Consultant Services to Provide Analytical Support for The Gambia Towards NDCs

Prioritisation of NDC implementation outcomes and costing of the prioritised outcomes

(Draft) Final Report (for comments)

Prepared by Genesis Analytics

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List of Acronyms

BAU	Business as Usual
CDKN	Climate & Development Knowledge Network
COP	Conference of Parties
DCC	Department of Climate Change
GFDRR	Global Facility for Disaster Reduction and Recovery
GSSD	General Secretariat of the National Council for Sustainable Development
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LTS	Long Term Strategy
M&E	Monitoring and Evaluation
MCDA	Multi Criteria Decision Analysis
MRV	Measuring, Reporting and Verification
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NDCP	Nationally Determined Contribution Partnership
NSDP	National Strategic Development Plan
OTS	Online Tracking System
PP	Partnership Plan
SDGs	Sustainable Development Goals
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNOPS	United Nations Office for Project Services
WASH	Water, Sanitation and Hygiene

TABLE OF CONTENTS

List of Tables

List of Figures

Executive Summary

The NDC Partnership (NDCP), a global coalition that works with national governments, international institutions, and civil society, to fast-track climate and development action, awarded an open contract to Genesis Analytics (Genesis) to provide analytical support to inform decision-making related to the development of Partnership Plans and Nationally Determined Contribution (NDC) implementation across NDCP member states. Within this framework, Genesis supported the Government of The Gambia (GoG) to prioritise NDC implementation outcomes and estimate the costs of the prioritised outcomes (including outcomes thereof).

This report presents 20 prioritised outcomes of the NDC Implementation Plan, according to the assessment of seven co-developed criteria and with reference to a Multi Criteria Decision Analysis (MCDA) framework.. Seven outcomes belong to the Adaptation plan, and 13 to the mitigation plan. The analyses have been undertaken by overall thematic components/ sector that allows to obtain a broader picture of the evaluation of the NDC implementation prioritisation, as well as a detailed analysis by key outcomes prioritised within each thematic component/ sector based on quantitative and qualitative assessments. In summary, the 20 NDC outcomes (inclusive of all their disaggregated outputs) suggested to be prioritised encompass **policy, legislative and institutional review and development and mobilisation of climate finance, furthering climate services investments and systems, and the built environment and infrastructure within the Adaptation thematic components – all of which are suggested to be implemented by the year 2026. Similarly, for Mitigation, the results indicate that outcomes specifically for Energy, Agriculture, IPPU, Waste and LULUCF sectors ought to be prioritised by the year 2029.**

In addition, this report presents the estimated cost of the prioritised outcomes, providing greater clarity on the actual cost of implementation above and beyond the indicative costs introduced in the Gambia Updated NDC, presented in October 2021 to the United Nations Framework Convention on Climate Change (UNFCCC). **It has been estimated that approximately USD 5.6 Mn. and USD 268 Mn. will be required to implement and operationalise the outputs and outcomes for Adaptation and Mitigation respectively, as per the NDC Implementation Plan.**

Estimating the cost of the prioritised outcomes, we have applied a tailored methodology that takes into consideration the proposed implementation plan, scope of work, and timeframe for completion. The tailoring was made according to the available information for the Gambia NDC Implementation Plan, providing a hybrid basis which can account for both aggregate costs as well as those which needed to be estimated through a bottom-up or calculated approach, which involves collecting detailed cost information at the activity level and then aggregating it to estimate the total cost of implementing outcomes. Our pragmatic and replicable approach has been consultative and research-focused, centring on the modification and contextualisation of an Excel-based tool to generate outputs while ensuring the use of verified/ validated inputs (costing data and information). Individual and group consultations with critical stakeholders across relevant government sectors were undertaken during March and April of 2023.

Financing the prioritised NDC outcomes in The Gambia requires a combination of international climate finance, domestic resource mobilization, public-private partnerships, innovative financial instruments, capacity building, and mainstreaming climate considerations in development planning. By adopting a multi-faceted approach and leveraging various financing mechanisms, The Gambia can secure the necessary resources to implement the prioritised NDC outcomes, and outputs thereof.

1 | Objectives and Scope of the Assignment

This chapter highlights the support provided by Genesis Analytics to the NDC Partnership for the overall assignment. It presents the key and the broader scope of the objectives of the assignment, as well as the specific tasks developed in the Gambia, and finalises by contextualising the report, through the overview of its structure.

1.1. Assignment Context

The NDCP is a global coalition that works with national governments, international institutions, and civil society, to fast-track climate and development action. Through the Partnership, members leverage their resources and expertise to provide countries with the tools they need to implement their NDCs to combat climate change and build a better future.

One of the unique value propositions that the NDCP brings through its in-country work is leveraging the support from a consortium of partners towards a common objective set by the government. The Partnership, through its Country Engagement process, engages directly with ministries and other stakeholders to assess climate- related needs and identify opportunities for collaboration around these needs—across sectors, regions, and international partners. The Partnership is hosted by the World Resources Institute in Washington D.C., United States; United Nations Framework Convention on Climate Change (UNFCCC) in Bonn, Germany; and United Nations Office for Project Services (UNOPS).

The NDC Partnership awarded an open contract to Genesis Analytics (Genesis) to provide analytical support to inform decision-making related to the development of Partnership Plans and NDC implementation across a range of NDCP developing country members.

1.2. Overall Objectives of the Assignment

The objectives of the overall assignment, when disaggregated by respective countries' support needs, will be varied in nature. However, the overarching objectives of the services will endeavour to:

- Strengthen the analytical basis for developing country members' projects and programs in support of NDC implementation and build governments' institutional and technical capacity in these areas. Requested analytical products will help country governments further develop these projects and programs, providing critical data and assessments to support their financing and execution. This will also help capacitate government actors by providing the methodological and subject-matter expertise they need to carry these projects forward.
- Build confidence among in-country stakeholders that their governments are following clear methodologies to determine the most effective way to achieve their NDCs.
- Assist developing country members in making a case for technical and/or financial support to development partners, implementing partners, and other potential sources of expertise or financing.
- Support NDCP developing country members to develop and revise NDC implementation plans.

1.3. Scope of Work in The Gambia

The Government of The Gambia (GoG) has recently submitted its draft NDC implementation plan, focusing on mitigation outcomes, and the preparation and finalisation of the second part of this implementation plan is underway (advanced stages) with focus on adaptation outcomes. Overall, implementation funding needs to be broadly defined, with more granular costing and prioritisation analysis required. Due to existing in-country constraints, GoG has requested from the NDCP technical assistance to support it in the process to advance the NDC implementation in targeted areas. This has entailed:

- Understanding key climate and county characteristics in The Gambia and key NDC outcomes developed to tackle the climate induced vulnerabilities and risks thereof.
- Identification of NDC outcomes ought to be prioritised based on a harmonised and contextualised set of criteria for prioritisation of NDC outcomes and a robust and integrated (quantitative and qualitative) methodology to include different sectoral stakeholder perspectives.

- High-level costing of the prioritised NDC outcomes to provide insights towards how much funding/financing will be required towards implementation of the same.

The overall objective of this assignment is **to support the Government of The Gambia (GoG) to enable its NDCs to become more holistic, actionable, and catering to critical needs through informed prioritisation and costing of implementation outcomes. This will lead to co-benefits at the intersection of advancements in terms of realisation of NDC outcomes, improvements in the enabling environment for overall economic growth and advanced resilience against climate induced risks.**

1.4. Structure of the Report

The report is structured in five chapters, presented below:

- **Chapter 1. Objectives and Scope of the Assignment.** This chapter is divided into three main sections with the aim of providing a broader scope of the objectives of the assignment, as well as the specific tasks developed in the Gambia.

- **Chapter 2. Background Context in The Gambia.** This chapter is divided into two subsections that provide details on the socio-economic, demographic and climate change characteristics and risks that The Gambia faces, which present the reasoning behind the NDC's development, goals and targets.

- **Chapter 3. Methodology and Limitations informing the Delivery Model.** This chapter is divided into three main sections which describe, first, the NDC outcome prioritisation methodology that the Genesis team used; second, the costing methodology applied to the NDC outcomes; and third, the limitations found in the application of the methodological model in The Gambia.

- **Chapter 4. Key Findings.** This chapter is divided into two sections, one dedicated to the analysis and main findings of the prioritisation exercise, and another one for the results of the costing process. The prioritisation section divides in two subsections as per adaptation and mitigation focusing, first, on a sectoral analysis that allows to visualise a broader perspective of the NDCs evaluated, and then on an analysis by outcome that focuses in greater detail on the quantitative and qualitative evaluation as well as the prioritisation of the outcomes according to the contribution of the surveyed stakeholders.

  The costing section, first, provides a comprehensive overview of the structure and classification of activities targets by each prioritised measure in the Gambia NDC Implementation Plan; second, introduces the parameters, cost estimations, and assumptions considered to conduct the costing exercise; and, third, presents the main result of the overall costing per sector.

- **Chapter 5. Recommendations.** This chapter highlights the next key steps identified for further assessments and towards developing the Final Report including recommendations.

2 | Background Context in The Gambia

This chapter presents an overview of the background of The Gambia, providing the baseline for the analysis of the development and progress of the NDC. It provides details on the geographic, socio-economic, and demographic characteristics of the country, highlighting the key climate change threats and vulnerabilities as the base of the NDC priority actions and sectors to overcome climate challenges and embrace the resilience-driven socio-economic opportunities available for the country. The chapter concludes by underlining the main highlights of the development and progress of the Gambia NDCs.

2.1. Country Characteristics and Climate-Induced Vulnerabilities in The Gambia

The Republic of The Gambia is the smallest country in Mainland Africa with a land mass of about 10,689 km2. The country is surrounded by the Republic of Senegal on all sides, except for its western border which faces the Atlantic Ocean**. The Gambia has a population of 2.5 million people, being one of Africa's most densely populated countries** (with 233 people per square kilometre).

In general, **more than two-thirds of Gambians reside in rural areas and derive their livelihoods mainly from agriculture and related activities. The agricultural sector is largely dependent on rainfall which makes the economy highly vulnerable to climate change**.

The Gambia experiences a Sahelian climate, characterised by a long, dry season and a short, wet season. Average temperatures in The Gambia range from 18°C to 30°C during the dry season and 23°C to 33°C during the wet season. In La Niña years, temperatures tend to be cooler than average throughout the year. Mean annual temperatures have increased by 1.0°C since 1960, an average rate of 0.21°C per decade. **By the end of the 21st century the country would experience an increase in the number of hot days and nights and longer heat waves.**

The Gambia is listed among the top 100 countries most vulnerable to climate change (IPCC, 2020), and is among the top ten countries most vulnerable to coastal erosion and sea-level rise in the world (Gomez, Adelagun, et al., 2020). The Gambia in recent years has experienced increased frequency and intensity of drought, flooding, coastal erosion, windstorms, high temperatures, and intense and erratic rainfalls. These extreme weather events, particularly drought, severely hinder the country's sustainable development and poverty eradication efforts. The country is particularly vulnerable to climate hazards due to its location, limited resources, and dependence on natural resources for its economy and livelihoods.

The main hazards, their associated risks, and direct sectoral impacts are presented in Table 1 below, based on an analysis conducted by the Global Facility on Disaster Risk Reduction (GFDRR, 2022) as well as The Gambia's Climate Change Profile developed by the World Bank (2021) and The Gambia's Disaster Risk Profile by the United Nations Office for Disaster Risk Reduction (UNDRR, 2019). Climate change is causing and is expected to cause stronger impacts on key economic sectors and livelihoods in The Gambia and the country's NDC identifies key sectoral outcomes to address most of these foreseen impacts.

Table 1: Climate Hazards, Risks and Most Vulnerable Sectors in The Gambia

Hazard and level of risk	Climate Change Impacts	Sectors impacted
Flood (river, urban and coastal) (High risk)	According to the World Bank (2021) potentially damaging and life-threatening coastal and river floods are expected to occur at least once in The Gambia in the next 10 years. Floods constituted 60% of weather/climate-related hazards in The Gambia between 1990-2014 and contributed to 96% of average annual monetary loss from all hazards.	**Agriculture** • Climate hazards can significantly impact crop yields and livestock production, leading to food shortages and economic losses in The Gambia. • Millet and groundnut are expected to suffer production losses ranging from 1 to 24%, whereas sorghum production is likely to slump

Hazard and level of risk	Climate Change Impacts	Sectors impacted
	Around 20% of the country is covered by wetlands and swamps, and flood-prone areas are hit by floods each year after heavy rains, subjecting these populations to life-threatening floods and property damage. An estimated 20% of The Gambia is flooded annually and the mangrove ecosystems are already affected by saline intrusion as well as flooding.	further by 16 to 30%. ● In the future three times more livestock is expected to be annually exposed to droughts. **Water Resources** ● Droughts and floods can affect the availability and quality of water, leading to water scarcity and waterborne diseases. ● Contamination of contact surfaces and water supply points increase the risk of water-related disease outbreaks. **Infrastructure** ● The largest portion of present climate-related losses are attributed to the productive sector, housing and transportation (roads), that together account for more than 80% of the overall loss. ● Climate hazards such as sea-level rise, coastal erosion, and storm surges can significantly impact infrastructure, homes, livelihoods and tourism attractions. **Human health** ● Higher temperatures will negatively impact vulnerable populations (particularly women - mainly pregnant women-, children and the elderly). ● The increase in temperatures and variability of precipitation would increase heat stress, dehydration among vulnerable population sub-groups, and fatalities actuated by increased concentrations of ground-level ozone and vehicle tailpipe emissions, and promote the resurgence of some endemic diseases. ● As habitats for mosquitoes expand, dense forest stands close to human habitations become more of a concern regarding the appearance and spread of Zika cases.
Water scarcity (High risk)	Droughts are expected to occur on average every 5 years. Droughts accounted for 13% of weather / climate-related hazards between 1990-2014 and impacted rainfed agriculture, water resources, soil quality, food security, public health, and environmental degradation. Currently, on average 350.000 people (19%) are annually potentially affected by severe droughts, i.e. hit by a drought that continues for three months. In the future, this number is expected to increase to 50% (on average 1.2 million people if population growth is accounted for). Both the western and upper river regions will reach over 100.000 people annually hit by droughts, while the Western province (with Banjul) will exceed 150.000.	
Extreme heat (High risk)	Prolonged exposure to extreme heat, resulting in heat stress, is expected to occur at least once in the next five years. According to IPCC (2013), continued emissions of greenhouse gases (GHG) will cause further warming, and it is virtually certain that there will be more frequent hot temperature extremes over most land areas during the next fifty years. Warming will not be regionally uniform.	
Wildfire (High risk)	There is greater than a 50% chance of encountering weather that could support a significant wildfire that is likely to result in both life and property loss in any given year. In The Gambia the peak fire season typically begins in early January and lasts around 18 weeks. There were 439 fire alerts reported between 11th of April 2022 and 3rd of April 2023 considering high confidence alerts only. This is unusually high compared to previous years going back to 2012 (Global Forest Watch, 2023).	

Source: Information as per GFDRR, 2022; World Bank, 2021; UNDRR, 2019

Climate change acts as a threat multiplier, and impacts are particularly damaging given the limited adaptive capacity of The Gambia's population due to socioeconomic conditions such as poverty, malnutrition, agricultural dependence, settlements in flood-prone areas, and poor public health.[1] Limited access to resources to make quick changes to lifestyles, especially with respect to food supplies, and low access to risk-spreading mechanisms, render many people very susceptible to the current variability and future climatic changes.

2.2. Development and Progress of the NDCs in The Gambia

The Gambia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994 and the Paris Agreement in 2016, which established a goal of limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. Leading up to the adoption of the Paris Agreement in 2015, parties were requested to prepare and submit their climate change pledges known as Intended Nationally Determined Contributions (INDC).

The Government of The Gambia submitted its INDC in 2015 which pledged to reduce overall emissions by about 44.4% in 2025 and 45.4% in 2030 (excluding Land Use Land Use-Change and Forestry -LULUCF emissions). With its INDC, according to the Climate Action Tracker (CAT), **The Gambia became the first country in the world whose plans were ambitious enough to fully honour the Paris Agreement.**

As a progression from its INDC and with the support from the NDC Partnership, the Gambia submitted its second NDC in September 2021 which set a new target of reducing GHG emissions by 49.7% below a business-as-usual scenario in 2030 (including now LULUCF emissions)., with revised mitigation targets and additional mitigation/adaptation outcomes. It will undertake mitigation outcomes in forestry and energy using its own resources. The mitigation potential of these unconditional outcomes would result in an absolute emissions level of about 5.53 MtCO2e excl. LULUCF by 2030. This is higher than the indicative unconditional target for 2030 in the first NDC (3.8 MtCO2e excl. LULUCF).

The updated NDC has also improved architectural elements. It now includes land use emissions, which had not been previously covered. As land use accounted for almost a third of The Gambia's emissions in the base year 2010, this greatly expands covered emissions. The first NDC focused on reductions in 2025 and also provided indicative 2030 targets. The 2021 NDC has shifted to 2030 targets only. **The second NDC also reiterates The Gambia's aim to achieve net zero carbon emissions by 2050, as outlined in the 2050 Climate Vision of The Gambia**.

The country's NDCs include strategies to increase renewable energy capacity, improve energy efficiency, and enhance climate resilience in various sectors such as agriculture, water resources, and coastal areas. It focuses on the country's five key greenhouse gas emitting sectors: Energy; Agriculture; Waste Management; Transport and LULUCF. According to the Gambia's Long-Term Strategy 2050 (LTS), which requires a total funding of USD 4.1 billion, hydro-power can address about 56% of the country's energy needs with the mitigation actions identified. The remaining 44%, equivalent to 161 GWh, can be provided by wind and solar power, which will lead to the country achieving a net zero GHG emission scenario in this sector by 2050. **Overall, the development and progress of NDCs in the Gambia will play a critical role in addressing climate change and building a sustainable future for the country and its people**.

The Gambia has an ambitious conditional emissions reduction target that would bend its emissions downwards; however, its current policies are not on track to meet this target (CAT, 2022). The Gambia will thus need to implement more stringent policies to meet its conditional target, for which **it will require additional international and south-south cooperation, collaboration and support for the development of its own technologies as well as for technology transfer and innovation to increase its mitigation and adaptive capacities.**

[1] https://unfccc.int/documents/231735

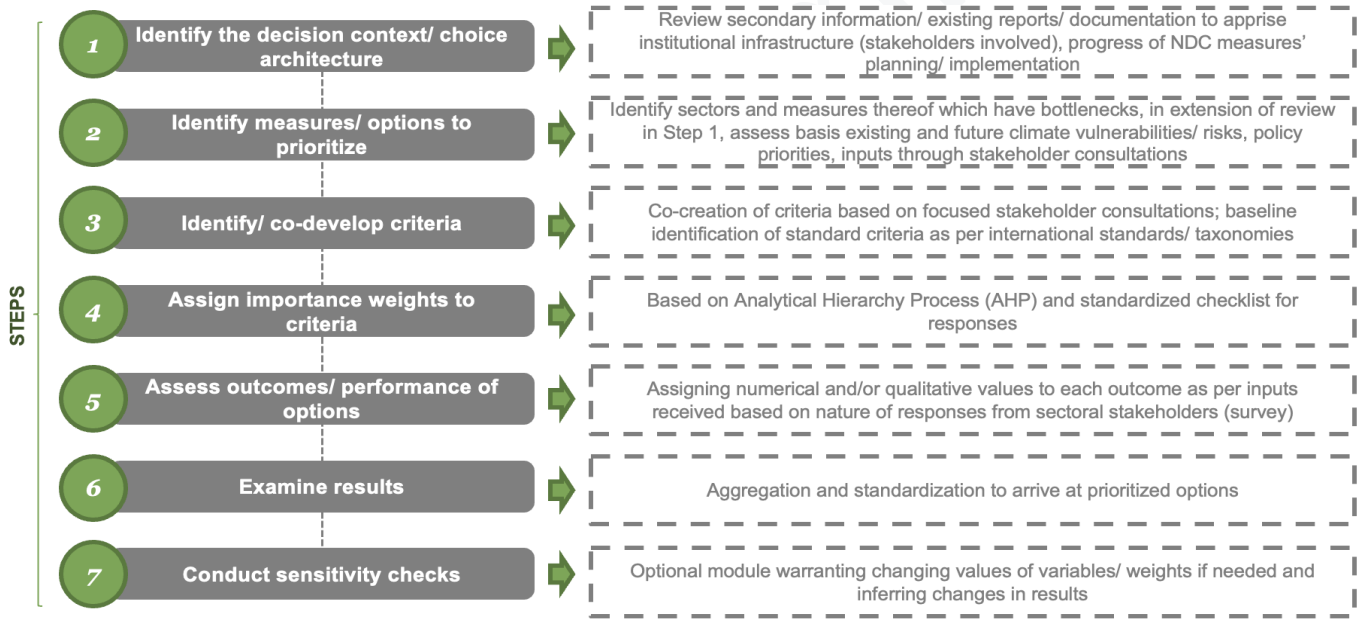
3 | Methodology and Limitations Informing the Delivery Model

This chapter presents the methodology used by the Genesis Analytics team for the prioritisation and costing of NDC outcomes. The first section describes the methodological process developed based on the multi-criteria analysis model, in which diverse stakeholders from the country were included and invited to participate, whose engagement and participation has been crucial for the achievement of an objective, rigorous and helpful exercise for the country. The second section is focused on the costing methodology applied to the prioritised outcomes. Subsequently, the third section of this chapter describes the limitations found in the application of the methodological model in The Gambia.

3.1 Methodology for the Prioritisation of NDC Outcomes

A Multi-Criteria Decision Analysis (MCDA) framework, which is a decision-making tool that can consider multidimensional factors and enables comparison of multiple outcomes by combining individual criteria into one overall appraisal, was the tool we used to guide our methodology for **the prioritisation assessment of NDC outcomes in The Gambia**. Our methodology has been rationalised and contextualised based on steps employed in the UNDP, UN Environment, UNEP DTU, UNFCCC, & WRI. (2020): Implementing NDCs, and USAID (2013): Analysing Climate Change Adaptation Options Using Multi-Criteria Analysis. The stepwise process is described in Figure 1.

Figure 1: Key steps involved in the MCDA process of prioritisation



Source: USAID (2013): Analysing Climate Change Adaptation Options Using Multi-Criteria Analysis

Based on the MCDA framework, we developed a structured process for comparing a set of defined options, across a diverse and contextualised set of criteria, evaluated across a range of priorities or values as well as providing the basis for incorporating stakeholders' perspectives.

Implementing the MCDA methodology combines two key processes:

- **Desk reviews** to apprise the overall assessment context and choice architecture in terms of the NDC implementation outcomes, screen for potential prioritisation criteria reflecting best practices in available literature, inform importance weight development method; and
- **Extensive stakeholder engagement** by bringing stakeholders along to co-develop and finalise the prioritisation criteria, in the data interpretation and meaning-making processes (e.g., agreeing on criteria, applying these criteria against the long-list of outcomes, undertaking a perception survey, and including both quantitative and qualitative questions, and interpreting results from the prioritisation process).

This methodology primarily involves co-producing a set of criteria with key stakeholders against which a set of actions (outcomes) can be prioritised. To guide the assessment, we derived a series of criteria from existing frameworks on NDC planning and implementation that have been used as guiding tools for in-country processes or as benchmarks for performance assessments. These criteria were then reviewed and critically examined by representatives from the Ministry of Environment, Climate Change and Natural Resources- MoECCNR who provided feedback for further updates. Thereafter the set of criteria, co-developed with MoECCNR, was finalised during a Stakeholders' Technical Orientation Workshop with 20+ participants from 10 different sectors. Table 2 lists the final set of seven criteria co-developed and used for the prioritisation exercise.

Table 2: Final set of criteria co-developed for the prioritisation exercise

SL.	Criteria	Rationale for inclusion
C1	**Adaptation/ Mitigation benefits**	To consider the potential adaptation and mitigation impacts of outcomes (and outcomes thereof), such as on air and water, impacts on biodiversity (environmental benefits), and land use changes to enable prioritisation based on net gains in adaptation/ mitigation benefits.
C2	**Complementarity with national/ other development priorities**	To inform the ability to unite efforts from the country's planning instruments aimed at achieving the sustainability agenda. This will enable prioritising outcomes for optimising operational, financial and resource efficiencies based on common/ overlapping/ complimentary outcomes (and outcomes thereof).
C3	**Cost effectiveness potential**	To enable identification of those outcomes which would be most cost-effective in nature (in terms of benefits accrued) to enable prioritising these to proceed towards short term targets. Additionally, this ought to provide a sense of financial readiness and support required thereof.
C4	**Technical feasibility**	To enable prioritising outcomes based on technical requirements, the availability of resources and technology, the skills and capacity of the relevant stakeholders, and the outcomes' potential impacts. In the case of The Gambia, it could be associated with the experience of the government agency developing those kinds of projects and the complex level of the activities to enable prioritising those outcomes which can be more easily implemented; alternatively, it can also indicate those outcomes for which resources are sub-optimal and require support.
C5	**Potential advancements in socio-economic development**	To prioritise outcomes based on social and economic impacts, including potential job creation, poverty reduction, improved access to services, and improved quality of life. In the case of The Gambia, it could involve objective social impacts in terms of gains of economic and social well-being and can help identify those outcomes which are aligned with the Long-Term Strategy's general targets of ecosystem, livelihood and economic resilience advancement.
C6	**Implementation timeline**	Select outcomes ought to be implemented earlier, relative to others. More so, this warrants adequate financial support to be mobilised on a more urgent basis. These criteria will enable prioritisation of outcomes which require completion in the short and medium terms.
C7	**Scalability**	To enable prioritisation basis the potential for regional projects to be scaled to achieve national outcomes, depending on the needs and resources available. In the case of absence of economic cooperation, it could be financed by local governments or private sector in The Gambia – this ought to provide an indication of outcomes to prioritise which can have inter-governmental responsibilities and potential for replicating benefits through increased coverage of beneficiaries/ increased administrative coverage.

In parallel to the previous step, **we undertook additional consultations with the representatives from MoECCNR to finalise the relative importance weights to be assigned to each criterion**. Towards this, we opted to use the Analytical Hierarchy Process (AHP), a method based on weighting or scaling extensively used for environmental issues, which uses pairwise comparison questions to draw out a matrix of judgments of the relative preference

between each pair of alternatives (herein the criteria). This results in a matrix of relative importance for each pair of criteria. A guided checklist was developed to derive the relative importance weights through stakeholder consultations (this has been included in Annexure 3) and thus a standardised rating scale (as widely cited in the literature on AHP[2]) was used to quantify the weights and generate scoring formulas for the NDC outcomes. The higher the importance weight of a given criterion, the more influence it had on the final score of each outcome.

The following is the process followed by the AHP method to obtain the weight of each criterion:

- The first step is to find the geometric mean (V), which is a type of average. The geometric mean of each criterion can be found by multiplying all the relative importance scores from the row and taking the nth root of this product (where n = total number of criteria).

$$V1 = \sqrt[7]{x1 * x2 * x3 * x4 * x5 * x6 * x7}$$

Next, the criterion's geometric mean is divided by the sum of the geometric means of all the criteria. The resulting decimal is the weight (W) of that criterion. This method is called normalisation, because it ensures the sum of all weights equals 1, or 100%[3].

$$W1 = \frac{V1}{V1 + V2 + V3 + V4 + V5 + V6 + V7}$$

Table 3: Aggregate criteria weights

Criteria	Relative Importance Weights
Adaptation and mitigation benefits	**13%**
Complementarity with national/ other development priorities	**18%**
Cost effectiveness potential	**14%**
Technical feasibility	**12%**
Potential advancements in socio-economic development	**14%**
Implementation timeline	**17%**
Scalability	**12%**

Source: Based on stakeholder inputs

Subsequently, we undertook a perception survey where identified sectoral stakeholders were tasked in scoring each outcome based on the extent of each outcome's benefit/ utility potential. We orchestrated the survey through an exhaustive questionnaire with 25 questions to evaluate 31 outcomes (12 for adaptation and 19 mitigation outcomes as identified in The Gambia's NDC Implementation Plan). The survey included both qualitative and quantitative questions to enable perception scores for calculating which outcomes ought to be selected based on quantification (which allowed us to calculate a final rating for each outcome with a number between 1 and 100, with 100 being the higher prioritisation level in each criterion) as well as to further inform the selection based on qualitative and subjective judgements/ inputs. The participants assessed each outcome in accordance with the questions (provided in Annexure 3) and the 7 criteria previously described.

We conducted the survey between 13th February to 3rd March 2023. The consulting team invited 16 sectoral stakeholders to participate in the survey and received responses from 13 among them. In particular, we received critical inputs from the following key agencies/departments/ ministries:

- National Environmental Agency (NEA)

[2] R. W. Saaty (1990),'The Analytical Hierarchy Process - what it is and how it is used'

[3] Frontiers (2020). What to Do? Let's Think It Through! Using the Analytic Hierarchy Process to Make Decisions. Retrieved from frontiers website [May 2023]

- National Water and Electricity Company (NAWEC)
- Brikama Area Council (BAC)
- Department of Forestry (DoFo)
- Department of Livestock Services (DoLS)
- Ministry of Trade (MoT)
- KMC
- Petroleum Commission
- Ministry of Environment Climate Change and Natural Resources (MoECCNR)
- National Disaster Management Agency (NDMA)
- Department of Community Development (DoCD)
- Department of Fisheries (DoF)
- Gambia Maritime Administration

Based on the responses given to the survey, the analysis proceeded by including the weight of each criterion in an average weighted formula to obtain the score of each outcome and thus achieve a quantitative analysis of all the evaluated outcomes. This last point allowed us to calculate a final rating for each outcome with a number between 1 and 100, with 100 being the higher prioritisation level in each criterion. When the weighted scores of all the outcomes were obtained, both at an aggregate level and by criteria, it was possible to visualise a ranking of outcomes.

On the other hand, with the aim of complementing the quantitative analysis with a qualitative perspective based on the contributions of the participating stakeholders and further research, **an additional prioritisation exercise was carried out around the qualitative evaluation of the outcomes.** The consulting team made cloud words[4]with the answers to identify the most repeated words related to the list of all outcomes present in the NDC Implementation Plan. The aggregated distributions of the qualitative inputs generated through the stakeholder survey has further informed the overall selection of the prioritised set out outcomes.

3.2. Methodology for Costing

To accurately estimate the cost of the prioritised outcomes generated in accordance with The Gambia's NDC Implementation Plan, we applied a tailored methodology that takes into consideration the disaggregated outputs for each prioritised outcome, and the sub-activities thereof, targets based on scope of work envisaged for each sub-activity, indicators informing the implementation of each sub-activity and associated timeframe for completion. This has been undertaken separately for all sectors/ thematic components for both Mitigation as well the Adaptation. Figure 2 below introduces relevant concepts from the methodological approach.

Figure 2: Methodological concept references

- **Outcomes:** refer to the prioritised NDC implementation outcomes, within each sector/thematic component, for both Mitigation and Adaptation
- **Outputs:** represent the primary components of the outcomes, comprised of key tasks/activities/ actions, details of commitments, and results thereof, to ensure the effective application/ implementation of the overall outcomes' targets
- **Sub-activities:** represent the detailed actions which inform each output and these act as the unit level basis which the costing exercise has been carried out in a bottom-up manner
- **Targets:** are the measurable goals that are set for each output and activities, providing a track on the current progress and estimated time towards the overall outcome
- **Key Performance Indicators (KPIs):** the quantifiable outcomes used to validate completion of the target and hence the expected outcome

Our analysis is based on the *Methodological Guide for the Costing of Colombia's NDC Adaptation outcomes*, which was created collaboratively by the NDC Support Facility, World Bank Group, NDCP, and the

[4] Cloud words are visual representations of words that give prominence to the words that appear most frequently. Genesis Analytics used Mentimeter for the visualisation: https://www.mentimeter.com/es-ES/features/word-cloud

Government of Colombia (World Bank Group, 2020)[5]. We have tailored this guide to the available information for the Gambia NDC Implementation Plan and ensured our methodology provides a hybrid basis which can account for both aggregate costs as well as those which need to be estimated through a bottom up or calculated approach, which involves collecting detailed cost information at the sub-activity level and then aggregating it to estimate the total cost of implementing an output, and thereafter an outcome and the sector/ thematic component. Our pragmatic and replicable approach has been consultative and research-focused in nature, and we have aimed to modify and contextualise an Excel based tool, to generate results while ensuring the use of verified/ validated inputs (costing data and information).

The stepwise methodological approach is summarised in Table 4 below.

Table 4: Methodological approach for the costing of prioritised outcomes in the Gambia NDC Implementation Plan

Steps	Description
1. Overview of Gambia NDC Implementation Plan	Review of the aggregate prioritised outcomes, outputs, KPIs, sub-activities and targets presented in the Gambia NDC Implementation Plan to apprise scope of the costing exercise and undertake a rapid gap assessment to inform data/ information availability.
2. Costing Model Template	Development of the strawman/ general structure of the template including detailing of outcomes, sub-activities, unit costs, progress/timelines of implementation, final costing formulas, aggregation criteria and computational adjustments and summary tables.
3. Target Classification and defining costing components	The primary objective of this exercise is to provide the GoG with support and insights to aid decision-making on adaptation and mitigation costs. The methodology aims to provide an integrated approach to estimate the indicative cost of outcomes in a homogenous and quantifiable way, despite existing imprecisions. The current approach involves estimating costs based on available information either based on the Gambia's recorded data and/or other/proxy countries' information when there is an alignment/replicability in the scope of outputs, socio economic, demographic and geographical characteristics (scaled otherwise). To achieve greater precision in cost estimation, a decision tree was created to classify targets based on existing information. Once classified, the methodology established the best pathway to use this information to estimate costs accurately. The existing classifications are presented below: • **Target Reference type 1 -** *Updated based on previous estimates as in the NDC Implementation Plan*: Implementation of certain outcomes has already begun and there are reliable unit/ aggregate cost data in the existing NDC Implementation Plan for the costing exercise. This classification has been leveraged to primarily inform the scenario of no other available information for similar sub-activities carried out in the Gambia or no available references to similar outputs carried out for other/ proxy countries in the relevant sector and NDC context. The updates in existing estimates have been adjusted for any costs of missing sub-activities in the previous estimates and have been rationalised based on the net present values and/or inflation adjustments. • **Target Reference type 2 -** *Similar Reference*: There are relevant and published financial data from other projects/programmes/sectors in the country or abroad (comparable countries - typically an NDC member country, mostly in Africa and/or has similar economic, demographic, geographical and climate impact characteristics). These reflect best practices that have been implemented within an industry or sector which can serve as a valuable reference point or data from similar actions that have been carried out in the sector in proxy countries. The above classification has been applied across all sub-activities, as an extended task of confirming the level and depth or information asymmetry and to provide differentiated solutions to calculating the cost of each sub-activity.

[5] World Bank Group, NDC Partnership, NDC Support Facility, Government of Colombia, (2021). Guía Metodológica para el costeo de medidas de adaptación. Retrieved from https://colaboracion.dnp.gov.co/CDT/Ambiente/Guia-Metodologica-para-el-costeo-de-medidas-de-adaptaci%C3%B3n-del-NDC-de-Colombia.pdf [February 2023].

Steps	Description
	As per the target reference type, the sub-activities were then reviewed additionally to develop the differentiated **target values** (**unit of measurement for the modalities** - number of years, number of reports/strategies/action plans, procurement units, etc.) and subsequently the **cost components** (**aggregate capital expenditures, operational and maintenance expenditures, outsourcing and procurement costs, etc**.) were developed which provided the basis for the costing computations.
4. Data, Adjustments and Assumptions	Identification, collection and triangulation of information for **(1) macroeconomic variables**: inflation, exchange rate, discount rate (5% as validated through stakeholder consultation), and others; **(2) proxy countries' information** (project/ output specific data as well as time-series of macroeconomic variables' data) according to geographic location, population size, and SIDS status; **(3) compilation of existing mitigation and adaptation information** to establish a costing benchmark and **(4) global and domestic outsourcing rates** for technical assistance and managerial/institutional support requirements. Sources included (among others): - Green Climate Fund (GCF), Global Environmental Facility (GEF), Climate Investment Fund (CIF), United Nation Development Program Climate Change Adaptation (CCA), Adaptation Fund (AF), Least Developed Countries Fund (LDCF), Multilateral Development Banks (MDBs) - Project sheets/ published information for Benin, Burkina Faso, Central African Republic, Ecuador, Ethiopia, Ghana, Guinea-Bissau, Liberia, Mali, Mauritius, Niger, Senegal, Sierra Leone, Togo, and Zambia. Developing key computational assumptions to enable the independent costing of the sub-activities, updating assumptions based on iterations (to ensure accurate sourcing/ replicability when proxy countries' data get used) and robustness checks. Need-based adjustments developed towards ensuring milestone and timeline-based progress tracking of the sub-activities by disaggregating overlapping scope and timeframe into independent tasks and forward-looking year-on-year progress/ disbursement shares.
5. Costing the Undiscounted Cash Flow (UCF) and Net Present Value (NPV)	The costs of each sub-activity and output were calculated in terms of the UCF and aggregated to arrive at the overall costs for each outcome and sector/ thematic component thereof. The UCF has also been translated in terms of the NPV to consider the time value of money by discounting future cash flows back to their present value (as on 2023). The costs for each outcome and outputs thereof have been disaggregated for the year 2023-2026 for Adaptation outcomes to be prioritised and from 2023-2029 for the Mitigation outcomes to be prioritised. These represent the respective timelines for implementing the outcomes by the wider thematic categories.
6. Stakeholder Engagement	Design of a participatory stakeholder engagement plan with the support of a local consultant with in-country knowledge and network. The iterative and ad-hoc process has included one-to-one consultations, in-person meetings with representatives from the sectors involved in the Gambia NDC Implementation Plan to ensure wider stakeholder buy-ins and validation of the key steps/ data in the exercise.

Source: Adjusted from Guía Metodológica para costeo de medidas de adaptación del NDC de Colombia *(World Bank Group, 2020)*

3.3. LIMITATIONS

The following represents limitations of the work undertaken relating to the findings presented in this Draft Report. We aimed to partially address the limitations encountered throughout our work and to incorporate feedback from the Gambia government on our initial findings.

- **The depth of insights derived from the analysis relies heavily on the contributions (responses) provided by the stakeholders through consultations and the perception survey for the prioritisation exercise.** However, this depends on their general understanding and engagement during the prioritisation process. Incomplete/ partially filled survey responses may impact the findings and make them skewed towards particular sectors only hindering the distributional nature of selected NDC outcomes to be prioritised. We have negated this by conducting multiple rounds of follow-ups and provision of hand-holding support to the departments/ ministries to ensure completeness of the survey.

- **Limited knowledge of the Gambia NDC Implementation Plan among nominated governmental stakeholders may result in limited feedback being provided or increased timing on responses, both of which could hinder the effectiveness of the cost estimation process.**
  We have encountered that several sectoral representatives had insufficient knowledge of the Gambia NDC Implementation Plan and technical knowledge of its outcomes, scope and actions. This challenge may be due to recent changes in the Gambia organisational structure as well as that during the COVID-19 pandemic, representatives and public figures across ministries, departments and agencies were unable to participate in the publication of the Gambia NDC Implementation Plan 2021. These factors have reduced stakeholder responses in the consultations and hindered the costing exercise in terms of coverage of activities and the ability to take account of local contextual factors that may influence costs.

- **NDC Implementation Plan limitations:**
  - **The lack of a traceability system to monitor** completion of outputs and alignment with the NDC Implementation Plan makes it difficult to track progress in achieving targets.
  - **The scope and structure of targets** associated with activities of the outcomes are only partially developed, making the costing exercise more challenging.
  - **Overlap of outputs and activities among sectors** may create double counting in the costing exercise and hence, the NDC implementation Plan may be overestimated.

- **Limitations of leveraging other countries variables as proxies:**
  Countries selected as proxies may vary in economic, social, demographic, governance and environmental variables. The selection of outputs or activities (and outcomes therein) of a similar nature in other identified countries may have a broader or narrower scope, resulting in an overestimation or underestimation of the cost of the outcomes in the Gambia NDC Implementation Plan.

- **Limitations on available data and assumptions used in the costing model:**
  - **Most of the information available corresponds to projects outside of The Gambia that could have increased costs when implemented internally.** Therefore, the analysis incorporated an adjustment with the GDP deflator to bring foreign prices to The Gambia.
  - **A fixed discounted rate** used to estimate the Net Present Value across all sectors may overestimate or underestimate final value. According to the consultation to the Ministry of Finances (April 13th, 2023), the GoG uses a discount rate of 5%.

4 | KEY FINDINGS

This chapter introduces the prioritisation and costing exercise of mitigation and adaptation outcomes of the Gambia NDC Implementation Plan. To develop it, the consulting team analysed the financial, institutional, and technological components of the NDC outcomes in the Gambia, underpinned by the active participation of stakeholders in the country through personal meetings, and surveys applied to different stakeholders and validation exercises thereof.

4.1. PRIORITISATION OF NDC IMPLEMENTATION COMPONENTS, OUTCOMES AND OUTPUTS

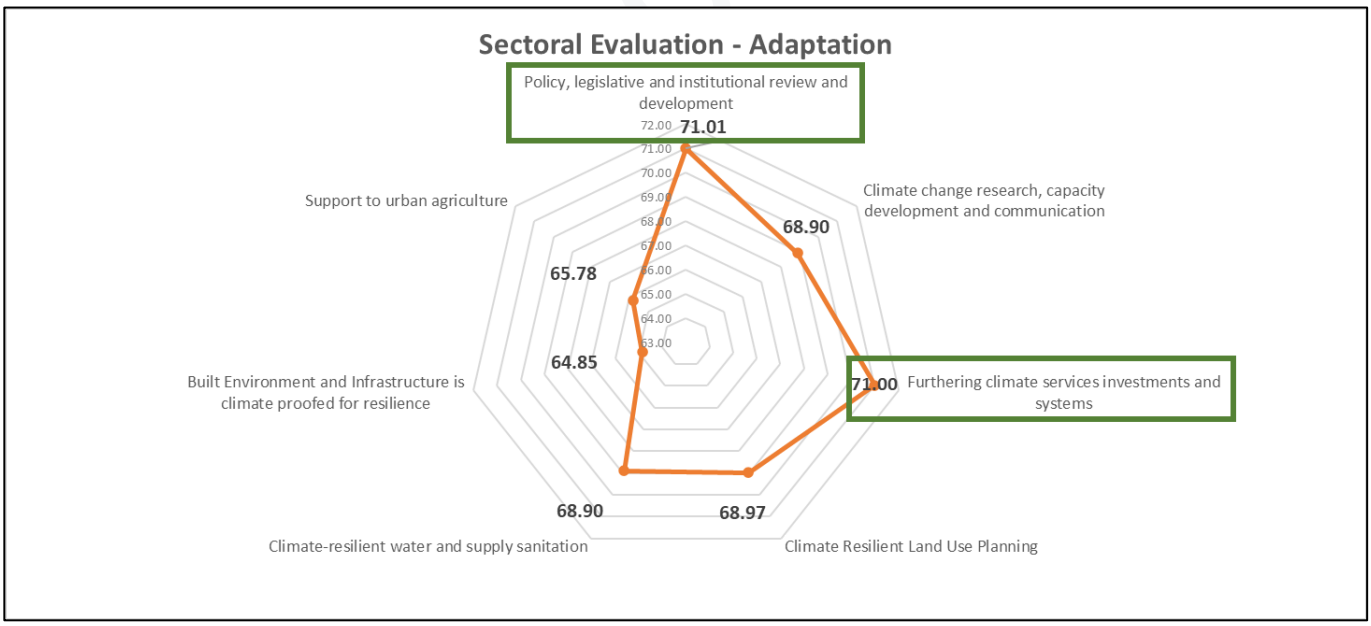
This section presents the main findings of the quantitative and qualitative prioritisation analysis applied both to the survey results and to their subsequent compilation and weighting. The section is divided into two subsections, one dedicated to adaptation findings and the other to mitigation findings. Each subsection contains an analysis by its overall thematic components/ sector that allows to obtain a broader picture of the evaluation of the NDC implementation prioritisation, as well as a detailed analysis by key outcomes prioritised within each thematic component/ sector based on quantitative and qualitative assessments.

4.1.1 Adaptation

4.1.1.1 Adaptation - prioritisation by thematic components/ sectors

Based on the scores assigned to each of the outcomes from each criterion, the exercise resulted in aggregate scores by outcome, the average of which allowed obtaining aggregate scores by each thematic component. In Figure 3, the aggregate evaluation of each thematic component can be visualised. The two key components with the highest average scores are Policy, legislative and institutional review and development (and mobilisation of climate finance) (71.0); and Furthering climate services investments and systems (71.0).

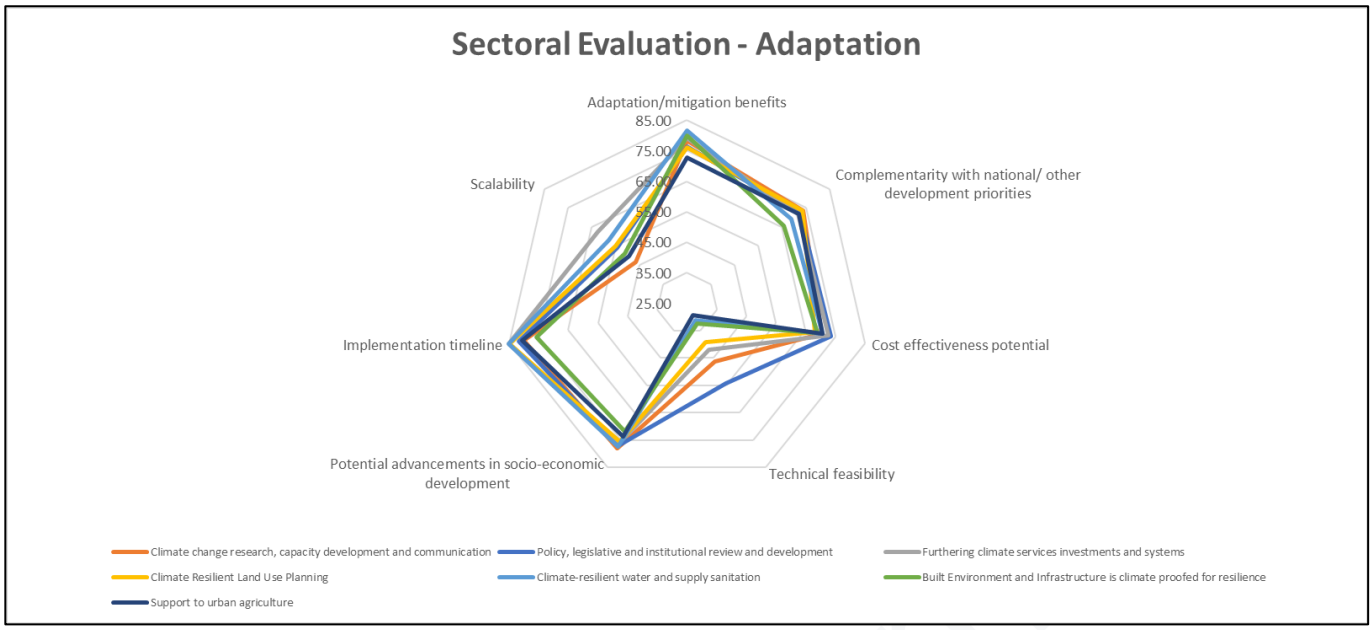
Figure 3: Radar graph on the adaptation thematic component/ sectoral average scores



(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

Figure 4 shows the thematic component or sectoral average assessment from each of the seven criteria. In general, a confluence of average scores per criterion can be observed, with some distortions specifically in the technical feasibility and scalability criteria. No sector yields a score above 54.3 and 62.5 in the evaluation based on these two criteria respectively. This means that the general perception of the surveyed stakeholders assumes that adaptation outcomes, under the current availability of resources, are not significantly technically feasible nor scalable in The Gambia.

Figure 4: Radar graph on the adaptation thematic/ sectoral average scores by weighting criteria



(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

On the other hand, following Figure 4 analysis, most sectors obtain a high average evaluation from the criteria of implementation timeline (81.8), adaptation benefits (77.7) and potential advancements in socio-economic development (75.6). This may mean that, first, the perception of urgency/importance of implementing adaptation actions is high; second, these actions are perceived as highly beneficial to overall NDC objectives; and third, the spill over for socioeconomic purposes from these actions is equally highly valued.

4.1.1.2. Adaptation - prioritisation by NDC implementation outcomes

Based on the thematic component/ sectoral analysis that resulted in two key components with the highest average scores, this subsection now presents the findings disaggregated by adaptation outcomes developed in the NDC Implementation Plan.

Table 5 shows the first five outcomes, organised by their thematic components/ sectors, in descending order, according to the final scores obtained through the quantitative assessment. These represent the outcomes, among all, which align with the aggregate perceptions of different sectoral and institutional stakeholders as warranting high relevance and opportunities for The Gambia and highlight the need for significant resource and coordination support to enable advancements of the NDCs. Annex 5 presents the final scores of all the 13 outcomes in Adaptation and the seven criteria.

Table 5: Prioritised outcomes as per the quantitative assessment for Adaptation

Sector/ Thematic Component	Outcome	Perception Score
Furthering climate services investments and systems	CCS1: The National Climate Services System of The Gambia is strengthened to support Climate Change Resilience	71.00
Policy, legislative and institutional review and development and	CCF2: Sustainable and Transparent Climate Change Resource Mobilization Mechanism and Framework developed and implemented	74.65

Sector/ Thematic Component	Outcome	Perception Score
mobilisation of climate finance	CCF3: National Climate Change Fund and its Local Level Windows capitalised and operational	73.43
	CCF4: National and Sectoral Climate Change Budget Coding and Tracking System developed and operational	71.28
	CCF5: Conducive financial and economic environment for Private Sector financing of climate change is established	71.23

(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

According to Table 5, the five prioritised adaptation outcomes represent 41.7% of the total adaptation outcomes which were assessed in the NDC Implementation Plan. In particular, the outcomes belonging to the "Built Environment and Infrastructure is climate proofed for resilience" and "Support to urban agriculture" components were not included in the initial selection of the list of prioritised outcomes in adaptation owing to low aggregate perception scores. On the contrary, inputs from stakeholders echo the relative importance of four of the six outcomes related to the "**Policy, legislative and institutional review and development and mobilisation of climate finance**" component/ sector and a single outcome for **"Furthering climate services investments and systems"**. These highlight the need to revisit, re-orient and update the existing climate related policy and legislative arrangements and the support required thereof to enable climate finance needs and processes.. Prioritising the policy, legislative, institutional and climate finance ecosystems will enable the advancement of a reliable foundation to implement more sector specific interventions.

The qualitative assessment focused on generating insights towards the adaptation benefits and implementation potential for each and every outcome. The consulting team generated the skewed distribution of the perceptions to identify those outcomes which require critical support and alignment with The Gambia's National Development Plan (NDP) and the sustainable development agenda. Although it is not optimal to exclusively prioritise the outcomes by qualitative criteria, those inform a level of preference and impact perceptions through the stakeholders' words to define the outcomes.

For instance, outcomes belonging to the Policy, legislative and institutional review and development sector reveal low scores in technical feasibility and scalability. However, the actors mentioned that those are essential to improve the management of the system and the coordination among the outcomes. For example, the outcome "[CCF1]: The Gambia IFMIS system of the Directorate of Treasury of MoFEA is adopted and adapted as the Climate Change Public Finance Management System" got low scores in technical feasibility and scalability, although it is related to the mainstreaming of systems, which is critical to manage climate related financial information more effectively. 84.6% of the participants recognised that the outcome complements many targets of the Gambia's Long-Term Strategy (LTS).

Finally, "CCRB1: A climate-proofed Built Environment and Infrastructure for Resilience", in the sector "Built Environment and Infrastructure is climate-proofed for resilience", got one of the highest results in adaptation benefits. In this regard, the participants thought that "it is essential to improve adaptation to flooding", "adapt and build resilience, especially during extreme weather conditions", and "enhance foreign direct investment in manufacturing". In addition, 92.30% of the participants stated that the outcome aligns/ compliment any outcome(s)/ measure(s) as in the National Development Plan (NDP), like the Outcome: 5:3 of the NDP or the Outcome 5.4: Enhanced Land, River, Sea and Air Transport for Affordability, Accessibility.

Therefore, the consulting team suggests prioritising the following two adaptation outcomes regarding the qualitative analysis (Table 6).

Table 6: Outcomes with a remarkable qualitative evaluation for Adaptation

Sector	Outcome
Built Environment and Infrastructure (e.g., buildings, roads and drainage infrastructure) is climate proofed for resilience	CCRB1: A climate-proofed Built Environment and Infrastructure for Resilience
Policy, legislative and institutional review and development and mobilisation of climate finance	CCF1: The Gambia IFMIS system of the Directorate of Treasury of MoFEA is adopted and adapted as the Climate Change Public Finance Management System

(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

Table 7 presents the **final (combined) list of seven prioritised outcomes and outputs/ measures across the adaptation components in the NDC Implementation Plan, based on both the quantitative and qualitative assessments.**

Table 7: Finalised set of prioritised outcomes and outputs for Adaptation

Sector	Outcome	Output (measure)	Estimated Year of Completion
Policy, legislative and institutional review and development and mobilisation of climate finance	CCF1: The Gambia IFMIS system of the Directorate of Treasury of MoFEA is adopted and adapted as the Climate Change Public Finance Management System	Adoption and Adapting the Current IFMIS of the Directorate of Treasury to serve as the Climate Change Public Finance Management System	2026
	CCF2: Sustainable and Transparent Climate Change Resource Mobilization Mechanism and Framework developed and implemented	Development and implementation of a transparent and sustainable Resource Mobilization Mechanism and Framework	2026
	CCF3: National Climate Change Fund and its Local Level Windows capitalised and operational	Establishment, Capitalization and Operationalization of the National Climate Change FUND and its Local Level Windows	2026
	CCF4: National and Sectoral Climate Change Budget Coding and Tracking System developed and operational	Development of a climate change budget coding/tagging, tracking and reporting system	2026
	CCF5: Conducive financial and economic environment for Private Sector financing of climate change is established	Establishment and promotion of conducive financial and economic environment for Private Sector participation in financing of climate change	2026
Furthering climate services investments and systems	CCS1: The National Climate Services System of The Gambia is strengthened to support Climate Change Resilience	Strengthening the National Hydrological and Meteorological Services of The Gambia to provide climate services for climate change resilience building and sustenance	2026

Built Environment and Infrastructure is climate proofed for resilience	CCRB1: A climate-proofed Built Environment and Infrastructure for Resilience	Climate and Climate Change Proofing of Built Environment and Infrastructure for Resilience	2026

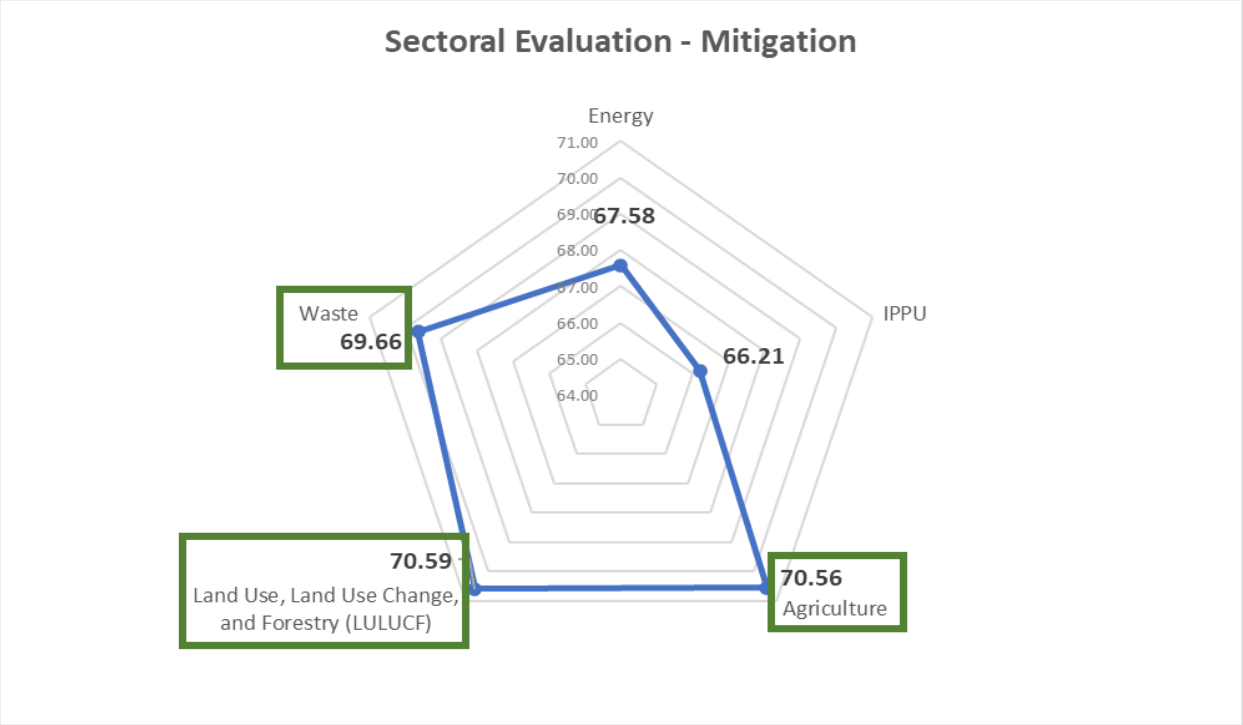
(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics and NDC Implementation Plan for The Gambia)

4.1.2 Mitigation

4.1.2.1 Mitigation - prioritisation by thematic components/ sectors

Based on the scores assigned to each of the outcomes from each criterion, the exercise resulted in aggregate scores by outcome, the average of which allowed obtaining aggregate scores by sector. In Figure 5, the aggregate evaluation of each sector can be visualised. The three sectors with the highest average scores are Agriculture (70.6); LULUCF (70.6); and Waste (69.7).

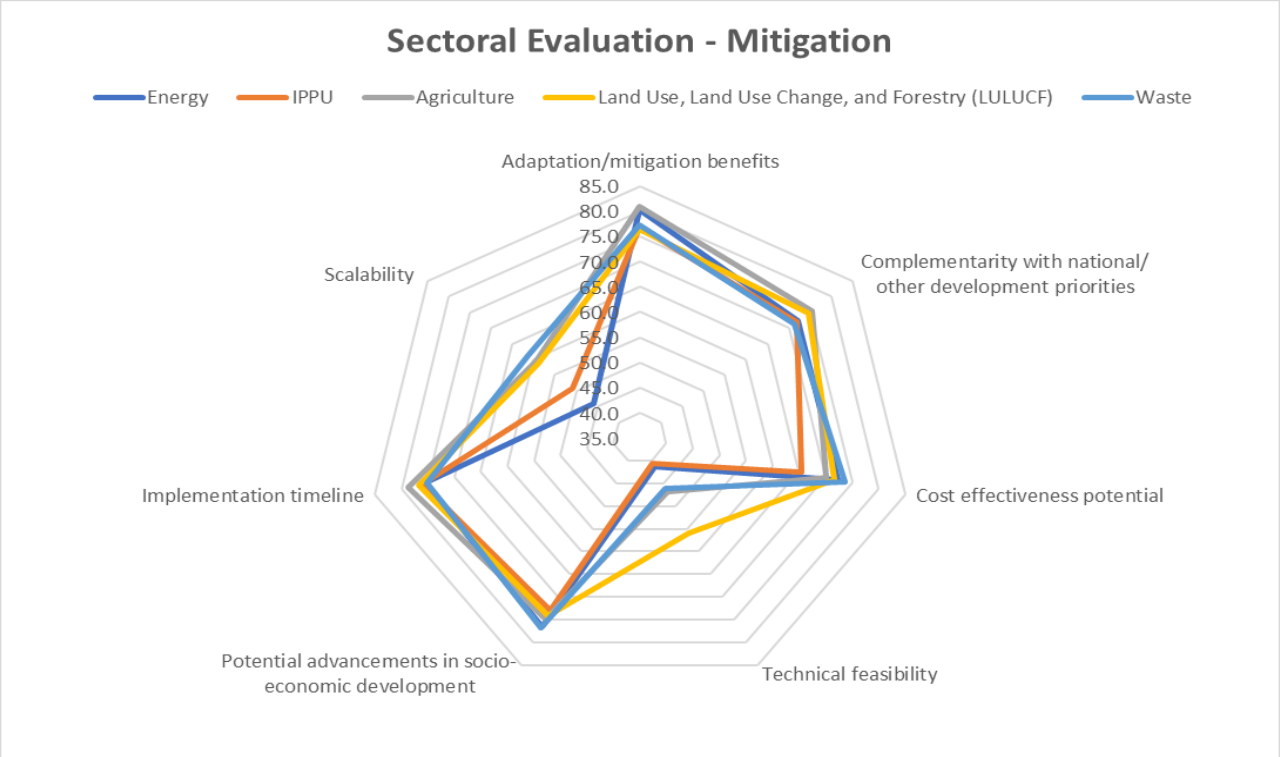
Figure 5: Radar graph on the mitigation thematic/ sectoral average scores



(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

Figure 6 shows the sectoral average assessment from each of the seven criteria. In general, a confluence of average scores per criterion can be observed, with some distortions specifically in the technical feasibility and scalability criteria. No sector yields a score above 55.9 and 61.4 in the evaluation based on these two criteria respectively. This means that the general perception of the surveyed stakeholders assumes that mitigation outcomes as well as adaptation outcomes, under the current availability of resources, are not significantly technically feasible nor scalable in The Gambia.

Figure 6: Radar graph on the mitigation thematic/ sectoral average scores by weighting criteria



(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

On the other hand, following Figure 6, most sectors obtain a high average evaluation from the criteria of mitigation benefits (78.3), implementation timeline (76.5), and potential advancements in socio-economic development (75.1). This may mean that, first, mitigation outcomes are perceived as highly beneficial to overall NDC objectives; second, the perception of urgency/importance of implementing these actions is high; and third, the spill over for socioeconomic purposes from mitigation is equally highly valued.

4.1.2.2 Mitigation - prioritisation by NDC implementation outcomes

Based on the sectoral analysis that resulted in three sectors with the highest average scores, this section now presents the findings disaggregated by mitigation outcomes.

Table 8 shows the first 10 outcomes organised by their thematic components/ sectors, in descending order, according to the final scores obtained through the quantitative assessment. These represent the outcomes, among all, which align with the aggregate perceptions of different sectoral and institutional stakeholders as warranting high relevance and opportunities for The Gambia and highlight the need for significant resource and coordination support to enable advancements of the NDCs. Annexe 5 presents the final score of the 19 outcomes in total for mitigation and the seven criteria.

Table 8: Prioritised outcomes as per the quantitative assessment for Mitigation

Sector	Outcome	Score
Agriculture	[C2] GHG emission reduction outcomes are adopted and implemented for the Agricultural Crop production sub-sector through Climate Smart Agriculture [CSA] outcomes	71.66
	[L1] Livestock Productivity is improved through effective GHG Mitigation outcomes	70.68

Sector	Outcome	Score
	[C3] GHG emissions reduction outcomes are adopted and applied in Full Food Value Change of The Gambia	70.39
	[C1] GHG reduction outcomes from different rice ecologies are determined and implemented in the Gambia	69.52
Energy	[E1] The National Electricity Production Systems (NAWEC, KARPower and OMVG) are integrated and Harmonised	70.22
	[E3] Transmission and Distribution Losses of Electricity and Water Systems are reduced	69.77
Land Use, Land Use Change, and Forestry (LULUCF)	[F1] Degraded landscapes (including protected forests) are restored	72.32
	[F2] Fuel-efficient and cleaner cookstoves are promoted and upscaled	70.66
	[F4] Sustainable Fire Management is applied	70.17
Waste	[W1] Integrated Waste Management, including waste gas recovery (MA6) and organic waste recovery [MA7] is established and promoted	69.66

(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

According to Table 8, the 10 prioritised mitigation outcomes represent 52.6% of the total mitigation outcomes which were assessed in the assignment. These reiterate that the agriculture sector holds immense importance for The Gambia's NDC as it is critical for food security, rural livelihoods, climate resilience, and sustainable development. Further, the agriculture sector is closely linked to other sectors such as water resources, land use, energy (wherein key outcomes have been prioritised as per the perception evaluation), and rural development. Addressing climate change on priority in agriculture requires a holistic approach that considers the interdependencies and synergies with these other sectors. By integrating the prioritised climate change mitigation outcomes and strategies thereof into agricultural, energy, land use and waste policies and programs, The Gambia can achieve multiple sustainable development goals, including poverty reduction, job creation, gender equality, and ecosystem preservation. Efforts and advocacy towards loss reductions in electricity distribution systems, restoration of land, reduced deforestation and the adoption of fuel-efficient and cleaner cookstoves, within LULUCF, can be part of a broader strategy for promoting sustainable land use practices. In areas where biomass fuels are obtained from forests or agricultural residues, the use of efficient cookstoves reduces the demand for such resources, leading to reduced pressure on land resources and potentially mitigating deforestation, soil erosion, and habitat destruction.

On the qualitative component, the participants expressed their perceptions about the mitigation benefits of the outcomes. In particular, the **Energy** sector outcomes are characterised by words like "productivity", "resources", "energy", "lives", "forest", and "efficiency". It mainly highlights the outcomes of "[E2] Grid-connected wind power is developed and operational" and "[E5] Solar home systems are established and operational", which includes other positive words like "clean", "health", "safety", "preservation", "sustainable", "environmental" and "reliable". In general, the energy outcomes got a low assessment in the technical feasibility and scalability criteria, confirmed by the participants' fears about the implementation and financing. In particular, 72.9% of the participants say that the overall benefits exceed the cost of implementing the outcomes in the two outcomes. Participants stated some potential advancements in socio-economic development, like "Employment generation in manufacturing and industrial sector" and "o improve lives and livelihood" in the case of the [E2] outcome, and "Enhanced livelihood of small-scale producers" and "Makes electricity affordable and thus improves the quality of life of the people" for the [E5]".

Finally, "[IP1] Consumption of HFCs in the **IPPU** category is reduced through fuel substitution" had low cost-effectiveness potential and technical feasibility scores. However, the participants highlighted its potential to

enhance "the availability of energy efficiency and use of renewable energy, save cost, make resilient and environmentally friendly cities", and promote "the green economic development". Therefore, 68.7% of the participants said it is a "very urgent" or "urgent" priority to be implemented.

Therefore, the consulting team suggests costing the following three additional mitigation outcomes for prioritisation, as per the qualitative assessment.

Table 9: Outcomes with a remarkable qualitative evaluation for Mitigation

Sector	Outcome
Energy	[E2] Grid-connected wind power is developed and operational
	[E5] Solar home systems are established and operational
IPPU	[IP1] Consumption of HFCs in the IPPU category is reduced through fuel substitution

(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

Table 10 the **final (combined) list of 13 prioritised outcomes and outputs/ measures across the adaptation components in the NDC Implementation Plan, based on both the quantitative and qualitative assessments.**

Table 10: Finalised set of prioritised outcomes and outputs for Mitigation

Sector	Outcome	Measure (Output)	Estimated year of completion
Energy	[E1] The National Electricity Production Systems (NAWEC, KARPower and OMVG) are integrated and harmonised	Electricity Supply (Grid and Renewables)	Per the NDC Implementation Plan, this was scheduled to be completed in 2022. However, if this still needs to be undertaken, it is suggested that 2023 be considered the year of completion.
		Sub-national grid connection to National Grid	2023
		Increment in share of renewable energy in the energy mix increased.	2024
		Reduction in and harmonisation of operational costs of the Electricity Generation systems	2025
		Increment in the efficiency of the generation of electricity in the country.	2026
	[E2] Grid-connected wind power is developed and operational	Feasibility of grid connected wind power	Per the NDC Implementation Plan, this was scheduled to be completed in 2022. However, if this still needs to be undertaken, it is suggested that 2023 be considered the year of completion.

Sector	Outcome	Measure (Output)	Estimated year of completion
		Mobilisation of resources for grid connected wind power	2023
		Reduction in fossil fuel consumption and greenhouse gas emissions	2024
		Reduction in fossil fuel consumption and greenhouse gas emissions	2025
		Renewable and low-carbon Wind power in the electricity mix and avoidance of greenhouse gas emissions	2026
	[E3] Transmission and Distribution Losses of Electricity and Water Systems are reduced	Transmission and Loss reduction	Per the NDC Implementation Plan, this was scheduled to be completed in 2022. However, if this still needs to be undertaken, it is suggested that 2023 be considered the year of completion.
		Implementation of a Comprehensive Transmission and Distribution (T&D) loss reduction strategy and action plan	2023
		Reduction in transmission and distribution losses and avoidance of new and additional power generation	2024
		Reduction in transmission and distribution losses and avoidance of new and additional power generation	2025
		Sustainability of investments and avoidance of greenhouse gas emissions	2029
	[E5] Solar home systems are established and operational	Installation and operationalization of Solar Home Systems	
IPPU	[IP1] Consumption of HFCs in the IPPU category is reduced through fuel substitution	Analysis of options to reduce HFC consumption	Per the NDC Implementation Plan, this was scheduled to be completed in 2022. However, if this still needs to be undertaken, it is suggested that 2023 be considered the year of completion.
		Development of strategy and action plan	2023

Sector	Outcome	Measure (Output)	Estimated year of completion
		Reduction of consumption and emissions from HFC	2029
Agriculture	[C1] GHG reduction outcomes from different rice ecologies are determined and implemented in the Gambia	Mapping of suitability for various rice cultivars	Per the NDC Implementation Plan, this was scheduled to be completed in 2022. However, if this still needs to be undertaken, it is suggested that 2023 be considered the year of completion.
		Cultivation of rice based on GHG mitigation	2026
	[C2] GHG emission reduction outcomes are adopted and implemented for the Agricultural Crop production sub-sector through Climate Smart Agriculture [CSA] outcomes	Implementation Climate Smart Agriculture as a GHG Mitigation option	2028
	[C3] GHG emissions reduction outcomes are adopted and applied in Full Food Value Change of The Gambia	Implementation of Food Loss and Waste Reduction as GHG mitigation in the Food Value Chain	2028
	[L1] Livestock Productivity is improved through effective GHG Mitigation outcomes	Improvement of Livestock productivity through mitigation of GHG emissions	2028
Land Use, Land Use Change, And Forestry (LULUCF)	[F1] Degraded landscapes (including protected forests) are restored	Restoration of degraded lands using afforestation, agroforestry, assisted natural regeneration, and re-greening of degraded lands	2028
	[F2] Fuel-efficient and cleaner cookstoves are promoted and upscaled	Promotion and dissemination of improved cookstoves	2028
	[F4] Sustainable Fire Management is applied	Protection from fires and establishment of livestock feed enterprises	2028
Waste	[W1] Integrated Waste Management, including waste gas recovery (MA6) and organic waste recovery [MA7] is established and promoted	Establishment and promotion of Integrated Waste Management System	2029

(Source: own elaboration based on the prioritisation survey carried out by Genesis Analytics)

4.2. Costing of Prioritised NDC Components, Outcomes and Outputs

This section presents the findings from the costing of The Gambia's prioritised NDC outcomes. The estimates are crucial for effective planning, resource allocation, and integration of climate change goals into national development processes. It aims to provide a comprehensive understanding of the financial requirements, aids in prioritization, and supports mobilization of necessary resources to achieve the country's climate change mitigation and adaptation objectives and furthering the sectoral outcomes in the Gambia's NDC Implementation Plan. Section 4.2.1. focuses on the costs to implement the prioritised outcomes for Adaptation followed by Section 4.2.2. which exhibits the costs for implementing the prioritised outcomes for Mitigation. The working Excel Masterfile which presents the detailed computations have been submitted separately for ease of reference.

4.2.1. Estimated costs towards implementing prioritised NDC Adaptation components, outcomes and outputs

On aggregate, it is estimated that **approximately USD 56 Mn. (UCF) will be required to implement and operationalise the prioritised NDC Adaptation components** between 2023-2026 which include enhanced mobilisation of climate finance, furthering climate services investments and systems and towards Built Environment and Infrastructure (e.g., buildings, roads and drainage infrastructure) which ought to be climate proofed for resilience. Among these, approximately **67% of the total funding/financing requirement will cater towards climate proofing (development as well as retrofitting) of the built environment and sectoral infrastructure**. By integrating climate adaptation outcomes into infrastructure design and construction, The Gambia can minimize the vulnerability of its built environment to climate induced risks. This can help safeguard the well-being of communities, prevent human and economic losses, and ensure the continuity of essential services, such as transportation, water supply, and energy systems. Investing in climate-proofing built infrastructure can attract international support and financing. Many international funding mechanisms and development partners prioritize projects that integrate climate resilience and sustainability. By demonstrating a commitment to climate-proofing infrastructure, The Gambia can access additional resources and technical assistance to support its NDC implementation efforts.

Table 11: High-level summary of costs for prioritised Adaptation components

Components	Total Cost for 2023-2026 - Undiscounted Cash Flow (UCF)	Total Cost as per Net Present Value (NPV)
Enhanced mobilisation of climate finance	**$1,82,65,454.49**	**$1,72,92,113.77**
Furthering climate services investments and systems	**$90,815.16**	**$83,913.56**
Built Environment and Infrastructure (e.g., buildings, roads and drainage infrastructure) is climate proofed for resilience	**$3,75,00,000.00**	**$3,49,05,450.28**
Total	**$5,58,56,269.65**	**$5,22,81,477.61**

Source: own elaboration based on Costing Model and stakeholder engagement

The other two components play an equally important role in enabling the overall functionality of the climate finance focused NDC resources and are key aspects towards ensuring the availability, and effective mobilisation of finances to advance the NDC Adaptation outcomes across sectors. The following section elaborates on the details of the aggregate costs by each corresponding outcome and outputs thereof.

Table 12: Break-down of costs for prioritised outcomes and outputs towards enhanced mobilisation of climate finance

Outcomes and outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[CCF1]: The Gambia IFMIS system of the Directorate of Treasury of MoFEA is adopted and adapted as the Climate Change Public Finance Management System**	**$ 2,80,000.00**	**$ 1,75,000.00**	**$ 1,75,000.00**	**$ 3,50,000.00**	**$9,80,000.00**	**$9,07,739.98**
Output CCF1.1	Adoption and Adapting the Current IFMIS of the Directorate of Treasury to serve as the Climate Change Public Finance Management System	$ 2,80,000.00	$ 1,75,000.00	$ 1,75,000.00	$ 3,50,000.00	$9,80,000.00	$9,07,739.98
Outcome	**CCF2: Sustainable and Transparent Climate Change Resource Mobilization Mechanism and Framework developed and implemented**	**$ 3,04,068.00**	**$ 2,64,640.00**	**$ 2,64,640.00**	**$ 2,25,212.00**	**$10,58,560.00**	**$9,90,688.97**
Output CCF2.1	Development and implementation of a transparent and sustainable Resource Mobilization Mechanism and Framework	$ 3,04,068.00	$ 2,64,640.00	$ 2,64,640.00	$ 2,25,212.00	$10,58,560.00	$9,90,688.97
Outcome	**CCF3: National Climate Change Fund and its Local Level Windows capitalized and operational**	**$ 25,22,218.50**	**$ 33,64,984.05**	**$ 31,01,018.95**	**$ 10,33,672.98**	**$1,00,21,894.49**	**$96,17,888.46**
Output CCF3.1	Establishment, Capitalisation and Operationalization of the National Climate Change FUND and its Local Level Windows	$ 25,22,218.50	$ 33,64,984.05	$ 31,01,018.95	$ 10,33,672.98	$1,00,21,894.49	$96,17,888.46
Outcome	**CCF4: National and Sectoral Climate Change Budget Coding and Tracking System developed and operational**	**$ 3,00,000.00**	**$ 3,00,000.00**	**$ 3,05,000.00**	**$ 3,00,000.00**	**$12,05,000.00**	**$11,21,736.31**
Output CCF4.1	Development of a climate change budget coding/tagging, tracking and reporting system	$ 3,00,000.00	$ 3,00,000.00	$ 3,05,000.00	$ 3,00,000.00	$12,05,000.00	$11,21,736.31
Outcome	**CCF5: Conducive financial and economic environment for Private Sector financing of climate change is established**	**$ 12,50,000.00**	**$ 12,50,000.00**	**$ 12,50,000.00**	**$ 12,50,000.00**	**$50,00,000.00**	**$46,54,060.04**
Output CCF5.1	Establishment and promotion of conducive financial and economic environment for Private Sector participation in financing of climate change	$ 12,50,000.00	$ 12,50,000.00	$ 12,50,000.00	$ 12,50,000.00	$50,00,000.00	$46,54,060.04
Total for prioritised outcomes as part of Component: Enhanced mobilisation of climate finance		**$46,56,286.50**	**$53,54,624.05**	**$50,95,658.95**	**$31,58,884.98**	**$1,82,65,454.49**	**$1,72,92,113.77**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 13: Break-down of costs for prioritised outcomes and outputs towards furthering climate services investments and systems

Outcomes and outputs		**2023 (Undiscounted Cash Flow - UCF)**	**2024 (Undiscounted Cash Flow - UCF)**	**2025 (Undiscounted Cash Flow - UCF)**	**2026 (Undiscounted Cash Flow - UCF)**	**Total Cost (Undiscounted Cash Flow - UCF)**	**Total Cost (Net Present Value - NPV)**
Outcome	**CCS1: The National Climate Services System of The Gambia is strengthened to support Climate Change Resilience**	**$ 18,163.03**	**$ 22,703.79**	**$ 22,703.79**	**$ 27,244.55**	**$ 90,815.16**	**$ 83,913.56**
Output CCS1.1	Strengthening the National Hydrological and Meteorological Services of The Gambia to provide climate services for climate change resilience building and sustenance	$ 18,163.03	$ 22,703.79	$ 22,703.79	$ 27,244.55	$ 90,815.16	$ 83,913.56
Total for prioritised outcomes as part of Component: Furthering climate services investments and systems		**$18,163.03**	**$22,703.79**	**$22,703.79**	**$27,244.55**	**$90,815.16**	**$83,913.56**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 14: Break-down of costs for prioritised outcomes and outputs towards built environment and infrastructure being climate proofed for resilience

Outcomes		**2023 (Undiscounted Cash Flow - UCF)**	**2024 (Undiscounted Cash Flow - UCF)**	**2025 (Undiscounted Cash Flow - UCF)**	**2026 (Undiscounted Cash Flow - UCF)**	**Total Cost (Undiscounted Cash Flow - UCF)**	**Total Cost (Net Present Value - NPV)**
Outcome	**CCRB1: A climate-proofed Built Environment and Infrastructure for Resilience**	**$ 93,75,000.00**	**$ 93,75,000.00**	**$ 93,75,000.00**	**$ 93,75,000.00**	**$ 3,75,00,000.00**	**$ 3,49,05,450.28**
Output CCRB1.1	Climate and Climate Change Proofing of Built Environment and Infrastructure for Resilience	$ 93,75,000.00	$ 93,75,000.00	$ 93,75,000.00	$ 93,75,000.00	$ 3,75,00,000.00	$ 3,49,05,450.28
Total for prioritised outcomes as part of Component 3: Built Environment and Infrastructure (e.g., buildings, roads and drainage infrastructure) is climate proofed for resilience		**$93,75,000.00**	**$93,75,000.00**	**$93,75,000.00**	**$93,75,000.00**	**$3,75,00,000.00**	**$3,49,05,450.28**

Source: own elaboration based on Costing Model and stakeholder engagement

Among others, the development and operationalization of a National and Sectoral Climate Change Budget Coding and Tracking System for The Gambia's Nationally Determined Contributions (NDC) is of great importance. Such a system enables the effective tracking and monitoring of financial resources allocated to climate change-related activities at both the national and sectoral levels. It plays a crucial role in ensuring transparency, accountability, and efficient resource management in the implementation of climate change initiatives. Additionally, the establishment and operationalization of a National Climate Change Fund, along with its Local Level Windows, for The Gambia's NDC, can play a significant role in supporting climate change mitigation and adaptation efforts at both the national and local levels. Such a fund provides a dedicated and sustainable financing mechanism to mobilize, manage, and disburse financial resources for climate-related projects and initiatives and thus should be prioritised accordingly for securing financial requirements to make it operational. The establishment of Local Level Windows within the National Climate Change Fund allows for the decentralization of financing decisions and ensures that local communities and sub-national entities have direct access to climate finance. This recognizes the importance of local knowledge, priorities, and capacity in addressing climate change challenges and implementing relevant projects. The Local Level Windows can provide targeted financial support to local governments, community-based organizations, and other stakeholders, empowering them to undertake climate change mitigation and adaptation actions that align with the objectives of the NDC.

4.2.2. Estimated costs towards implementing prioritised NDC Mitigation sectors/ thematic components, outcomes and outputs

On aggregate, it is estimated that **approximately USD 268 Mn. (UCF) will be required to implement and operationalise the prioritised NDC Mitigation sectoral outcomes and outputs thereof,** between 2023-2029 which include sectoral outcomes encompassing Energy, IPPU, Agriculture, LULUCF and Waste. Among these, approximately **43% and 30% of the total funding/financing requirement will cater towards the Energy and Agricultural sector outcomes prioritised (respectively)**. Specifically, for the Energy sector outcomes, the **integration and harmonisation of the National Electricity Production Systems, specifically NAWEC (National Water and Electricity Company), KARPower, and OMVG (Organization for the Development of the Gambia River), can greatly contribute to The Gambia's NDC. This integration aims to improve the efficiency, reliability, and sustainability of electricity generation, ensuring a coordinated and optimized approach to meet the country's energy needs while reducing greenhouse gas emissions.** It demonstrates a coordinated and strategic approach to the energy sector, enhancing investor confidence and promoting public-private partnerships. This can result in increased funding for renewable energy projects, grid infrastructure upgrades, and technology advancements, supporting the achievement of The Gambia's NDC targets. Furthermore, the financing requirements warranted by the prioritised outcomes in the Agriculture sector reiterates the importance of the sector in the Gambia's food security, economic development, rural livelihoods, environmental sustainability, trade, and cultural significance. Particularly, **investments in GHG reduction measures for different rice ecologies benefit The Gambia's NDC by mitigating climate change, enhancing agricultural productivity and food security, supporting complementary adaptation efforts, promoting sustainable land use, accessing climate finance, and fostering socio-economic development.** These investments provide a holistic approach to address climate change challenges while ensuring sustainable and resilient development in the country.

Table 15: High-level summary of costs for prioritised Mitigation outcomes by sectors

Sectors	Total Cost for 2023-2026 - Undiscounted Cash Flow (UCF)	Total Cost as per Net Present Value (NPV)
Energy	**$ 11,48,10,142.42**	**$ 10,69,64,985.05**
IPPU	**$ 7,42,592.96**	**$ 7,05,875.80**
Agriculture	**$ 7,88,66,468.79**	**$ 7,01,00,359.45**
Land Use, Land Use Change, and Forestry (LULUCF)	**$ 3,20,12,214.08**	**$ 2,81,13,794.02**
Waste	**$ 4,18,09,086.34**	**$ 3,75,18,251.06**
Total	**$ 26,82,40,504.59**	**$ 24,34,03,265.40**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 16: Break-down of costs for prioritised outcomes and outputs in Energy sector

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[E1] The National Electricity Production Systems (NAWEC, KARPower and OMVG) are integrated and Harmonised**	**$ 1,46,21,512.69**	**$ 1,25,77,830.25**	**$ 74,24,101.61**	**$ 2,26,690.53**	**$ 2,26,690.53**	**$ 2,26,690.53**	**$ 2,26,690.53**	**$ 3,55,30,206.66**	**$ 3,40,63,378.24**

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Output E1.1	Electricity Supply (Grid and Renewables)	$ 1,46,21,512.69	$ 1,24,64,484.99	$ 73,10,756.34	$ -	$ -	$ -	$ -	$ 3,43,96,754.03	$ 3,31,23,522.29
Output E1.2	Sub-national grid connection to National Grid, Increment in the share of renewable energy in the energy mix increased, Reduction in and harmonisation of operational costs of the Electricity Generation systems and Increment in the efficiency of the generation of electricity in the country.	$ -	$ 1,13,345.26	$ 1,13,345.26	$ 2,26,690.53	$ 2,26,690.53	$ 2,26,690.53	$ 2,26,690.53	$ 11,33,452.64	$ 9,39,855.95
Outcome	**[E2] Grid-connected wind power is developed and operational**	**$ 1,65,979.55**	**$ 16,49,972.43**	**$ 18,57,446.87**	**$ 2,07,474.44**	**$ -**	**$ -**	**$ -**	**$ 38,80,873.29**	**$ 36,19,735.64**
Output E2.1	Feasibility of grid connected wind power	$ 1,65,979.55	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,65,979.55	$ 1,65,979.55
Output E2.2	Mobilization of resources for grid connected win power	$ -	$ 16,49,972.43	$ 18,57,446.87	$ 2,07,474.44	$ -	$ -	$ -	$ 37,14,893.74	$ 34,53,756.08
Outcome	**[E3] Transmission and Distribution Losses of Electricity and Water Systems are reduced**	**$ 6,02,872.92**	**$ 99,19,235.84**	**$ 1,09,91,770.72**	**$ 68,26,794.35**	**$ -**	**$ -**	**$ -**	**$ 2,83,40,673.82**	**$ 2,59,16,865.89**
Output E3.1	Transmission and Loss reduction	$ 6,02,872.92	$ 6,02,872.92	$ 3,44,498.81	$ 1,72,249.41	$ -	$ -	$ -	$ 17,22,494.06	$ 16,38,303.70
Output E3.2	Implementation of a Comprehensive Transmission and Distribution (T&D) loss reduction strategy and action plan	$ -	$ 93,16,362.92	$ 1,06,47,271.91	$ 66,54,544.94	$ -	$ -	$ -	$ 2,66,18,179.76	$ 2,42,78,562.19
Outcome	**[E5] Solar home systems are**	**$ 39,94,682.02**	**$ 1,78,40,588.01**	**$ 1,55,21,919.14**	**$ 77,60,959.57**	**$ 19,40,239.89**	**$ -**	**$ -**	**$ 4,70,58,388.64**	**$ 4,33,65,005.29**

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
	established and operational									
Output E5.1	Installation and operationalization of Solar Home Systems Study	$ 39,94,682.02	$ 1,78,40,588.01	$ 1,55,21,919.14	$ 77,60,959.57	$ 19,40,239.89	$ -	$ -	$ 4,70,58,388.64	$ 4,33,65,005.29
Total for prioritised outcomes as part of Energy sector		**$ 1,93,85,047.18**	**$ 4,19,87,626.53**	**$ 3,57,95,238.34**	**$ 1,50,21,918.89**	**$ 21,66,930.42**	**$ 2,26,690.53**	**$ 2,26,690.53**	**$ 11,48,10,142.42**	**$ 10,69,64,985.05**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 17: Break-down of costs for prioritised outcomes and outputs in IPPU sector

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[IP1] Consumption of HFCs in the IPPU category is reduced through fuel substitution**	**$ 2,43,687.32**	**$ 2,36,952.82**	**$ 2,36,952.82**	**$ 25,000.00**	**$ -**	**$ -**	**$ -**	**$ 7,42,592.96**	**$ 7,05,875.80**
Output IP1.1	Analysis of options to reduce HFC consumption	$ 31,734.50	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ -	$ -	$ -	$ 1,06,734.50	$ 99,815.70
Output IP1.2	Development and implementation of reduction of consumption and emissions from HFC	$ 2,11,952.82	$ 2,11,952.82	$ 2,11,952.82	$ -	$ -	$ -	$ -	$ 6,35,858.46	$ 6,06,060.10
Total for prioritised outcomes as part of IPPU sector		**$ 2,43,687.32**	**$ 2,36,952.82**	**$ 2,36,952.82**	**$ 25,000.00**	**$ -**	**$ -**	**$ -**	**$ 7,42,592.96**	**$ 7,05,875.80**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 18: Break-down of costs for prioritised outcomes and outputs in Agriculture sector

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[C1] GHG reduction measures from different rice ecologies are determined and implemented in the Gambia**	**$ 7,41,240.08**	**$ 44,04,039.88**	**$ 87,53,968.00**	**$ 1,31,30,952.00**	**$ 1,75,07,936.00**	**$ -**	**$ -**	**$ 4,45,38,135.96**	**$ 3,86,22,503.13**
Output C1.1	Mapping of Suitability for various rice cultivars	$ 7,41,240.08	$ 27,055.87	$ -	$ -	$ -	$ -	$ -	$ 7,68,295.95	$ 7,67,007.58
Output C1.2	Cultivation of rice based on GHG mitigation	$ -	$ 43,76,984.00	$ 87,53,968.00	$ 1,31,30,952.00	$ 1,75,07,936.00	$ -	$ -	$ 4,37,69,840.01	$ 3,78,55,495.55
Outcome	**[C2] GHG emission reductio measures are adopted and implemented for the Agricultural Crop production sub-sector through Climate Smart Agriculture [CSA] measures**	**$ 52,01,406.04**	**$ 31,15,638.55**	**$ 30,59,426.12**	**$ 30,59,426.12**	**$ 30,59,426.12**	**$ -**	**$ -**	**$ 1,74,95,322.96**	**$ 1,61,03,515.29**
Output C2.1	Strategy of Climate Smart Agriculture as a GHG Mitigation option	$ 21,41,979.91	$ 56,212.43	$ -	$ -	$ -	$ -	$ -	$ 21,98,192.34	$ 21,95,515.56
Output C2.2	Implementation Climate Smart Agriculture as a GHG Mitigation option	$ 30,59,426.12	$ 30,59,426.12	$ 30,59,426.12	$ 30,59,426.12	$ 30,59,426.12	$ -	$ -	$ 1,52,97,130.62	$ 1,39,07,999.74
Outcome	**[C3] GHG emissions reduction measures are adopted and applied in Full Food Value Change of The Gambia**	**$ 33,38,259.76**	**$ 29,10,618.10**	**$ 29,10,618.10**	**$ 29,10,618.10**	**$ 29,10,618.10**	**$ -**	**$ -**	**$ 1,49,80,732.17**	**$ 1,36,59,167.48**
Output C3.1	Strategy of Food Loss and Waste Reduction as GHG mitigation in the Food Value Chain	$ 9,78,318.56	$ 5,50,676.90	$ 5,50,676.90	$ 5,50,676.90	$ 5,50,676.90	$ -	$ -	$ 31,81,026.17	$ 29,30,991.60

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Output C3.2	Implementation of Food Loss and Waste Reduction as GHG mitigation in the Food Value Chain	$ 23,59,941.20	$ 23,59,941.20	$ 23,59,941.20	$ 23,59,941.20	$ 23,59,941.20	$ -	$ -	$ 1,17,99,706.00	$ 1,07,28,175.89
Outcome	**[L1] Livestock Productivity is improved through effective GHG Mitigation measures**	**$ 6,44,443.31**	**$ 3,01,958.60**	**$ 3,01,958.60**	**$ 3,01,958.60**	**$ 3,01,958.60**	**$ -**	**$ -**	**$ 18,52,277.70**	**$ 17,15,173.55**
Output L1.1	Strategy for improvement of Livestock productivity through mitigation of GHG emissions	$ 3,42,484.71	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,42,484.71	$ 3,42,484.71
Output L1.2	Improvement of Livestock productivity through mitigation of GHG emissions	$ 3,01,958.60	$ 3,01,958.60	$ 3,01,958.60	$ 3,01,958.60	$ 3,01,958.60	$ -	$ -	$ 15,09,792.99	$ 13,72,688.84
Total for prioritised outcomes as part of Agriculture sector		**$ 99,25,349.18**	**$ 1,07,32,255.13**	**$ 1,50,25,970.83**	**$ 1,94,02,954.83**	**$ 2,37,79,938.83**	**$ -**	**$ -**	**$ 7,88,66,468.79**	**$ 7,01,00,359.45**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 19: Break-down of costs for prioritised outcomes and outputs in LULUCF sector

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[F1] Degraded landscapes (including protected forests) are restored**	**$ 4,97,259.74**	**$ 18,11,335.53**	**$ 18,11,335.53**	**$ 18,11,335.53**	**$ 18,11,335.53**	**$ 18,11,335.53**	**$ -**	**$ 95,53,937.39**	**$ 83,39,394.66**
Output F1.1	Stock-take for restoration of degraded lands using afforestation, agroforestry, assisted natural regeneration, and re-greening of degraded lands strategy	$ 4,97,259.74	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,97,259.74	$ 4,97,259.74

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Output F1.2	Implementaton for restoration of degraded lands using afforestation, agroforestry, assisted natural regeneration, and re-greening of degraded lands	$ -	$ 18,11,335.53	$ 18,11,335.53	$ 18,11,335.53	$ 18,11,335.53	$ 18,11,335.53	$ -	$ 90,56,677.64	$ 78,42,134.91
Outcome	**[F2] Fuel-efficient and cleaner cookstoves are promoted and upscaled**	**$ 24,44,973.55**	**$ 22,54,130.80**	**$ 22,54,130.80**	**$ 22,54,130.80**	**$ 22,54,130.80**	**$ 22,54,130.80**	**$ -**	**$ 1,37,15,627.54**	**$ 1,22,04,180.25**
Output F2.1	Stock-take for Promotion and dissemination of improved cookstoves strategy	$ 24,44,973.55	$ -	$ -	$ -	$ -	$ -	$ -	$ 24,44,973.55	$ 24,44,973.55
Output F2.2	Implementation for Promotion and dissemination of improved cookstoves	$ -	$ 22,54,130.80	$ 22,54,130.80	$ 22,54,130.80	$ 22,54,130.80	$ 22,54,130.80	$ -	$ 1,12,70,653.99	$ 97,59,206.70
Outcome	**[F4] Sustainable Fire Management is applied**	**$ -**	**$ 17,48,529.83**	**$ 17,48,529.83**	**$ 17,48,529.83**	**$ 17,48,529.83**	**$ 17,48,529.83**	**$ -**	**$ 87,42,649.16**	**$ 75,70,219.11**
Output F4.1	Protection from fires and establishment of livestock feed enterprises strategy	$ -	$ 17,48,529.83	$ 17,48,529.83	$ 17,48,529.83	$ 17,48,529.83	$ 17,48,529.83	$ -	$ 87,42,649.16	$ 75,70,219.11
Total for prioritised outcomes as part of LULUCF sector		**$ 29,42,233.29**	**$ 58,13,996.16**	**$ 58,13,996.16**	**$ 58,13,996.16**	**$ 58,13,996.16**	**$ 58,13,996.16**	**$ -**	**$ 3,20,12,214.08**	**$ 2,81,13,794.02**

Source: own elaboration based on Costing Model and stakeholder engagement

Table 20: Break-down of costs for prioritised outcomes and outputs in Waste sector

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
Outcome	**[W1] Integrated Waste Management, including waste gas recovery (MA6] and organic waste recovery [MA7] is is**	**$63,58,375.32**	**$88,04,789.36**	**$82,29,500.93**	**$73,66,568.29**	**$73,66,568.29**	**$36,83,284.15**	**$0.00**	**$4,18,09,086.34**	**$3,75,18,251.06**

Outcomes and Outputs		2023 (Undiscounted Cash Flow - UCF)	2024 (Undiscounted Cash Flow - UCF)	2025 (Undiscounted Cash Flow - UCF)	2026 (Undiscounted Cash Flow - UCF)	2027 (Undiscounted Cash Flow - UCF)	2028 (Undiscounted Cash Flow - UCF)	2029 (Undiscounted Cash Flow - UCF)	Total Cost (Undiscounted Cash Flow - UCF)	Total Cost (Net Present Value - NPV)
	established and promoted									
Output W1.1	Protection from fires and establishment of livestock feed enterprises strategy	$26,75,091.18	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$26,75,091.18	$26,75,091.18
Output W1.2	Protection from fires and establishment of livestock feed enterprises	$36,83,284.15	$88,04,789.36	$82,29,500.93	$73,66,568.29	$73,66,568.29	$36,83,284.15	$0.00	$391,33,995.16	$348,43,159.89
Total for prioritised outcomes as part of Waste sector		**$63,58,375.32**	**$88,04,789.36**	**$82,29,500.93**	**$73,66,568.29**	**$73,66,568.29**	**$36,83,284.15**	**$0.00**	**$4,18,09,086.34**	**$3,75,18,251.06**

Source: own elaboration based on Costing Model and stakeholder engagement

In summary, investments are essential for The Gambia's NDC implementation as they support climate change mitigation, adaptation, technology development, capacity building, socio-economic development, access to climate finance, and sustainable development co-benefits. Adequate investments can catalyse transformative actions, accelerate progress towards NDC targets, and foster a sustainable and climate-resilient future for The Gambia. The findings from the above costing exercises provide estimates of financial requirements which will be critical towards ensuring the actualisation of the ambitious outcomes proposed in the Gambia's NDC Implementation Plan. The estimates are subject to alterations based on relaxation of any assumptions used towards their calculations as well as based on the need to leverage past and subjective judgements of different sectoral and institutional stakeholders to further inform any adjustments required.

5 | Recommendations

To prioritise the specific NDC Adaptation and Mitigation outcomes in The Gambia, it is essential to build upon the findings of this exercise and undertake additional support gap assessments and engage stakeholders in a participatory process to ensure timely progress and implementation.

1. **Engage Stakeholders:** Ensure active engagement and coordination of key stakeholders, including government agencies, local communities, civil society organizations, private sector entities, and development partners. Stakeholders should be involved in the implementation processes through effective coordination and accountability, consultations, and multi-stakeholder dialogues. This inclusive approach will help gather diverse perspectives, build ownership, and ensure that the prioritised outcomes address the needs and aspirations of different stakeholders.
2. **Consider Co-Benefits:** Prioritise NDC outcomes that have multiple co-benefits across various sectors. Look for actions that not only contribute to climate change mitigation and adaptation but also have positive impacts on sustainable development, such as improving energy access, enhancing food security, promoting job creation, and protecting ecosystems. Co-benefits can help garner support and increase the overall effectiveness and sustainability of NDC implementation.
3. **Align with National Priorities and Development Plans:** Ensure that the prioritized NDC outcomes are closely aligned with national development priorities and plans, such as poverty reduction strategies, sectoral development plans, and the Sustainable Development Goals (SDGs). Integration with existing plans increases the chances of mainstreaming climate actions into broader development processes and leveraging existing resources.
4. **Consider Urgency and Timeframes:** Consider the urgency of specific NDC outcomes and the associated timelines for implementation. Prioritize actions that address immediate and urgent climate challenges or have early mitigation and adaptation benefits. Additionally, identify short-term, medium-term, and long-term outcomes to ensure a balanced approach and a clear roadmap for implementation over time.
5. **Monitor, Evaluate, and Adapt:** Establish a robust monitoring and evaluation system to track the progress of NDC outcomes and regularly review and update priorities based on evolving circumstances. This adaptive management approach ensures that the prioritized outcomes remain relevant, responsive to changing climate dynamics, and aligned with emerging opportunities and challenges.
6. **Enhance Capacity and Technical Assistance:** Build the capacity of relevant stakeholders to implement and monitor prioritized NDC outcomes effectively. Provide training, technical assistance, and knowledge sharing opportunities to enhance skills, knowledge, and expertise in climate change mitigation, adaptation, project management, and finance. Strengthening capacity ensures the successful implementation and sustainability of prioritized outcomes.

Financing the prioritised NDC outcomes in The Gambia requires a combination of international climate finance, domestic resource mobilization, public-private partnerships, innovative financial instruments, capacity building, and mainstreaming climate considerations in development planning. By adopting a multi-faceted approach and leveraging various financing mechanisms, The Gambia can secure the necessary resources to implement its NDC.

1. **Mobilize Climate Finance:** The Gambia should actively engage with international climate finance mechanisms, such as the Green Climate Fund (GCF), Adaptation Fund, and Global Environment Facility (GEF), to access financial resources for NDC implementation. This involves building institutional capacities for developing high-quality project proposals and aligning them with the requirements of these funds. The Gambia should also explore bilateral agreements and partnerships with donor countries and organizations that offer climate finance.
2. **Strengthen Domestic Financial Resources:** The Gambia can explore innovative financing mechanisms to mobilize domestic financial resources for NDC implementation. This can include establishing the National Climate Fund or expanding existing funds to pool resources from the public and private sectors. The government can consider introducing green taxes, levies, or fees on sectors contributing to greenhouse gas emissions to generate additional revenue for climate actions. The Gambia should also promote sustainable investment and attract private sector financing through incentives, such as tax breaks or subsidies.
3. **Public-Private Partnerships (PPPs):** Foster partnerships between the public and private sectors to leverage financial resources and expertise. PPPs can attract private sector investments in renewable energy projects, climate-smart agriculture initiatives, and sustainable infrastructure development. The government should create an enabling environment for PPPs by establishing clear regulatory frameworks, providing risk-sharing mechanisms, and streamlining procurement processes.
4. **Climate Insurance and Risk Financing:** The Gambia can explore climate insurance mechanisms to manage climate-related risks and provide financial protection against extreme weather events. This can include establishing weather-indexed insurance programs for farmers or developing insurance schemes for infrastructure projects vulnerable to climate impacts. The government can collaborate with insurance providers and international organizations to design and implement these mechanisms.

5. **Blended Finance and Innovative Financial Instruments:** The Gambia can leverage blended finance, which combines public and private capital, to fund NDC priorities. Blended finance mechanisms can de-risk private sector investments and attract additional funding for sustainable projects. The government can also explore innovative financial instruments such as green bonds, carbon credits, or results-based financing mechanisms to attract private investments and generate revenue streams for NDC implementation.
6. **Capacity Building for Financial Management:** Strengthening financial management capacities is crucial for effective and transparent utilization of climate finance. The Gambia should invest in capacity building programs to enhance financial management skills and knowledge within government agencies responsible for NDC implementation. This includes training on project planning, budgeting, financial reporting, and monitoring and evaluation of climate projects.
7. **South-South Cooperation and Knowledge Exchange:** The Gambia can engage in South-South cooperation and knowledge exchange with other countries facing similar climate challenges. This can help identify innovative financing approaches and learn from successful experiences in financing NDC implementation. The government should actively participate in regional and international climate forums to facilitate knowledge sharing and access to financial resources.
8. **Mainstreaming Climate Considerations in Development Planning:** The Gambia should integrate climate change considerations into national development planning processes to ensure that climate priorities are adequately reflected in sectoral plans and budgets. This involves aligning national policies and strategies with the NDC goals, conducting climate risk assessments, and integrating climate finance needs into budgeting processes. Mainstreaming climate considerations ensures that financial resources are allocated strategically and that climate actions are integrated into broader development objectives.

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ANNEXURES

ANNEXURE 1: DOCUMENTS REVIEWED

Table 21: Key documents reviewed

Name of the Document
The Gambia NDC Update Report FNL[77].pdf
Lot2_Climate Resilience Livelihood options Final_Report_27Feb2020%20(2).pdf
Long_Term_Climate_Change_Strategy_of_The_Gambia_Final.pdf
NDP Results Matrix.pdf
The Gambia 2050 Climate Vision.pdf
Final-The Gambia NDP (2018-2021).pdf
Second NDC of The Republic of The Gambia-16-12-2021.pdf
The Gambia NDC Implementation Plan (V2) – Adaptation and Mitigation

ANNEXURE 2: KEY CONSULTATIONS AND MEETINGS UNDERTAKEN

Table 22: Key meetings/ consultations undertaken

Date of meeting	What was discussed?	Participants
16th January 2023. *Kick-off Meeting on Gambia NDC Prioritization and Costings*	• Introductions - Overview and rationale on the Gambia NDC Prioritising and Costings assignments. • Identification of roles by the Firm, Local Consultant for Genesis Analytics and the Government of The Gambia on the process. • Highlights on key expectations, and scope of work • Presentation on the overall methodology and reference materials for the assignment	Mr. Alaph A.K. Jallow kabada2008@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Mr. Sambou Kinteh kintehsambou9@gmail.com Genesis Analytics Team NDC Partnership Team

Date of meeting	What was discussed?	Participants
26th January, 2023. *First planning meeting the Ministry of Environment, Climate Change and other stakeholders*	• The meeting focused on the prioritisation strategy and dates for stakeholder meetings. • Genesis to update prioritisation criteria based on inputs received along with questions for stakeholders as per criteria and share with the government before the meeting on 2nd February • Stakeholder list shared by Genesis; government to add on basis NDC working committee and approve as the NDC/LT-LEDS multi sectoral committee will be core to the sectoral consultations. • The reference documents were shared with sectoral representatives for review prior to the stakeholders meeting. • The next meeting was announced on the 2nd April at 10:am Gambian time/11:00 am CET	Mr. Alaph A.K. Jallow kabada2008@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Mr. Sambou Kinteh kintehsambou9@gmail.com Genesis Analytics Team NDC Partnership Team
2nd February, 2023. *The Gambia: Analytical Support to NDC implementation plan*	• This meeting cantered on the margins of the first stakeholder virtual workshop on Prioritization. • The meeting agrees with the Secretariat to send the invitation letter on an official letterhead to stakeholders indicating the date and time of the initial stakeholder virtual workshop to enhance ownership of the project. • More reference materials such as the second edition of the National Development Plan 2023-2027 (Draft). As this NDP has focused more on climate change issues and green recovery. • Genesis analytics to share the master file with the changes discussed. A word document with important weight matrix and guiding questions to be shared and the team was requested to send feedback/input urgently. This was asked to be updated with inputs that will include the finalised prioritisation criteria, weighing module, stakeholder consultation checklist and the respective adaptation and mitigation response collection template for a high-level stakeholder survey. • After the prioritisation exercise, the Genesis analytics to work on the costing. • The NDC Partnership can support the government to convene the virtual meeting upon confirmation. • The Local Consultant to coordinate stakeholder meetings with date and time alongside with the Invitation.	Mr. Alpha Jallow kabada2008@gmail.com Mr. Sambou Kinteh kintehsambou9@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Genesis Analytics Team NDC Partnership Team
10th February 2023. *Pre-Planning Meeting with the Ministry of Environment Climate Change Secretariat on the Stakeholder Workshop*	• The aim of the meeting was to plan for upcoming stakeholder virtual workshops such as the agenda, the methodology of the workshop and the overall objectives of the workshop. • The Local Consultant to share a list of stakeholders who attended the meeting and schedule of meetings for stakeholders who will not attend the meetings. • Genesis analytics team will collate and analyse the date and develop and excel document and report with the priorities. The documents will be shared before	Mr. Alpha Jallow kabada2008@gmail.com Mr. Sambou Kinteh kintehsambou9@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Genesis Analytics Team

Date of meeting	What was discussed?	Participants
	2nd March, 2023. The agenda of the meeting is to go through the prioritisation list for concurrence before the costing process. ● The Government proposed a suitable time for the meeting to take place on the 13th February, 2023.	NDC Partnership Team
13th February 2023. *Virtual Workshop on the NDC*	● Introduction, presentation of participants and methodology of the workshop. The meeting was attended by representatives of Government Stakeholders in the NDC Sector led by the Director of Climate Change Secretariat. ● The Genesis Team presents the Prioritization of NDC outcomes for the stakeholders. ● A technical session was carried out on the prioritisation form. The stakeholders were taken through on the mode of prioritisation through the MIRO Online system of analysis to help in prioritisation. ● The meeting agrees for a physical meeting to complete the process as the time of the virtual workshop is not limited. This meeting scheduled the meeting to take place on the 16th February, 2023. ● The meeting was closed with a questions and answer session from the stakeholders.	Mr. Alpha Jallow kabada2008@gmail.com Mr. Sambou Kinteh kintehsambou9@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Mr. Omar Ceesay omarceesay80@gmail.com Ms. Sainabou Ndow saibaitaal@gmail.com Mr. Habibou Mbaye hibmbye@nawec.gm Mr. Saihou Jallow s4jallow@gmail.com Mr. Bakary Jadama babjados@yahoo.com Mr. Sariyang MK Jobarteh sariyangmkj@gmail.com Mr. Alieu Barry barryalieu25@gmail.com Ms. Adam Sanyang Sanyangadam100@gmail.com Mr. Nfamara BM Jarju nfamarabmj@gmail.com Mr. Ebou Jobe ebou22@gmail.com Mr. Ousman Jeng ojdel8@gmail.com Mr. Dodou Jallow magadou07@gmail.com Mr. Saikou Jagne Jagne.saikou@yahoo.com Mr. Sulayman Camara scamara@petcom.gm Mr. Bubacarr Fofana

Date of meeting	What was discussed?	Participants
		bfofana484@gmail.com Mrs. Elizabeth Carayol-Ndong elicarayol@gamworks.gm Mr. Francis Mendy najulo77@gmail.com Genesis Analytics Team
16th February, 2023. *The NDC Prioritization Stakeholder Consultation Workshop Outcomes*	• Upon the virtual workshop, the Local Consultant has led the physical convergence of the stakeholders to take them through on the adaptation and mitigation response as per the sectors and outcomes. • This workshop was attended by 16 institutions including the Ministry of Environment, Climate Change and Natural Resources. • Stakeholders were briefed by the Climate Change Secretariat on the importance of NDC and their institutions contribution to the zero emission of the Paris Agreement. This was followed by the Local Consultant to take stakeholders through on the methodology and the importance of administering the questionnaire. • An administering session also takes place to help stakeholders understand the form for easy facilitation in their response. • Reference materials were shared with stakeholders to help in administering their respective sector responses for both adaptation and mitigation. These reference materials were such as the NDC 1 & 2, LTS, Revised NDP and other related documents on climate change. • The meeting agrees a dateline for stakeholders to submit their respective responses on Wednesday 22nd February, 2023. • The meeting also recommends the Local Consultant to extend support where there are challenges faced during the administering process by stakeholders.	Mr. Omar Ceesay omarceesay80@gmail.com Mr. Habibou Mbaye hibmbye@nawec.gm Mr. Saihou Jallow s4jallow@gmail.com Mr. Bakary Jadama babjados@yahoo.com Mr. Sariyang MK Jobarteh sariyangmkj@gmail.com Mr. Alieu Barry barryalieu25@gmail.com Ms. Adam Sanyang Sanyangadam100@gmail.com Mr. Nfamara BM Jarju nfamarabmj@gmail.com Mr. Ebou Jobe ebou22@gmail.com Mr. Ousman Jeng ojdel8@gmail.com Mr. Dodou Jallow magadou07@gmail.com Mr. Saikou Jagne Jagne.saikou@yahoo.com Mr. Sulayman Camara scamara@petcom.gm Mr. Bubacarr Fofana bfofana484@gmail.com Mr. Modou Cham Climate Change Secretariate Mr. Ibrahim Colley Ministry of Environment, Climate Change & Natural Resources

Date of meeting	What was discussed?	Participants
		Mr. Sambou Kinteh Climate Change Secretariate Mr. Modou Lamin Bah Climate Change Secretariate Ms. Fatoumata Manjang Climate Change Secretariate Mr. Kawsu Barrow Genesis Analytics - Gambia
23rd February - 1st March 2023. Face-to-face meeting with stakeholders	• A face-to-face was conducted based on demand from stakeholders for the Local Consultant to help in doing their sectoral response. • Amongst the Sectors help were the Department of Community Development, National Disaster Management Agency, Department of Fisheries, and others on virtual support.	Ms. Sainabou Ndow saibaitaal@gmail.com Ms. Mbassi Sanneh mbassisanneh@gmail.com Mr. wandifa@yahoo.co.uk wandifa@yahoo.co.uk
20th – 23rd March 2023. Face-to-face meeting with the Ministry of Agriculture	• Upon the presentation of the report to the Government, particularly the climate change secretariat, it was strongly agreed by the Ministry of Agriculture to submit their response as they are a critical contributor to emission in the country. • A two-day face-to-face consultation was made to help them in administering the said questioner and help in the understanding of the studies.	Mr. Sariyang M. K. Jobarteh sariyangmkj@gmail.com Genesis Analytics Rep
6th – 13th April 2023. Government meeting with Genesis Analytics and the NDC Partnership embarked on follow-up meetings on the costing and prioritisation.	• Below were the meeting outcomes between the Government of The Gambia and the Genesis Analytics: • Clarification of the discounting rate used by The Gambia. Is there an official discounting rate? Genesis analytics team is currently using a 2% discounting rate for the calculation of the Net Present Value (NPV). The representative from the Ministry of Finance and Economic Affairs to provide the feedback. • Adaptation costing is ongoing, and a draft excel will be shared next week. • The Secretariat requested Mr. Kawsu to visit the office and engage the team when convening meetings with sectors such as forestry. • The costing documents shared are not the final versions. New information will be added to enhance the costing process. For example, the information gathered from consultations with sectors such as Forestry will be incorporated in the costing process. • The information gathered from the stakeholder consultations on 12.04.2023 to be shared for incorporation into the report and inform the costing process. • Validation meeting date selected	Mr. Alpha Jallow kabada2008@gmail.com Mr. Sambou Kinteh kintehsambou9@gmail.com Ms. Isatou Camara aisharahman84@yahoo.com Momodou Lamin Bah modoulbh@gmail.com Bubu Pateh Jallow bubupateh@yahoo.com Genesis Analytics NDC Partnership

Date of meeting	What was discussed?	Participants
	● The Secretariat requested to send stakeholder invitations for the validation meeting. Mr. Kawsu will share the draft letter together with the previous stakeholders contact list for input by the Secretariat. ● The validation meeting will be convened on 2nd May 2023. ● The NDC Partnership through Genesis Analytics will provide food and refreshments for the delegates. ● Genesis analytics requested to share the report at the earliest opportunity to enable the Secretariat to share the report together with the invitation letter. ● Follow-up meeting will be on 20th April 2023 at 11.30 Gambian time. A calendar invite and meeting link will be shared by the NDC Partnership. The meeting agenda will be: ● Prioritisation and costing report ● Validation Meeting ● Next steps	
12th April, 2023. Consultation meeting with NAWEC, Forestry, and National Environment Agency (NEA)	● During the Genesis analytics support: Follow-up-Costing exercise meeting with the Government, the Expert from the Genesis request for the in-country expert with the support from the Climate Change Secretariat to provide additional information on the harmonisation of electricity grid in the Gambia, the management of HCFs in the Gambia and Forest management. ● The aim of the visits to the three key sectors was to brief their Executives on the NDC Costing Prioritizations and the role their respective institutions play. It also serves as an opportunity for them to understand their significant role in Climate Change and in particular the Gambia's NDCs. ● A request was made to all the three institutions to share with the teams the relevant documents that were initially requested by Genesis Analytics during the follow-up meetings with the government.	Alieu Barry barryalieu25@gmail.com Omar Ceesay omarceesay80@gmail.com Alhagie Sarr alhagiesarr42@gmail.com Habibou IB Mbye hibmbye@nawec.gm Nani Juwara njuwara@nawec.gm Climate Change Secretariat Genesis Analytics Rep

ANNEXURE 3: REFERENCE TEMPLATES FOR THE PRIORITISATION EXERCISE

Table 23: Checklist developed to guide the generation of importance weight scores

Sl	Questions	Choices:						
		Extremely Preferred	Between Extremely Preferred and Very Strongly Preferred	Very Strongly Preferred	Between Very Strongly Preferred and Strongly Preferred	Strongly Preferred	Between Strongly Preferred and Moderately Preferred	Moderately Preferred
1.	To what extent is the criteria 'Complementarity with national/ other development priorities' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
2.	To what extent is the criteria 'Cost effectiveness potential' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
3.	To what extent is the criteria 'Cost effectiveness potential' preferred/ is more important than the criteria ' Complementarity with national/ other development priorities'?							
4.	To what extent is the criteria 'Technical Feasibility' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
5.	To what extent is the criteria 'Technical Feasibility' preferred/ is more important than the criteria ' Complementarity with national/ other development priorities'?							

Sl	Questions	Choices:						
		Extremely Preferred	Between Extremely Preferred and Very Strongly Preferred	Very Strongly Preferred	Between Very Strongly Preferred and Strongly Preferred	Strongly Preferred	Between Strongly Preferred and Moderately Preferred	Moderately Preferred
6.	To what extent is the criteria 'Technical Feasibility' preferred/ is more important than the criteria 'Cost Effectiveness Potential'?							
7.	To what extent is the criteria 'Potential advancements in socio-economic development' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
8.	To what extent is the criteria 'Potential advancements in socio-economic development' preferred/ is more important than the criteria ' Complementarity with national/ other development priorities'?							
9.	To what extent is the criteria 'Potential advancements in socio-economic development' preferred/ is more important than the criteria 'Cost Effectiveness Potential'?							
10.	To what extent is the criteria 'Potential advancements in socio-economic development' preferred/ is more important than the criteria 'Technical Feasibility'?							

Sl	Questions	Choices:						
		Extremely Preferred	Between Extremely Preferred and Very Strongly Preferred	Very Strongly Preferred	Between Very Strongly Preferred and Strongly Preferred	Strongly Preferred	Between Strongly Preferred and Moderately Preferred	Moderately Preferred
11.	To what extent is the criteria 'Implementation Timeline' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
12.	To what extent is the criteria 'Implementation Timeline' preferred/ is more important than the criteria 'Complementarity with national/ other development priorities'?							
13.	To what extent is the criteria 'Implementation Timeline' preferred/ is more important than the criteria 'Cost Effectiveness Potential'?							
14.	To what extent is the criteria 'Implementation Timeline' preferred/ is more important than the criteria 'Technical Feasibility'?							
15.	To what extent is the criteria 'Implementation Timeline' preferred/ is more important than the criteria 'Potential advancements in socio-economic development'?							

Sl	Questions	Choices:						
		Extremely Preferred	Between Extremely Preferred and Very Strongly Preferred	Very Strongly Preferred	Between Very Strongly Preferred and Strongly Preferred	Strongly Preferred	Between Strongly Preferred and Moderately Preferred	Moderately Preferred
16.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Adaptation/ Mitigation benefits'?							
17.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Complementarity with national/ other development priorities'?							
18.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Cost Effectiveness Potential'?							
19.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Technical Feasibility'?							
20.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Potential advancements in socio-economic development'?							
21.	To what extent is the criteria 'Scalability' preferred/ is more important than the criteria 'Implementation Timeline'?							

Table 24: Stakeholder perception survey questionnaire

C1: Adaptation/ Mitigation benefits					
C1	1.1	What are the adaptation benefits of this outcome?	*Qualitative*		
	1.2	What are the mitigation benefits of this outcome?	*Qualitative*		
	1.3	On a perception scale of 0-100, with 100 representing the maximum perceived adaptation/ mitigation benefit or utility to be derived from the outcome which can cater to overall NDC objectives, what will you score for the outcome?	*Quantitative*		
C2: Complementarity with national/ other development priorities					
C2	2.1	Does the outcome align/ compliment any outcome(s)/ measure(s) as in the National Development Plan (NDP)?	*Yes*	*No*	
	2.1.1	If yes, can you mention which NDP outcomes/ outcomes?	*Qualitative*		
	2.2	Does the outcome align/ compliment any of the Sustainable Development Goals (SDGs)?	*Yes*	*No*	
	2.2.1	If yes, can you mention which SDGs?	*Qualitative*		
	2.3	Does the outcome align/ compliment any other nationally relevant and prioritised policy/ plans/ outcomes?	*Yes*	*No*	
	2.3.1	If yes, can you mention the 'other' policy/plans/ outcomes?	*Qualitative*		
	2.4	On a perception scale of 0-100, with 100 representing the maximum perceived alignment/ complementarity with other national development priorities or utility to be derived from the outcome which can cater to overall NDC objectives, what will you score for the outcome?	*Quantitative*		
C3: Cost effectiveness potential					
C3	3.1	Will the overall benefits exceed the cost of implementing the outcomes in the outcome?	*Yes*	*No*	
	3.2	Is the funding/ financing available for its implementation sufficient?	*Yes*	*No*	
	3.3	On a perception scale of 0-100, with 100 representing the maximum perceived cost effectiveness or utility to be derived from the outcome which can cater to overall NDC objectives, what will you score for the outcome?	*Quantitative*		
C4: Technical feasibility					
C4	4.1	Are the available human resources sufficient to implement the outcomes in the outcome?	*Yes*	*No*	
	4.2	Are the available technological resources sufficient to implement the outcomes in the outcome?	*Yes*	*No*	
	4.3	Are the available institutional capacities sufficient to implement the outcomes in the outcome?	*Yes*	*No*	
	4.4	On a perception scale of 0-100, with 100 representing the maximum perceived feasibility of implementing the outcome based on the above 3 resource parameters, what will you score for the outcome?	*Quantitative*		
C5: Potential advancements in socio-economic development					
C5	5.1	Does the outcome align with/ compliment any of the Gambia's Long Term Strategy (LTS) targets?	*Ecosystem Resilience*	*Livelihood Resilience*	*Economic Resilience*
	5.2	What other socio-economic impacts can the outcome aim to achieve?	*Qualitative*		

	5.3	On a perception scale of 0-100, with 100 representing the maximum perceived socio-economic benefit or utility to be derived from the outcome which can cater to overall NDC objectives, what will you score for the outcome?	*Quantitative*		
C6: Timeline (Urgency/Importance)					
C6	6.1	How urgently should this outcome be implemented considering the scope and importance to national priorities/ enabling other actions?	*Very Urgent*	*Moderately Urgent*	*Less Urgent*
	6.2	On a perception scale of 0-100, with 100 representing the maximum perceived urgency of implementing the outcome which can cater to overall NDC objectives, what will you score for the outcome?	*Quantitative*		
C7: Scalability					
C7	7.1	Are there projects informing this outcome which are being undertaken at a sub-national/ regional level?	*Yes*	*No - planned for national coverage*	
	7.2	If yes, on a perception scale of 0-100, with 100 representing the maximum perceived potential to scale to other regions/ coverage of more beneficiaries, what will you score for the outcome?	*Quantitative*		

ANNEXURE 5: RESULTS IN THE QUANTITATIVE COMPONENT OF THE STAKEHOLDER CONSULTATION

Table 25: Results of the quantitative exercise for prioritisation

Adaptation / Mitigation	Sector	Outcomes	Score	Adaptation/mitigation benefits	Complementarity with national/ other development priorities	Cost effectiveness potential	Technical feasibility	Potential advancements in socio-economic development	Implementation timeline	Scalability
Adaptation	Policy, legislative and institutional review and development	CCF2: Sustainable and Transparent Climate Change Resource Mobilization Mechanism and Framework developed and implemented	74.6	85.2	78.2	75.7	54.2	82.2	84.5	54.4
Adaptation	Policy, legislative and institutional review and development	CCF3: National Climate Change Fund and its Local Level Windows capitalised and operational	73.4	77.0	73.6	75.6	50.5	86.4	86.1	56.7
Mitigation	LAND USE, LAND USE CHANGE, AND FORESTRY (LULUCF)	[F1] Degraded landscapes (including protected forests) are restored	72.3	77.3	76.4	73.2	54.5	79.1	81.7	56.5

Adaptation / Mitigation	Sector	Outcomes	Score	Adaptation/mitigation benefits	Complementarity with national/ other development priorities	Cost effectiveness potential	Technical feasibility	Potential advancements in socio-economic development	Implementation timeline	Scalability
Mitigation	AGRICULTURE	[C2] GHG emission reduction outcomes are adopted and implemented for the Agricultural Crop production sub-sector through Climate Smart Agriculture [CSA] outcomes	71.7	82.3	76.5	69.5	46.6	75.0	80.9	63.4
Adaptation	Policy, legislative and institutional review and development	CCF4: National and Sectoral Climate Change Budget Coding and Tracking System developed and operational	71.3	74.2	72.3	70.7	58.8	77.7	77.4	63.6
Adaptation	Policy, legislative and institutional review and development	CCF5: Conducive financial and economic environment for Private Sector financing of climate change is established	71.2	75.2	74.1	76.4	54.5	79.5	80.9	50.0
Adaptation	Furthering climate services investments and systems	CCS1: The National Climate Services System of The Gambia is strengthened to support Climate Change Resilience	71.0	79.1	71.9	72.7	41.9	75.7	85.1	62.5
Mitigation	AGRICULTURE	[L1] Livestock Productivity is improved through effective GHG Mitigation outcomes	70.7	76.7	74.7	72.7	48.4	74.6	81.9	57.4
Mitigation	LAND USE, LAND USE CHANGE, AND FORESTRY (LULUCF)	[F2] Fuel-efficient and cleaner cookstoves are promoted and upscaled	70.7	78.2	74.1	70.9	55.5	71.4	80.0	58.2
Mitigation	AGRICULTURE	[C3] GHG emissions reduction outcomes are adopted and applied in Full Food Value Change of The Gambia	70.4	81.6	78.0	70.4	47.5	73.8	76.2	57.5
Mitigation	ENERGY	[E1] The National Electricity Production Systems (NAWEC, KARPower and OMVG) are integrated and Harmonised	70.2	89.4	72.5	78.8	29.6	86.3	78.8	45.9

Adaptation / Mitigation	Sector	Outcomes	Score	Adaptation/mitigation benefits	Complementarity with national/ other development priorities	Cost effectiveness potential	Technical feasibility	Potential advancements in socio-economic development	Implementation timeline	Scalability
Mitigation	LAND USE, LAND USE CHANGE, AND FORESTRY (LULUCF)	[F4] Sustainable Fire Management is applied	70.2	72.2	75.0	74.4	54.8	73.5	73.3	63.0
Mitigation	ENERGY	[E3] Transmission and Distribution Losses of Electricity and Water Systems are reduced	69.8	84.2	72.8	74.5	45.5	77.9	80.6	43.5
Mitigation	WASTE	[W1] Integrated Waste Management, including waste gas recovery (MA6] and organic waste recovery [MA7] is is established and promoted	69.7	77.3	71.4	73.8	46.0	76.8	75.3	61.4
Mitigation	AGRICULTURE	[C1] GHG reduction outcomes from different rice ecologies are determined and implemented in the Gambia	69.5	83.3	72.8	67.6	44.9	76.0	76.2	59.5
Mitigation	LAND USE, LAND USE CHANGE, AND FORESTRY (LULUCF)	[F3] Multi-strata agroforestry as a GHG mitigation measure is adopted, promoted and implemented	69.2	77.7	73.2	68.5	58.8	72.4	71.8	57.7
Adaptation	Policy, legislative and institutional review and development	[CCF1]: The Gambia IFMIS system of the Directorate of Treasury of MoFEA is adopted and adapted as the Climate Change Public Finance Management System	69.0	74.0	72.5	70.8	55.8	69.0	79.6	54.4
Adaptation	Climate Resilient Land Use Planning	CCRL1: Land and Land-Use Governance, Strategy and Action for Climate and Climate Change Resilience are developed and operational	69.0	76.0	73.5	68.1	39.4	75.6	84.7	55.0
Adaptation	Climate change research, capacity	CCR1: The Gambia Multidisciplinary Climate Change Research Centre is	68.9	78.2	73.8	70.4	46.3	77.9	80.0	46.4

Adaptation / Mitigation	Sector	Outcomes	Score	Adaptation/mitigation benefits	Complementarity with national/ other development priorities	Cost effectiveness potential	Technical feasibility	Potential advancements in socio-economic development	Implementation timeline	Scalability
	development and communication	established, resourced and operational								
Adaptation	Climate-resilient water and supply sanitation	CCRW1: Climate Change Resilient Water and Sanitation (WATSAN) Management System is established and operational	68.9	81.6	69.1	70.6	31.3	77.3	85.0	57.9
Mitigation	ENERGY	[E2] Grid-connected wind power is developed and operational	68.7	82.4	74.2	73.8	36.0	80.1	78.5	45.6
Mitigation	ENERGY	[E8] Solar rooftop PV Systems for institutions are established.	67.8	80.6	72.5	72.4	43.8	76.3	75.9	44.3
Mitigation	ENERGY	[E4] All HFO-powered Heating and Lighting Systems are replaced by Solar PV and Battery-based power mini-grids	67.2	78.0	69.5	74.8	45.3	78.7	74.7	41.2
Mitigation	ENERGY	[E6] Efficient lighting systems are established and promoted	67.2	77.4	72.1	71.5	42.4	72.9	76.6	48.3
Mitigation	ENERGY	[E5] Solar home systems are established and operational	67.1	78.4	74.9	74.6	40.0	74.1	71.5	46.8
Adaptation	Policy, legislative and institutional review and development	G1: National Climate Change Governance Established and Implemented	66.4	72.9	65.0	72.9	52.1	67.4	81.3	46.3
Mitigation	IPPU	[IP1] Consumption of HFCs in the IPPU category is reduced through fuel substitution	66.2	76.8	72.0	65.5	40.5	73.0	76.0	50.8

Adaptation / Mitigation	Sector	Outcomes	Score	Adaptation/mitigation benefits	Complementarity with national/ other development priorities	Cost effectiveness potential	Technical feasibility	Potential advancements in socio-economic development	Implementation timeline	Scalability
Adaptation	Support to urban agriculture	CCUA1: Urban Agriculture and Green Spaces in Cities and Large Settlements for green economy and climate resilient Urban Agriculture in the Gambia is Strengthened and Expanded	65.8	72.7	72.0	70.6	29.4	73.6	80.6	49.5
Mitigation	ENERGY	[E7] Solar water heating systems are established and operational	65.6	77.4	70.9	70.6	46.6	69.5	68.7	49.1
Adaptation	Built Environment and Infrastructure (e.g., buildings, roads and drainage infrastructure) is climate proofed for resilience	CCRB1: A climate-proofed Built Environment and Infrastructure for Resilience	64.9	80.0	65.7	69.0	32.5	71.9	75.7	51.0
Mitigation	ENERGY	[T1] The carbon footprint of the Gambia's transport sector is downsized (decarbonization of Transport Sector)	64.7	74.3	71.0	60.2	42.1	73.0	74.5	48.8

ANNEXURES 6: PRIORITISATION AND COSTING DATABASE

For the sake of visual clarity, the prioritisation and costing databases have been attached to this report as separate Excel master files. .

DOCUMENT REFERENCE

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