implementation of the project.

Strategy to integrate mitigation measures into national development priorities

As indicated in the above chapter, unavailability of required policies, resources, capacity, etc., are barriers to the successful implementation of mitigation actions and MRVs. Alignment of mitigation actions with national priorities will enhance the possibility of acquiring resources such as financial, political, human resources, etc., for the successful implementation of the project. As such, mitigation actions to develop the MRV system were selected considering political preference, financial feasibility, etc.

Continuity in staffing

Despite the capacity building programmes conducted, Inadequate capacities of the stakeholders to maintain MRV systems were identified as barriers in existing MRV systems. Capacity building programmes are mainly designed for employees directly involved in the climate change/ MRV related project. However, staff members are not continuously working on climate change/ MRV related projects. Continuous changes in staff members in similar projects without proper knowledge transfer programmes dilute the capacity building programme's impact and cause to reduce the institutionalise memory and experience gaining. Therefore, measures should be taken in the proposed MRV system to ensure continuity in staffing to improve the expertise within the country.



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Direct more financial resources to implement project/programmes

Financial resource management must be more systematic. Based on the requirement, finances should be distributed within the complete project cycle to ensure the continuation of the project. As such financial feasibility of the project were considered when selecting the mitigation actions for the MRV system.

Establish and institutionalise data management system and QA/QC procedures.

The quality of all the analyses depends on the data availability and quality of the available data. Unavailability or lack of data and quality assurance procedures were identified as a major barrier to the implementation of existing MRV systems. As such proper data management system must be developed and institutionalised for the proposed transport sector MRV system. This will ensure continuous data availability for the MRV system. Further, QA/QC procedures also need to be included in the proposed MRV system to ensure the quality of the data and the emissions assessment.

Enabling systematic institutional arrangement

Most of the above-mentioned gaps and barriers such as lack of coordination, lack of resources, lack of capacities can be overcome through the establishment of systematic institutional arrangement with defined roles and responsibilities. As such systematic institutional arrangements with adequate legal backstopping need to be established for the proposed Transport sector MRV system.



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Annex I – Roles and responsibilities of the MPWT

Name of the Ministry	Name of the Department	Other	Roles and responsibilities	Source
Ministry of Public Works and Transport			<ul style="list-style-type: none"> • To formulate, execute and control the implementation of the policies and the national strategic plan of the Royal Government of Cambodia to develop the Public Works and Transport Sector. • To formulate master plans on Transport networks such as land, railways, inland waterways, marine and ports or other networks as allowed by the Royal Government. • To manage, control, inspect and research the detailed design. • To evaluate the construction, improvement, fix, and maintenance of roads, bridges, ferry terminals, railways, inland waterways, marine, ports, 	www.mpwt.gov.kh



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			<p>logistics, and others relevant to the Public Works and Transport Sector.</p> <ul style="list-style-type: none">• To manage, control, inspect and evaluate the Transport businesses such as land, inland waterways, marines, logistics and others relevant to the Public Works and Transport Sector.• To manage, evaluate, recognise, and certify all construction businesses which shall serve the Public Works and Transport Sector.• To draft laws, guidelines, and legislation relevant to the Public Works and Transport.• To control the implementation of those legislation for the Public Works and the Transport Sector in the Kingdom of Cambodia.• To manage, control and evaluate the over-loaded Transport.	
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			<ul style="list-style-type: none">• To take firm measures for the protection of roads, bridges and other transport infrastructures.• To study, research and test the physical composition for the road and bridge construction.• To evaluate the road and bridge construction, including railways and ports.• To manage and promulgate technical regulations or technical standards and new technologies.• To ensure the quality of Public Works infrastructure railways construction and port construction.• To cooperate with relevant Ministries and institutions.• To lead and participate in implementing the Royal Government strategic policies for the international cooperation on the Public Works and Transport Sector.	
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			<ul style="list-style-type: none">• To make the Kingdom of Cambodia be integrated into the sub-regional, regional and global frameworks.• To encourage private participation in the development of the Public Works and Transport Sector in the Kingdom of Cambodia.• To develop human resources by inspiring the study, technical research and the new technology transfer for the development of the Public Works and Transport.• To be the technical supervision of the public enterprises such as Sihanoukville Autonomous port, Phnom Penh Autonomous port, Kampuchea Shipping Agency and Broker (KAMSAB), Public Works construction Laboratory and others relevant to the Public Works and Transport Sector.	
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			<ul style="list-style-type: none"> • To conduct the technical inspection and audit of the Public Works and Transport Sector. • To conduct the management inspection and audit of the Public Works and Transport. 	
	Department of Land Transport		<ul style="list-style-type: none"> • To prepare plans, policies, laws and legislation for the management of land Transport, traffic, road traffic safety and cross-border land Transport. • To manage all kinds of vehicles moving on roads such as the registration. • To issue vehicle registration cards and plates, the technical vehicle inspections and the transport businesses • To manage and issue driving licenses for all types of vehicles. • To manage the country's transport businesses, driving schools, the garages of fixing, transforming and assembling vehicles, and all kinds of vehicle shops. 	



			<ul style="list-style-type: none">• To manage the cross-border Transport in the bilateral or multilateral frameworks such as permissions of transport businesses operation, cross-border Transport, the permissions for the companies• To operate the cross-border Transport.• To collect, compile, analyse, and manage the statistic and data on the Transport in the country and the cross-border Transport.• To cooperate with the National Institute of Public Works and Transport.• To develop, research, and train on the scientific techniques and new technologies pertaining to the concepts and visions on the land Transport sector's developments.• To execute the cooperation in the national or international frameworks on the land Transport.	
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			<ul style="list-style-type: none"> • To lead, implement, inspect and monitor the executions of plans, policies, laws and legislation relevant to the land Transport. • To report to the leaders the activities according to the timeline. • To complete other tasks as required by the leaders. 	
	Department of Urban Public Transport		<ul style="list-style-type: none"> • To prepare plans, policies, laws and legislation for the management of the public transport means. • To collect, compile, analyse, and manage the statistic and data on Transport. • To manage the public Transport. • To cooperate with the national and international institutions for the development of the transport sector. • To report to the leaders the activities according to the timeline. • To complete other tasks as required by the leaders. 	



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	General Department of Planning and Policy		The General Department of Planning and Policy is in charge of managing and facilitating planning, information system, policies, monitoring, and evaluation of the Public Works and Transport Sector.	www.mpwt.gov.kh
	General Department of Public Works		The General Department of Public Works is responsible for the management, facilitation, orientation, monitoring and inspection of the affairs relating to building, construction, fixing and maintenance of public works infrastructure, public properties, business investment processes to develop the Public Works and Transport Sector.	www.mpwt.gov.kh
	Department of Railway		<ul style="list-style-type: none"> To develop policies, plans and development strategies and modernise the railway network system in Cambodia pursuant to the Policies of the Royal Government for the economic-social developments with effectiveness and competitiveness. 	www.mpwt.gov.kh



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			<ul style="list-style-type: none">• To prepare the budget package and facilitate the budget allocation for the expenses of the Department of Railways and the expenses of the construction, to fix and maintenance of railway infrastructure.• To collect data on railway infrastructure with the analysis and assessment for the management of railway infrastructure with sustainability and being in line with the development conditions.• To develop the technical documents on railways usage and workmanship as well as other information relating to railway infrastructure.• To manage, inspect, monitor and evaluate the railway infrastructure and Transport.• To manage properties, real estate, equipment inventory, fiscal list, expense	
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			<p>program and equipment supplies of the Railways Department.</p> <ul style="list-style-type: none"> • To manage civil servants, staff and workers, and to prepare positions and specialised positions in the Railways Department by communicating with relevant organisations under the supervision of the Ministry. • To conduct the training-need assessment of the civil servants, staff and workers, and to propose the specialised training as required in the Railways Department. • To cooperate with the National Institute of Public Works and Transport in order to study and research the technical-scientific training, modern technologies relating to the concepts and visions of the railway sector development. • To research and participate in disseminating technology, sciences and new techniques related to railway 	
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			<p>infrastructure, building explanation, equipment quality and new techniques for constructing, repairing, and maintaining railway infrastructure.</p> <ul style="list-style-type: none">• To research, propose projects, compile legal framework and other legal documents related to railway, and participate in consulting and developing other infrastructures related to the railway sector.• To study, prepare, compile standards and guidelines to support the inspection and maintenance of the order, security, railway traffic, and railway operation as well as standards and guidelines related to the safety in railway transport, both the passenger and goods transport.• To cooperate and facilitate work in the railway sector under the framework of bilateral, trilateral, sub-regional,	
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			<p>regional, international and international organisational cooperation.</p> <ul style="list-style-type: none">• To participate in solving social-economic impacts of railway infrastructure development projects.• To report to the leaders the activities according to the timeline.• To complete other tasks as assigned by the leaders.	
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