

# The National Data Hub for Gender and Climate Information in Nigeria

A Framework for Implementation

November 2025



The Commonwealth



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# Glossary of Key Terms

**Climate information:** Data on past, present and projected climate conditions such as temperature, rainfall and extreme events used to support planning and decision-making.

**Citizen science:** Scientific research and data collection conducted, in whole or in part, by members of the public or community groups.

**Climate vulnerability:** The degree to which a system (community, sector, ecosystem) is susceptible to, or unable to cope with, adverse effects of climate change.

**Data interoperability:** The ability of different data systems or datasets to work together or be combined for analysis and decision-making.

**Decision support systems (DSS):** Tools or platforms that support informed decision-making by providing timely, relevant data and analysis.

**Gender:** The socially constructed roles, behaviours, activities and attributes a given society considers appropriate for men and women, girls and boys, and non-binary persons. Gender tends to be assigned on the basis of biological characteristics but is not biologically constructed. It is a social construct that is contextually bound but that can, and does, change throughout history and across cultural contexts.

**Gender-disaggregated data:** Statistical information that is broken down by gender to provide insights into the different experiences, needs and outcomes of individuals based on their gender. This type of data helps in understanding the social and cultural roles, norms and relations that influence individuals' lives and experiences.

**Gender-disaggregated indicators:** Indicators that track progress on gender outcomes by capturing differences in experiences, opportunities and impacts between women, men and other genders.

**Gender-responsive climate action:** Policies, plans and activities that intentionally address gender inequalities and aim to promote equitable outcomes in climate change mitigation and adaptation.

**Institutional architecture:** The structures, relationships and processes through which institutions (governmental and non-governmental) operate, collaborate and govern.

**Intersectionality:** An approach that recognises how different aspects of a person's identity (such as gender, age, disability, ethnicity) intersect and influence their experiences of climate change and access to resources.

**Non-state actors:** Organisations and individuals that are not part of government, including civil society organisations, the private sector, academia and community-based organisations.

# Acronyms

|               |                                                       |
|---------------|-------------------------------------------------------|
| <b>BTR</b>    | Biennial Transparency Report                          |
| <b>CSO</b>    | civil society organisation                            |
| <b>ETF</b>    | Enhanced Transparency Framework                       |
| <b>FGM</b>    | female gender mutilation                              |
| <b>GAP</b>    | Gender Action Plan (under UNFCCC)                     |
| <b>GBV</b>    | gender-based violence                                 |
| <b>ICT</b>    | information and communication technology              |
| <b>JGIT</b>   | Just and Gender Inclusive Transition                  |
| <b>MRV</b>    | Measurement, Reporting and Verification               |
| <b>NAP</b>    | National Adaptation Plan                              |
| <b>NBS</b>    | National Bureau of Statistics                         |
| <b>NCCC</b>   | National Council on Climate Change                    |
| <b>NDC</b>    | Nationally Determined Contribution                    |
| <b>NGO</b>    | non-governmental organisation                         |
| <b>NIHSA</b>  | Nigerian Hydrological Services Agency                 |
| <b>NIMET</b>  | Nigerian Meteorological Agency                        |
| <b>PPP</b>    | public–private partnership                            |
| <b>SDG</b>    | Sustainable Development Goal                          |
| <b>ToC</b>    | theory of change                                      |
| <b>UNFCCC</b> | United Nations Framework Convention on Climate Change |
| <b>USSD</b>   | unstructured supplementary service data               |





# Executive Summary

Nigeria faces growing climate risks: floods, droughts, and desertification that disproportionately affect women, youth, and vulnerable communities. Yet, the dearth of gender-disaggregated, real-time, and decision-relevant data severely limits the country's ability to design inclusive, effective, and equitable climate responses. To address this critical gap, Nigeria, through the National Council on Climate Change (NCCC) and its partners, proposes the establishment of a National Data for Gender and Climate Information (Data Hub).

The Data Hub will serve as a centralised, policy-linked platform to generate, harmonise, and disseminate gender-responsive climate data across sectors and regions. By integrating data from both state and non-state actors, the Hub will enable evidence-based decision-making, strengthen institutional accountability, and ensure that Nigeria's climate actions reflect the lived realities of all citizens.

Building on national policy commitments such as the Climate Change Act (2021), the National Action Plan on Gender and Climate Change (2020–2025), and international obligations under the Paris Agreement and the Enhanced Transparency Framework, the Data Hub will deliver on the following objectives, among others.

1. Systematically collect gender-disaggregated climate data across sectors, including agriculture, health, water, energy, disaster risk reduction, and governance.
2. Strengthen institutional capacity to apply gender and inclusion lenses to climate policy, planning, and finance.
3. Provide interactive, accessible platforms for data visualisation, localised reporting, and decision support tools.
4. Enhance Nigeria's eligibility for climate finance by meeting funder requirements for gender-responsive data and transparency.
5. Promote inclusive participation through engagement of women, youth, indigenous groups, civil society, and private sector partners.

The Data Hub will be implemented over a two-year period in two main phases: (i) **Foundation and Early Impact**, focused on governance structures, gender-responsive data standards, pilot collection, and stakeholder co-ordination; and (ii) **Expansion and Integration**, covering sectoral data integration, interoperability with existing platforms, and nationwide capacity-building. Sustainability will then be ensured through multi-level co-ordination, government ownership, and diversified financing beyond the initial two years.

A multi-stakeholder steering committee, co-led by the NCCC and the Federal Ministry of Women Affairs, will ensure the Data Hub aligns with national priorities, fosters accountability, and upholds global best practices for data ethics, privacy, and gender responsiveness. This framework document forms part of phase one activities and will provide guidance for the full roll-out of this initiative. As part of the foundational phase, a detailed implementation and budget plan will be developed to translate this framework into co-ordinated action. This plan will outline phased activities, cost estimates, roles and responsibilities, and monitoring mechanisms to guide delivery, enable effective resource mobilisation, and support stakeholder alignment at national and subnational levels.

Through this transformative initiative, Nigeria will position itself as a continental leader in gender-just climate governance. The Data Hub will close existing data gaps, inform inclusive adaptation and mitigation strategies, and unlock greater access to gender-responsive climate finance. Most importantly, it will ensure that Nigeria's climate actions build resilience and promote equity for all segments of society, leaving no one behind.

# 1. Background and Rationale

Nigeria has made strides in terms of mainstreaming gender and climate action into policy, such as through the National Climate Change Act 2021, the First National Determined Contribution 2021 Update, the National Adaptation Plan (NAP) Framework 2020 and the National Action Plan on Gender and Climate Change 2020–2025. However, without a unified data infrastructure, these commitments remain difficult to operationalise. Existing data systems are fragmented and disaggregated and are often not used to inform real-time decision-making or planning at national or sub-national levels.<sup>1</sup>

To address this challenge, Nigeria's National Council on Climate Change (NCCC) has proposed a National Data Hub for Gender and Climate Information, a timely and strategic intervention that will build on existing national frameworks while addressing key implementation gaps. The Data Hub will leverage government partnerships across all relevant line ministries, civil society organisations (CSOs) and research actors. It aligns with current national priorities for digital governance, transparency and inclusive development, while also positioning Nigeria to meet international reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC), including but not limited to the Biennial Transparency Reports (BTRs) under the Enhanced Transparency Framework (ETF).

This proposed initiative is not just about data collection; it is also about embedding equity and evidence at the heart of climate policy, finance and action. By enabling access to gender-disaggregated, real-time and decision-relevant data, the Data Hub will provide the enabling conditions for gender-responsive, climate-resilient development in Nigeria.

## 1.1 Problem statement

Nigeria lacks a centralised, gender-responsive climate data system to inform inclusive climate action. Existing climate and socio-economic data

are fragmented across institutions, often not disaggregated by gender or age, and rarely applied in policy, planning or reporting. This gap limits the government and development partners' ability to identify gendered vulnerabilities, design equitable adaptation measures and track progress towards national commitments. It also constrains access to climate finance, as key funders such as the Green Climate Fund require gender-disaggregated data. Without timely, reliable and integrated gender data, climate actions risk reinforcing existing inequalities and overlooking opportunities to strengthen resilience among the most affected groups. This leads to the following.

- **Invisible impacts:** Gendered vulnerabilities such as women's disproportionate exposure to food insecurity, water scarcity and loss of income often go unreported in national datasets. This makes it difficult to prioritise women and other marginalised groups in adaptation, resilience-building or social protection programmes.
- **Missed financing opportunities:** Many climate financiers require a demonstration of gender-responsiveness. Without credible, disaggregated data, Nigeria may struggle to meet eligibility requirements or justify proposals targeting the needs of the most vulnerable including women, youth and indigenous communities.
- **Inequitable planning:** Without adequate data on how women, men, youth and vulnerable communities are affected by climate change, national and sub-national governments risk designing adaptation and mitigation interventions that are not responsive to the unique needs of these groups.
- **Weak monitoring of progress:** Nigeria has made commitments to gender equality under its NDC, the Climate Change Act and the Sustainable Development Goals (SDGs). Yet it lacks a systematic way to track gender-specific outcomes, including how women benefit from climate funds, participate in decision-making or adopt adaptation technologies.

1 Federal Government of Nigeria (2022) Draft National Data Strategy of Nigeria. <https://nitda.gov.ng/wp-content/uploads/2022/11/Final-Draft-National-Data-Strategy.pdf>

## 1.2 Climate shocks and gendered impacts in Nigeria

Nigeria is highly vulnerable to climate-related hazards including floods, droughts, desertification and extreme heat, whose frequency and severity are accelerating as a result of climate change.<sup>2</sup> These shocks do not affect everyone equally. Instead, they exacerbate existing structural inequalities, disproportionately impacting women, girls, persons with disabilities, youth, older persons and indigenous people.<sup>3</sup> Women and men experience climate impacts differently because of gendered roles and unequal access to resources.

In Nigeria, women play a central role in food systems resilience. They constitute approximately 60 per cent of the agricultural labour force. Despite their important contributions, women face barriers that limit their access to and control over productive resources such as land tenure, credit, agricultural extension services, agriculture technology and timely climate information.<sup>4</sup>

During the 2022 floods in Nigeria, over 1.5 million children were estimated to be at risk as a result of the country being an 'extremely high risk' country in the face of the impacts of climate change.<sup>5</sup>

Climate change-induced disasters in Nigeria have been shown to disproportionately affect already vulnerable populations.<sup>6</sup> In 2024, floods in Borno State, northeastern Nigeria, resulted in the collapse of the Alau Dam, displacing an estimated 122,774 people and severely disrupting livelihoods, agricultural production and access to safe water.

Women, children and internally displaced persons bore the brunt of the crisis, confronting heightened exposure to cholera, malaria, acute malnutrition and other preventable diseases owing to deteriorating sanitation conditions and strained health services in overcrowded displacement camps.<sup>7</sup>

## 1.3 Gender and climate data system in Nigeria

Under Nigeria's Climate Change Act of 2021, significant legal and institutional frameworks have been established to track progress in implementing the country's climate commitments. Central to this framework is the National Council on Climate Change (NCCC).

The NCCC brings together all federal ministries, state representatives and umbrella organisations representing civil society, including women, youth, persons with disabilities, the private sector and financial institutions, creating a broad governance structure intended to support inclusive climate action. Despite these institutional advances, Nigeria's first BTR noted that, while the NCCC is established and operational, certain aspects of its institutional strengthening and resourcing are still ongoing. Under Nigeria's Climate Change Act 2021, the NCCC has the mandate for the collection, projection and dissemination of data on climate risks, climate impact and the carbon budget.

To support its activities, the NCCC has developed and shared data collection tools with ministries, departments, agencies and states and conducted various training sessions on the use of these tools. However, data collection has been only partially successful, owing to limited time and systemic capacity gaps.<sup>8</sup> Nigeria has also committed to identifying the differential impacts of climate change on men, women and children, as reflected in the National Action Plan on Gender and Climate Change, and the participation of women's groups within the NCCC framework. As Nigeria continues to develop its climate data system, the effective inclusion of gender considerations, the use of robust monitoring tools and strengthened

2 Federal Ministry of Environment Department of Climate Change (2021) National Climate Change Policy for Nigeria 2021–2030. <https://faolex.fao.org/docs/pdf/NIG209876.pdf>

3 Federal Ministry of Environment (2020) National Action Plan on Gender and Climate Change 2020–2025. [https://genderclimatetracker.org/sites/default/files/Resources/climate-change-and-gender-action-plan\\_nigeria.pdf](https://genderclimatetracker.org/sites/default/files/Resources/climate-change-and-gender-action-plan_nigeria.pdf)

4 Federal Ministry of Agriculture and Rural Development (2022) National Agriculture Technology and Innovation Policy 2022–2027. <https://agriculture.gov.ng/wp-content/uploads/2024/06/National-Agricultural-Technology-and-Innovation-Policy-NATIP-2022-2027.pdf>

5 UNICEF (2022) 'More Than 1.5 Million Children at Risk as Devastating Floods Hit Nigeria'. 21 October. <https://www.unicef.org/press-releases/more-15-million-children-risk-devastating-floods-hit-nigeria>

6 Aborode, A.T., Otorkpa, O.J., Abdullateef, A.O. et al. (2025) 'Impact of Climate Change-Induced Flooding Water Related Diseases and Malnutrition in Borno State, Nigeria: A Public Health Crisis'. *Environmental Health Insights*. <https://doi.org/10.1177/11786302251321683>

7 IOM (2024) 'DTM Nigeria – Flood Situation Report 1 – Borno State'. 13 September.

8 Federal Government of Nigeria (2024) Nigeria's First Biennial Transparency Report to the UNFCCC. <https://unfccc.int/sites/default/files/resource/Nigeria%20BTR1%20.pdf>

institutional capacity remain important to achieving both its climate targets and broader social inclusion objectives.

National statistics and data management in Nigeria are co-ordinated by the National Bureau of Statistics (NBS). The NBS leads the National Statistical System, which integrates data producers such as federal ministries, state statistical agencies, local government councils and other key institutions to ensure the production and dissemination of high-quality, harmonised official statistics across all levels of government. The NBS collects some data on climate change and gender through surveys such as the Nigeria Labour Force Survey and the General Household Survey, which are of relevance to reporting on gender and climate indicators. Meanwhile, the Maryam Babangida National Centre for Women Development has committed to establishing a National Gender Data Bank, which would harmonise gender data from various sources. However, this process has been stalled since its announcement in 2006 as a result of funding issues.<sup>9</sup>

As part of preparation for ETF implementation in Nigeria, the Initiative for Climate Action Transparency has supported the Government of Nigeria in the establishment of institutional arrangements; the design and implementation of legal frameworks; data collection; and the set-up of reporting and verification methodologies and procedures. This has included support to the Just and Gender Inclusive Transition (JGIT) Measurement, Reporting and Verification (MRV) System in Nigeria.<sup>10</sup> This process has identified various indicators, including gender indicators for tracking progress.

The proposed JGIT MRV framework is designed to employ a tracking methodology that will integrate mixed-method approaches, combining quantitative data from remote sensing technologies and Internet of Things devices with qualitative insights from stakeholder consultations. Under the planned institutional arrangement, the NBS would serve as

the central co-ordinating body for data collection to ensure standardisation and quality, while independent third-party auditors will verify data to enhance reliability.

The evaluation approach will encompass baseline assessments, periodic evaluations and continuous feedback loops, with the Federal Ministry of Labour and Employment designated to oversee the process and facilitate collaboration across relevant ministries and stakeholders. Key performance indicators will be established for each sector involved in the transition through stakeholder engagement to ensure contextual relevance, and evaluation procedures will include annual assessments with mid- and end-term reviews to assess multifaceted impacts, incorporating specific social justice indicators such as equitable resource distribution and access for vulnerable groups. The framework will rely on strong institutional structures and continuous stakeholder engagement, with feedback mechanisms designed to incorporate inputs from local communities, non-governmental organisations (NGOs) and private sector partners, ensuring evaluations remain grounded in real-world impacts and adaptable to changing circumstances, with analytical insights intended to inform policy decisions across all governance levels.

## 1.4 Rationale for a National Data Hub for Gender and Climate Information

The Data Hub initiative is aligned with both national and international frameworks. Internationally, it supports the UNFCCC's Enhanced Lima Work Programme on Gender and its Gender Action Plan (GAP), which call for gender integration across all climate processes, including NDCs, NAPs and BTRs. At the 62nd Sessions of the UNFCCC Subsidiary Bodies held in June 2025 in Bonn, the GAP Workshop emphasised strengthening gender data and transparency, leveraging digital tools for gender-responsive governance, building peer learning networks and bridging national data systems with global climate commitments. Nationally, the proposed Data Hub builds on Nigeria's existing Gender and Climate Action Plan by enabling monitoring of and accountability to its targets. If Nigeria does not address gendered data and governance gaps, it risks designing

<sup>9</sup> Federal Ministry of Women Affairs and Social Development (2019) National Beijing + 25 Review. <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/CSW/64/National-reviews/Nigeria.pdf>

<sup>10</sup> ICAT (2024) 'The Nigeria Just and Gender Inclusive Transition Monitoring, Reporting and Verification Framework'. <https://climateactiontransparency.org/resources/nigeria-jgit-mrv-framework-report/>

climate interventions that reinforce inequality and exclusion, thereby missing a critical opportunity to build resilience for all.

## 1.5 Objectives

The primary objective of the National Data Hub for Gender and Climate Information Hub is to provide timely, reliable and gender-disaggregated climate data that inform evidence-based policies and actions for gender-responsive climate solutions.

The secondary objective includes the following.

1. **Strengthen institutional frameworks** for the collection, management and use of gender-responsive climate data across state and non-state actors.
2. **Bridge existing data gaps** by integrating gender-disaggregated and socially inclusive data into national climate policies, plans and actions.
3. **Enhance data accessibility and usability** through improved data visualisation, knowledge platforms and decision support tools that inform policy and planning.
4. **Promote inclusive participation** by engaging women, men, youth, marginalised communities and non-state actors in the climate data ecosystem.
5. **Build national and subnational capacity** to collect, analyse and use gender-responsive climate data for evidence-based decision-making and climate action.
6. **Ensure the sustainability** of the National Data Hub for Gender and Climate Information through institutional partnerships, capacity-building and long-term governance arrangements.

## 2. The National Data Hub for Gender and Climate Information

Building on successes and lessons from initiatives such as the climate data hub of Dataphyte;<sup>11</sup> the national transparency systems developed for the implementation of the ETF in Nigeria; and existing initiatives by the NBS, the Federal Ministry of Environment, the Federal Ministry of Women Affairs and various other stakeholders, there is a case to be made for comprehensive, accessible climate information in Africa's most populous nation. As the National Action Plan on Gender and Climate Change 2020–2025 recognises, climate impacts are not gender-neutral. This framework document proposes a structure for a gender-responsive climate data hub that harmonises existing

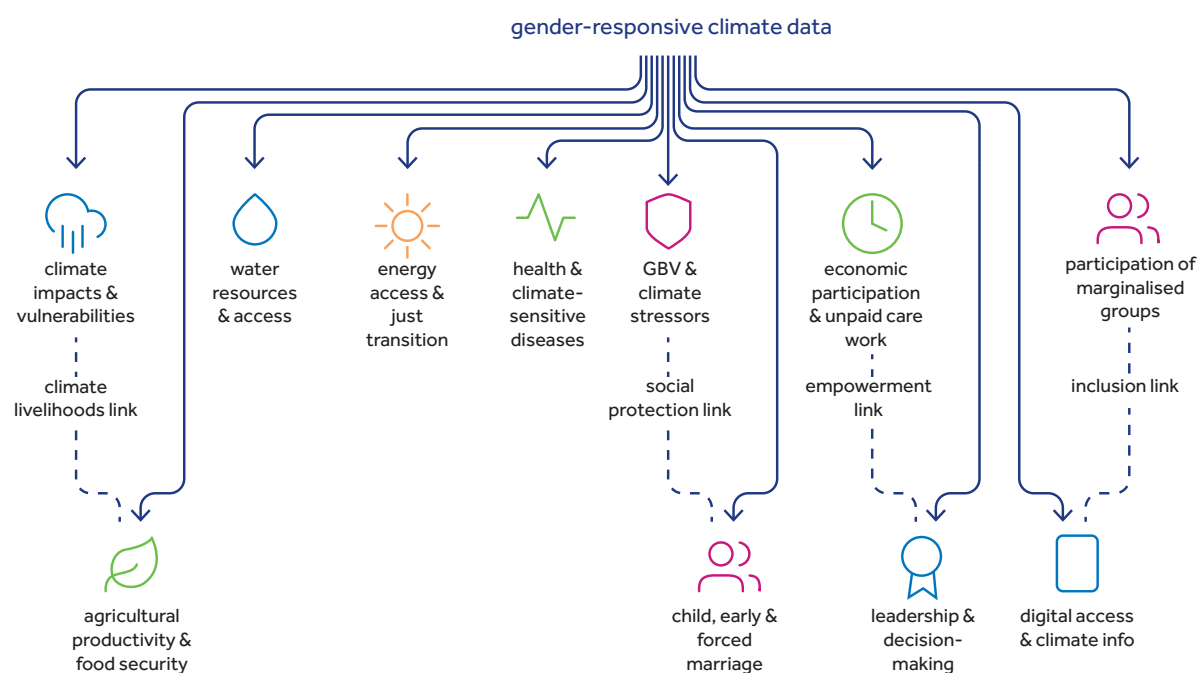
institutions and work done and considers data collection by non-state actors to address Nigeria's pressing climate challenges with an equity lens.

The proposed National Data Hub for Gender and Climate Information will serve as a centralised, policy-linked platform to generate, manage and disseminate gender-disaggregated climate data across Nigeria's sectors and regions. The Data Hub will strengthen institutional capacity, support evidence-based decision-making and ensure climate response strategies do not leave women, youth and other marginalised groups behind.

A well-designed Data Hub will address these gaps by serving as a multisectoral, policy-linked platform that consolidates climate and socio-economic data with a focus on gender and inclusion.

11 Ugwu, C. (2022) 'Dataphyte Launches Climate Data Hub #COP27'. The Independent, 10 November. <https://independent.ng/dataphyte-launches-climate-data-hub-cop27>

**Figure 2.1: Visual flow of core data categories and indicators**



Source: Authors.

Table 2.1: Core data categories and gender-disaggregated indicators

| No. | Data category                                           | Examples of gender-disaggregated indicators                                                                                                                                                                                                                                                                                                                                                                 |
|-----|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | <b>Climate Impacts and Vulnerabilities</b>              | <ul style="list-style-type: none"> <li>Number of individuals affected by floods, droughts or heatwaves, disaggregated by gender, age and location</li> <li>Perceptions of climate risk and adaptation projects beneficiaries by gender, social protection coverage, climate finance access by gender</li> <li>Differential impacts on livelihoods and food security by gender</li> </ul>                    |
| 2.  | <b>Agricultural Productivity and Food Security</b>      | <ul style="list-style-type: none"> <li>Number of individuals affected by floods, droughts or heatwaves, disaggregated by gender, age and location</li> <li>Perceptions of climate risk and adaptation project beneficiaries by gender, access to social protection and climate finance by gender</li> <li>Differential impacts of climate change on livelihoods and food security across genders</li> </ul> |
| 3.  | <b>Forestry and Other Land Use</b>                      | <ul style="list-style-type: none"> <li>Participation of women and men in forest and land use management committees</li> <li>Access to forest resources (e.g., firewood, non-timber forest products) by gender</li> <li>Gender-differentiated impacts of land degradation and deforestation</li> <li>Tenure security and land restoration initiatives by gender</li> </ul>                                   |
| 4.  | <b>Water, Sanitation, and Hygiene</b>                   | <ul style="list-style-type: none"> <li>Household access to clean water and sanitation facilities by gender</li> <li>Time spent by women and men in water collection</li> <li>Gendered impacts of water scarcity on health, hygiene and care-giving roles</li> <li>Participation in water user associations by gender</li> </ul>                                                                             |
| 5.  | <b>Waste Management</b>                                 | <ul style="list-style-type: none"> <li>Participation of women and men in formal and informal waste management systems</li> <li>Exposure to health risks from poor waste management by gender</li> <li>Access to recycling and circular economy opportunities by gender</li> </ul>                                                                                                                           |
| 6.  | <b>Green Jobs and Climate-Smart Livelihoods</b>         | <ul style="list-style-type: none"> <li>Number of green jobs created, disaggregated by gender, age and location</li> <li>Participation of women and youth in renewable energy, sustainable agriculture and climate services sectors</li> <li>Access to skills training and entrepreneurship support for green economy opportunities</li> </ul>                                                               |
| 7.  | <b>Water Resources and Access</b>                       | <ul style="list-style-type: none"> <li>Average time spent collecting water by gender</li> <li>Access to safe water sources, disaggregated by gender and location</li> <li>Gendered impacts of water scarcity and water-related disasters</li> </ul>                                                                                                                                                         |
| 8.  | <b>Energy Access and Just Energy Transition</b>         | <ul style="list-style-type: none"> <li>Household access to clean cooking solutions, disaggregated by gender</li> <li>Women's participation in renewable energy initiatives and green jobs</li> <li>Gender gaps in energy affordability and use patterns</li> </ul>                                                                                                                                          |
| 9.  | <b>Health, Well-Being and Climate-Sensitive Disease</b> | <ul style="list-style-type: none"> <li>Incidence of climate-sensitive diseases disaggregated by gender, age and location</li> <li>Maternal health outcomes during climate shocks</li> <li>Gendered access to health services in disaster-affected areas</li> </ul>                                                                                                                                          |



| No. | Data category                                                      | Examples of gender-disaggregated indicators                                                                                                                                                                                                                                                                                 |
|-----|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10. | <b>Gender-Based Violence (GBV) and Climate Stressors</b>           | <ul style="list-style-type: none"> <li>Reported cases of GBV linked to resource scarcity, displacement or climate-induced crises, disaggregated by gender, age and location</li> <li>Availability and accessibility of GBV prevention and response services in climate-vulnerable communities</li> </ul>                    |
| 11. | <b>Child, Early and Forced Marriage Trends</b>                     | <ul style="list-style-type: none"> <li>Prevalence of child marriage in regions facing food insecurity or displacement</li> <li>Correlation between climate shocks and early marriage rates, disaggregated by region and socio-economic status</li> </ul>                                                                    |
| 12. | <b>Female Genital Mutilation (FGM)</b>                             | <ul style="list-style-type: none"> <li>Prevalence and trends (SDG 5.3.2)</li> <li>Links between climate shocks, displacement and harmful practices</li> <li>FGM-related health complications, including maternal health impacts</li> </ul>                                                                                  |
| 13. | <b>Economic Participation and Unpaid Care Work</b>                 | <ul style="list-style-type: none"> <li>Labour force participation rates by gender and sector</li> <li>Gender pay gaps in climate-relevant sectors</li> <li>Time use data reflecting unpaid care responsibilities by gender and age</li> <li>Women's access to credit, savings and financial inclusion indicators</li> </ul> |
| 14. | <b>Leadership, Governance and Decision-Making</b>                  | <ul style="list-style-type: none"> <li>Proportion of women and marginalised groups in climate governance bodies (local, state and national levels)</li> <li>Influence of women's organisations in climate policy formulation</li> <li>Representation in disaster risk reduction and early warning committees</li> </ul>     |
| 15. | <b>Digital Access and Climate Information Services</b>             | <ul style="list-style-type: none"> <li>Access to mobile phones, internet and climate information platforms by gender and location</li> <li>Use of digital early warning systems by women and men</li> <li>Gender gaps in digital literacy and technology adoption in climate-vulnerable regions</li> </ul>                  |
| 16. | <b>Participation of Indigenous Peoples and Marginalised Groups</b> | <ul style="list-style-type: none"> <li>Disaggregated data on the participation of ethnic minorities, persons with disabilities and other marginalised groups in climate decision-making</li> <li>Barriers faced by intersecting identities in accessing resources and services</li> </ul>                                   |

The Data Hub will:

- enable real-time access to gender and age-disaggregated data on climate impacts, vulnerabilities and resilience capacities
- inform the design of gender-responsive climate projects, policies and budgets
- serve as an evidence base for climate finance proposals and donor reporting
- support monitoring, evaluation and learning across ministries and development partners
- facilitate multi-stakeholder engagement and data-sharing, strengthening co-ordination across sectors.

By linking data to decision-making, the Data Hub will shift Nigeria from reactive responses to proactive, equitable climate governance, while also supporting its global leadership in gender and climate justice.

## 2.1 Core data categories and gender-disaggregated indicators

The Data Hub will need to systematically collect and analyse gender-disaggregated data across key sectors identified in Nigeria's National Action Plan on Gender and Climate Change. Based on

the documented gender vulnerabilities in Nigeria, a number of core data categories should be prioritised, as presented in Table 2.1.

## 2.2 Climate parameters and projections

The Data Hub should incorporate seasonal climate predictions from the Nigerian Meteorological Agency (NIMET) and annual flood outlooks from the Nigerian Hydrological Services Agency (NIHSA) but enhance these with gender-specific impact projections. This would involve analysing how projected climate changes will affect men and women differently, considering their distinct roles, responsibilities and access to resources. The Hub should facilitate the downscaling of these national projections to state and local levels to enable targeted interventions.

Research from Kwara and Nassarawa States demonstrates that males and females perceive climate change differently, with varying adaptation practices.<sup>12</sup> Despite men in the study area having more control over physical resources, women were found to have better access to essential intangible assets, including foundational knowledge and skills for adaptation. This was demonstrated through their gender-specific views on climate change. The Data Hub will need to document these gender-differentiated perceptions alongside meteorological data to provide a more complete picture of climate impacts and responses.

In addition, the Data Hub will capture gendered dimensions of waste production and management, recognising that women and men experience different exposure to health risks, play different roles in waste handling and have unequal access to emerging opportunities in recycling and circular economy initiatives. Including this perspective will help ensure climate adaptation strategies integrate both environmental sustainability and gender equity.

### 2.2.1 Agriculture and food systems data

Given that 70 per cent of Nigeria's population, especially women, are involved in agriculture and food systems, this sector requires special attention. The Data Hub should track gender-disaggregated data not only on agricultural productivity, access to climate-smart technologies, land tenure and crop losses, but also on **livestock and aquaculture (fisheries)**, which are essential to livelihoods in many regions.

Beyond primary production, the Hub will capture data across the **food value chain**, including **processing, storage, distribution and marketing**, where women are often found. This will highlight gendered roles and constraints in food systems, as well as opportunities to empower women via climate-resilient value chain interventions.

The Hub should also monitor changes in food security indicators, disaggregated by gender, particularly in climate-vulnerable regions facing flooding, drought or desertification. Such data will support more targeted agricultural and food systems interventions, helping states overcome the current gap where agricultural planning often proceeds without integrating climate data and gender considerations.

### 2.2.2 Water resources, sanitation and disaster impact data

Nigeria's vulnerability to flooding, particularly in coastal areas, necessitates comprehensive data on **water resources, sanitation and disaster impacts**. The Data Hub should collect gender-disaggregated data on access to safe water and sanitation services, time spent collecting water, and water- and sanitation-related health issues. It should also capture the gendered impacts of water-related disasters, including displacement, economic losses and increased risks of GBV. These datasets will help identify gender-specific vulnerabilities and strengthen early warning systems, while also informing more inclusive policies for water and sanitation management under changing climate conditions.

### 2.2.3 Energy access and transition data

The Data Hub should monitor gender-disaggregated data on energy access, use of clean cooking technologies and involvement in renewable energy initiatives, and the gendered impacts of

12 Ayanlade, A., Oluwatimilehin, I.A., Ayanlade, O.S. et al. (2023) 'Gendered Vulnerabilities to Climate Change and Farmers' Adaptation Responses in Kwara and Nassarawa States, Nigeria'. *Humanities and Social Sciences Communications* 10: 911 <https://doi.org/10.1057/s41599-023-02380-9>

energy transitions. These data would support Nigeria's commitments under the Paris Agreement while ensuring energy policies do not inadvertently exacerbate gender inequalities.

### 2.2.4 Health and vulnerability data

Health is a critical lens through which climate vulnerability must be understood especially for women, children, the elderly and persons with disabilities. The Data Hub should incorporate health and vulnerability data to capture the differentiated impacts of climate change on physical and mental well-being. This includes gender-disaggregated data on climate-sensitive diseases (e.g., malaria, cholera, respiratory illnesses), maternal and child health during climate shocks, and access to health services in disaster-affected areas. The Hub should also track vulnerabilities such as pregnancy status, disability, age and nutrition factors that shape exposure and adaptive capacity. Integrating health data will allow policy-makers and responders to design more equitable early warning systems, health preparedness plans and adaptation strategies that prioritise at-risk populations.

### 2.2.5 Women, leadership and decision-making data for inclusive climate governance

Reliable, disaggregated data on women's participation in climate leadership and decision-making are essential to ensure inclusive and equitable governance. In Nigeria, women remain significantly underrepresented in climate-related institutions, committees and policy-making spaces, from local adaptation platforms to national strategy bodies. This gap leads to the exclusion of women's priorities such as reproductive health, household energy needs and community resilience from climate planning. Capturing and analysing gender-specific data on leadership roles, decision-making influence and institutional participation will enable the Data Hub to track progress on gender equity, inform targeted interventions and strengthen accountability for inclusive climate action.

### 2.2.6 Women's access to finance and credit

Access to finance is a key enabler of women's economic empowerment and resilience to climate shocks. Data on women's access to credit, loans,

savings and financial services can inform gender-responsive climate finance mechanisms and support inclusive green growth.

### 2.2.7 Access to digital technologies and climate information services

Access to mobile phones, internet and climate information platforms enables women and marginalised groups to make informed decisions about adaptation and risk reduction. Tracking gender gaps in digital access helps identify barriers to information flow and resilience.

### 2.2.8 Prevalence of GBV and links to climate stressors

Climate-related displacement, resource scarcity and social instability can exacerbate GBV risks. Data on GBV prevalence, trends and hotspots can help inform protection strategies and gender-responsive disaster risk management.

### 2.2.9 Child, early and forced marriage rates

Child marriage is often used as a negative coping mechanism in the face of poverty, food insecurity or climate-induced displacement. Monitoring trends in early marriage can provide insights into household vulnerability and social impacts of climate stress.

### 2.2.10 Women's labour force participation, income levels and unpaid care work

Women's participation in the workforce and disproportionate share of unpaid care work affect their adaptive capacity. Data on employment, income and time use can guide policy interventions to reduce gender inequalities in climate resilience.

### 2.2.11 Participation of women and marginalised groups in climate governance

Inclusive governance strengthens the legitimacy and effectiveness of climate action. Data on women's participation in climate decision-making bodies and policy processes can help track progress towards gender-equal representation.

# 3. Data Collection Methodologies and Integration Mechanisms

A gender-responsive climate data hub must employ diverse methodologies to capture both quantitative and qualitative aspects of climate impacts across genders.

## 3.1 Government data integration

The Data Hub should establish formal data-sharing protocols with key government agencies, including NIMET, NIHSA, the NBS and relevant ministries. These protocols would enable regular, automated data flows from existing government collection systems into the central hub. Special attention should be paid to enhancing existing data collection tools to incorporate gender dimensions where these are currently absent.

Climate Change Desk offices at state levels, which the National Action Plan suggests should be used for socialising gender considerations, could serve as crucial nodes for sub-national data collection and validation. The Hub should provide these offices with standardised data collection tools that include gender considerations.

## 3.2 Non-state actor contributions

NGOs and CSOs play a vital role in collecting granular, community-level data that government systems often miss. Organisations like Dataphyte, which has already launched a climate data platform, should be integrated into the Data Hub through formal partnership agreements. The Women Environmental Programme, which supported the development of the National Action Plan on Gender and Climate Change, could contribute valuable gender-specific data and methodologies.

The Hub should develop a standardised but flexible data collection toolkit for NGOs and CSOs to ensure their field data can be effectively integrated into the central system. This toolkit would include gender-responsive survey instruments, interview

guides and participatory methods designed to capture differential impacts and responses across genders.

International research partners like Climate Change Agriculture and Food Security and the International Livestock Research Institute, which supported the validation workshop for the National Action Plan, could contribute research methodologies and technical support.

## 3.3 Citizen science and community-based monitoring

To address the identified gap in climate change and early warning information flow from government institutions to citizens, the Data Hub should incorporate citizen science approaches. A mobile application and unstructured supplementary service data (USSD) service would enable community members, particularly women, to report local climate conditions, impacts and adaptation strategies. This two-way flow of information would empower communities while enriching the Hub's datasets with ground-level observations.

Community-based monitoring systems should be established in climate-vulnerable regions, with equal representation of male and female monitors trained to document local climate impacts. This approach would help address the lack of aggregated and on-the-ground data about climate change and resultant issues while ensuring gender perspectives are captured.

## 3.4 Data access, visualisation and decision support systems

A gender-responsive climate data hub must make information accessible to diverse users while providing decision support tools that highlight gender dimensions.

### 3.4.1 Multi-format data access

The Data Hub should provide multiple access channels to ensure information reaches different user groups, including:

- an interactive web portal with customisable dashboards displaying gender-disaggregated climate data
- mobile applications with offline functionality for areas with limited connectivity
- regular data bulletins and simplified infographics for distribution to communities through local institutions
- a data request service for researchers and policy-makers requiring specialised datasets.

### 3.4.2 Decision support for policy and planning

The Data Hub should develop decision support tools that help government agencies integrate gender considerations into climate planning. These tools would enable state governments to respond to the call to make use of climate data released yearly by NIMET and the Flood Outlook from NIHSA while also accounting for gender dimensions.

Specific features should include scenario planning tools that model the gender-differentiated impacts of potential climate policies, intervention mapping tools to identify priority areas for gender-responsive climate action and monitoring frameworks to track progress on gender-climate commitments.

### 3.4.3 Capacity-building component

Building technical and institutional capacity is essential for the Data Hub's success and sustainability.

### 3.4.4 Training and skills development

The Data Hub should incorporate a training programme targeting:

- government officials responsible for climate and gender policies
- NGO and CSO staff engaged in climate and gender work
- community representatives, with equal participation of women and men
- researchers and academics working on climate and gender issues.

Training modules should cover gender-responsive data collection methodologies, data analysis techniques, interpretation of climate information and application of data insights to policy and programming.

### 3.4.5 Institutional strengthening

The Data Hub should support institutional capacity development within government agencies and non-state organisations to enhance their ability to collect, analyse and utilise gender-disaggregated climate data. This would include technical support for improving data management systems, developing standard operating procedures and creating internal policies for gender-responsive data practices.

## 3.5 Guiding principles for data collection

Data collection for the Data Hub should be grounded in principles of inclusivity, gender responsiveness, transparency and ethical integrity. Data processes should prioritise the collection of gender-disaggregated and socially inclusive information that captures the differentiated impacts of climate change across communities, with special attention to marginalised groups. All data collection should adhere to national and international standards for data protection, privacy and informed consent, ensuring participation is voluntary and culturally sensitive, and does no harm. Furthermore, the approach should promote interoperability, quality assurance and collaboration across state and non-state actors to foster trust, accuracy and policy relevance.

While not exhaustive, some of these principles are as follows.

- **Intersectionality:** All data will consider intersecting identities, including gender, age, disability status, socio-economic background and geographic location.
- **Standardisation:** Data collection tools will be harmonised across sectors to ensure comparability and integration with Nigeria's national statistical system.
- **Community engagement:** Ground-level data collection, particularly for vulnerable groups, will be participatory and inclusive, capturing lived experiences alongside quantitative metrics.

- **Alignment with global indicators:** Where applicable, indicators will be harmonised with UNFCCC, SDG and climate finance requirements to streamline reporting and attract resources.

### 3.6 Data governance, ethics and privacy

The Data Hub will adopt global best practices in data governance to protect privacy, ensure data integrity and promote ethical use.

- **Data protection:** All personal data collected, especially relating to GBV, health or vulnerable populations, will be anonymised and handled per Nigeria's Data Protection Act 2023 and international standards.
- **Informed consent:** Community-level data collection will incorporate consent protocols, particularly where sensitive gender data are involved.
- **Data-sharing protocols:** Formal agreements will govern how data flows between government agencies, CSOs and private sector actors, with clear stipulations on access rights, attribution and security.
- **Mitigation of risks:** Gender-sensitive datasets prone to misuse will have controlled access, ensuring responsible dissemination.
- **Ethical oversight:** An independent Ethics and Data Oversight Committee, with representation from women's groups and data experts, will review data collection tools, ensure ethical compliance and safeguard against misuse.

### 3.7 Integration with global reporting systems

The Data Hub will support Nigeria's international obligations by aligning data collection and reporting with the following.

- **The ETF:** The Data Hub will supply gender-disaggregated data for Nigeria's BTRs, including adaptation progress, impacts and participation of vulnerable groups.

- **NDC tracking:** The Data Hub will enhance monitoring of gender integration within NDC implementation, supporting periodic updates and stocktakes.
- **The UNFCCC GAP:** The Data Hub will generate data on women's participation, leadership and access to climate services in alignment with GAP Priority Areas C and D.
- **SDG 5 and SDG 13 monitoring:** The Data Hub will produce harmonised indicators relevant to both gender equality (SDG 5) and climate action (SDG 13), facilitating integrated progress tracking.

### 3.8 High-level technology architecture

The Data Hub will leverage scalable, inclusive and interoperable technologies.

- **Data infrastructure:** Cloud-based, secure data storage systems ensuring scalability, reliability and compliance with data protection standards.
- **User interfaces:** Multi-platform access via web dashboards, mobile apps (with offline capabilities) and USSD services for remote or low-connectivity regions.
- **Interoperability standards:** Open data standards will ensure seamless integration with existing national data platforms (NBS, NIMET, NIHSA) and future expansion.
- **Analytics layer:** Built-in visualisation tools, scenario planning modules and gender-impact dashboards tailored to policy-makers, CSOs and local communities.
- **Cybersecurity measures:** Regular security audits, access controls and encryption protocols to mitigate technological risks identified in the risk assessment.



## 4. Theory of Change

The theory of change (ToC) for the proposed Data Hub outlines how establishing a centralised, gender-responsive climate data system will contribute to equitable climate governance, enhanced resilience and improved access to climate finance. The ToC demonstrates the causal pathway from foundational activities to the long-term goal of inclusive, gender-just climate action in Nigeria.

### 4.1 Pathway to impact

Nigeria recognises that, by strengthening institutional frameworks, enhancing technical capacity and establishing a centralised, gender-responsive data system, it can improve evidence-based decision-making, advance inclusive governance and build resilience for the most vulnerable populations.

The Data Hub will catalyse this change through a series of connected steps.

- **Inputs:** Establishment of institutional arrangements; development of gender-disaggregated indicators; technical infrastructure; partnerships with state and non-state actors; and targeted capacity-building.
- **Outputs:** Functional Hub operational within government structures; standardised, gender-responsive climate data collection tools; trained stakeholders; accessible data platforms; and strengthened data-sharing protocols.
- **Outcomes:** Improved availability and use of gender-disaggregated climate data in national policies, plans and reports; increased participation of women and marginalised groups in climate governance; and enhanced ability to secure climate finance that addresses gender-specific vulnerabilities.
- **Impact:** A more inclusive, equitable and resilient climate governance system that reflects the realities of all citizens, improves adaptive capacity for vulnerable groups and strengthens national compliance with global climate and gender commitments.

Global experience and Nigeria's own policy assessments confirm that the absence of gender-responsive data limits the effectiveness of climate interventions. Evidence from other countries demonstrates that gender-disaggregated data improve targeting of adaptation programmes, enhance women's participation in governance and enable access to finance streams that require demonstration of gender inclusion.

The success of the ToC is based on several assumptions.

- There is sustained political commitment to gender equality and inclusive climate action.
- Key government and non-state stakeholders are willing to collaborate and share data.
- Institutional capacity for data management and gender analysis can be strengthened.
- Technological solutions can be deployed in an inclusive, accessible manner, addressing the digital divide.
- Sustainable financing mechanisms will be secured to support long-term Hub operations.

Potential risks, including data misuse, privacy concerns, exclusion of marginalised groups and tokenistic participation, can be mitigated through strong data governance frameworks, stakeholder engagement, community-based monitoring and continuous learning mechanisms embedded within the Data Hub's design.

### 4.2 Intermediate outcomes

- Improved integration of gender data into national climate reports
- Increased representation of women groups in climate governance structures
- More gender-responsive climate finance proposals submitted and approved
- Enhanced awareness and capacity of policy-makers to apply gender data to decision-making
- Strengthened resilience of vulnerable communities through data-informed interventions

### 4.3 Long-term vision

Through the Data Hub, Nigeria will:

- lead by example in implementing gender-just climate action in Africa
- close gender data gaps that hinder equitable adaptation, mitigation and resilience-building
- ensure national climate strategies reflect the lived experiences of all Nigerians
- mobilise increased, gender-responsive climate finance to support inclusive development.



Table 4.1: Theory of change

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |                                                               |                                                                                                                                                                                                                        |                                                                                 |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Situation                                                         | Nigeria's fragmented climate and gender data systems, combined with institutional co-ordination challenges and limited gender-disaggregated information, constrain inclusive climate action, fulfilment of international obligations and access to climate finance, highlighting the urgent need for a centralised, gender-responsive Data Hub.                                                                                   |                                                                    | Goal                                                          | A resilient, inclusive and gender-just climate governance system in Nigeria, supported by reliable, disaggregated data for evidence-based decision-making, policy development and equitable access to climate finance. |                                                                                 |
|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |                                                               |                                                                                                                                                                                                                        |                                                                                 |
| Inputs and activities                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Outputs                                                            | Outcomes                                                      |                                                                                                                                                                                                                        | Impacts                                                                         |
| Establish institutional and governance structure for the Data Hub |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Multi-stakeholder oversight committee formed                       | Strengthened co-ordination and institutional ownership        |                                                                                                                                                                                                                        | Inclusive, gender-responsive climate governance established                     |
| Develop and integrate gender-disaggregated data systems           |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Gender-responsive indicators and data standards adopted            | Improved availability and accessibility of disaggregated data |                                                                                                                                                                                                                        | Evidence-based, equitable climate policies and plans implemented                |
| Build technical infrastructure (platforms, tools, visualisation)  |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Functional Data Hub with user-friendly access points               | Stakeholders use data for planning, monitoring and reporting  |                                                                                                                                                                                                                        | Improved resilience and adaptive capacity, especially for women                 |
| Conduct capacity-building for government, CSOs and communities    |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Increased skills in gender-responsive data collection and analysis | Enhanced institutional and human capacity for data use        |                                                                                                                                                                                                                        | Reduced gender gaps in climate resilience and leadership participation          |
| Establish data-sharing agreements and partnerships                |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Formal collaboration mechanisms operational                        | Strengthened data quality, coverage and stakeholder trust     |                                                                                                                                                                                                                        | Nigeria meets international reporting requirements and attracts climate finance |
| Facilitate community-based monitoring and citizen science         |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Ground-level data integrated into the Hub                          | Inclusion of local realities and marginalised voices          |                                                                                                                                                                                                                        | Gendered vulnerabilities addressed through targeted adaptation actions          |
| Monitor, evaluate and adapt Hub operations                        |                                                                                                                                                                                                                                                                                                                                                                                                                                   | Continuous learning and system improvements                        | Increased effectiveness and sustainability of the Hub         |                                                                                                                                                                                                                        | Sustained gender-responsive climate governance in Nigeria                       |
| Evidence assessment                                               | Available evidence from Nigeria's climate vulnerability reports, gender assessments and global best practices demonstrates that integrating gender-disaggregated data into climate governance improves policy effectiveness, enhances resilience for marginalised groups and increases eligibility for gender-responsive climate finance.                                                                                         |                                                                    |                                                               |                                                                                                                                                                                                                        |                                                                                 |
|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                    |                                                               |                                                                                                                                                                                                                        |                                                                                 |
| Assumptions                                                       | a. Political will exists to operationalise inclusive climate governance frameworks.<br>b. Stakeholders are willing to share data and collaborate.<br>c. Technical capacity can be built to support gender-responsive data systems.<br>d. Access to reliable funding will be secured for Hub development and sustainability.<br>e. Gender inequalities can be addressed through improved access to information and representation. |                                                                    | Possible unintended consequences                              | f. Data privacy and security risks<br>g. Increased bureaucratic burden<br>h. Tokenistic participation<br>i. Data fatigue among communities<br>j. Unintended social tensions from visibility of gender disparities      |                                                                                 |

# 5. Implementation Strategy and Sustainability Plan

The National Data Hub for Gender and Climate Information will be implemented in two years, ensuring it becomes functional quickly while building strong foundations for long-term sustainability.

## Phase 1: Foundation and early impact (months 1–12)

Key activities

- Establish multi-stakeholder steering committee (within three months).
- Develop framework document, standards and gender-responsive indicators.
- Conduct mapping of existing data systems and gaps.
- Pilot data collection in three high-risk states (urban, conflict-climate, flooding).
- Develop and launch beta version of interactive data portal.
- Hold national capacity-building workshops for government and CSOs.
- Secure initial donor commitments and private sector partnerships.

**Quick wins in Year 1:** Steering committee in place, pilot data collection, beta portal launched, first capacity-building completed.

## Phase 2: Expansion and integration (months 13–24)

Key activities

- Expand data collection across priority sectors (health, agriculture, water, energy).
- Integrate data from CSOs, academia and private sector partners.
- Launch full version of interactive data portal with decision support tools.
- Roll out national and sub-national training programmes.

- Embed gender-responsive processes across government systems.
- Establish sustainability measures (co-financing, legal frameworks, policy linkages).

**Quick wins in Year 2:** Full platform launched, expanded datasets integrated, institutionalisation pathways initiated.

## Sustainability plan (post-year-2)

- Multi-level co-ordination: Continued oversight and co-ordination by steering committee;
- Government ownership: Integration into national policy frameworks and budgets.
- Funding diversification: Government allocations, donor support and public-private partnerships (PPPs);
- Continuous learning: Refinement of tools, scenario planning and impact tracking.

## 5.1 Financing and sustainability

To ensure long-term viability, the National Data Hub for Gender and Climate Information will adopt a blended financing model that combines public, donor and private sector resources. This diversified approach will reduce reliance on single funding sources, support technical innovation and enable phased growth and maintenance of the Data Hub.

Key financing streams will include the following.

- **Government budget allocations:** Core operational costs will be embedded within the national budget, particularly through the NCCC, to institutionalise the Data Hub and ensure sustainability beyond project cycles.
- **Development partner contributions:** Targeted funding from bilateral and multilateral partners will support the development of specific components, such as digital platforms, capacity-building and technical advisory services.

Table 5.1: Risk management

| Risk                                                              | Likelihood | Impact | Mitigation strategy                                                                                                           |
|-------------------------------------------------------------------|------------|--------|-------------------------------------------------------------------------------------------------------------------------------|
| Limited political or institutional buy-in                         | Medium     | High   | Engage key ministries early; build on existing policies (e.g., NAP, NDC, Climate Act)                                         |
| Data-sharing reluctance between agencies                          | High       | Medium | Formalise data-sharing agreements; establish trust via inclusive governance                                                   |
| Inadequate technical capacity at sub-national levels              | Medium     | High   | Integrate capacity-building in all phases; leverage local universities/partners                                               |
| Insufficient or fragmented funding                                | Medium     | High   | Apply blended financing model; align with donor priorities for gender and climate                                             |
| Gender data not prioritised or consistently collected             | High       | Medium | Develop mandatory gender indicators and reporting protocols; institutionalise practices                                       |
| Technological or cyber-security challenges with the data platform | Low        | Medium | Use secure, scalable technology; include information and communication technology (ICT) specialists and regular system audits |
| Turnover of key government staff or focal points                  | Medium     | Medium | Institutionalise roles and responsibilities through policy/legal instruments                                                  |

- **Private sector partnerships:** Collaborations with technology firms and data service providers will enable co-investment in innovation, software development and scalable data applications.
- **Research grants and academic collaborations:** Competitive grants will be pursued to fund applied research, advanced analytics and development of gender-responsive data methodologies.
- **Fee-based services:** The Data Hub will explore fee-for-service models for customised data analysis, visualisation tools and technical support, while ensuring free and equitable access to core public information for all users.

This financing strategy will be guided by a sustainability plan developed during Phase 1, including clear cost projections, funding targets and engagement frameworks for donors and investors.

## 5.2 Estimated cost and financing pathways

Funding sources include:

- core allocations from the Federal Government
- targeted grants from bilateral partners (United Kingdom, European Union, Canada) focused on gender-climate innovation
- contributions from climate finance entities such as the Green Climate Fund and the Adaptation Fund
- private sector co-investment in technology infrastructure
- research partnerships and competitive innovation funds for pilots and analytics development.

A detailed implementation and budget plan will be developed as part of this initiative to guide the phased roll-out of the Data Hub. This document will provide a costed action plan aligned with the institutional architecture, technical components and stakeholder engagement pathways outlined in

**Table 5.2: Workplan/timeline**

| Timeline            | Key milestones/outputs                                                                                   |
|---------------------|----------------------------------------------------------------------------------------------------------|
| <b>Months 1–3</b>   | Steering committee established; framework document drafted; mapping of existing systems started          |
| <b>Months 4–6</b>   | Data standards + gender indicators finalised; partnerships formalised; pilot states identified           |
| <b>Months 7–9</b>   | Pilot data collection launched; beta interactive data portal developed and tested                        |
| <b>Months 10–12</b> | Capacity-building workshops held; donor/PPP commitments secured; Year 1 review completed                 |
| <b>Months 13–15</b> | Data collection expanded to additional sectors; CSO and research data integration begins                 |
| <b>Months 16–18</b> | National training rollout; full version of interactive data portal launched                              |
| <b>Months 19–21</b> | Decision support tools operational; gender mainstreaming embedded across systems                         |
| <b>Months 22–24</b> | Policy/legal institutionalisation steps taken; sustainability mechanisms (budget lines + PPPs) confirmed |

this framework. It will support resource mobilisation efforts by presenting clearly defined activities, financing needs and expected results.

### 5.3 Risk management

The successful implementation of the Data Hub will depend on co-ordinated stakeholder engagement, technical soundness and institutional ownership. Key risks and mitigation strategies are outlined in Table 5.1.

## 6. Situational Analysis to Inform Hub Development

A detailed situational analysis will be conducted to assess existing data systems, institutional mandates, gaps and opportunities in relation to establishing the National Data Hub for Gender and Climate Information. The next step will be to administer a set of key questions to stakeholders. Stakeholder feedback will provide the necessary input for the situation analysis to better guide the Data Hub.

The analysis will help determine:

- types of gender and climate data needed
- hosting arrangements and institutional leadership
- alignment with government priorities and development plans
- roles of key partners, including the Commonwealth Secretariat and the Government of Nigeria
- data management cycles and pathways for use in policy and planning
- existing data, gaps and systems at national and sub-national levels.

Annex 1 provides the checklist of key questions to guide the situational analysis.

## 7. Institutional Architecture and Governance Framework

The National Data Hub for Gender and Climate Information requires a carefully designed institutional structure that leverages existing government bodies while creating space for non-state actor participation. The NCCC, as the designated National Focal Point for UNFCCC implementation, will serve as to serve as the primary anchor institution for the Hub. However, effective governance demands representation from multiple stakeholders, including the Federal Ministry of Environment.

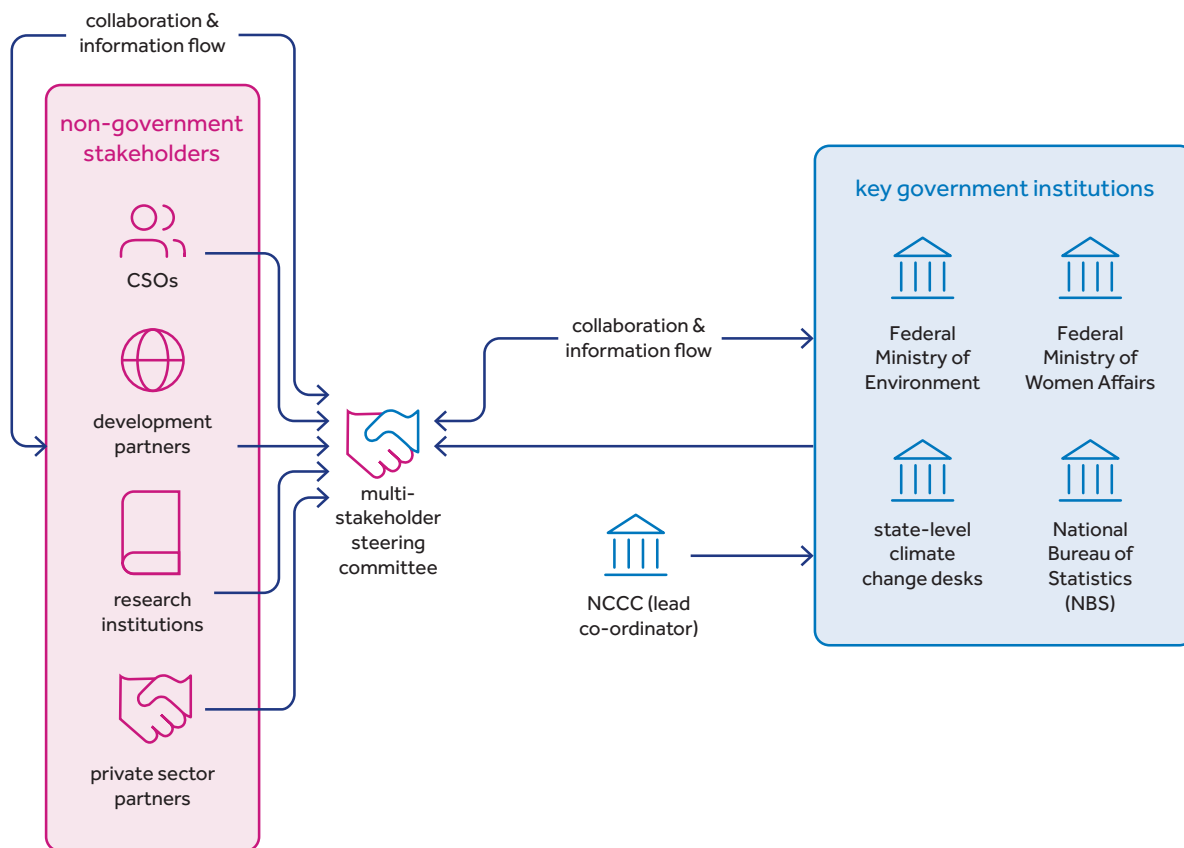
A multi-stakeholder steering committee should oversee the Hub, comprising representatives from key government ministries (Environment, Women Affairs, Agriculture, Water Resources), research institutions and CSOs focusing on gender and

climate, as well as representatives of vulnerable communities. This governance structure will ensure the Hub's operations align with national priorities while maintaining scientific integrity and gender responsiveness.

The operational structure should include a specialised team focusing on data collection protocols, quality assurance, analysis, visualisation and dissemination. A dedicated gender team within the hub would be responsible for ensuring all data collection instruments and methodologies incorporate gender considerations and that gender analysis is integrated into all outputs. This team would collaborate with the Federal Ministry of Women Affairs to ensure alignment with national gender policies and international best practices.

**Table 7.1: Institutional roles and responsibilities**

| Institution                                                          | Role                                                                                                                                                                   |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Council on Climate Change</b>                            | Lead implementing agency and Hub host; ensures alignment with national climate commitments and UNFCCC obligations                                                      |
| <b>Federal Ministry of Environment, Department of Climate Change</b> | Technical oversight for climate data alignment with NDCs, NAP and adaptation policies                                                                                  |
| <b>Federal Ministry of Women Affairs</b>                             | Lead on gender policy integration, gender-disaggregated indicators and stakeholder engagement with women's groups                                                      |
| <b>Nigeria data protection commission</b>                            | Provides regulatory guidance on data privacy, security and compliance with national data protection laws                                                               |
| <b>National Information Technology Development Agency</b>            | Supports ICT infrastructure, interoperability and standards for the Hub's digital platforms                                                                            |
| <b>Relevant sub-national organisation</b>                            | Facilitates state-level data collection, validation and integration into the national Hub; ensures local ownership and community engagement                            |
| <b>National Bureau of Statistics</b>                                 | Custodian of official statistics; ensures data quality standards, harmonisation with national statistical systems and production of official gender-climate indicators |
| <b>State-level Climate Change Desks</b>                              | Sub-national data collection, validation and community-level engagement                                                                                                |
| <b>Civil society and research institutions</b>                       | Ground-level data collection, participatory research, capacity-building and advocacy                                                                                   |
| <b>Private sector</b>                                                | Technology innovation, data infrastructure, co-investment and digital inclusion initiatives                                                                            |
| <b>Development partners</b>                                          | Financial and technical assistance; capacity-building                                                                                                                  |

**Figure 7.1: Visual flow of institutional relationships**

Source: Authors.

To ensure sustainability, the Hub should be institutionalised through formal agreements between participating organisations and backed by appropriate executive action and budgetary allocation to secure its mandate and funding. A phased implementation approach would allow for capacity-building and incremental expansion of the Hub's capabilities over time.

### 7.1 Institutional roles and responsibilities

A successful Data Hub requires clear delineation of institutional roles to avoid fragmentation and ensure accountability. A multi-stakeholder steering committee co-chaired by the NCCC as lead, with support from the Federal Ministry of Women Affairs, will guide strategic decisions, while technical working groups manage operational details.

### 7.2 Partnerships and co-ordination mechanisms

The successful establishment and sustainability of Nigeria's National Data Hub for Gender and Climate Information will depend on effective partnerships and co-ordination across state and non-state actors. The Data Hub should foster collaboration between data producers, data users and decision-makers to ensure relevance, quality and utility of gender-responsive climate data.

### 7.3 Co-ordination mechanisms

Effective co-ordination between government, civil society and development partners is essential for the success of the Data Hub. The following mechanisms will facilitate structured collaboration, ensure data interoperability and promote joint ownership of outcomes:

- establishment of a multi-stakeholder steering committee
- regular co-ordination meetings between state and non-state actors

- development of data-sharing protocols and memoranda of understanding
- integration with national climate governance structures.

## 7.4 Sustainability of partnerships

Sustaining momentum and stakeholder engagement beyond the initial phase of the Data Hub requires deliberate investment in partnerships. The following strategies are proposed to foster long-term collaboration, institutional ownership and adaptive capacity:

- incentivising stakeholder engagement through mutual benefits
- building long-term institutional capacities
- embedding co-ordination structures within existing national systems.

## 7.5 Private sector engagement pathways

The private sector is critical to advancing the Hub's technology, innovation and financing goals.

- **Technology partnerships:** Collaborations with Nigerian and international tech firms can be used to co-develop mobile platforms, data analytics tools and community reporting applications.
- **Digital inclusion programmes:** Joint initiatives can enhance women's access to mobile devices, internet connectivity and digital skills, enabling wider participation in climate data collection.
- **Corporate responsibility alignment:** Private sector actors in agriculture, energy and finance should be encouraged to integrate Data Hub data into their operations, contributing to the SDGs and NDC goals.
- **Data co-creation:** Companies can be engaged to provide satellite data, climate models or agricultural inputs to enrich the Hub's datasets with private sector expertise.



## 8. Monitoring, Learning and Communications Plan

A monitoring, learning and communications plan will ensure tracking of progress, adaptive learning and effective stakeholder engagement throughout the implementation of the National Data Hub for Gender and Climate Information. The plan will combine quantitative and qualitative methods to assess project performance, identify lessons

and inform continuous improvement. Data will be disaggregated by gender, age, location and other relevant social markers.

A digital results-tracking system will be integrated into the Hub, and progress will be shared through reports, dashboards, policy briefs and stakeholder dialogues.

**Table 8.1: Indicators to monitor outputs**

| Output                                                                              | Indicator                                                                          | Disaggregation                             |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------|
| <b>Operational National Data Hub for Gender and Climate Information established</b> | Hub launched and functional within hosting institution                             | N/A                                        |
|                                                                                     | Number of users accessing Hub platform monthly                                     | By gender, sector, region                  |
| <b>Standardised gender-climate indicators developed and applied</b>                 | Number of indicators developed and adopted by institutions                         | By sector                                  |
|                                                                                     | % of data collected using gender-responsive tools                                  | N/A                                        |
| <b>Capacity-building delivered to stakeholders</b>                                  | Number of individuals trained on gender-climate data tools                         | By gender, institution type                |
|                                                                                     | % of trained actors applying knowledge in climate planning/ reporting              | By sector, location                        |
| <b>Stakeholder co-ordination enhanced</b>                                           | Number of stakeholder institutions contributing data to Hub                        | By type (government, CSO, research, local) |
|                                                                                     | Frequency of inter-agency data co-ordination meetings                              | N/A                                        |
| <b>Gender and climate data used in decision-making and proposals</b>                | Number of policies or climate plans referencing Hub data                           | By policy level                            |
|                                                                                     | Number of gender-responsive climate finance proposals supported with data from Hub | By funding agency                          |
| <b>Communication and knowledge products developed</b>                               | Number of data bulletins, briefs or infographics published                         | By audience type                           |
|                                                                                     | % of targeted users reporting improved access to gender-climate data               | By stakeholder group                       |

# Annex 1: Proposed Questions for the National Data Hub for Gender and Climate Information in Nigeria

The following table presents a consolidated set of guiding questions to inform the design, governance and implementation of the Data Hub. The questions draw on existing frameworks, presentations and stakeholder discussions, and are organised thematically to facilitate structured

dialogue with government agencies, civil society and development partners. They are intended to help identify data needs, clarify institutional roles and ensure the Data Hub is inclusive, sustainable and aligned with both national priorities and global commitments.

| Thematic area                                        | Key questions                                                                                                                                                         |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Data scope and sources</b>                        | Are the proposed priority data categories (agriculture, health, energy, water, GBV, leadership, finance, digital access) complete and relevant from your perspective? |
|                                                      | Which government agencies, CSOs and private sector actors are already collecting relevant gender-disaggregated climate data?                                          |
|                                                      | Are there standardised protocols for gender-disaggregated data collection across ministries, departments and agencies?                                                |
|                                                      | Are there existing data-sharing agreements or mechanisms that could be leveraged or adapted for the Hub?                                                              |
| <b>Governance and institutional roles</b>            | Which agency will lead implementation and co-ordination of the Hub?                                                                                                   |
|                                                      | What is the proposed composition and mandate of the steering committee?                                                                                               |
|                                                      | How will the NCCC, the NBS and the Federal Ministry of Women Affairs collaborate in operationalising the Hub?                                                         |
| <b>Alignment with national and global frameworks</b> | How will the Hub align with Nigeria's Climate Change Act (2021) and National Action Plan on Gender and Climate Change (2020–2025)?                                    |
|                                                      | What priorities under the UNFCCC GAP and the SDGs should be embedded in the Hub?                                                                                      |
|                                                      | How will the Hub support the implementation of NDCs, NAPs and BTRs?                                                                                                   |
| <b>Existing data landscape and utilisation</b>       | What gender and climate data are already being collected at national and sub-national levels, and what are the key gaps?                                              |
|                                                      | What data systems, platforms or repositories currently exist that could be integrated?                                                                                |
|                                                      | What is the current cycle of data collection, analysis and dissemination, and how are data currently used for policy- and decision-making?                            |
|                                                      | What barriers exist to data access, interoperability, and use?                                                                                                        |

| Thematic area                              | Key questions                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stakeholder roles and engagement</b>    | Which CSOs, grassroots organisations and women's groups are already engaged, and which should be prioritised for inclusion?                                     |
|                                            | How will citizen science approaches be operationalised, especially in vulnerable communities?                                                                   |
|                                            | What mechanisms will ensure meaningful private sector participation, particularly in digital innovation and expanding access to gender-responsive climate data? |
| <b>Sectoral prioritisation</b>             | Which climate-vulnerable sectors (e.g., water, energy, health, agriculture, finance) should be prioritised in Phase 1 of implementation?                        |
|                                            | Are there existing gender-linked indicators Nigeria would like to refine or expand within these sectors?                                                        |
| <b>Funding and sustainability</b>          | What are Nigeria's preferred funding modalities (e.g., federal budget, bilateral donors, climate finance)?                                                      |
|                                            | Is there a plan for private sector co-investment or PPP models to support sustainability?                                                                       |
|                                            | What expectations does Nigeria have for Commonwealth support in mobilising resources?                                                                           |
| <b>Capacity and sustainability</b>         | What institutional capacities exist for gender-responsive climate data collection and use?                                                                      |
|                                            | What capacity-building needs should be addressed for ministries, departments and agencies; CSOs; and communities?                                               |
|                                            | What factors are critical to ensuring long-term sustainability of the Hub (technical, institutional, financial)?                                                |
| <b>Implementation timeline and phasing</b> | What is Nigeria's proposed timeline for phased implementation of the Hub?                                                                                       |
|                                            | Are there specific pilot states or regions identified for initial roll-out?                                                                                     |
|                                            | What are the key milestones envisioned for the first 12–24 months?                                                                                              |





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