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Initiative for Climate Action Transparency ReCATH-ECCAS Gap Analysis Report

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Introduction

The Regional Climate Action Transparency Hub (ReCATH) for the Economic Community of Central African States (ECCAS) will provide a focal point for climate change related information and expertise for the region. The hub will develop a team of regional experts that will support sustainable climate change related data gathering, reporting and stakeholder engagement (Monitoring Reporting and Verification (MRV)/Transparency) "systems". At a practical level the hub will provide expert resources, training, capacity building and technical support to ECCAS countries so that they can build teams to provide up-to-date climate change information to a broad range of national and international decision makers and attract investment for action.

This 3-year programme will help to implement a collaborative/cooperative approach that brings together the 11 ECCAS countries and different technical partner institutions and actors supporting climate mitigation and adaptation evidence gathering and reporting (MRV/Transparency) efforts in the region. This detailed assessment of the transparency needs, gaps and priorities of the different countries will be used to define the specific activities that will be undertaken by the programme.

A pre-launch meeting for the ReCATH-ECCAS project was held during COP26 in Glasgow, hosted by ECCAS. This was well attended by delegates from the ECCAS countries and gained considerable support for the programme. The event gave the opportunity for some initial contact between the project team and ECCAS member countries and was followed by some initial stakeholder engagement with the UNFCCC national focal points in the ECCAS member countries.

The official Launch Event, hosted by ECCAS, took place 24th–25th March 2022. The formal ceremony was opened by Dr. Henning Wuester, Director of the Initiative for Climate Action Transparency (ICAT), who welcomed Her Excellency Mrs. Eve BAZAIBA MASUDI through her representative, His Excellency Ambassador Gilberto Da Piedade Verissimo, President of the ECCAS Commission, and their Excellencies Ministers of ECCAS Countries to the project. The countries and partners recalled the context in which this ceremony was held, including the commitments made by the countries of the Central Africa region in the fight against climate change, and stressed the importance of financial resources, and strong policies and actions for countries to achieve their climate action and sustainable development goals. To this end, they praised the initiative and expressed their willingness to engage, participate and benefit from the opportunities that the Regional Hub will offer to the region. The second day focussed on the technical approach and content of the project. The agenda included a series of short presentations by each ECCAS member country during which they had the opportunity to describe their current position with regards to transparency, their interest and commitment to the ReCATH-ECCAS project and the support they would like the project to provide. Overall, there was a good level of discussion that demonstrated a high level of interest for the ReCATH-ECCAS hub. Dr Tabuna, Commissioner for the Environment, Natural Resources, Agriculture and Rural Development Department (DERNADR) at ECCAS, confirmed that the establishment of the hub at ECCAS was underway and that it was hoped a Head of Hub would be appointed shortly.

Gap analysis methodology

The first task in the ReCATH-ECCAS project was to review the current status of transparency activities in each of the ECCAS countries and assess their needs and gaps. Engagement with country and regional stakeholders will allow the ReCATH-ECCAS work programme to be tailored more

specifically to the priority needs and gaps of the region. The output from this analysis task will be used to develop a tailored work plan. The plan will focus on common needs and gaps as well as identifying examples of good practice in one or more countries that can be shared with others.

To structure the information gathered during this task and to allow the detailed analysis of needs and gaps, a matrix of thematic areas and transparency elements was identified (Figure 1). These are described in the following sections. Together they cover all the different areas and activities required for a well-functioning Monitoring Reporting and Verification (MRV) system.



It is recognised that in any country there

can be a lot of different stakeholders involved in the climate change transparency activities and that individual stakeholders do not necessarily work across all elements of climate action and may work just in one thematic area. Hence, the needs and gap analysis included discussion with multiple stakeholders.

Thematic areas

The four thematic areas covered by the MRV system are:

- Greenhouse gas (GHG) emissions and removals, including GHG inventories
- Climate scenarios and risk and vulnerability, including GHG projections and information on adaptation and mitigation
- Climate action and wider impacts, including tracking of climate action as well as the positive and negative additional impacts of action
- Support and climate finance, including tracking of funders and supporters and allocation of these funds to projects.

By targeting information gathering and stakeholder engagement by thematic area, the output will enable the development of a work plan that includes tailored training activities that meet the identified priorities in each area.

Transparency elements

The assessment of each thematic area considered five separate transparency elements; governance, expertise, data flows, systems and tools and stakeholder engagement. A more detailed description of each element is provided in Table 1. Structuring the work in this way allows a clear understanding of the state of development and enables the identification of specific training and capacity building needs.

Table 1 - Transparency elements used for analysis during this project

Transparency element	Description	Key questions
Governance	In most countries one ministry is identified as the UNFCCC focal point, but it then depends on data and expert input from other ministries to undertake its responsibilities within UNFCCC reporting. Similarly, regular reporting between the ministries is required for the tracking of progress with the implementation of the National Determined Contribution (NDC).	 What is the governance framework in place? Does the framework guarantee sufficient resources (manpower/funding) are available to collect data, analyse it, produce reports and inform stakeholders?
Expertise	Governance frameworks can include climate change acts/laws, agreements, memorandum of understanding between ministries that facilitate the exchange of data/information.	 What national technical expertise is available to collect and analyse data and provide timely insights to and for review of reports and decision maker briefings? Is sufficient expertise available and stable long term permanent teams? What organisations are they from? How many experts are available?
Data flows	In some countries the current IPCC reporting has been done on a 'project' basis, funded by one of the international funding organisations e.g. UNDP, UNEP and it is not really integrated within national government activities. Hence, it is very important to understand the level of national technical expertise available. Several countries in the study are already receiving technical support from other sources of funding and it is important to identify the most appropriate areas for this ICAT project to focus.	 Does the country have sufficiently detailed data available in a usable format and provided in time for the compilation of the GHG inventory and the analysis of NDC implementation? Is there key data missing or not provided in a timely manner? Is data quality good or poor (incomplete, inaccurate)?
Systems and tools	A number of tools are available and routinely used for the compilation of GHG inventories, the assessment of different mitigation and adaptation actions, the modelling of future scenarios appraisal and for monitoring, reporting and verification (MRV). During the initial desk review it has become apparent that some of these tools are already being used by one or more countries e.g. 2006 IPCC Guidelines for GHG Inventory compilation, LEAP model for scenario analysis, REDD+ tools, ICAT tools. It is important to understand how these tools are used and if they are integrated with national monitoring and reporting systems	 What systems and tools do you need to be able to gather and analyse data and produce timely reports and engage with stakeholders? What database and management/coordination systems are needed? What QAQC and verification procedures are needed to assure data quality to users? Are templates and models needed?

Stakeholder engagement and communication	The availability of good, accurate data in a timely manner is key to efficient and effective transparency reporting. This is usually facilitated by having appropriate agreements between the different stakeholders in place. These agreements need to have flexibility to encompass continuous improvements in methodology and datasets used. However, there may be gaps in the availability of required data and a lack of country-specific information.	•	Who are the key stakeholders (data providers, data compilers, decision makers who will use the climate change data)?Do stakeholders take time to provide data or engage with and use outputs?How does this stakeholder engagement take place?Planned public awareness and education programmes?
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Sources of information

Information for the gap and needs assessment was collected from three main sources. An initial desk-based research study, stakeholder engagement with the UNFCCC National Focal Points (NFPs) and other appropriate stakeholders and the presentations made by individual ECCAS countries at the project Launch Event.

Desk-based research

Initially, a desk study reviewed the published UNFCCC reports and other available project reports. This provided an initial perspective on the current status, needs and gaps for each country, and helped to inform a more detailed technical stakeholder engagement.

The reports were reviewed using a template to ensure consistency of analysis across countries, the research looked specifically at the following reports:

- Nationally Determined Contributions (NDCs)
- National Communications (NCs)
- International Consultation and Analysis reports (ICAs)
- REDD+ National Strategies
- Relevant project reports e.g. previous ICAT reports

For each report, a series of questions was devised, aimed at extracting relevant information on current levels of reporting, availability, and level of detail of relevant data, proposed and implemented climate actions, and tracking of climate actions. The full list of questions can be found in Annex 1.

Stakeholder engagement

Following the pre-launch meeting at COP26, the project team began stakeholder engagement and approached the UNFCCC National Focal Points (NFPs) for each ECCAS country. A series of discussions took place and NFPs were requested to complete a gap and needs assessment questionnaire. This was designed in line with the transparency matrix described above and contains a series of tailored questions, aiming to identify existing transparency capacity and the needs and gaps. A copy of the questionnaire is provided in Annex 2.

Table 2 provides a summary of these stakeholder engagement activities. It shows the number of letters sent to each country, the number of responses received, the organisation responding and the form in which the response was given.

Contact details and supporting notes for all stakeholders are being stored in a central stakeholder database. This stakeholder database is constantly evolving as new stakeholders are identified and added. The current version (as of 13th April 2022) has been downloaded as an Excel file. See Annex 3 for more details.

Table 2 - Summary of stakeholder engagement activities

Country	Number of letters sent	Number of responses received	Organisation/ role of responder(s)	Type of response received		
Angola	4	0				
Burundi	8	1 Ministry of Finance, Budget, and Economic Planning. Head of Department of Development Programs, Environment and Climate Change sector		Google form response to questionnaire		
Cameroon	16	2	Environment and climate change consultant	Excel response to questionnaire		
			COMIFAC	Provided a list of stakeholders		
Central African Republic	6	0				
Chad	7	1	Environmental education and fight against climate change	Happy to arrange a call (phone or virtual)		
Democratic Republic of	6	2	Ministry of Environment and Rural Development (2)	Google form response to questionnaire		
Congo				Provided a list of stakeholders		
Equatorial Guinea	14	14	14	4 2	Ministry of Agriculture	Google form response to questionnaire
			INCOMA	Google form response to questionnaire		
			UNFCCC focal point	Provided a list of stakeholders		
Gabon	4	1	AGANOR	Google form response to questionnaire		
Republic of Congo	8	1	Climate change project coordinator	Google form response to questionnaire		
			UNFCCC focal point	Happy to arrange a call (phone or virtual)		
			Ministry of Environment and Rural Development	Provided a list of stakeholders		
Rwanda	5	0				
São Tomé and Príncipe	8	0		Presentation slides sent in advance of Launch Event.		
Total	86	10				

Launch Event March 2022

The formal ReCATH-ECCAS project Launch Event was held in March 2022. This was another useful source of information for the gap and needs assessment. It included a series of presentations by ECCAS member countries. In preparation for the event the team contacted all NFPs and requested that they prepared a summary of the current status of transparency activities in their country, their needs and gaps and areas where they would like support from the project. A possible slide template for their use was provided. Three slides were suggested:

Slide 1: Current situation and achievements to date

- Governance: What laws, memorandum of understanding and agreements are in place to support climate action transparency?
- Expertise: What national technical expertise is available? Key organisations?
- Data flows: Current availability and quality of data?
- Systems and tools: What systems and tools are in place for monitoring, reporting and verifying data on climate action?
- Stakeholder engagement: Do key stakeholders, including the public, engage with the data?
- What are your most significant achievements to date?

Slide 2: Priorities for the future

- Do you have other ongoing or planned projects that are relevant to climate action transparency?
- What are your most important needs?
- What are your current priorities for future projects and training?
- What are your long-term priorities and do these differ from your short-term, immediate priorities?

Slide 3: ICAT ReCATH Project

- How would you like this project to help you address your needs and priorities?
- What training sessions or themes would you like to be included?
- Any other relevant information?

At the Launch Event all countries (with the exception of Angola) gave a short presentation, several used this template as a basis for their presentation whilst other used their own formats or provided aural updates. Overall, a good set of up-to-date information was collected and has been incorporated within this gap and needs assessment. All countries, except Angola and Rwanda, committed to participation in the Re-CATH-ECCAS project.

Country	Representative	Organisation/ role	Presentation notes
Angola	Giza Gaspar-Martins,	Director for Environment and Climate Action,	Met with ICAT at Pre-Launch at COP26.
	Ernesto Escórcio	Ministry of Culture, Tourism and Environment	There were no representatives from Angola at Launch Event.
Burundi	Astère Nindamutsa	Representative of the UNFCCC Focal Point	Informative presentation - copy provided.
Cameroon	Témothée Kagonbé	UNFCCC National Focal Point, Deputy Director Ecological and Climate Monitoring, Ministry of Environment, Nature Protection and Sustainable Development	Provided information about the country's MRV framework for data collection and processing and challenges faced.

Table 3 - Summary of Launch Event presentations

Central African Republic	Igor Gildas Tolka Kogadou	UNFCCC National Focal Point	Provided information about the country's MRV system and challenges faced to implement it.
Chad	Mr. Mahamat Abdoulaye Issa	UNFCCC National Focal Point, Ministry of the Environment, Fisheries and Sustainable Development	Presentation referring to previous ICAT work and the support for the updated NDC and for the implementation of MRV system
Democratic Republic of Congo	Aimé Mbuyi Kalombo	UNFCCC National Focal Point, Head of Climate Change Division, Ministry of Environment, Conservation of Nature and Tourism	Informative presentation - copy provided
Equatorial Guinea	Mr. Ndong Nzang José Nsue	UNFCCC National Focal Point, Ministerio de Agricultura, Ganaderia, Bosques y Medio Ambiente	Presented NDC targets, noted his country was fully engaged and want to join the Hub.
Gabon	Davy Onomori	Advisor to the President of the Republic, Deputy Permanent Secretary of the National Climate Council	Briefly detailed the existing systems for climate change MRV. Further details in reports available from government website.
Republic of Congo	Ms Florantine Mapeine Onotiang	UNFCCC National Focal Point, Ministry of Environment, Sustainable Development and the Congo Basin	Committed to the project and promised to send information about the country's needs.
Rwanda	Mathieu Mbati		Happy to contribute to the project but we need to contact not the UNFCCC NFP.
São Tomé and Príncipe	Jose Luiz Onofre	UNFCCC Focal point	Informative presentation - copy provided in advance of meeting together with ongoing project reports.

Results of gap and needs analysis

The results of the initial desk-based research, the stakeholder consultation and the additional information provided by the countries during their Launch Event presentations, have been collated and assessed to produce a gap and needs assessment for each ECCAS member country. These are presented in the following sections.

The results are summarised and presented using the matrix of transparency elements for each thematic area. Each cell in the matrix is shaded red, orange, or green, based on the level of evidence/or lack of evidence of transparency activities found in each country. Red identifies areas where evidence is lacking, or there are serious challenges and needs, orange where there is some evidence of potential activity or expertise, and green highlights examples of good practice including established systems and expertise.

Angola

Current status

Angola's Nationally Determined Contribution (NDC) sets out an unconditional contribution of a 14% reduction relative to the Business-As-Usual (BAU) baseline (2015) by 2025 and a 21% reduction by 2030. This is based on domestically supported and implemented mitigation measures and policies. It also defines a conditional target of an additional reduction of 10% relative to BAU in 2025 and 15% in 2030 which is based on the provision of international support and funding. The NDC provides detail on measures in place to meet these targets, set out by sector and including information on potential emissions savings, the contribution of each action to the target, and potential costs. For adaptation measures, only costs are quantified.

Angola's NDC states that from 2021 onwards, the country plans to provide NCs every four years, BURs every two years and an NDC update every five years, in line with UNFCCC timelines. Angola doesn't currently have a domestic system in place to track implementation of the NDC and the information available is often dispersed, incomplete and difficult to collect. However, a monitoring, reporting and verification (MRV) system is expected to be in place in 2025 and this will form part of the NDC tracking process. The MRV system will include four sub-systems; namely, the greenhouse gas (GHG) inventory, mitigation action, adaptation action and financial/technical/technological components. A meeting between ICAT and Angolan representatives at COP26 established that Angola has recently implemented an MRV system which includes sub-systems for adaptation and climate finance.

Angola has published two National Communications (NCs), the first was submitted in 2012 and the second in November 2021. The inventory is complete for the years 2005 to 2018, for CO_2 , CH_4 , and N_2O . Estimates are available for the energy, agriculture, waste, IPPU, and LULUCF sectors. Some sub-sector estimates are provided. The updated inventory provided in the second National Communication uses 2006 IPCC Guidelines.

UNFCCC report	Publication date
NDC	Submitted in November 2020, updated May 2021
NC	NC1 February 2012, NC2 November 2021
BUR	Not submitted

 Table 4 - Overview of Angola's report publication dates and information gained on any planned updates

Needs, gaps, and priorities

In Angola's NDC (updated version May 2022), it is noted that the country will require finance, capacity building, technology transfer, partnerships and national policy processes and institutional arrangements, to fully implement the mitigation and adaptation contributions contained in this NDC. More specifically, it is recognised that for the efficient implementation of the planned MRV system there will be training, quality assurance and quality control, and legal and institutional framework requirements. It identifies:

• Capacity Development Plan to identify the training needs – to include training for focal points from different ministries, relevant entities in data collection, as well as training technicians from provincial governments, so that they can in turn, train other actors.

- A quality assurance and control system for the GHG inventory, that meets the good practice requirements of UNFCCC.
- Legal and institutional framework needs to be defined to formalize the implementation of the MRV system, as well as to define responsibilities and deadlines that will constitute the annual cycles of the MRV system in Angola.

In the NC2, it is recognised that there are some issues regarding the quality of the GHG inventory. For example, IPCC emission factors are used that in some cases are not compatible with the reality of Angola. It is noted that emissions in the LULUCF, could have been significantly different if Angolan emission factors had been considered. Further improvement of the inventory needs to include the use of more national activity data.

The National Strategy for Climate Change identifies capacity needs to achieve the targets for mitigation and adaptation measures. Specific national needs include:

- Better knowledge on new and more efficient technologies among the different sectors and public and private entities
- Increase in qualified human resources for the development and implementation of mitigation and adaptation actions
- Build national capacity for the development of low carbon technologies
- Expand knowledge and access to financing mechanisms by public and private entities
- Create a robust national data collection system.

It is noted in the NC2 that national consultants developed the various components, which will allow them to prepare future national communications. International consultants were involved in the training of national staff to apply the various technical methodologies. In the NC2 it is reported that the GACMO (Greenhouse Gas Abatement Cost) and LEAP (Low Emissions Analysis Platform) models were employed. However, as noted above, further capacity building of technical teams is still required.

Based on the findings described above, Table 5 presents an initial gap analysis for Angola. However, it is recognised that it is largely based on published reports and there has been very limited stakeholder engagement.

Table 5 - Gap analysis summary for Angola

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Burundi

Current status

The Nationally Determined Contribution (NDC) defines a conditional and unconditional target. The unconditional target is a 3% reduction in greenhouse gas (GHG) emissions compared to a Business-As-Usual (BAU) scenario by 2030 whilst the conditional contribution is a reduction of GHG emissions by 20% beginning in 2016, compared to BAU for 2030. Other unconditional targets include re-afforestation of 4,000 hectares per year and creating three new hydroelectric power plants, increasing total electrification rate to 35%. Conditional targets set are for the re-afforestation of 8,000 hectares per year, the replacement of all traditional charcoal kilns and traditional home ovens by 2030 and the gradual replacement of all mineral fertilizers with organic fertilizers in the agricultural sector. The NDC was updated in 2020 and raised the country's ambition by taking into account more sectors (transport and waste). The National Development Plan 2018-2027 aligns with the climate objectives.

The country sets out plans to establish functional monitoring and evaluation mechanisms for climate change risk and adaptation in its Strategy & Action Plan on Climate Change. It also plans to design and set up a national REDD+ monitoring, reporting and verification (MRV) mechanism and to reinforce climate change impact tracking systems to monitor progress with NDC implementation. The Burundi Office for the Protection of the Environment (OBPE), deputy UNFCCC Focal Point, was established in 2014. Its responsibilities include monitoring the implementation of the national forestry policy and coordination of all climate change interventions and monitoring of policies, strategies, and action plan by stakeholders.

Three National Communications (NCs) have been submitted in the years 2001, 2010 and 2019.

Emission estimates are reported for Energy, AFOLU, IPPU and Waste sectors and for CO_2 , CH_4 and N_2O . The GHG inventory covers the years 2005, 2010 and 2015 and is compiled using IPCC 2006 Guidelines and Inventory Software. Uncertainty assessment, key category analysis and quality control procedures have been undertaken and are set out in NC3.

Burundi used the LEAP model to assess two scenarios (BAU and Low Carbon). A series of mitigation programmes and measures are identified and prioritised but are not costed. Sectoral adaptation actions are discussed with costing information.

Table 6 - Overview of Burundi's report publication dates and information gained on any planned updates

UNFCCC report	Publication date
NDC	Submitted in January 2018, updated October 2021
NC	NC1 November 2001
	NC2 June 2010
	NC3 October 2019
	NC4 In preparation
BUR	Prepared but not yet submitted

Needs, gaps, and priorities

The Updated NDC identified the following needs and gaps:

- Limited availability of quality data
- Weak technical knowledge for developing GHG projections and the analysis of mitigation measures
- Difficulty in training due to the lack of technical training institutions specialising in climate change.

Priorities identified were:

- Strengthening sectoral institutions for the compilation of reliable data
- Supporting research and development in the field of climate change.

During the stakeholder engagement, a questionnaire was completed by the Head of the Department of Development Programmes and Environment and Climate Change Sector. It was noted that a MRV system has been developed but not yet implemented. The national teams compiling the GHG inventory are able to compile a Tier 1 inventory but need help for higher tiers and country specific data are scarce or incomplete. No systems or tools are used for the inventory compilation and data is provided to stakeholders on an ad hoc basis. On the compilation of climate finance data it was noted some project level data exists for main sectors but national experts need support to identify and assess sources of climate finance. This finance data is used regularly by stakeholders.

At the project Launch Event Burundi identified that their focus in recent years has been on being more transparent in their international communications. It was reiterated that an MRV system is in place but Burundi needs financial and technical support to meet the institutional needs at both the national and regional levels that are necessary for the implementation of priority climate actions.

A summary of the gap analysis based on the recently updated NDC, stakeholder engagement and the country presentation at the Launch Event is presented in Table 7.

Table 7 - Gap analysis summary for Burundi

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Cameroon

Current status

Cameroon aims to achieve an unconditional 12% reduction in greenhouse gas (GHG) emissions compared to a baseline scenario in 2030, and a further 23% reduction conditional on international support (funding, capacity building and technology transfer) for the implementation of conditional mitigation actions. The baseline and business as usual (BAU) scenario represent 71% increase in emissions between 2010 and 2030, whilst the Nationally Determined Contribution (NDC) scenario represents a 66% increase over the same time period. The target covers CO_2 , CH_4 and N_2O and emissions for the baseline and NDC scenarios are provided by sector.

Cameroon outlines actions for evaluation of the NDC including establishing indicators on emissions, carbon intensity of Gross Domestic Product (GDP), installed renewable energy capacity, adaptation, and vulnerability indicators (to be specified), agricultural land use, climate national budget tracking and climate expenditure. The National Observatory on Climate Change (ONACC), created in 2009, is responsible for planning, coordinating, implementing, monitoring, and evaluating the NDC. The Department of Conservation and Management of Natural Resources oversees projects relating to climate change. The latest version of the NDC (2021) includes an institutional structure for the implementation of the NDC including the identification of roles and responsibilities of the different organisations involved.

Two National Communications (NCs) have been submitted, in 2005 and 2016. The inventory only includes estimates for the year 2000. Estimates for CO_2 , CH_4 , N_2O , NO_x , CO, NMVOC, SO_x are included by sector (Energy, Industrial Processes, Agriculture, LULUCF and Waste) and have been compiled used IPCC 1996 Guidelines. Key category analysis and quality control procedures are not reported.

Individual mitigation actions, including impact on GHG emissions and a cost-benefit analysis are provided. Actions for implementation have been classed as either unconditional or conditional and have been selected based on their alignment to the national development plan and sustainable development goals (SDGs). For adaptation, four strategic axes are identified. The updated NDC outlines adaptation actions with projected costs for each sector and aligns them with the corresponding sustainable development goals (SDGs).

A conceptual approach for monitoring, reporting and verification (MRV) for REDD+ has been proposed however the operational dimension of this system is yet to be defined. Funding for activities related to REDD+ MRV have been received from multiple sources including US Forest Services, Government of Japan, and Forest Carbon Partnership Facility. Institutional roles for a MRV framework for tracking NDC implementation are mapped out in Cameroon's updated NDC. At the Launch Event it was noted that a MRV system is now being implemented – see below. It is understood that a GEF CBIT project on capacity building for Cameroon on transparency/MRV has recently been approved.

Whilst the country does not currently have any legislation surrounding climate finance and support they have set up a finance group to facilitate the mobilisation of resources.

The majority of previous work for UNFCCC report preparation has been undertaken by international consultants meaning that historical data is difficult to obtain, however a web platform has been set up for data collection in recent years and data collection sheets have been developed for all relevant sectors.

UNFCCC report	Publication date
NDC	Submitted in July 2017, updated October 2021
NC	NC1 January 2005
	NC2 March 2016
BUR	Not submitted

Table 8 - Overview of Cameroon's report publication dates and information gained on any planned updates

Needs, gaps, and priorities

The Second NC highlighted particular difficulties in collecting data for preparation of the report. Other constraints identified included:

- Lack of data
- Limited technical expertise
- Limited national expertise capacity due to lack of appropriate equipment and planning

Capacity building needs relating to education, training and public awareness raising were detailed together with the need for technology transfer.

In the NC2 actions were identified to operationalise the NDC by improving data collection systems, improving the inventory, refining cost benefit analysis of actions, improving in-country knowledge and evaluating future mitigation technology options.

Responses to the stakeholder engagement questionnaire indicated that national expertise has been strengthened in recent years, however some additional training and capacity building is still required. National experts can compile Tier 1 GHG inventories and some detailed country specific data is available. Whilst for GHG projections country specific data is scarce and incomplete and although some tools and systems are available there is a lack of expertise to use them. National experts currently carry out vulnerability assessments but capacity building of personnel in this area is particularly important for the sectors most vulnerable to the impacts of climate change. In the climate finance area, national teams have a good understanding. Some project level financial data is available but data collection is slow and inefficient and there is a lack of experience using the tools and systems available. Stakeholder engagement appears to be rather ad hoc.

During the project Launch Event, Témothée Kagonbé, the National Focal Point explained that an MRV framework based on the institutional structure provided in the updated NDC has been developed. It covers data gathering and processing and the current focus is on the preparation of the national databases. He noted that Cameroon is committed to establishing a durable system, and in particular improving the sustainability of the national system for data collection. Hence, current priorities are to strengthen this MRV system and improve data collection processes. Gaps have been identified and work to fill these is ongoing. Some of the data required is from the private sector, which is presenting issues with regards to commercial sensitivity. Mr Kagonbé noted that much of the earlier climate change work has been undertaken by international consultants but there are now some national experts both in institutions and national consultants.

A summary of the gap analysis based largely on the stakeholder engagement and the country presentation at the Launch Event is presented in Table 9. In transparency, the main priority is the implementation of the newly developed MRV system with particular emphasis on establishing a robust and sustainable system for data collection. Further capacity building of national experts is

required in most areas.

Table 9 - Gap analysis summary for Cameroon

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					
Wider impacts of clima	te action				
Consideration of links between climate action and other development priorities					

Central African Republic

Current status

The Nationally Determined Contribution (NDC) sets out a target to reduce emissions by 24% compared to the Business-As-Usual (BAU) reference level (i.e. 4,284.4 kt CO_2 eq of avoided emissions) at the 2030 horizon and 25% (i.e. 33,076.1 kt CO_2 eq) at the 2050 horizon, within the framework of conditional implementation.

A measurement, reporting and verification mechanism is proposed in the updated NDC and covers adaptation, mitigation, and finance as well as integrating SDGs. The plan for implementation of the NDC involves adjusting national strategies to include climate change, improving legislative framework, capacity building, technology transfer, and establishment of the monitoring, reporting and verification (MRV) system.

Mitigation measures at individual project level are provided. These are categorised as conditional or unconditional and estimates for quantity of emissions avoided per year are provided for each project. Adaptation actions are also outlined, alongside quantified targets.

Two National Communications (NCs) have been submitted in the years 2003 and 2015. 2010 is the latest inventory year provided. Yearly emissions estimates are provided by sector (energy industries, manufacturing and construction, commercial/institutional, residential, agriculture/forestry/fishing, mining, and hydrocarbon exploitation) for the period 2003-2010 and include CO_2 emissions and "Other GHGs". "Other GHGs" includes an aggregated emission estimate for CH_4 , N_2O , NO_x , CO and NMVOC. Key category analysis and quality control procedures have not been undertaken in NC2.

Central African Republic has prepared a REDD+ National Strategy and has received financial and technical support related to REDD+ MRV.

Table 10 - Overview of Central African Republic's report publication dates and information gained on any planned updates

UNFCCC report	Publication date
NDC	Submitted in October 2016, updated January 2022
NC	NC1 June 2003
	NC2 February 2015
BUR	Not submitted

Needs, gaps, and priorities

During stakeholder engagement, a questionnaire was completed by a representative from the central focal point. It noted that a national MRV system is in place and integrated with the National Development Plans. He noted that UNFCCC reporting documents are produced by national experts. The response identified a good level of technical expertise held by national experts involved in the development of GHG projections and tracking climate finance, with a lot of good and detailed country specific data available, likewise tools and systems are used. However, national experts compiling the GHG inventory need significant support to develop a Tier 1 inventory, some country specific data for the main sectors is available and they have access to some tools and models but lack the experience to use them. Overall, he felt the processes for the preparation of the inventory, projections and compiling climate finance information were inefficient. Stakeholder engagement

and the provision of climate change information was reported as good.

During the project Launch Event, the country's UNFCCC Focal Point, Igor Gildas Tolka Kogadou, noted that although the country does currently have an MRV framework, it faces challenges when implementing it. Mr Kogadou identified the need to build capacity at a sectoral level and improved data collection processes in the country to better inform the current MRV mechanism.

More broadly the NDC notes major financing needs to allow the implementation of the mitigation and adaptation actions and how the majority will need to be internationally sourced.

The summary gap analysis for Central African Republic is presented in Table 11 and has been largely based on the responses provided in the questionnaire and the country's Launch Event presentation.

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Table 11 - Gap analysis summary for Central African Republic

Chad

Current status

Unconditional and conditional targets have been defined in the revised Nationally Determined Contribution (NDC) as a minimum of 0.5% and 19.3% reduction relative to the reference scenario by 2030 respectively. Indicators have not yet been developed to track implementation.

The initial NDC (2017) included an implementation plan with activities including establishing a legal framework for implementing the NDC, a launch workshop and communications strategy, setting up a monitoring, reporting and verification (MRV) system and a call for funding. The status of activities scheduled for completion by 2020 is unknown but appear to be outstanding. An updated NDC was submitted in October 2021 and was prepared with support from ICAT – see below. This updated NDC considers "Measures generating co-benefits" and "contributions to the Rio Conventions and SDGs" reflecting synergies between policies.

Two National Communications (NCs) have been submitted, one in 2001 and one in 2013. The inventory presented was for the year 2000. Estimates of total GHGs by sector have been provided for 1993 and 1998-2003, however, estimates split by sector (energy, agriculture, LULUCF and waste) and by gas (CO₂, CH₄, N₂O, SO₂, NO_x, NMVOC and CO) were only available for 2000. IPCC 1996 Guidelines were used to calculate the inventory. The National Communication does provide information on key categories and quality control activities that had been undertaken for the report. The revised NDC provides an updated inventory covering 2010 to 2018 and using 2006 IPCC Guidelines to estimate emission of CO₂, CH₄, and N₂O.

Sets of mitigation and adaptation actions were identified in the NC2 and have subsequently been updated in the NDC and the recent updated NDC.

An ICAT Project was launched October 2020. This capacity building project provided support to develop a National MRV System in parallel with the update of its NDC and set up a system for monitoring the NDC using indicators to monitor mitigation objectives. Activities included a review of the GHG Inventory. It was found this had not been updated since the submission of the initial NDC but it was updated as part of the NDC update. The LEAP model was used for GHG projections and the GACMO tool was used to identify NDC mitigation measures and has been set up to monitor actions. The international experts provided training capacity building to the national experts in the use of these tools.

UNFCCC report	Publication date
NDC	Submitted in January 2017, updated in October 2021
NC	NC1 October 2001
	NC2 June 2013
BUR	Not submitted

Table 12	- Overview	of Chad's	report publication	dates and	information	gained on	any planned	updates
		-,				0		

Needs, gaps, and priorities

The NDC highlights support required for the establishment of the National MRV Agency involving the various sectors that will enable the establishment of a national transparency system covering the regular updating of GHG inventories, the definition and reporting of indicators for monitoring mitigation actions and the support needed and received. It also highlights the need for

international funding, technology transfer and reinforcement of capacity to achieve conditional targets. The NDC notes the requirement for capacity building in the field of national statistics and the definition of mitigation actions at the sectoral level. Specific activities to support the energy, agriculture, LUCF and waste sectors were identified. In addition, the updated NDC identified capacity building of stakeholders in the implementation of carbon market mechanisms provided for in Article 6 of the Paris Agreement as well as technology transfers.

More specifically, the recent ICAT project found that essential data required for the compilation of the GHG inventory was available but scattered and data archiving was not systematic. It was noted sectoral information systems require technical and material capacity building to set up robust and sustainable databases.

During the project Launch Event the National Focal Point representative identified that the previous ICAT project had created a national system, which will be operationalised through the MRV Agency. While data collection was relatively smoothly done by consultants appointed by ICAT, a new team within the agency, working with those developing national statistics and more local data has been established. More capacity is still required within the agency especially for those in leadership positions and compilers and better coordination is required for data collection. Additionally, it was noted that financial and material capacity also needed strengthening.

A summary of the gap analysis for Chad is provided in Table 13 based on the insight gained through the previous ICAT work and the presentation at the Launch Event.

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					
Wider impacts of clima	te action				
Consideration of links between climate action and other development priorities					

Table 13 - Gap analysis summary for Chad

Democratic Republic of Congo

Current status

Through its revised NDC, the Democratic Republic of Congo is committed a conditional reduction target of 19% and an unconditional reduction target of 2% by 2030, compared to the status quo emissions scenario.

For adaptation, targets are largely qualitative (adapted from National Action Program for Adaptation to Climate Change (PANA, 2006)), and include securing the livelihoods and lifestyles of communities rural / urban, rational management of forest resources, and protection and preservation of vulnerable ecosystems in coastal areas.

Indicators for adaptation actions have been developed under one adaptation project (PANA-ASA), with more indicators to be developed under the PANA-AFE and PANA Coastal zone projects. There is no confirmation that tracking indicators for mitigation or adaptation are being actively monitored.

The revised NDC provides mitigation actions by sector along with estimated costs and sector level potential emissions reduction estimates. Detailed information on risks and vulnerabilities is provided, together with proposed adaptation measures to address specific climatic risks. 52 priority adaptation actions are listed in the revised NDC along with estimated costs for each action. The country is currently preparing its fourth NC and will shortly submit its first BUR.

Three National Communications (NCs) have been submitted in the years 2000, 2009 and 2015. A time series for emissions in the years 2000-2010 were reported, including sector level emissions, disaggregated by gas (CO_2 , CH_4 , N_2O , CO, NMVOC), for each year. Some sub-sector emissions are also included. The inventory was compiled using 1996 IPCC Guidelines with Tier 1 methodologies applied. There was no key category analysis but some estimates for uncertainties for emission factors in the IPPU sector. The NC4 is currently being finalised. The first BUR has been prepared but not yet published by UNFCCC.

The Democratic Republic of Congo has prepared a REDD+ National Strategy and have partially developed and implemented a national REDD+ registry. DRC has produced its first Forest Reference Emissions (NERF) including a forest data information website. The country has received financial and technical support related to REDD+ MRV.

A detailed presentation by Aimé Mbuyi Kalombo, the NFP, at the Launch Event, noted that DRC has a body specifically responsible for coordinating and monitoring the implementation of climate change issues and multisectoral and interdisciplinary groups of national experts are dedicated to the various issues of climate change. About ten national experts are trained in GHG inventory. The DRC has set up a technical consultation platform for the various stakeholders involved in forest issues.

A good set of national datasets are available including annual reports of the Central Bank of Congo (all production and consumption statistics), yearbooks of animal and plant production statistics, energy balance data, yearbooks of national statistics, and forest mapping, forest cover monitoring and forest inventory data.

It was noted that DRC has implemented:

- a multi-stakeholder task force for monitoring GHG inventories;
- an ad hoc Working Group of Experts on Adaptation;
- Establishment of the National Forest Monitoring System (NFMS);
- A community MRV pilot system for monitoring initiatives and projects

A response to the questionnaire sent out to representatives in the country suggested that the national MRV system has been set up and integrated into the Democratic Republic of Congo's national development plans. This system will be managed by the country's Ministry of Environment and Sustainable Development. Information on the framework for the MRV system can be found in the revised NDC.

Table 14 - Overview of Democratic Republic of Congo's report publication dates and information gained on any planned updates

UNFCCC report	Publication date
NDC	Submitted in December 2017, updated December 2021
NC	NC1 November 2000
	NC2 November 2009
	NC3 April 2015
BUR	Prepared but not yet available on UNFCCC register.

Needs, gaps, and priorities

The presentation at the Launch Event identified that a lack of in-country technical experts resulted in a heavy reliance on external consultants for UNFCCC reporting processes, poor integration of climate change into decision making processes and a lack of regulatory framework to ensure all sectors provide data.

More specifically, it was noted that the following set of challenges are being faced in the development of MRV systems:

Type of barrier	Specific gap and obstacle identified
Institutional	 Lack of technical institutions in the process of implementing UNFCCC obligations. Weak integration of climate change issues in decision-making processes and development policies. Lack of active engagement of all stakeholders and a regulatory framework that requires sectors that generate data to make it available for the GHG inventory. Lack of official collaboration framework for the national GHG inventory.
Technical	 This technical hurdle arises because national reporting processes to the UNFCCC are mostly carried out by external consultants. Low knowledge of calculation methodologies and tools to carry out MRV-related processes. In particular, there is a need to develop capacities to use IPCC methodologies for GHG inventory by several sector administrations and other key stakeholders.

Data quality and management	• Low data quality associated with external consultants, as a robust process was not used for data collection or for quality assurance and control (QA/QC).
	• Absence of specific emission factors for the main emitting sectors.
	 Uncertainty has not been estimated for GHG sources and sinks.
	 Lack of data or reliable data in certain source categories (N₂ O emissions on agricultural land; CO₂ emissions and removals in the forestry sector; energy consumption, in particular transport, residential and commercial buildings, as well as the volume of wood used as fuel).

Priority for DRC is to train more national experts in the methods required and to streamline the data sharing, management and archiving processes. Additionally, the development of country specific factors and improvements to the uncertainty analysis are required. The following specific priorities were noted:

- A system/platform for managing, storing and exchanging data, as well as the development of the procedures necessary for its operation;
- Strengthen the capacities of the technical and strategic team responsible for reporting to the UNFCCC (the ETF's content, submission processes and consistency requirements for national reports (such as the BTR) relating thereto; and
- A framework to track progress in the implementation and achievement of NDCs in the AFOLU and Energy sectors.

DRC's commitment to the ReCATH-ECCAS project was confirmed and it was hoped that the project would:

- Strengthen the capacities of national experts (national institutions) on the monitoring and evaluation (M&E) process of adaptation actions in different sectors, in particular agriculture and forestry, including the analysis of climate scenarios, risk and vulnerability.
- Improve methodologies, guidelines and procedures for quality assurance and quality control (QA/QC), the estimation of uncertainties and the complete integration of data from the AFOLU sector.
- Improve emissions projections and analyzes of mitigation measures

A summary of the gap analysis is presented in Table 15 based on the stakeholder engagement and the detailed presentation provided at the Launch Event.

Table 15 - Gap analysis summary for Democratic Republic of Congo

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Equatorial Guinea

Current status

Equatorial Guinea's ambition is to reduce emissions by 20% by 2030, compared to 2010 levels; in order to achieve a reduction of 50% by 2050. The Nationally Determined Contribution (NDC) does not reference tracking indicators although mitigation and adaptation actions are discussed.

Only one National Communication (NC) has been submitted, in November 2019. The only year included in the GHG emissions inventory is 2013. Both 1996 and 2006 IPCC guidelines are used, and it is unclear when each is used. Emissions for CO_2 (emissions and removals), CH_4 , N_2O and NMVOC are provided for each sector and sub-categories. Uncertainty assessment has been carried out, but key category analysis and QC activities have not been included.

Sectoral mitigation actions are included in the NDC and the NDC is aligned with the National Action Plan for Adaptation (PANA, 2013). The five priority adaptation projects from PANA are discussed in the NC, but these include little detail with respect to timelines and impact assessments.

Equatorial Guinea has received some financial and technical support relating to REDD+ MRV. The country has submitted a National Forest Reference level and a national forest monitoring system to the UNFCCC.

Table 16 - Overview of Equatorial Guinea's report publication dates and information gained on any planned updates

UNFCCC report	Publication date
NDC	Submitted in October 2018, no update since
NC	NC1 November 2019
BUR	Currently in preparation

Needs, gaps, and priorities

Financial estimates for mitigation and adaptation actions are identified in the NDC, as are other institutional needs. However, there is no mention of tracking current needs with a MRV system. Needs are identified in the NDC under three categories:

Institutional needs:

- Raise the issue of climate change to the rank of Secretary of State
- The creation of a Committee for the Economic Modelling of the Impacts of Climate and Integration of Climate Change in the State budget
- Creation of a National Committee on Climate Change
- Creation of a service in charge of Environmental Impact Assessments and Audits National environmental according to international standards.

Information, awareness, and education needs:

- Development of information and awareness programs on the threats of change climate to increasingly encompass the general public
- Development of modules of formal and informal education regarding the importance and conservation of the environment
- Publication of magazines, brochures, environmental agendas, and other material to promote environmental awareness at the national level
- Development of joint action plans on the conservation of biodiversity, the fight against

desertification, to strengthen the synergy between the three Rio conventions and other signatories throughout the country.

Training and research needs:

- Development of specialized training modules in adaptation and mitigation techniques
- Operationalization and equipping of the National Institute for the Conservation of the Environment (INCOMA), for applied environmental research
- Promotion of scientific and technological research in Adaptation and Attenuation
- Provision of geographic information system (GIS) laboratories to the university National of Equatorial Guinea (UNGE) and the professional schools of the forestry branch and environment for climate modelling and promotion of research habits
- Development of competitions and research offers of different modalities on the climate change domain
- Operationalization of the National Fund for the Environment (FONAMA).

The first NC includes a detailed discussion of capacity building needs. Two main challenges are identified: firstly, building national capacity and secondly, educating the public and decision makers (and the business sector) about climate change.

The country relies on international funding to produce UNFCCC reports and the majority of work in this area is undertaken by national experts with international assistance. Responses to the stakeholder engagement questionnaire noted that delays in receiving funding often results in the late submission of reports. The responses confirm that there is currently no MRV system in place or being developed. National experts need support from international experts to produce GHG inventories (Tier 1), and country specific data is often scarce, disorganised and difficult to obtain. The national experts have access to some tools but do not have the expertise to use them. In the climate finance area it was noted that some project level data exist but they do not have any tools or systems to process it. It was noted that climate change information is not shared with decision makers or the public. The exception is climate finance which is regularly used to inform decision makers.

The responses to the stakeholder engagement questionnaire identified the following projects that are currently ongoing in Equatorial Guinea:

- Improvements to the institutional and technical capacity in the AFOLU sector in order to improve transparency (funded by GEF)
- Assessment of recent trends in the deforestation and forest degradation and related drivers in Central Africa (funded by CAFI).

The presentation from the country representation during the Launch Event did not identify any further needs but did note that the country is fully engaged and wants to join the Re-CATH project.

A summary of the gap analysis is presented in Table 17, based on the information discussed above.

Table 17 - Gap analysis summary for Equatorial Guinea

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Gabon

Current status

Gabon aims to achieve a 50% reduction in emissions compared to the 'uncontrolled development' scenario by 2025 (reference year is 2000). This target includes all greenhouse gas (GHG) sources apart from carbon storage in biomass. The target does not include a reduction in carbon credits purchased outside Gabon. In the area of adaptation, the National Coastal Adaptation Strategy includes measures aimed at managing the coastal zone through the establishment of an appropriate legal framework, the acquisition of monitoring and provision of training.

Two National Communications (NCs) have been submitted, one in 2004 and the other in 2011. The inventory includes all years within the period 1991 – 2000. Estimates for CO_2 , CH_4 , N_2O , NO_x , CO, NMVOCs, SO_2 are provided for five sectors (energy, LULUCF, industrial processes, waste, and agriculture) as well as some sub-sector estimates. Emissions of HFCs, PFCs and SF6 are not estimated due to lack of data but are considered negligible. The Ministry of Forest Economy, Fisheries and Environment, in charge of the Protection and Sustainable Management of Ecosystems and Sustainable Development, is responsible for the preparation of the NCs with other government ministries supplying some sector specific data. The NC3 is in preparation. Mitigation actions have been costed and potential impacts have been quantified for CO_2 . Adaptation measures are discussed but little information is provided other than cost.

Gabon has received financial and technical support related to REDD+ MRV and submitted both a National Forest Reference level and a national forest monitoring system to the UNFCCC. These submissions are awaiting validation. A Tier 3 methodology have been implemented for forestry emissions.

Responses to a stakeholder questionnaire identified the National Climate Council as the designated authority for national climate change issues and indicated that the development of a national MRV system was planned and would include the GHG inventory, mitigation and adaptation actions and financing and support. This system would be managed by the National Climate Council.

UNFCCC report	Publication date
NDC	Submitted in November 2016
NC	NC1 December 2004
	NC2 December 2011
	NC3 in preparation
BUR	Not submitted

Table 18 - Overview of Gabon's report publication dates and information gained on any planned updates

Needs, gaps, and priorities

Financial needs are identified and the NDC discusses a proposed National Fund for Sustainable Development. Constraints are divided into three categories: human, material and technical, and financial.

Some examples include:

- Lack of national expertise
- Lack of accessible data bases

- Lack of climate forecasting systems
- Inconsistency in methods for documenting information across a large number of data holders
- Insufficient financial resources to build capacity and low mobilisation of resources to finance programs

The response received for the stakeholder engagement questionnaire highlighted the complete lack of national expertise for the development of the GHG inventory, projections and for the identification and tracking of climate finance. In addition, it highlighted that no institutional framework is in place to support it, country specific data is scarce or incomplete and although some tools and systems are available for GHG inventory compilation there is a lack of expertise to use them. It was also noted that no climate change information was shared with decision makers and the public. The presentation from the country representative during the Launch Event did not highlight any further gaps.

A summary of the gap analysis is presented in Table 19, based largely on the evidence presented in the NDC and stakeholder questionnaire.

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Table 19 - Gap analysis summary for Gabon

Republic of Congo

Current status

An unconditional target has been defined in the Nationally Determined Contribution (NDC) as a 17.09% reduction in all greenhouse gas (GHG) emissions relative to Business-As-Usual (BAU) baseline by 2025 and a total 20.46% reduction by 2030. The country sets a conditional target of a 39.88% emissions reduction in 2025 and a 32.19% reduction by 2030. This conditional target is dependent on external funding.

The Revised NDC states that the NDC technical team are responsible for monitoring, reporting and verification (MRV) although it is unclear if MRV systems are planned. The report does however highlight how the implementation of the NDC contributes to achievement of the Sustainable Development Goals.

Two National Communications (NCs) have been submitted in the years 2001 and 2009, a third is planned for September 2022. The emissions inventory includes estimates for four sectors (Energy, Agriculture, LULUCF, Industry and Waste) for the gases CO_2 , N_2O , CH_4 , CO, NMVOC and SF_6 where relevant. Emissions are reported for the years 1994 and 2000. Some sub-sector estimates are also included. IPCC default emissions factors and the IPCC software are used. The NC does not include a key category analysis and it is unclear what QC/QA procedures have been undertaken. Some uncertainty analysis is included for activity data and emission factors and for some emissions totals. In the revised NDC the reference year for emissions is 2017 but details about the GHG inventory are not provided.

The NC proposes some mitigation and adaptation measures, but the information given is limited. A few mitigation measures are outlined for the energy sector and agriculture sector with some cost information provided. The revised NDC provides an updated discussion on mitigation and adaptation actions with more details regarding their potential impacts and costs. Adaptation measures have been listed in order of priority in the NDC, with qualitative information provided.

The Republic of Congo has prepared a REDD+ national strategy and has partially implemented both a national REDD+ registry and a REDD+ MRV system. The country has received some financial and technical support related to REDD+ MRV.

UNFCCC report	Publication date
NDC	Submitted April 2017, updated August 2021
NC	NC1 October 2001
	NC2 November 2009
	NC3 Planned Sept 2022
BUR	Planned 2023

Table 20 - Overview of Republic of Congo's report publication dates and information gained on any planned updates

Needs, gaps, and priorities

Technical and financial needs are identified in the NDC, and it is noted that one of the main focuses when updating the NDC was monitoring progress. Financial needs are quantified in the NDC. The second NC identifies a need for technological support. The main barriers are identified as technical, financial, and cultural. The second NC also identifies a need for an adequate legal and institutional framework within the Republic of Congo in order to support mitigation actions.

Responses to the stakeholder engagement questionnaire established that Republic of Congo does not have a national MRV system in place and one is not yet in development. UNFCCC reports are produced by national experts with support from international experts. The questionnaire noted that national experts need assistance from international experts for the compilation of GHG inventory (Tier 1), projections and for the identification and assessment of climate finance. National data is scarce and incomplete, and systems and tools are not available. Although stakeholders are engaged and committed to providing information, they lack the resources to track data and data collection systems are yet to be established. The presentation from the country representative during the Launch Event did not highlight any further gaps but commented that her country would like to participate in the ReCATH project.

Previous discussions with ICAT about support in January 2021 led to the development of a draft work plan. The scope of the proposed plan is:

- Determination of MRV requirements; analysis of data quality and emission inventory processes to see where it needs to be improved.
- Preparation of an MRV/transparency framework, starting with the data inventory and based on the MRV processes already established.
- Establishment of an NDC monitoring framework to cover the priority sectors of the NDCs; Evaluate the use of GACMO as a NDC tracking tool.

The planned work would complement the work of the ReCATH-ECCAS project.

Results of gap analysis

A summary of the gap analysis based on the information discussed above is presented in Table 21.

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

Table 21 - Gap analysis summary for Republic of Congo

Rwanda

Current status

The Nationally Determined Contribution (NDC) defines a conditional and unconditional target. The unconditional target is a 16% reduction in emissions by 2030 compared to Business-As-Usual (BAU) baseline (2015) projections and is based on domestically supported and implemented mitigation measures and policies. The conditional target sets out a 22% emissions reduction in addition to the unconditional target but is reliant on the provision of international support and funding.

A monitoring, reporting and verification (MRV) framework has been developed and is detailed in the NDC, including institutional arrangements. It is understood that work to implement this system has recently been commissioned.

Three National Communication (NCs) have been submitted in the years 2005, 2012 and 2018. The inventory includes estimates for the years between 2006-2015 for CO₂, CH₄, N₂O and HFCs. Sector estimates are provided for Waste, Energy, IPPU and AFOLU with some sub-sector information. IPCC 2006 guidelines are used for the inventory with Tier 1 methodologies and some country specific data. The third NC includes a key category analysis. Quality assurance and quality control procedures are detailed and comprehensive, including verification workshops and report checking by international consultants. Further work on the development of country specific emission factors has been commissioned.

Inventory roles are well defined with the Single Project Implementation Unit from the Rwanda Environmental Management Authority being responsible for the inventory. Rwanda have also established a National Committee on Climate Change to supervise the inventory report. Institutions that contribute to the inventory are listed in the NC. Rwanda also has a GHG working group who are responsible for inventory estimates, key category analysis and QAQC. An inventory improvement plan is also provided.

Mitigation options and impacts are discussed and quantified. The third NC lists individual mitigation options by sector and in some cases sub-sector. Mitigation assessments are provided based on a combination of three approaches; activity-based, outcome-based or a combination of the two. Adaptation measures are proposed although little detail is provided.

During the desk research, ICAT provided information on its project work that was completed in December 2019 in Rwanda, relating to GHG impacts of mitigation policies and the NDC. This work aimed to develop a methodological framework for assessing the impacts of climate actions in the energy sector and brought together experts from the energy, waste, transport, industry, and building sectors.

UNFCCC report	Publication date
NDC	Submitted in October 2016, updated May 2020
NC	NC1 September 2005
	NC2 June 2012
	NC3 November 2018
BUR	Not submitted

Table 22 - Overview of Rwanda's report publication dates and information gained on any planned updates

Needs, gaps, and priorities

The NDC identifies gaps and constraints in MRV. Key gaps and constraints that need to be addressed are covered in the five following areas:

- Institutional and regulatory framework for sector coordination
- Data availability, collection, MRV
- Financing opportunities
- Institutional and technical capacity among sectors involved in adaptation strategies
- Challenges on the operational level which focus on metrics, data management, MRV.

Funding gaps are outlined in the third NC, along with technical and capacity needs. Detail of funding already received is also provided. The presentation from the country representative during the Launch Event did not highlight any further gaps however he said that further information should be available from the National Focal Point. At the time of writing this report, the team are still trying to gain a response from the National Focal Point.

A summary of the gap analysis is presented in Table 23.

Table 23 - Gap analysis summary for Rwanda

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					

São Tomé and Príncipe

Current status

The Nationally Determined Contribution (NDC) defines a conditional target as a 27% reduction in emissions by 2030, compared to Business-As-Usual (BAU) projected emissions which are based on the latest GHG inventory (2012). This conditional target is to be implemented with external support and covers CO_2 , CH_4 and N_2O . It covers all sectors apart from LULUCF which has historically generated removals greater than total GHG emissions. The country will develop a "finance tracking methodology" that will allow presentation of unconditional mitigation steps for a subsequent NDC.

A monitoring, reporting and verification (MRV) system was proposed in 2016 and the proposal was updated in 2019 but has not yet been institutionalised and no further details are given in the NDC. For adaptation, a future National Adaptation Plan will develop MRV mechanisms.

The country has submitted three National Communication (NCs), in 2005, 2012 and 2019. The inventory has been completed for the years 1998, 2005 and 2012. Sector level CO_2 emissions are provided for the years 1998 and 2005. In 2012 emissions are reported for CO_2 (removals are also included), CH_4 and N_2O , NO_x , CO and NMVOC, for Energy, Industrial Processes, Agriculture, LULUCF and Waste. The IPCC 1996 Guidelines have been used to complete the inventory. The NC includes a key category analysis but does not comment on uncertainties. Eight QC procedures have been undertaken including data documentation and archiving of data sources and results.

Fifteen potential mitigation scenarios have been proposed in the third NC, each one including an assessment of emissions reduction potential. Adaptation actions are also discussed, although with only qualitative information. Overall, the country's economic fragility and heavy reliance on foreign aid is cited as a key barrier for implementation of climate actions. Other barriers are said to be political, cultural, legislative, and institutional.

A review of the existing MRV structures currently in place for BUR and NC preparation in São Tomé and Príncipe was conducted in November 2021 by international consultants which identified gaps and made recommendations for improving the system. This document sets out the current roles of government departments and working groups for NC and BUR preparation, as well as proposing a new structure for the MRV system. The proposed MRV system was evaluated by a national gender expert to assess gender integration of the country's actions relating to climate change.

At the Launch Event, Jose Luiz Onofre the UNFCCC NFP, provided a detailed presentation of the current status of transparency activities in São Tomé and Príncipe. He noted that the country still does not have a robust and operational MRV system but has a project underway to design a system that is compliant with the requirements of the Paris Agreement and will be supported by a knowledge management system. Information sharing protocols will be developed and adopted. He noted there are some good national consultants but they are limited in number and the availability of national data can also be limited and incomplete.

UNFCCC report	Publication date
NDC	Submitted in November 2016, updated in July 2021
NC	NC1 May 2005
	NC2 October 2012
	NC3 October 2019

Table 24 - Overview of São Tomé and Príncipe's report publication dates and information gained on any planned updates

BUR

Not submitted

Needs, gaps, and priorities

At the Launch Event Jose Luiz Onofre described the following set of challenges that need to be faced for the implementation of the MRV system:

- Establish a legal or regulatory basis for data collection, which defines what data is reported by which national entity and when it must occur, and which obliges all public, private and NGO entities that produce and/or hold data and sector information to make it available to the SNMNV.
- Develop transparency and comparability criteria for all sectoral, measurable and verifiable emission reduction projects developed at the national level.
- Develop technical and financial capacity building plans for mobilizing and accessing climate finance funds needed to make the MRV system operational.
- Establish a monitoring and evaluation framework to ensure the proper management of the economic resources made available for the implementation of MRV activities.

He noted that the country's priority needs are to build the national technical capacity, improve the availability of national statistics and data and the implementation of the MRV system.

The third NC identified the following specific issues faced when producing the GHG inventory:

- Low availability and reliability of data used
- Lack of country specific emission and conversion factors
- Inadequate format for storing and archiving data
- Lack of disaggregated activity data across sectors
- Insufficient financial resources to deepen data collection.

Confirmed São Tomé and Príncipe's support for the ReCATH-ECCAS project and envisages it will support the technical capacity building of institutions that provide information to the MRV system, improving existing databases and carrying out their harmonization and interconnection, and improving data archiving systems. He noted that he would like to see ETF Adaptation Reporting, MRV/Transparency, Data Management and GIS, Climate Trade, Climate Risk and Vulnerability Analysis, Gender and Climate Change activities within the Re-CATH-ECCAS capacity building programme. He also noted that strengthening the capacities of the National Committee on Climate Change is a very important aspect because it serves as a control and monitoring institution for the operation of the MRV system.

A summary of the gap analysis based on the sources of information discussed above is presented in Table 25.

Table 25 - Gap analysis summary for São Tomé and Príncipe

	Governance	Technical teams of experts	Data flows	Systems and tools	Stakeholder engagement
Mitigation					
GHG inventory					
Projections					
Mitigation action					
Adaptation					
Climate monitoring and scenarios					
Risks, vulnerabilities, and loss and damage					
Adaptation action					
Support					
Support and climate finance					
Wider impacts of clima	te action				
Consideration of links between climate action and other development priorities					

Launch Event interactive needs assessment

Workshop participants were invited to engage in an interactive session, delivered on Mentimeter, that aimed to capture countries views on their priorities for the technical support and training to be provided by the ReCATH-ECCAS hub. It was based on information collected through the desk study and stakeholder engagement undertaken as part of this gap analysis gap analysis. Fourteen participants from 5 countries took part in this survey including the National Focal Points from Cameroon, Republic of Congo and a representative of the National Focal Point for Burundi. Other participants included interested parties from Gabon and Rwanda and the Climate Application and Prediction Centre (CAPC-AC) at ECCAS. In line with standard Mentimeter surveys, the results themselves are anonymised.

The first question considered the provision of support on mitigation and asked which sectors the countries would like the ICAT ReCATH hub to provide support. The results are presented in Figure 2 and show a significant number of respondents would like support across all sectors, but the highest response was for forestry, agriculture and energy systems. The other sectors requested were disaster management and water and health.



Figure 2 - Response to the question in which areas of mitigation do you wish to be supported?

In the second question, participants were asked their priorities for support in adaptation. The results are presented in Figure 3 and again show significant interest in the provision of support across all sectors, with the highest level of interest in water resources and floods, agriculture, human health, closely followed by infrastructure.



Figure 3 - Response to the question in which areas of adaptation do you wish to be supported?

Participants were then asked whether they experienced a series of common problems encountered in transparency work. In each case they were asked mark on a scale from 1-5, with 5 representing a serious issue. The average scores for each question are summarised below, although in all cases there was a spread of responses from 1 to 5.

- Lack of technical expertise within national teams (score 3.3)
- Insufficient and good quality national data (score 3.4)
- Ineffective systems and tools data collection, assessment, reporting & archiving (score 3.3)
- Weak institutional frameworks for transparency (score 3.1)
- Insufficient resources and dependence on international finance (score 4.8)
- Lack of engagement with decision makers and the public (score 3.2).

Participants were then asked for their priorities for support on climate risks, vulnerability, and adaptation. The proposed areas for support to be scored from 1-5 and were: climate monitoring and scenario analysis, identification of climate risks and vulnerabilities, loss and damage assessment and follow-up of adaptation actions. All actions proposed were seen as high priority, each receiving a score over four.

Similarly, participants were asked on their priorities for support actions on GHG inventories. The areas of support proposed, to be scored from 1-5 were:

- Understanding institutional arrangements, data collection and processing
- Development of estimation methods, using T2/3 methodologies
- Data collection, management, storage, and QA/QC
- GHG analysis key category, uncertainty.

The spread of responses was much wider for all these areas of support, Figure 4. All actions scored an average score between 3 and 3.4, with some participants giving the highest score of 5 and others giving the lowest of 1.



Figure 4 - Responses to the question on prioritisation of GHG inventory actions

Participants were then asked on their priorities for support on projections and mitigation measures. The proposed areas for support were:

- Projection data, technical expertise, and modelling tools
- Monitoring the impact of climate policies and mitigation measures
- Sustainable institutional arrangements for monitoring NDC actions.

All participants have a score over three for "Projected data, technical expertise and modelling tools" resulting in an average score of 4.8, showing it to be the highest priority for many participants. However, both other areas of support received average scores of 4 or over showing all actions to be of high priority.

Support on climate finance, technologies and capacity building was also a high priority area. Collecting information on climate finance, on technology, on capacity building and identifying opportunities for support all received an average score of 3.8 and a score of 3 or above from all participants.

Finally, participants were asked about their priorities for support on wider impacts. Scoring the following actions:

- Link climate action to national sustainable development strategies
- Linking climate action to the Sustainable Development Goals
- Disaster risk reduction and SENDAI framework.

The first two areas were of highest priority, receiving average scores of 4.3 and 4.5 respectively. No participant identified the last action as an area for priority support.

Summary of findings and next steps

All the 11 ECCAS countries have submitted at least one version of a Nationally Determined Contribution (NDC) and National Communication (NC), although to date, none have submitted Biennial Update Reports (BURs) although a number of countries mentioned these have been prepared. Activities relating to REDD+ national strategies were varied across the countries; five countries have not submitted anything and the other 6 have submitted some elements.

This gap analysis has reviewed the current position in each country on a consistent basis. Monitoring, reporting and verification (MRV) systems across the region are not well developed. Several countries have received support to define and, in some cases, develop MRV systems but there is only very limited implementation. Other countries have not yet started. It is proposed that countries designing MRV systems could learn from the implementation challenges faced by those countries that have already developed such systems such as Burundi, Cameroon, Central African Republic and Democratic Republic of Congo.

Many of the challenges faced are common to the majority of the countries in the region. These include:

- Weak institutional frameworks for transparency activities. To establish a well-functioning, efficient and sustainable system It is very important that the roles and responsibilities of the different stakeholders are clearly defined and appropriate data sharing agreements and/or memorandum of understanding exist between the different ministries and institutions involved.
- Insufficient number of well trained and experienced national experts. Effective transparency activities require core teams of national experts experienced in the data compilation, use of models and systems and reporting of transparency data. Several countries reported too few experts available and a continued reliance on international experts to guide activities. For example, whilst all countries have compiled greenhouse gas (GHG) inventories, the majority use Tier 1 methodologies, and it was noted that international experts were required to move to higher tier methodologies.
- **Insufficient, good quality national data.** This varied significantly between countries but several reported scarce, incomplete or inaccurate national data and inadequate data platforms to allow the efficient sharing of datasets.
- Lack of experience in the use of systems and tools. In some countries national teams have been trained in the use of specific tools such as IPCC software for inventory compilation, LEAP for GHG projections, GACMO for the assessment of mitigation actions. However, several countries reported that their national teams did not have the expertise to use these tools without international expert support.
- **Limited stakeholder engagement.** Most countries reported limited or rather ad hoc arrangements to inform decision makers and the public about climate activities.

Conversely, the gap analysis has revealed some examples of good practice that could be shared across the region. These include:

- Definition of institutional arrangements for the MRV system in São Tomé and Príncipe.
- National Forest Reference level and a national forest monitoring systems in Equatorial Guinea, Democratic Republic of Congo and Gabon to the UNFCCC. Gabon has also developed a Tier 3 methodology for forestry emissions.

• Use of GACMO model to identify mitigation measures and monitor NDC actions in Chad.

Overall, the gap analysis will inform the workplan and training plan for the Re-CATH-ECCAS Hub. Technical support and training sessions will be tailored towards the specific needs and priorities identified by the afore mentioned activities. Hub activities will also highlight the good practice examples and will encourage knowledge sharing between country stakeholders.

Annex 1 Desk research template

Below are the questions used to guide the desk-based research. The evidence found during this task was used to compile the initial gap analysis.

Biennial Update Reports (BURs)/National Inventory Reports

Has the country reported Biennial Update Reports? If so, how regularly?

Do the BURs contain all the necessary content as prescribed by the UNFCCC guidelines?

Do the BURs outline MRV needs and capacity constraints? Is there evidence of a clear Improvements Plan?

Are sectoral mitigation actions reported in the BURs?

Are adaptation actions regularly reported in the BURs?

How well developed are the descriptions of the institutional arrangements?

Was the BUR compiled by permanent staff in country or by a third party? Was any support received for the compilation of the BUR?

Did the country receive funding, such as CBIT funding, for preparation of the BUR?

Has financial, technological and capacity building support provided and/or received been tracked and reported in national reports?

Nationally Determined Contributions (NDCs)

Have any targets been defined? If so, what are the targets?

Have indicators been developed to track NDC implementation?

Are NDC tracking indicators actively monitored?

What challenges, constraints and barriers are there to NDC implementation? Are these monitored by the MRV system?

Do key policy documents support the mainstreaming of NDC implementation?

National Communications (NCs)

Has the country submitted National Communications?

Do the NCs contain all the necessary content as prescribed by the UNFCCC guidelines?

How regularly are the NCs produced and does that conform with the UNFCCC timeline for submissions?

What is the latest inventory year provided? Is there a consistent time series?

How transparent is the methodology e.g. what IPCC guidelines were used for GHG Inventory reporting, are the activity data and emission factors detailed? Have country specific metrics been used?

How complete is the reported inventory? Are the reported sectors, source categories and gases complete?

Has a key category analysis and/or uncertainty analysis been carried out?

Have quality assurance and quality control procedures been undertaken?

Are institutional roles for the inventory well defined?

Has a timeline for reporting been established?

Does the country have a National Inventory Improvement Plan?

Is the inventory preparation done by permanent staff or by third party?

Are sectoral mitigation actions reported in the NCs?

Have the GHG impacts of mitigation actions been quantified? Are the methodologies and assumptions documented?

Are adaptation actions regularly reported in the NCs?

Has financial, technological, and capacity building support provided and/or received been tracked and reported in national reports?

International Consultation and Analysis (ICA) reports

Has the country received an ICA?

What were the main findings of the ICA?

Have comments from the International Consultation and Analysis (ICA) process been addressed in subsequent BURs?

REDD+ National Strategies

Has the country prepared a REDD+ national strategy?

Has the country developed a national REDD+ registry? Is it operational?

Has the country developed a comprehensive REDD+ MRV system? Is it operational?

Has the country received the required financial and technical support related to REDD+ MRV?

Has the country submitted a National Forest Reference level to the UNFCCC?

Has the country submitted a national forest monitoring system to the UNFCCC?

Annex 2 Stakeholder engagement questionnaire

UNFCCC reporting

When do you plan to submit 1st Biennial Update Report (BUR), next National Communication, revised NDC?

Are these activities funded nationally or do you expect to need international funds?

Will the work be done by national experts/international support?

Other information

Monitoring Reporting and Verification (MRV) systems

Is a national system in place/under development or planned?

Scope of MRV system - does it include GHG inventory, mitigation/adaptation actions, NDC implementation?

Is MRV system integrated with national development plans?

Who will be responsible for the MRV system?

How is it being/will be funded?

Other information

Other projects and programmes in this area

Please provide title/funding institution

Please highlight the appropriate response and provide any additional details (example given) and add notes in the appropriate space.	1. Governance	2. Expertise	3. Data flows	4. Systems and tools	5. Stakeholder engagement
GHG inventory					
 Is there an overarching legal framework or other arrangements in place which mandate, and provide resources for, regular data collection, compilation, and reporting for the GHG Inventory. For example, a climate change legislation / Memorandum of Understanding / data sharing agreements? 					
2. What is the level of expertise of national GHG inventory compilers?					
3. How would you describe the availability and quality of data for the GHG inventory?					
4. Do you have access to systems and tools for GHG Inventory data collection, compilation, and reporting?					
5. Do decision makers and the general public have access to historic national GHG emissions data?					
Greenhouse Gas Projections					
6. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting for GHG emissions projections such as a climate change bill / by-law / MoUs / data sharing agreements?					
7. What is the level of expertise for producing national GHG emission projections?					
8. How would you describe the availability of data for GHG emission projections?					
9. Do you have access to systems and tools for GHG emission projections modelling and reporting?					
10. Do decision makers and the general public have access to national GHG emission projections?					
Climate change mitigation action (policies, measures, projects, interventions)					
11. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting on climate change mitigation action such as a climate change bill / by-law / MoUs / data sharing agreements?					
12. What is the level of expertise for managing climate change mitigation action data and assessing the GHG emissions reduction impact of mitigation actions?					
13. How would you describe the availability of data for national mitigation actions?					
14. Do you have access to systems and tools for managing, quantifying, and reporting mitigation actions?					
15. Do decision makers and the general public have access to information on national mitigation actions?					

Climate change adaptation - climate risks and vulnerability			
16. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting on climate risks and vulnerabilities such as a climate change bill / by-law / MoUs / data sharing agreements?			
17. What is the level of expertise for climate risk and vulnerability assessments and climate modelling?			
18. How would you describe the availability of data on climate risk and vulnerability?			
19. Do you have access to systems and tools for managing, quantifying, and reporting climate risk and vulnerability?			
20. Do decision makers and the general public have access to information on national climate risk and vulnerability and climate projections?			
Climate adaptation action			
21. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting on climate change adaptation action such as a climate change bill / by-law / MoUs / data sharing agreements?			
22. What is the level of expertise for managing climate change adaptation action data and assessing the impact of adaptation actions in reducing risk and vulnerability?			
23. How would you describe the availability of data for national adaptation actions?			
24. Do you have access to systems and tools for managing, quantifying, and reporting adaptation actions?			
25. Do decision makers and the general public have access to information on national adaptation actions?			
Climate finance and support			
26. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting on climate change finance and support (including climate budget tagging) such as a climate change bill / by-law / MoUs / data sharing agreements?			
27. What is the level of expertise for managing climate change finance and support data or climate budget tagging?			
28. How would you describe the availability of data for climate change finance and support?			
29. Do you have access to systems and tools for managing, quantifying, and reporting climate change finance and support or for climate budget tagging?			

30. Do decision makers and the general public have access to information on national climate change finance, expenditure, and support?			
Wider impacts of climate action (e.g. national strategic objectives, Sustainable Development Goals, gender, poverty a	alleviation)		
31. Is there an overarching legal framework which mandates, and provides resources for, regular data collection, compilation, and reporting on the wider impacts of climate change action such as legislation for reporting on SDGs or gender/development metrics?			
32. What is the level of expertise for collecting data on, and assessing, the wider impacts of climate actions?			
33. How would you describe the availability of data for assessing wider impacts of climate actions?			
34. Do you have access to systems and tools for managing, quantifying, and reporting the wider impacts of climate actions?			
35. Do decision makers and the general public have access to information on wider impacts of climate actions?			

Annex 3 Stakeholder mapping

Information of stakeholders is being collated using a central, online database. This system allows the project team to collaborate on the collection on information and tagging of entries to ensure as much detail as possible is recorded. A copy of the current database (as of 13th April 2022) has been downloaded in Excel format – see separate file. The database is continuously evolving as new stakeholders are added. These columns listed below will enable the team to track information relevant to this project and track activities that stakeholders are involved in:

- MRV transparency roles this field will allow us to define MRV roles for each stakeholder.
- Engagement activities the online database holds a separate list of all engagement activities undertaken as part of this project and in other related projects. We can tag stakeholders with engagement activities to track who has participated in which events.
- Challenges in performing roles and responsibilities this information will help us to identify needs and priorities.