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Report on the technical expert review of the first biennial transparency report of Kenya*

Summary

This report presents the results of the technical expert review of the first biennial transparency report of Kenya, conducted by a technical expert review team in accordance with the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement. The review took place from 26 to 30 May 2025 in Kisumu, Kenya.

* In the symbol for this document, 2024 refers to the year in which the biennial transparency report was submitted, not to the year of publication.



Abbreviations and acronyms

2006 IPCC Guidelines	<i>2006 IPCC Guidelines for National Greenhouse Gas Inventories</i>
A6.4ER	emission reduction under Article 6, paragraph 4, of the Paris Agreement
AD	activity data
BTR	biennial transparency report
CER	certified emission reduction
CH ₄	methane
CO ₂	carbon dioxide
CO ₂ eq	carbon dioxide equivalent
CRT	common reporting table
CTF	common tabular format
EEA	European Environment Agency
EF	emission factor
EMEP	Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
GDP	gross domestic product
GHG	greenhouse gas
ICAO	International Civil Aviation Organization
IPCC	Intergovernmental Panel on Climate Change
IPPU	industrial processes and product use
ITMO	internationally transferred mitigation outcome
LULUCF	land use, land-use change and forestry
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
N ₂ O	nitrous oxide
NA	not applicable
NCCAP	National Climate Change Action Plan of Kenya
NDC	nationally determined contribution
NE	not estimated
NID	national inventory document
NIR	national inventory report
PaMs	policies and measures
QA/QC	quality assurance/quality control
REDD+	reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks (decision 1/CP.16, para. 70)
TERT	technical expert review team

I. Introduction and summary

A. Introduction

1. This report covers the technical expert review of the BTR1 of Kenya. The review was organized by the secretariat and conducted by the TERT in accordance with the MPGs,¹ particularly chapter VII thereof. Kenya, on a voluntary basis, requested the secretariat to organize a review of the information reported pursuant to chapter IV of the MPGs as part of the technical expert review.² The outcome of the voluntary review is presented in annex I.

2. A draft version of this report was transmitted to the Government of Kenya, which did not provide any comments.³

3. The review was conducted as an in-country review from 26 to 30 May 2025 in Kisumu, Kenya, by the following team of nominated experts from the UNFCCC roster of experts: Kristina Gonchar (Belarus), Atsuko Hayashi (Japan), Yewon Kim (Republic of Korea), Lawrence Mashungu (Zimbabwe), Esther Mertens (Belgium), Ekaterine Mikadze (Georgia), Nkanyiso Ndlovu (Zimbabwe), Ngoc Nguyen Thi Bich (Viet Nam), Valentyna Slivinska (Ukraine) and Ahmad Wafiq (Egypt). Valentyna Slivinska and Ahmad Wafiq were the lead reviewers. The review was coordinated by Vitor Góis Ferreira (secretariat).

B. Scope

4. The TERT conducted a technical expert review of the information reported in the BTR1 of Kenya as per the scope of the review defined in paragraph 146 of the MPGs and decision 9/CMA.4, consisting of:

(a) Review of the consistency of the information submitted by the Party under Article 13, paragraphs 7 and 9, of the Paris Agreement with the MPGs taking into account the flexibility accorded to the Party under Article 13, paragraph 2, of the Paris Agreement (see chap. II.A below);

(b) Consideration of the Party's implementation and achievement of its NDC under Article 4 of the Paris Agreement (see chap. II.B below);

(c) Identification of areas of improvement⁴ for the Party related to implementation of Article 13 of the Paris Agreement (see chap. II.C below);

(d) Assistance in identifying capacity-building needs (see chap. II.D below);

(e) Voluntary review of the information reported by the Party pursuant to chapter IV of the MPGs (see annex I).

C. Summary

5. Kenya submitted its BTR1 on 25 December 2024, before the deadline of 31 December 2024 mandated in decision 18/CMA.1. Kenya submitted its NID as a stand-alone document on 26 December 2024, before the deadline of 31 December 2024. Kenya submitted its CRTs on 31 December 2024 and CTF tables on 31 December 2024, both before the deadline of 31 December 2024.⁵

¹ Decision 18/CMA.1, annex.

² See decision 9/CMA.4, para. 1.

³ As per para. 162(e) of the MPGs.

⁴ As referred to in paras. 7, 8, 146(d) and 162(d) of the MPGs.

⁵ The technical expert review was conducted on the basis of the versions of the CRTs submitted on 30 January 2025.

6. A list of the areas of improvement identified on the basis of the review of the consistency of the reported information with the MPGs can be found in the assessment tables.⁶

7. The Party applied flexibility as provided for those developing country Parties that need it in the light of their capacities pursuant to Article 13, paragraph 2, of the Paris Agreement in relation to the NIR of anthropogenic GHG emissions by sources and removals by sinks⁷ and the information necessary to track progress in implementing and achieving its NDC.⁸ Information on where the flexibility was applied is included in chapters II.A.1–II.A.2 below.

D. Information provided by the Party pursuant to paragraphs 143–145 of the modalities, procedures and guidelines

8. Kenya reported information on support needed and received for implementing Article 13 of the Paris Agreement and transparency-related activities, including for transparency-related capacity-building. The Party reported on support needed and received for preparing reports pursuant to Article 13 of the Paris Agreement and addressing the areas of improvement identified by the TERT in the BTR, the NID and CTF table III.7, but CTF tables III.12 and III.3 were not provided.

II. Technical expert review⁹

A. Review of the consistency of the submitted information with the modalities, procedures and guidelines¹⁰

1. National inventory report¹¹

9. The TERT assessed the information reported in the BTR1 of Kenya and identified areas of improvement relating to consistency with the MPGs, which are described in tables 1–7 of the assessment tables referred to in paragraph 6 above and summarized in table 1.

⁶ Contained in document FCCC/ETF/TERR.1/2024/KEN/Add.1, available at <https://unfccc.int/first-biennial-transparency-reports>.

⁷ The developing country Party applied flexibility in the light of its capacities with respect to the provisions in paras. 29, 34, 35, 48 and 57 of the MPGs.

⁸ The developing country Party applied flexibility in the light of its capacities with respect to the provisions in para. 92 of the MPGs.

⁹ As per para. 187 of the MPGs.

¹⁰ As per para. 146(a) of the MPGs.

¹¹ As per para. 150(a) of the MPGs.

Table 1

Information reported in Kenya's national inventory report and review of consistency with the modalities, procedures and guidelines

<i>Element</i>	<i>Elements of information to be reported</i>	<i>Summary of information reported</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
Submission type (para. 12 of the MPGs)	Has the NIR been submitted as a stand-alone document?	Yes	No areas of improvement were identified
Time series (paras. 57–58 of the MPGs)	What years have been reported and is the time series in accordance with the MPGs? ^b	1990–2022, in accordance with the MPGs; 2001–2022 for the LULUCF sector	No areas of improvement were identified
Metrics (para. 37 of the MPGs)	Has the Party used the 100-year global warming potential values from the IPCC Fifth Assessment Report?	Yes	No areas of improvement were identified
	Has the Party used other metrics?	No	No areas of improvement were identified
Gases (paras. 47–49 and 51 of the MPGs)	Which gases have been reported? ^b	CO ₂ , CH ₄ , N ₂ O	No areas of improvement were identified
Indirect emissions (para. 52 of the MPGs)	Has the Party reported indirect CO ₂ emissions and national totals with and without indirect CO ₂ ?	No	No areas of improvement were identified
	Has the Party reported indirect N ₂ O emissions from sources other than those in the agriculture and LULUCF sectors as a memo item?	No	No areas of improvement were identified
National circumstances and institutional arrangements (paras. 18–19 of the MPGs)	Has the Party reported information on the functions related to inventory planning, preparation and management?	Partly	2.G.2
Methodologies, parameters and data (paras. 20–24 of the MPGs)	Has the Party used the 2006 IPCC Guidelines?	Yes	5.A.3, 6.L.6, 6.L.8
	Has the Party used other IPCC methodological guidance?	No	No areas of improvement were identified
Key category analysis (paras. 25 and 41–42 of the MPGs)	Has the Party reported a key category analysis?	Yes, a key category analysis was performed using approach 1 and a 95 per cent threshold for level and trend assessment for the starting year (1990) and the latest reporting year (2022) and with and without LULUCF	2.G.4

<i>Element</i>	<i>Elements of information to be reported</i>	<i>Summary of information reported</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
Time-series consistency and recalculations (paras. 26–28 and 43 of the MPGs)	Has the Party reported a consistent time series?	Partly	4.I.4, 5.A.1, 6.L.5
	Has the Party provided justification and explanatory information for recalculations?	NA	No areas of improvement were identified
Uncertainty assessment (paras. 29 and 44 of the MPGs)	Has the Party reported the results of the uncertainty analysis and the methods used, underlying assumptions and trends? ^b	Only qualitatively discussed and reported	2.G.5
QA/QC plan and procedures (paras. 34–36 and 46 of the MPGs)	Has the Party elaborated information on an inventory QA/QC plan, including information on the inventory agency responsible for implementing QA/QC, and current and future QA/QC procedures? ^b	No	2.G.7
Assessment of completeness (paras. 30–33, 45, 47 and 50 of the MPGs)	Have any areas of improvement for lack of completeness been identified for the following sectors?		
	Energy	Yes	3.E.3, 3.E.4
	IPPU	Yes	4.I.1, 4.I.2, 4.I.5, 4.I.6, 4.I.8
	Agriculture	Yes	5.A.6, 5.A.7
	LULUCF	Yes	6.L.2, 6.L.9, 6.L.11, 6.L.12
Threshold for reporting significant categories (para. 32 of the MPGs)	Waste	Yes	7.W.3, 7.W.6
	For categories reported as “NE” owing to insignificance, has information been reported showing that the likely level of emissions is below the threshold of significance?	Partly	2.G.8, 7.W.5
Methodologies, EFs, parameters and AD (paras. 39–40 and 53–56 of the MPGs)	Has information been reported on categories, gases, methodologies (including the rationale for selecting them), EFs and AD at a disaggregated level for the following sectors?		
	Energy	Partly	2.E.3
	Has information been reported on international aviation and marine	No	No areas of improvement were identified

<i>Element</i>	<i>Elements of information to be reported</i>	<i>Summary of information reported</i>	<i>ID#(s) for the area(s) of improvement identified^a</i>
	bunker fuel emissions as two separate entries and such emissions distinctly reported from national totals?		
	Has information been reported indicating how feedstocks and non-energy use of fuels have been accounted for in the inventory, under the energy or IPPU sector?	No	No areas of improvement were identified
	IPPU	Partly	No areas of improvement relating to recommendations were identified
	Agriculture	Partly	5.A.2, 5.A.4, 5.A.5
	LULUCF	Partly	6.L.4, 6.L.7
	Waste	Partly	7.W.1

^a See document FCCC/ETF/TERR.1/2024/KEN/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

^b The developing country Party applied flexibility in the light of its capacities with respect to this provision.

2. Information necessary to track progress in implementing and achieving the nationally determined contribution¹²

10. The TERT assessed the information reported in the BTR1 of Kenya and identified areas of improvement relating to consistency with the MPGs, which are described in tables 8–14 of the assessment tables referred to in paragraph 6 above and summarized in table 2.

Table 2

Information reported in Kenya's submission

<i>Topic</i>	<i>ID#s for the area(s) of improvement identified^a</i>
National circumstances and institutional arrangements (paras. 59–63 of the MPGs)	8.1–8.3
Description of the NDC under Article 4 of the Paris Agreement, including updates (para. 64 of the MPGs)	9.1
Information necessary to track progress in implementing and achieving the NDC under Article 4 of the Paris Agreement (paras. 65–79 of the MPGs)	10.1–10.3, 10.5–10.9
Mitigation PaMs, actions and plans related to implementing and achieving the NDC under Article 4 of the Paris Agreement ^b (paras. 80–90 of the MPGs)	11.1–11.6
Summary of GHG emissions and removals (para. 91 of the MPGs)	12.1
Projections of GHG emissions and removals ^b (paras. 92–102 of the MPGs)	No areas of improvement were identified

^a See document FCCC/ETF/TERR.1/2024/KEN/Add.1. The areas of improvement referred to in this table comprise only those relating to recommendations in that document.

^b The developing country Party applied flexibility in the light of its capacities with respect to this provision.

B. Consideration of the Party's implementation and achievement of its nationally determined contribution¹³

11. In considering Kenya's progress in implementing and achieving its NDC, the TERT noted that the mitigation element of the NDC¹⁴ is defined as an economy-wide single-year absolute GHG emission reduction target. Kenya's target is to reduce GHG emissions by 32 per cent by 2030 relative to a 'business as usual' scenario. The sectors covered are energy, IPPU, agriculture, LULUCF and waste. The GHGs covered are CO₂, CH₄ and N₂O. The NDC implementation period is from 1 January 2021 to 31 December 2030. The resource requirements for mitigation activities for 2020–2030 are estimated at USD 17.7 billion. Subject to its national circumstances, Kenya will provide 21 per cent (USD 3.7 billion) of the mitigation cost, while the remaining 79 per cent (USD 14.0 billion) is conditional on international support.

12. The indicator that Kenya selected to track progress in implementing and achieving its NDC is described in table 3.

¹² As per para. 150(b) of the MPGs.

¹³ As per para. 146(b) of the MPGs.

¹⁴ The consideration of the Party's implementation and achievement of its NDC is in the context of the NDC submitted by Kenya on 24 December 2020. The TERT noted that the Party submitted a new NDC on 30 April 2025 for 2031–2035.

Table 3

Description of the indicator(s) selected by Kenya to track progress in implementing and achieving its nationally determined contribution

<i>NDC target</i>	<i>Indicator</i>	<i>Description</i>
Economy-wide absolute emission target to reduce GHG emissions by 32 per cent by 2030 relative to a 'business as usual' scenario	Total annual GHG emissions and removals in t CO ₂ eq	Kenya's economy-wide absolute target is to reduce GHG emissions by 32 per cent by 2030 relative to 'business as usual' scenario projections, calculated as 143 Mt CO ₂ eq. Total annual GHG emissions in 2030 will be compared with the 2030 target (97.24 Mt CO ₂ eq)

Sources: Kenya's BTR1 and CTF tables 1–2.

13. The TERT noted that the contribution of LULUCF to achieving the NDC is included in the Party's target-year level and that Kenya plans to use ITMOs from cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement towards the achievement of its NDC.

14. Table 4 summarizes information on progress in implementing the NDC based on the indicator total annual GHG emissions and removals in t CO₂ eq taking into account the type of Kenya's NDC target, including quantitative values for the base year and end year of the baseline scenario, implementation period, including the most recent year available, and target year.

Table 4

Summary of information on Kenya's progress in implementing and achieving its nationally determined contribution(Mt CO₂ eq)

	<i>Total annual GHG emissions and removals</i>	<i>Contribution of LULUCF, as applicable</i>	<i>ITMOs, A6.4ERs and/or CERs used towards NDC, as applicable</i>	<i>Indicator adjusted for contribution of LULUCF and ITMOs, A6.4ERs and/or CERs used towards NDC, as applicable</i>
Baseline in reference year (2010)	67.00	NA	NA	NA
Baseline (2030) ^a	143.00	NA	NA	NA
2021	114.23	NA	0	114.40
2022	113.18	NA	0	113.36
Target level (2030) ^b	97.24	NA	NA	97.00

Sources: Kenya's BTR1 and CTF table 4, and information provided by the Party during the review.

^a Emission level corresponding to the baseline scenario in 2030 is based on 'business as usual' GHG projections.

^b Target level corresponds to both a conditional and an unconditional NDC target.

15. According to the most recent information on the total annual GHG emissions and removals provided in the CRTs, in 2021 Kenya's total GHG emissions were 114.40 Mt CO₂ eq. In 2022, Kenya's total GHG emissions were 113.36 Mt CO₂ eq. The indicator in 2021 is 17.8 per cent (17,225.79 kt CO₂ eq) above the emission level corresponding to the target level in 2030, and the indicator in 2022 is 16.7 per cent (16,182.76 kt CO₂ eq) above the emission level corresponding to the target level in 2030.

16. Kenya reported information on the actions and PaMs that support the implementation and achievement of its NDC. Table 5 provides a summary of the reported information on the key PaMs of Kenya.

Table 5
Summary of information on key policies and measures reported by Kenya

<i>Sector</i>	<i>Key PaMs</i>
Energy	Least Cost Power Development Plan (which emphasizes prioritization of renewable energy options for electricity generation)
Transport	Transfer of freight from road to rail between Nairobi and Mombasa Transition to e-mobility Electrification of the railway between Nairobi and Mombasa
IPPU	Energy efficiency Water and wastewater management Circular economy Process optimization and environmental compliance
Agriculture	Kenya Climate Smart Agriculture Strategy 2017–2026 Dairy nationally appropriate mitigation action Towards Ending Drought Emergencies: Ecosystem Based Adaptation in Kenya’s Arid and Semi-Arid Rangelands project National Agricultural and Rural Inclusive Growth Project Kenya Climate Smart Agriculture Project
LULCUF	Strategy for 10 per cent tree cover by 2022 National REDD+ Strategy 2021
Waste	National Sustainable Waste Management Policy 2021 Sustainable Waste Management Act 2022 Extended producer responsibility regulations 2024 Ban on the manufacture, sale, export and import of plastic carrier bags

Sources: Kenya’s BTR1 and CTF table 5, and information provided by the Party during the review.

17. The TERT noted that increased electricity generation from renewable energy technologies and the adoption of lower carbon fuels have started to have an impact on GHG emissions in the energy sector. In the agriculture sector, GHG emissions decreased between 2020 and 2022, likely as a result of the decline in livestock populations, a consequence of consecutive droughts over the previous three years. In contrast, GHG emissions from cement production have been continuously and significantly increasing owing to growth of the housing sector and the large public infrastructure public projects being undertaken by the Government.

18. The TERT notes that 16.18 Mt CO₂ eq need to be reduced to reach the 2030 target level compared with the level in the most recent reported year (2022). The TERT also notes that there are not yet enough data to sufficiently assess the Party’s progress in implementing the NDC, as data have been reported for only two years (2021–2022) as it is early in the implementation period (2021–2030). The TERT further notes that regular monitoring of the results of mitigation actions in terms of GHG emission reductions and the findings of the national inventory allows adjustments to be made as needed towards achieving the necessary reductions.

C. Identification of areas of improvement¹⁵

19. During the technical expert review, the TERT identified areas of improvement in relation to Kenya’s implementation of Article 13 of the Paris Agreement, which are summarized in chapter II.A above and included in the assessment tables referred to in paragraph 6 above.

¹⁵ As per para. 146(d) of the MPGs.

D. Assistance in identifying capacity-building needs¹⁶

20. The TERT, in consultation with Kenya, identified the following prioritized needs for capacity-building to facilitate the Party's reporting in its BTR relating to the flexibilities applied by it as per the MPGs:¹⁷

- (a) Preparing an uncertainty assessment, including, at a minimum, a qualitative discussion of uncertainty for key categories applying the 2006 IPCC Guidelines, but where possible, a quantitative estimate of uncertainty for all source and sink categories of the GHG inventory;
- (b) Developing an inventory QA/QC plan, identifying the inventory agency responsible for implementing QA/QC procedures and implementing the plan;
- (c) Preparing emission estimates for fluorinated gases;
- (d) Enhancing QC/QA procedures specific to waste sector categories;
- (e) Developing projections for all GHG emissions and removals for the 'with measures', 'with additional measures' and 'without measures' scenarios.

21. Furthermore, in order to facilitate continuous improvement in reporting, in consultation with Kenya, the following additional prioritized capacity-building needs were identified during the review:

- (a) Strengthening the national inventory arrangements related to the capacity of the GHG inventory team to ensure consistent implementation of the general reporting requirements of the MPGs and for each sector;
- (b) Establishing and operationalizing a system for documenting and archiving data for the continued estimation, compilation and timely reporting of NIRs in accordance with the MPGs;
- (c) Preparing an assessment of the insignificance of categories across the entire inventory in accordance with paragraph 32 of the MPGs;
- (d) Enhancing the expertise and technology available to account for fugitive emissions from fuel handling;
- (e) Enhancing the capacity of energy sector experts and waterborne navigation data providers to collect and disaggregate data for domestic and international waterborne navigation;
- (f) Strengthening the capacity of government and private sector actors to collect sufficient data for estimating and reporting emission estimates for all categories in the IPPU sector under which emissions occur in Kenya and for which methodologies are provided in the 2006 IPCC Guidelines, for at least CO₂, CH₄ and N₂O;
- (g) Enhancing national capacity to develop country-specific EFs for categories of the IPPU sector to enable reporting using higher-tier methodologies, where relevant, in accordance with the 2006 IPCC Guidelines;
- (h) Enhancing the capacity of regional livestock experts to apply IPCC data gap-filling techniques and access data analysis tools, and enhancing national capacity to develop software and tools for improving systematic data collection, data cleaning, conducting QC at the county level and aggregating data at the national level;
- (i) Improving the quality and consistency of AD for manure management systems by developing a standardized classification system that aligns with the 2006 IPCC Guidelines and conducting coordinated livestock surveys across all significant livestock types (e.g. dairy cattle, non-dairy cattle, camels);

¹⁶ As per para. 146(e) of the MPGs.

¹⁷ For a complete list of the capacity-building needs identified by the TERT in consultation with the Party, see table 15 in document FCCC/ETF/TERR.1/2024/KEN/Add.1.

- (j) Providing support for using reporting tools to ensure all subcategories under category 3.D direct and indirect N₂O emissions from agricultural soils are covered;
- (k) Harmonizing data collection, improving yield-to-area estimation methods, and strengthening technical capacity to accurately and transparently report rice cultivation AD;
- (l) Inputting into the IPCC inventory software the AD used to estimate losses in living biomass and strengthening QC measures to ensure the estimates generated by the software match the Party's calculations;
- (m) Enhancing the collection of the AD necessary to estimate emissions for category 4(IV) biomass burning for all relevant land-use categories, such as AD on the extent and frequency of fire events;
- (n) Understanding how to input data on land-use matrices into the IPCC inventory software and strengthening QC measures appropriate to the land representation approach adopted by the Party;
- (o) Enhancing the collection of data, preferably from 1971 onward, that will enable gaps in areas of land-use change to be addressed in order to estimate carbon stock changes due to land-use conversion in mineral soils for the entire time series;
- (p) Enhancing the collection of data on harvested wood products to enable estimation of carbon stock changes for this mandatory pool;
- (q) Conducting studies on mineral soils to generate country-specific data that can be used to accurately estimate carbon stock changes in mineral soils;
- (r) Strengthening the AD collection system for the waste sector as a whole;
- (s) Enhancing national capacity, including of multi-stakeholder technical committees, climate change units within ministries, departments and agencies, as well as private sector actors and project developers, to participate in cooperative approaches and to identify the sectors for which cooperative approaches are suitable;
- (t) Developing a measurement, reporting and verification system for tracking NDC implementation, including establishing legal, institutional and procedural arrangements;
- (u) Estimating achieved and expected GHG emission reductions for mitigation actions in all sectors.

III. Conclusions and recommendations

22. The TERT conducted a technical expert review of the information reported in the BTR1, NID, CRTs and CTF tables of Kenya in accordance with the MPGs.
23. The areas of improvement identified by the TERT on the basis of the review of the consistency of the information reported by Kenya with the MPGs are summarized in chapter II.A above and included in the assessment tables referred to in paragraph 6 above.
24. The TERT considers that, on the basis of a comparison of information on the total annual GHG emissions and removals for the most recent reported years (2021 and 2022) with the base-year level and target level, taking into account information on mitigation actions, and noting that it is early in the NDC implementation period, there are not yet enough data to assess the Party's progress in implementing the NDC.
25. The TERT notes that PaMs and actions have started to have an impact on GHG emission reductions in the energy sector (increased electricity generation from renewable energy technologies and the adoption of lower carbon fuels). In the agriculture sector, the decrease in emissions between 2020 and 2022 was likely a result of the decline in livestock populations due to consecutive droughts over the previous three years. Emissions from cement production have been continuously and significantly increasing over the years owing to construction and housing.

26. Kenya did not report information on financial, technology development and transfer, or capacity-building support provided under Articles 9–11 of the Paris Agreement in its BTR1 in accordance with the MPGs.¹⁸

27. Regarding the implementation of Article 13 of the Paris Agreement and transparency-related activities, Kenya required support for NDC implementation, both mitigation and adaptation components, including finance, technology development and transfer, and capacity-building support.

28. In consultation with Kenya, the TERT identified reporting-related needs for capacity-building support relating to the flexibilities applied by the Party as per the MPGs that could facilitate the Party's preparation of subsequent BTRs. For Kenya, the main reporting-related needs for capacity-building support relate to enhancing institutional, technical and financial capacity to ensure timely, sustainable reporting of impacts of mitigation actions; developing projections; identifying relevant PaMs; and reporting on climate change impacts and adaptation.

¹⁸ As per para. 118 of the MPGs.

Annex I

Outcome of the review conducted on a voluntary basis of the information reported by the Party in its first biennial transparency report pursuant to chapter IV of the modalities, procedures and guidelines

I. Summary of reported information

1. In its BTR1 Kenya provided information related to climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs and, as per paragraph 1 of decision 9/CMA.4, on a voluntary basis, requested the secretariat to organize a review of that information as part of the technical expert review pursuant to chapter VII of the MPGs. As per paragraph 3 of decision 9/CMA.4, the Party selected chapter 3 in the BTR1 for particular attention by the TERT.

2. Kenya provided a description of the national circumstances relevant to its adaptation action, its institutional arrangements and governance, and legal and policy frameworks and regulations. Kenya has seven agroecological zones, which experience different climate change impacts but mostly drought and extreme weather events such as heavy rainfall. Based on data from the National Bureau of Statistics for 2019, Kenya's population is 47 million. Most of the population is under 35 years of age and lives in rural areas. Kenya is a lower-middle income economy and its GDP for 2024 was 115.08 billion. The agriculture sector accounts for 20 per cent of Kenya's economy. The main crops are tea, coffee, flowers and vegetables.

3. Climate action in Kenya is coordinated by the Climate Change Directorate under the State Department for Environment and Climate Change in the Ministry of Environment, Climate Change and Forestry. The Directorate takes the lead in planning and coordinating climate change adaptation action, collecting data and reporting on adaptation activities, and ensuring stakeholder engagement and monitoring. Ministries and agencies are responsible for leading implementation of adaptation activities in their respective sectors, while county governments manage climate action planning and budgeting at the subnational level.

4. Kenya's adaptation policy and legal framework includes national climate change action plans, the national adaptation plan and the Climate Change Act of 2016. Other relevant acts include the Urban Areas and Cities Act, the National Drought Management Authority Act and the Environmental Management and Coordination Act, under the National Climate Change Framework Policy (2018).

5. Kenya provided information on climate change impacts, risks and vulnerabilities. In Kenya, 70 per cent of natural disasters are attributed to extreme climatic events such as droughts and floods. Since 2005, the frequency of droughts has doubled. Other hazards include increased temperature, changing rainfall pattern and sea level rise. Key vulnerabilities include a low-lying coastline, dependence on rain-fed agriculture, water scarcity, insecure land tenure, environmental degradation, conflicts over natural resources and high levels of poverty in arid and semi-arid areas. The most vulnerable groups include pastoralist communities, women, children and youth, persons with disabilities, elderly people, people with small households and people living in informal settlements. Climate change poses risks to food and nutrition security, water, fisheries, the blue economy, forestry, wildlife, tourism and health (through increases in malaria vectors, acute respiratory infections and outbreaks of waterborne and vector-borne diseases during floods in urban areas). Declining water availability affects the secondary manufacturing sector, especially tea producers, and extreme weather events threaten energy and transport infrastructure, including by damaging roads, electricity generation and transmission infrastructure (including hydropower). According to the Notre Dame Global Adaptation Initiative's Country Index, which assesses vulnerability and adaptive capacity, Kenya was ranked 135 out of 187 countries in 2022.

6. Kenya described its adaptation priorities and barriers to implementing adaptation action. The priorities are categorized as short term (one to two years), medium term (three to five years) and long term (up until to 2030). Key areas of these adaptation priorities include agriculture, fisheries, food security, biodiversity, wildlife and natural resources, forest, coastal areas, disaster risk reduction, human health, infrastructure and water resources. All areas also consider gender, youth, vulnerable groups and the private sector. Adaptation-related challenges and gaps identified by Kenya include poor coordination among actors, insufficient technical staff, lack of accountability mechanisms, inadequate financial resources and competing risks and priorities requiring action such as coronavirus disease 2019. As part of its updated NDC, Kenya aims to address the barriers by recruiting additional technical officers, seeking alternative funding sources, developing comprehensive climate risk management tools and enhancing access to climate information. Kenya also faces the barriers of poor access to background functional data and lack of fully implemented monitoring and evaluation systems, as well as insufficient technical resources to manage these systems. As part of its updated NDC, Kenya aims to improve technical capacity, promote the use of relevant adaptation technologies and create a multi-stakeholder platform to bring together State and non-State actors.

7. Kenya described its adaptation strategies, policies, plans and goals, and action to integrate adaptation into national policies and strategies. The Bottom-Up Economic Transformation Agenda focuses on agricultural transformation, micro, small and medium-sized enterprises, housing and settlements, healthcare, the digital superhighway and the creative economy. These areas of action are priorities in Kenya's national adaptation plan and NDC. Kenya adopted the National Policy on Climate Finance in 2018, establishing frameworks for accessing and managing climate finance. The Green Economy Strategy and Implementation Plan for 2016–2030 identifies multiple challenges, including infrastructure gaps, food insecurity, environmental degradation, climate change, poverty, inequality and unemployment. Other legal and policy regulations have been established by Kenya for 2016–2030 related to reducing the risks of climate-related disasters such as droughts and floods, improving food and nutrition security, and enhancing access to water and its efficient use. Kenya aims, by 2030, to increase forest cover to 10 per cent of total land area and rehabilitate degraded lands; reduce the incidence of climate-related diseases; promote climate-resilient waste management; encourage climate-resilient buildings and settlements; improve energy and resource efficiency; and develop climate-proof infrastructure, promote renewable energy and increase uptake of clean cooking solutions. Kenya recognizes that climate change impacts are not gender-neutral and affect women and men differently because of traditional roles, societal expectations and livelihoods. Children, youth, persons with disabilities and marginalized groups are also highly vulnerable to climate change hazards.

8. Kenya described its progress in implementing adaptation action. Disaster risk reduction measures include increasing the number of households benefiting from devolved adaptive services, distributing funds to local households and making cash transfers for drought shock response measures. Flood resilience has been improved by issuing flood warnings earlier and relying on weather forecasts during the rainy seasons. County disaster management legislation, plans and coordinating units have been established in six counties to improve coordination of response to climate-related risks.

9. In terms of food and nutrition security, the National Agricultural Insurance Policy has been developed to enhance agricultural insurance and inclusion of the private sector in the policy. Other progress in food and nutrition security has been achieved by improving crop productivity, water harvesting and storage capacity, and access to climate-oriented crop insurance; increasing the uptake of fish farming and fish production; and establishing county-level climate information service plans.

10. Kenya has made progress in the water and blue economy sectors by increasing access to water and providing access to sanitation and hygiene services for the population across nine counties.

11. In the forestry, wildlife and tourism sectors, Kenya increased forest cover from 6.99 per cent of total country area in 2010 to 8.83 per cent in 2021 and has a goal to reach 30 per cent by 2030. Other efforts related to forestry have included producing seedlings of drought-tolerant indigenous tree species to promote drought resilience in dryland areas and enhancing

community engagement in rangelands. Wildlife conservation efforts have led to the protection of more than 2,000 ha wildlife habitat and have addressed issues such as drought, and human and wildlife conflict. The National Wildlife Climate Change Adaptation Strategy 2022–2032 has been developed to ensure sustainable wildlife management and support the tourism sector.

12. In the health, sanitation and human settlements sectors, actions with achieved results include a national assessment of climate change impacts, vulnerability and adaptation for the health sector, integration of climate considerations into Kenya’s Integrated Disease Surveillance and Response system, and a reduction in the incidence of malaria and other vector-borne diseases.

13. In the manufacturing sector, key actions include building private sector capacity for climate-resilient products, prioritizing water and resource efficiency, and supporting farmers in adopting climate-smart agricultural practices.

14. In the energy and transport sectors, Kenya has optimized hydropower plants to improve water management, conservation and rehabilitation of catchment areas feeding dams. The energy sector has rehabilitated 2,500 ha forest serving hydropower dams. Climate risk and vulnerability assessments have become part of the Environment and Social Impact Assessment studies for proposed projects.

15. Kenya has also made progress in implementing priority adaptation actions and responding to opportunities for gender equality and social inclusion. Indigenous Peoples’ knowledge has been incorporated into research-based innovations to support the livelihoods of vulnerable populations facing negative impacts of climate change. Efforts have been made to improve the land tenure system of Indigenous Peoples, such as by registering community lands to enhance tenure rights and autonomy of decision. The agriculture sector gender policy has been reviewed to provide guidance on gender mainstreaming in climate change and food security interventions. Youth access to finance for climate change adaptation activities has been enhanced through capacity-building, support for start-ups, and climate-focused grants and subsidized loans.

16. Kenya provided information on its monitoring and evaluation of adaptation actions and processes. NCCAP 2013–2017 introduced a National Performance and Benefit Measurement Framework (also known as ‘MRV+’) for monitoring and evaluating adaptation actions. Some aspects of this framework have been operationalized, including the monitoring, evaluation and learning system for adaptation. According to the NCCAP 2018–2022 report prepared by the Climate Change Directorate, the adaptation monitoring and evaluation system was expected to be fully functional by June 2023 and was to outline institutional structures for and stakeholder roles in reporting. In addition, a climate registry for adaptation actions was to be established with publicly available information. However, implementation has been slow owing to capacity-building needs being unmet. Kenya identified a shortlist of county-level adaptation indicators as part of the current NCCAP 2023–2027.

17. Kenya reported on the effectiveness and sustainability of its adaptation actions. It provided information on various stakeholder engagement platforms that support the effective implementation of adaptation actions. In addition, Kenya has enhanced implementation of adaptation actions on the ground through the County Climate Change Fund mechanism.

18. Kenya provided information related to averting, minimizing and addressing loss and damage associated with climate change impacts. These impacts include heavy rains, floods, droughts, soil erosion and sea level rise, which put both rural and urban infrastructure at risk. Economic losses attributed to climate change impacts have been estimated to be 3–5 per cent of GDP per year. Loss and damage are reported by Kenya for priority sectors such as disaster risk management, food and nutrition security, ecosystems and biodiversity, health, sanitation, human settlements, energy and transport. Kenya reported on its activities to avert and minimize loss and damage due to climate change. The National Disaster Operation Center is responsible for documenting and reporting flood disaster information, providing early warnings, modernizing early warning systems and mobilizing resources for Government responses. Kenya plans to establish national loss and damage focal points or focal institutions for operationalizing activities aimed at addressing loss and damage.

19. Kenya reported on cooperation, good practices, experience and lessons learned in relation to climate change impacts and adaptation. For example, the Adaptation Consortium brought together local and international organizations, county governments, the National Drought Management Authority and the Kenya Meteorological Department to discuss the use of climate information services for adaptation planning financed under the County Climate Change Fund mechanism. Multi-stakeholder platforms have been established to champion the dissemination of good practices in climate adaptation. In the agriculture sector, regarding food and nutrition security, experience and lessons learned in climate-smart agriculture have been documented and shared. Policy innovation and pilot projects involve strategic partnerships with the Government of Kenya, the European Union, the International Fund for Agricultural Development, the Food and Agriculture Organization of the United Nations and the World Food Programme. One example is the Kenya Cereal Enhancement Programme–Climate Resilient Agricultural Livelihoods Window, focusing on rain-fed cereals and pulses, which account for a significant portion of food crop production and value in Kenya.

20. Good practices developed from this programme, such as soil fertility management, have been documented in a curriculum and training materials, which can be replicated for other crops. Multi-stakeholder seasonal outlook forums are used for sharing the best available science for adaptation. Collaboration under these forums has emphasized the importance of co-production of weather and climate information with sector-specific advisories, making the information relevant and understandable. Kenya’s County Climate Change Fund – through its Financing Locally Led Climate Change programme – has provided a framework for and lessons learned in implementing climate action through local-level multi-stakeholder partnerships. These partnerships prioritize grass-roots structures and actors, particularly communities. Establishment of a legal, policy and institutional framework at both the national and the subnational level is a good practice now replicated across all 47 counties in Kenya.

21. Table I.1 summarizes the information on vulnerability and adaptation to climate change presented in the BTR1 of Kenya.

Table I.1

Summary of information on vulnerability and adaptation to climate change reported by the Party

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
Agriculture and food security	Vulnerability: Heavy dependence on rain-fed agriculture, insufficient irrigation systems, insecure land tenure and land fragmentation Adaptation: Implementing climate-smart agricultural practices, building resilience through sustainable management of land, and introducing climate-oriented crop insurance schemes	Resistance to using climate-resilient seeds, crops, livestock and food crops Lack of specific research on relevant climate-smart agriculture good practices	Multi-stakeholder platforms to disseminate good practices in climate adaptation
Biodiversity, wildlife and natural ecosystems	Vulnerability: Environmental (land and forest) degradation and wildlife migration Adaptation: Rehabilitating and conserving degraded forests and land, integrating use of nature-based solutions and mangrove management plans into national and country development plans, and adopting a biodiversity strategy	Lack of financial resources	NCCAP established a conservation target of 30,000 ha wildlife habitat, of which conservation activities for more than 2,000 ha wildlife habitats were completed
Coastal zones	Vulnerability: Low lying coastline and informal settlements	Lack of financial resources	More than 600 ha mangrove forests have been either planted or

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
	Adaptation: Implementing flood risk management and nature-based solutions		rehabilitated to protect the coastline and sustain ecosystem services for coastal communities
Disaster risk management for droughts and floods	Vulnerability: High level of poverty, informal settlements, and arid and semi-arid areas prone to extreme weather events Adaptation: Implementing drought risk management, early warning systems and flood management plans	Disaster preparation and management for emerging risks is not adequate to withstand increased risks Lack of capacity and financial resources	The Kenya Meteorological Department has expanded the availability of climate information services to users in the form of daily, weekly, monthly and seasonal forecasts and advisories
Fisheries	Vulnerability: Salinity of coastal fresh water Adaptation: Introducing climate-smart agricultural practices and value chains to build the resilience of fisheries	Deterioration of water quality and marine ecosystems	Uptake of fish farming cages as a fish production alternative to traditional fishing
Forests	Vulnerability: Loss of forest to pastoral land and wildfires Adaptation: Rehabilitating and conserving degraded forests and conducting afforestation	Lack of financial resources to develop an adaptation-related monitoring, evaluation and learning system for the forestry sector	Introduction of a campaign to plant 15 billion trees to support tree growing and environmental conservation efforts Introduction of the Jaza Miti App, a species site matching tool, to increase tree growing and help to achieve 30 per cent tree cover by 2032
Human health	Vulnerability: Limited access to quality healthcare Adaptation: Conducting vulnerability assessments for different climate risks to human health, and developing public awareness-raising and social mobilization strategies on climate change impacts on human health	Lack of early warning systems and advisories in support of the health sector	Integration of climate information into Kenya's Integrated Disease Surveillance and Response system
Infrastructure and economy	Vulnerability: Poverty, migration, informal settlements, high urbanization rate and poor urban land planning Adaptation: Implementing nature-based solutions for flood control around informal settlements, strengthening enforcement of green building codes at the national and local level, and building the climate resilience of energy infrastructure and roads	Lack of financial resources Low engagement of the private sector in relevant adaptation actions	Introduction of climate risk assessments in sectors such as transport and energy
Water resources	Vulnerability: Scarcity and lack of water management practices and conflict over water resources Adaptation: Building resilience to protect dams, dykes and riverbanks,	Lack of technical knowledge and access to data and information	Introduction of the Kenya Integrated Water, Sanitation, and Hygiene programme

<i>Priority adaptation sector or area</i>	<i>Vulnerability and adaptation measures reported</i>	<i>Challenges and constraints</i>	<i>Cooperation, good practices, experience and lessons learned</i>
	promoting water harvesting and storage at the county and household level, and mainstreaming climate change in water catchment management plans		Increased number of boreholes to tap into groundwater resources in response to increased water scarcity

II. Areas of improvement identified during the technical expert review of the reporting in the Party's first biennial transparency report on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the modalities, procedures and guidelines

22. The TERT assessed the information reported on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs in the BTR1 of Kenya and identified areas of improvement relating to consistency with the MPGs, which are described in table I.2. All recommendations and encouragements contained in the table are for the next BTR, unless otherwise specified.

Table I.2

Areas of improvement of the reporting on climate change impacts and adaptation under Article 7 of the Paris Agreement

<i>ID#</i>	<i>Reporting requirement</i>	<i>Description of area of improvement with recommendation or encouragement</i>
I.2.1	Specified in paragraph 113 of the MPGs	<p>Kenya did not provide in its BTR the following information related to monitoring and evaluation: achievements, impacts, resilience, review, effectiveness and results; assessment of and indicators for; and how adaptation actions influence other development goals.</p> <p>During the review, Kenya clarified that implementation of monitoring and evaluation measures has been delayed owing to capacity-building constraints; however, several sets of indicators have been developed.</p> <p>The TERT encourages Kenya to report on the effectiveness and results of adaptation measures, especially on the indicators used to measure the progress of implementation of adaptation measures, and on how adaptation measures influence other development goals.</p>
I.2.2	Specified in paragraph 115 of the MPGs	<p>Kenya did not report in its BTR on potential climate change impacts, including those related to extreme weather events and slow onset events, drawing on the best available science. The Party also did not provide information on the relationship between the institutional arrangements for adaptation and institutional arrangements for loss and damage.</p> <p>During the review, Kenya explained that it requires additional capacity and guidance to differentiate between the reporting requirements in chapter IV.B of the MPGs, on impacts, risks and vulnerabilities, and chapter IV.G, on information related to averting, minimizing and addressing loss and damage associated with climate change impacts.</p> <p>The TERT encourages Kenya to report on (1) the potential impacts of loss and damage to address the requirement in paragraph 115(a) of the MPGs and (2) the linkages between the institutional arrangements for adaptation and institutional arrangements for loss and damage.</p>

III. Assistance in identifying capacity-building needs¹

23. In order to facilitate continuous improvement of the reporting in the BTR on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs, the following capacity-building needs were identified during the review:

- (a) Quantify the financial requirements of adaptation measures to improve their implementation;
- (b) Apply new technologies for innovative solutions and enable their uptake by the private sector;
- (c) Improve reporting on loss and damage, especially on slow onset events;
- (d) Enhance, through training courses, the capacity of Government entities responsible for mobilizing finance and for donor relations to proactively identify (new) financial resources for implementing adaptation actions;
- (e) Enhance the knowledge of finance sources of entities at the national and subnational level and of the private sector;
- (f) Enhance national capacity to develop robust monitoring and evaluation system for adaptation;
- (g) Enhance national capacity to develop projections of potential loss and damage associated with climate change impacts for relevant sectors;
- (h) Enhance institutional capacity to strengthen the linkages between actions for adaptation and loss and damage on the ground.

24. Kenya also identified capacity-building support needs in its BTR1 to facilitate reporting in the BTR on climate change impacts and adaptation under Article 7 of the Paris Agreement pursuant to chapter IV of the MPGs (BTR chap. 3.5.3 on support and implementation). These needs include:

- (a) Improve cooperation and cooperation among institutional entities at the national and county level to improve understanding of climate risk and vulnerability assessments for adaptation planning and reporting;
- (b) Increase domestic capacity to implement adaptation actions, reducing donor dependency;
- (c) Improve monitoring, evaluation and learning systems to improve the tracking of progress on implementing adaptation action;
- (d) Improve the collection of gender-disaggregated information on adaptation action;
- (e) Facilitate the translation of climate-related information into dialects used in counties;
- (f) Expand the dissemination of early warning bulletins and tailor early warning systems in order to improve effective disaster risk management;
- (g) Increase the capacity of extension services along the value chains relating to food and nutrition security to support climate-smart agriculture;
- (h) Improve the adaptive capacity of the agriculture sector in relation to Indigenous knowledge, livestock insurance schemes, early warning systems, and livestock management and breeding practices;
- (i) Establish a climate change unit in the State Department of Tourism to enhance the adaptive capacity of the tourism sector;
- (j) Take into account the need to implement adaptation needs when developing project concepts for the manufacturing sector with a view to unlocking adaptation finance;

¹ As per para. 146(e) of the MPGs.

(k) Conduct participatory risk assessments for energy and transport projects to consider the impacts of climate hazards;

(l) Increase awareness of communities of, and increase their capacity to participate in, climate risk assessment and decision-making processes for projects in the industrial, energy and transport sectors.

Annex II

Documents and information used during the review

A. Reference documents

BTR1 of Kenya. Available at <https://unfccc.int/first-biennial-transparency-reports>.

BTR1 CTF tables of Kenya. Available at <https://unfccc.int/first-biennial-transparency-reports>.

CRTs of Kenya. Available at <https://unfccc.int/first-biennial-transparency-reports>.

EEA. 2023. *EMEP/EEA air pollutant emission inventory guidebook 2023. Technical guidance to prepare national emission inventories*. Luxembourg: Publications Office of the European Union. Available at <https://www.eea.europa.eu/publications/emep-eea-guidebook-2023>.

“Guidance for operationalizing the modalities, procedures and guidelines for the enhanced transparency framework referred to in Article 13 of the Paris Agreement”. Decision 5/CMA.3. FCCC/PA/CMA/2021/10/Add.2. Available at <https://unfccc.int/documents/460951>.

IPCC. 2000. *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. J Penman, D Kruger, I Galbally, et al. (eds.). Hayama: IPCC/Organisation for Economic Co-operation and Development/International Energy Agency/Institute for Global Environmental Strategies. Available at <https://www.ipcc.ch/publication/good-practice-guidance-and-uncertainty-management-in-national-greenhouse-gas-inventories>.

IPCC. 2003. *Good Practice Guidance for Land Use, Land-Use Change and Forestry*. J Penman, M Gytarsky, T Hiraishi, et al. (eds.). Hayama, Japan: Institute for Global Environmental Strategies. Available at <https://www.ipcc.ch/publication/good-practice-guidance-for-land-use-land-use-change-and-forestry>.

IPCC. 2006. *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. S Eggleston, L Buendia, K Miwa, et al. (eds.). Hayama, Japan: Institute for Global Environmental Strategies. Available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl>.

“Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement”. Annex to decision 18/CMA.1. FCCC/PA/CMA/2018/3/Add.2. Available at <https://unfccc.int/documents/193408>.

“Reviews on a voluntary basis of the information reported pursuant to decision 18/CMA.1, annex, chapter IV, and respective training courses needed”. Decision 9/CMA.4. FCCC/PA/CMA/2022/10/Add.2. Available at <https://unfccc.int/documents/626570>.

B. Additional information provided by the Party

Responses to questions during the review were received from Fredrick Ouma (State Department for Environment and Climate Change), including additional material. The following references were provided by Kenya and may not conform to UNFCCC editorial style as some have been reproduced as received:

Ministry of Environment and Forestry. 2018. National Climate Change Action Plan 2018–2022. Government of Kenya

Ministry of Agriculture, Livestock and Fisheries, State Department for Livestock Directorate of Livestock Production. 2019. *Inventory of GHG emissions from dairy cattle in Kenya 1995–2017*.

Ministry of Agriculture, Livestock, Fisheries and cooperatives, State Department for Livestock. 2024. *Inventory of GHG emissions from dairy cattle in Kenya 1995-2023*.

27 Feb-1 March 2023, *Report of the Sixth Kenya National Climate Outlook Forum For March – April – May (Mam) 2023 Season*, Boma Hotel, Nairobi.

White, David. 2018. *Feasibility study on the use of sustainable aviation fuels. ICAO-European Union assistance project: capacity building for C)2 mitigation from international aviation*. ICAO
