

## CONCEPT NOTE PROPOSAL FOR SINGLE COUNTRY

### PART I: PROJECT/PROGRAMME INFORMATION

**Title of Project/Programme:** Building Climate Resilient Health Systems

**Country:** Namibia

**Thematic Focal Area:** Disaster risk reduction and early warning systems

**Type of Implementing Entity:** Multilateral Implementing Entity

**Implementing Entity:** World Health Organisation Namibia Country office

**Executing Entities:** Ministry of Health and Social Services Namibia

**Amount of Financing Requested:** 10,000,000 U.S Dollars

**Project Formulation Grant Request (available to NIEs only):** Yes ☒ No ☐

**Amount of Requested financing for PFG:** 150,000 U.S Dollars

**Letter of Endorsement (LOE) signed:** Yes ☒ No ☐

*NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: <https://www.adaptation-fund.org/apply-funding/designated-authorities>*

**Stage of Submission:**

- ☒ This concept has been submitted before
- ☐ This is the first submission ever of the concept proposal

In case of a resubmission, please indicate the last submission date: 3/19/2025

<p><b>Please note that concept note documents should not exceed 50 pages, including annexes.</b></p>
--

## Project/Programme Background and Context:

**Geography:** Namibia is a vast, sparsely populated country in southwestern Africa, covering approximately 824,116 square kilometers. It shares borders with Angola, Botswana, South Africa, Zambia, and Zimbabwe, while the Atlantic Ocean lies to the west. The country consists of 14 administrative regions and features three major deserts: the Namib in the west, the Kalahari in the east, and the Karoo in the south, each with distinct ecological characteristics. The presence of deserts and rugged terrain hinders transportation and logistics and presents a challenge to the provision of health services.

**Socio- economic:** The population of Namibia is about 3,022,401, and 51% of the population live in rural<sup>1</sup>. The population is projected to reach 4 million by 2050. Namibia has a relatively young demographic, with a median age of 22 years, and 71.1% of the population under the age of 30<sup>2</sup>.

Despite being an upper middle-income country with a GDP per capita of USD current prices at 4,742.8, Namibia has one of the most highly skewed income distributions with a Gini coefficient of 0.597<sup>3</sup>. Inequality is highest in urban areas (0.583) than in rural areas (0.487)<sup>3</sup>. Further, inequality is highest in !Kharas (0.634) and lowest in Ohangwena (0.405) regions. About 28.7% of the population is poor while 15% are extremely poor<sup>3</sup>. Poverty is highest in rural areas (37%) than in urban areas (15%). Poverty is higher amongst the population whose main language spoken at home is Khoisan (93.4%), followed by Rukavango (67.8%) and Zambezi languages (54.2%)<sup>4</sup>. Due to their low literacy level, indigenous peoples are finding it difficult to enter the mainstream work force of Namibia.<sup>5</sup>

### Gender analysis:

#### Gender-based violence, inequalities, poverty and vulnerability

- Women constitute 51% of the Namibian population. Despite Namibia ranking high in global and regional gender indices, disparities persist. The incidence of multidimensional poverty is higher among female-headed households (46%), compared to male-headed households (41%)<sup>4</sup>, making them more vulnerable to various economic factors including the impacts of climate change. Women rely more on climate-sensitive work to make a living. They dominate the subsistence and communal farming<sup>6</sup> activities and have limited technical skills to get into paid employment, limiting their capacity to diversify their livelihood<sup>7</sup>.
- Gender-Based Violence (GBV) persists in Namibia, and increased during the COVID-19 pandemic, resulting in protests in 2020. In 2020, 4,607 cases of GBV cases were reported to the Police.<sup>8</sup> Climate-related disasters like droughts can exacerbate existing GBV, as women become more vulnerable in situations of resource scarcity and social disruption. Without investing in mitigation measures, the number of women reporting Intimate Partner Violence in a year is projected to increase from 113,539 in 2020 to 127,697 in 2030.<sup>9</sup> Gender dimensions of racial discrimination have been reported. San women and girls, especially in rural areas, and the disabled continue to face barriers in accessing education, justice, employment, and health services<sup>10</sup>.
- Gender imbalances in leadership and decision-making due to intersecting historic inequalities, ethnicity and socio-cultural factors in local community-based natural resource management institutions have been

---

<sup>1</sup> Population & Housing Census Preliminary Report, 2023

<sup>2</sup> Policy brief, Population Dynamics, National Planning Commission, 2015

<sup>3</sup> The root causes of Poverty, National Planning Commission, 2023; <https://www.npc.gov.na/wp-content/uploads/2023/06/Root-Causes-of-Poverty.pdf>

<sup>4</sup> Republic of Namibia (2021) NAMIBIA MULTIDIMENSIONAL POVERTY INDEX (MPI) REPORT

<sup>5</sup> Institute for Public Policy Research. (2024). Namibia CSOs report on ICCPR. Institute for Public Policy Research. [https://ippr.org.na/wp-content/uploads/2024/03/Namibia\\_CSOs-Report-on-ICCPR.pdf](https://ippr.org.na/wp-content/uploads/2024/03/Namibia_CSOs-Report-on-ICCPR.pdf).

<sup>6</sup> Martha Nangolo & Ndapwa Alweendo; Agriculture in Namibia: An overview (2020)

<sup>7</sup> Ministry of Gender Equality, Poverty Eradication and Social Welfare, Namibia Statistics Agency, United Nations Women, Women Count (2023); Namibia National Gender Statistics Assessment.

<sup>8</sup> UN Women, Namibia <<https://data.unwomen.org/country/namibia>>.

<sup>9</sup> United Nations Namibia (2022); Common Country Analysis (CCA)

<sup>10</sup> Committee on the Elimination of Racial Discrimination, Concluding observations on the combined thirteenth to fifteenth periodic reports of Namibia CERD/C/NAM/CO/13-15 (10 June 2016) paras 17-18.

highlighted in Namibia<sup>11</sup>. Discussions held in communities usually target heads of households, in majority of cases men, thus limiting effective participation of women in public forums. This results in misrepresentation of women during planning and implementation climate change mitigation and adaptation programs.

- Ensuring gender equality is a policy objective by the Government of the Republic of Namibia (GRN). However, only 34.4% of indicators needed to monitor the Sustainable Development Goals (SDGs) from a gender perspective are available. Availability of timely gender statistics is impacted by lack of gender statistics awareness, inadequate statisticians and inadequate consideration for gender and sex disaggregation in the data collection tools<sup>11</sup>.

#### **Gender roles, cultural and societal barriers:**

- Due to cultural factors, women, especially in communal areas, are not empowered to access markets where they can sell their farm produce and have limited control over assets and resources.<sup>11</sup>
- Women are more impacted by droughts due to their reliance on subsistence agriculture and limited access to water and other sources, putting them at higher risk of malnutrition and food insecurity<sup>11</sup>. This is largely due to established gender roles that limit women's control over resources; women have significantly less land ownership compared to men.<sup>11</sup>
- Men typically hold more power in decision-making regarding household responses to climate change, limiting women's ability to participate in adaptation strategies.<sup>11</sup> Power imbalances and decision making at household level also impact women's health seeking decisions. In 2020, 6% of Namibian women did not access health services because they did not receive permission<sup>9</sup>. These factors impact resilience and adaptive capacities of men and women to climate change differently.
- Gender differentiated access to information has been highlighted with majority of communal women reported to receive delayed "early warning information" regarding rainfall forecast, which is a key aspect to subsistence farming in Namibia.<sup>11</sup> Lack of access to information delays timely adaptation to climate effects such as relocation to high lands, timing cultivating season, choosing climate adapted seeds, etc
- Open defecation is a persistent problem practiced by 43% of the population<sup>12</sup>. Use of open defaecation method is common as an option especially in rural areas and informal urban settlements. These practices make women more prone to acquiring infections with subsequent lost production time due to ill health.

**Historical and projected climate changes in Namibia:** Identified as one of the driest countries south of the Sahara, Namibia has experienced persistent drought conditions for over 7 years<sup>13</sup>. The country is prone to climatic variability, and recent years have seen an escalation in the frequency and severity of El Niño-induced droughts<sup>14</sup>. The climate in Namibia is predominantly hot and dry, with 92% of the land classified as very-arid, arid, or semi-arid. Implementing early warning systems coupled with strong governance can mitigate the impacts of climate change on health in Namibia, given the high climatic variability that has led to persistent droughts and unpredictable rainfall patterns, significantly impacting water availability and agricultural productivity.

Namibia ranks 78th in the 2023 Global Hunger Index among 125 evaluated countries, indicating a moderate hunger level with a score of 18.0<sup>14</sup>. Currently over 331 000 households have already registered for the government-funded Drought Relief Program (DRF) <sup>Error! Bookmark not defined.</sup>. Interventions to combat malnutrition at community and health facility level can mitigate the impact of the deteriorating food security, which is attributed to climatic and prices shocks, economic decline, and unemployment. Against the backdrop of scarce rains, drilling solar-powered boreholes ensures sustainable availability of water to households and health facilities, while reducing emission of green gases. On 22 May 2024, the Government of Namibia declared a State of Emergency following the worst drought that the country has experienced in 100 years.<sup>14</sup>. The US Agency for

<sup>11</sup> Angula, M.N., Mogotsi, I., Lendelvo, S., Aribeb, K.M., Iteta, A.M. and Thorn, J.P., 2021. Strengthening gender responsiveness of the Green Climate Fund ecosystem-based adaptation programme in Namibia. *Sustainability*, 13(18), p.10162.

<sup>12</sup> UNICEF Assessing the cost of inaction on Water, Sanitation and Hygiene in Namibia-WASH-Policy-Brief-2023.

<sup>13</sup> IFRC (2022), Namibia Drought Assessment Report 2022; <https://www.ifrc.org/sites/default/files/2022-08/Namibia-drought-assessment-report-2022.pdf>

<sup>14</sup> Drought situation report, June 2024

International Development (USAID) described the malnutrition situation in Namibia as producing ‘alarming statistics that demand immediate attention.’<sup>15</sup> A recent International Federation of the Red Cross (IFRC)<sup>13</sup> assessment found that health implications brought on by the drought are primarily a result of below-average rainfall, poor crop production, and the reduction of meals consumed in a day. Building infrastructure with climate-resilient designs and incorporating climate-related risks into planning processes, can enhance the resilience of critical infrastructure to ensure sustainable access to health services for marginalized communities that currently have no or only one clinic in their proximity.

Namibia’s average annual temperature has been increasing by 0.0123°C annually between 1901-2016, with minimal change in precipitation. Projections indicate a significant temperature rise, with a 2°C increase by mid-century and up to 4°C by the end of the century under the worst-case emission scenario.<sup>16</sup> Building a resilient health system and mobilizing communities to engage in climate change mitigation measures to combat the effects of the predicted drier future, with increased rainfall variability and more frequent extreme weather events like droughts and floods. Implementing early warning system, strong national and regional level governance for climate change and proactive evidence informed planning can minimize the damage caused by the likelihood of flooding that has been projected in Ohangwena, Omusati, Zambezi, Kavango West, Kavango East, and Oshana regions.<sup>17</sup> Rainfall may decrease by 7% by mid-century and 14% by the end of the century<sup>18</sup>. Implementing climate change mitigation measures at community level can improve water and food security and combat effects of environmental pollution caused by open defaecation.

**Vulnerability to Climate Change:** Gender consideration must be mainstreamed in all interventions given the disproportionate impact of climate change on women and children due to their socio-economic status. A strong multisectoral approach is essential to mitigate and respond to natural disasters, namely floods, droughts and epidemics which have dire socioeconomic impacts including loss of numerous lives. It is estimated that during the period 1980 to 2020, droughts (9), epidemics (7) and flood (15) events have cumulatively affected more than 3.25 million people, costing the economy more than 2 billion USD.<sup>19</sup> Epidemics and extreme weather other than the COVID-19 pandemic and floods are responsible for claiming more than 555 lives over the same period<sup>20</sup>. Key sectors such as agriculture, water resources, coastal zones, health, and tourism are highly vulnerable. The northern regions, where poorer communities reside, are especially at risk compared to the southern part of the country which is more resilient.

### Vulnerability projections for targeted regions

The regions targeted exhibit varying levels of vulnerability, with some areas facing particularly significant challenges. Ohangwena is notably the most affected, with projections indicating high levels of vulnerability across all categories: 211,978 people at risk from drought, 217,766 from flooding, 159,354 from malaria, and 178,589 from diarrhea. Kavango East and Kavango West also show considerable vulnerabilities, especially to flooding, with 103,340 and 79,862 individuals at risk, respectively. Oshikoto reports substantial drought and flooding vulnerabilities, affecting 127,685 and 132,842 people.

**Table 1: Climate change vulnerability projection for selected regions.**

Region	Distribution of population by high to very high vulnerability level in the targeted regions			
	Drought Vulnerability	Flooding Vulnerability	Malaria Vulnerability	Diarrhea Vulnerability
Kavango East	72,459	103,340	70,869	51,494
Kavango West	79,610	79,862	23,878	47,736
Zambezi	49,180	60,043	59,829	40,718
Ohangwena	211,978	217,766	159,354	178,589

<sup>15</sup> USAID (2024), United States Donates Emergency Drought Relief for Malnourished Children; <https://na.usembassy.gov/united-states-donates-emergency-drought-relief-for-malnourished-children/>

<sup>16</sup> (Climate Change Knowledge Portal for Development Practitioners and Policy makers – Namibia, accessible via <https://climateknowledgeportal.worldbank.org/country/namibia/vulnerability>).

<sup>17</sup> Namibia 2024/25 Vulnerability Assessment and Analysis (VAA).

<sup>18</sup> Government of the Republic of Namibia (2023): Namibia’s Nationally Determined Contribution

<sup>19</sup> Hipondoka, M. & Hamunyela, E. 2024. Risks profile of natural hazards and selected diseases in Namibia. Risk Profiling Project, Windhoek, Namibia

<sup>20</sup> Climate Risk Profile: [https://climateknowledgeportal.worldbank.org/sites/default/files/2021-08/15931-WB\\_Namibia](https://climateknowledgeportal.worldbank.org/sites/default/files/2021-08/15931-WB_Namibia)

<b>Oshikoto</b>	127,685	132,842	90,129	84,978
<b>Otjozondjupa</b>	25,335	66,016	46,303	18,720
<b>Kunene</b>	34,451	44,931	17,457	26,461
<b>Omaheke</b>	6,975	46,012	1,797	7,637

**Health Threats from Climate Change:** Climate change worsens health outcomes, particularly infant and adult mortality. A resilient health system, functional early warning systems and availability quality evidence can engender proactive measures to reduce the impact of floods and associated vector-borne diseases, as well as droughts and associated water and food scarcity leading to better health outcomes. Increased rainfall fosters disease-carrying insects, while floods lead to water-borne diseases like cholera and diarrhea. Rising temperatures exacerbate health risks for the elderly, infants, and those with poor health, while droughts threaten nutrition and safe water availability, increasing respiratory and gastrointestinal infections and other water-borne diseases. Based on the 2016/17 Namibia Intercensal Demographic Survey and the 2006/07 National Demographic and Health survey<sup>21,22</sup>, the main causes of deaths in children under five years are diarrhoea (42%), undernutrition, (40%), malaria (32%) and acute respiratory infections (30%), although it must be noted that multiple causes of death are frequent. All these causes of death have a strong environmental component linked to climate variability. Strengthening early warning systems for disease outbreaks, integrating climate resilience into primary healthcare, and enhancing cross-sectoral collaboration between health and environmental agencies can mitigate these risks while also improving long-term health outcomes.

The projected higher rainfall in areas that were previously not used to receive these amounts will increase populations of disease-carrying insects<sup>23</sup>, leading to higher transmission of vector-borne diseases like malaria. Flood incidences, whose frequency is increasing, are usually accompanied by outbreaks of water-borne diseases and infections, such as cholera and diarrhoea. Improved water and sanitation infrastructure and strengthened disease surveillance systems, can reduce vulnerability while offering mitigation co-benefits by preventing outbreaks and ensuring early response mechanisms.

Proactive multisectoral measures informed by robust evidence, resilient water, sanitation and hygiene interventions can mitigate the impact of the drought, which is projected to increase in intensity, on agricultural productivity, health service delivery and availability of clean water. Drought causes primarily malnutrition, hunger, heat related illnesses (heat stroke), increased risk of infectious diseases (cholera, malaria, dysentery, etc), Exacerbation of chronic respiratory illnesses (asthma, bronchitis, chronic obstructive pulmonary diseases, etc). Secondary effects of climate change on health include increased mental health illness due to psychological stress, worsening health outcomes due to reduced access to health care services caused by economic strain, increased migration leading to strained healthcare systems which increase the risk of disease outbreak, Increased food insecurity contributing to losing the gains made in the fight against HIV/AIDS as a public health threat by 2023 (increased new HIV infections, treatment interruption, and poor viral load suppression rates), and social disruption due to water and food scarcity. Introducing drought-resilient agricultural practices, enhanced water resource management, and community-based nutrition and health programs can reduce the immediate impacts of drought but also strengthen long-term resilience against climate variability.

Malaria is one of the major health problems. However, year-on-year incidences of malaria are highly variable, and closely correlated with the prevailing temperature, rainfall and humidity. Malaria is endemic in parts of the north-central and north-eastern regions. In contrast, in the north-western and parts of central Namibia, malaria transmission is seasonal and follows the onset of rains, these unstable occurrences increase the risk of malaria epidemics.<sup>23</sup> Strengthening vector control programs, improving early detection and treatment, and fostering

<sup>21</sup> Ministry of Health and Social Services (MoHSS) [Namibia] and Macro International Inc. 2008. Namibia Demographic and Health Survey 2006-07. Windhoek, Namibia and Calverton, Maryland, USA: MoHSS and Macro International Inc. Retrieved from <https://dhsprogram.com/pubs/pdf/fr204/fr204c.pdf>

<sup>22</sup>Namibia Statistics Agency. (2016). Namibia Integrated Social Development Survey (NIDS) 2016. Retrieved from [https://cms.my.na/assets/documents/NIDS\\_2016.pdf](https://cms.my.na/assets/documents/NIDS_2016.pdf)

<sup>23</sup> Republic of Namibia (2020) Fourth National Communication to the United Nations Framework Convention on Climate Change

climate-informed disease surveillance can reduce the malaria burden and ensure better health outcomes. There is a lack of formal and supported inter-sectoral linkages between health and the environment, which increases the vulnerability of the sector to climate change. Strengthening these linkages through policy integration, data-sharing mechanisms, and multi-sectoral climate adaptation strategies is critical to building health systems resilience to climate-related challenges.

### **This proposal will focus on mitigating the impact of drought and floods on health of the Namibian people**

**Health service delivery:** Currently, 1.4 million people are facing food insecurity across Namibia<sup>17</sup>. Forecasts show that between October 2024 and March 2025, all the regions are projected to be classified in Integrated Food Security Phase Classification (IPC) Phase 3, where the food insecure population will increase significantly in the range of 30 to 65% of the population<sup>17</sup>. Kunene and Kavango West (65% of the population each) and Kavango East and Zambezi regions (60% each of the population) remain the top four regions with the highest populations projected to be facing food insecurity. Otjozondjupa and Oshikoto regions (30 percent each of the population) have the least food insecure population projected.

The ongoing drought has led to an increase in cases of malnutrition, coupled with reports of infant deaths, teenage pregnancies, and substance abuse. Substantial increase in malnutrition is reported among under five children and marginalized communities like the San<sup>24</sup>. Infant deaths were higher in some regions like Omaheke, with deaths up 18% (79) against the 436 admissions between January 2023 and April 2024. Similar figures in Oshana and Otjozondjupa were reported as 14% and 9% respectively<sup>25</sup>. The healthcare system is overwhelmed and facing shortages of essential medical supplies<sup>26</sup>. The flooding experiences in Northern regions increasing breeding sites for mosquitos affecting 8 regions (targeted in this proposal)

Service availability varies across the country, for example, Kunene and Zambezi have the highest proportion of health facilities to population, with 3.2 per 10,000 people. The lowest ratios are in Khomas, with 0.38 facilities per 10,000 people and Oshana, with 0.96 facilities per 10,000 people. These disparities also affect the availability of healthcare workers across the regions. Khomas, Oshana, Zambezi, and Kunene are better resourced with overall health workers than the other regions. Omusati, Khomas, and Oshikoto have more physicians than the other regions, while extension workers are more concentrated in Zambezi, Kunene, Omaheke, and Karas.

**Water and Sanitation and Hygiene (WASH) and waste management:** Access to WASH, especially in informal and rural settings, is a challenge. In 2016, only 34% of households nationwide had access to sanitation facilities that meet the United Nations SDG standards for basic sanitation<sup>12</sup>. Regarding access to basic toilet facilities, only 13.4% of rural households have basic toilet facilities compared to 63.2% in urban areas and, only 8% of the poorest population use toilets meeting the basic United Nations (UN) criteria<sup>12</sup>. Open defecation is a persistent problem practiced by 43% of the population, more in rural areas (65%) compared to urban areas (23%)<sup>27</sup>. Poor WASH is associated with 183 857 diarrheal cases, 1996 malaria cases and 719 deaths annually among children under 5 years<sup>27</sup>. The regions with the highest rates of open defecation reported highest rates of stunting<sup>28</sup>.

Access to fully functioning WASH services is a critical aspect of patient safety, quality care as well as infection prevention and control. An assessment conducted in 21 health care facilities which provide maternity and neonatal services from all 14 regions showed that only 57% of assessed facilities met basic WASH standards,<sup>12</sup> indicating a need for major improvement.

Good medical waste management is vital to protecting the environment, natural resources, preserving public health, minimizing pollution and exposure to infectious agents; ultimately maintaining a cleaner and healthier planet for future as articulated in Regulation 53(1)–(4) of the Public and Environmental Health Act, (Act No 1 of 2015). Many incinerators in public hospitals have passed their lifespan and are no longer suitable for use. Some

---

<sup>24</sup> Uplifting the lives of marginalized communities in Omaheke, 2023; <https://namibia.un.org/en/227293-uplifting-lives-marginalised-communities-omaheke#:~:text=To%20ensure%20that%20underprivileged%20households,No%20One%20Behind%20Project%2C%20funded>

<sup>25</sup> District Health Information Software 2, 2024

<sup>26</sup> Report on the Multi-Stakeholder Malnutrition Intervention Omaheke Region, 4 - 16 February 2024

<sup>27</sup> Ministry of Agriculture, Water and Land Reform (2024); National strategy, Sanitation and Hygiene.

<sup>28</sup> Namibia Revised Food and Nutrition Security Policy, 2021; <https://faolex.fao.org/docs/pdf/nam212041.pdf>

emit excessive smoke, which pollutes the environment and constitutes a health risk. For some hospitals, the capacity of the current Incinerators is insufficient to cater for the needs at the facilities. In some facilities, for example Rundu Intermediate Hospital, the incinerator is located close to the hospital kitchen<sup>29</sup>. These practices are not only costly but defy infection and prevention measures to mitigate disease spread.

**Limited evidence:** Health information and surveillance systems are weak, negatively impacting the capacity to identify and respond to health threats.<sup>30</sup> Early warning systems are still in infancy while event-based surveillance has not yet been established. In-country modelling capacity to predict climate and disease is non-existent and the processes for verifying, investigating, and assessing community-detected risks need strengthening. The capacity to analyze and interpret data at the regional level and national level is limited. High staff attrition rates among surveillance focal persons further exacerbate this problem, leading to gaps in knowledge and continuity in surveillance efforts. Additionally, many health facilities are in hard-to-reach areas, complicating data collection and timely reporting of disease outbreaks<sup>30</sup>.

Namibia's Climate Change Adaptation Communication (NCCAC) highlights the lack of in-depth vulnerability studies and access to information; and insufficient evidence base on the benefits of adaptation versus costs and reactive approach versus long-term and strategic planning. The health information system is still characterized by many standalone information systems managed by different divisions in different directorates and running on different software.

**Leadership and Governance:** The vision of the government to prepare and respond to public health hazards is detailed in several strategic documents. Environment impact assessments are a prerequisite to any project in the country that has potential impact on the environment. Structures to prepare and respond to public health threats are in place (at national and regional level), with roles and responsibilities well defined, albeit with varied functionality.

Among the challenges identified, is weak partner coordination and inadequate resources. Although climate change impacts several sectors, mainstreaming of mitigation measures in relevant sector strategies is suboptimal. The National Public Health Emergency Operation Center (NPHEOC), that is tasked with the responsibility of coordinating response to public health events, lacks a legal framework. The National Public Health Emergency Management Committee (NPHEMC) secretariat, whose role is to develop and oversee the implementation of emergency preparedness strategies, action plans, is resource constrained compromising its effectiveness.

Namibia's Climate Change Adaptation Communication (NCCAC)<sup>31</sup> highlights recurrent gaps the country faces in the implementation of climate change adaptation actions as:- inadequate human capacity; lack of in-depth vulnerability studies; limited access to the latest technologies; limited coverage of the country for systematic observation; relatively low awareness of a large segment of the population; and insufficient funds to correct the gaps and barriers while enabling the country to embark on adaptation in sectors that are already strained by climate change. The communication makes note of the lack of coordination and conflicting programme implementation; framing of climate change as a solely environmental issue; lack of effective decentralization and limited institutional capacity at the local level.

The National Disaster Risk Management Policy calls for improved institutional emergency preparedness and response capacity at local, regional and national levels. Further, the MoHSS policy framework and the National Action Plan on Health Security (NAPHS) seek to operationalize the early warning system, preparedness and response through a multi sectoral collaboration approach. The National Health Policy Framework (NHPF) 2023 – 2033<sup>32</sup> and the Universal Health Coverage (UHC) policy framework 2023<sup>33</sup> seek to establish formal platforms and mechanisms for collaboration across different sectors, enabling more cohesive and efficient efforts towards

---

<sup>29</sup> MoHSS, (2024); proposal for mobilisation of additional funding for critical activities and interventions for health system strengthening over the Period 2023/2024 to 2027/2028 financial years

<sup>30</sup> Strengthening Integrated Disease Surveillance and Response (IDSR) capacities in Namibia. | WHO | Regional Office for Africa

<sup>31</sup> Republic of Namibia; Ministry of Environment, Forestry and Tourism - First Adaptation Communication Namibia's Climate Change Adaptation Communication to the United Nations Framework Convention on Climate Change (UNFCCC) (2021)

<sup>32</sup> Ministry of Health and Social Services (2024); National Health Policy Framework (NHPF) 2024-2034

<sup>33</sup> Ministry of Health and Social Services (2024); Universal Health Coverage policy framework

However, several strategic documents acknowledge the weak institutional capacity and multi-sectoral collaboration - currently noted as weak at the national level and non-existent in some of the regions. The One Health (OH) concept which aims to engender a multi sectoral collaboration to tackle the impacts of climate change on health, remains fragmented.

The programme will focus on regions with significant indigenous populations, including the San, Ovatie, and Ovatjimba communities, predominantly residing in Omaheke, Kunene, Otjozondjupa, and the Kavango regions. These groups experience extreme poverty, limited access to education and healthcare, and widespread social marginalization. Women in these communities often face systemic inequalities and resource limitations due to traditional gender roles. Children endure high rates of malnutrition, inadequate access to education, and poor health outcomes. Men face challenges such as limited employment opportunities and insufficient support to transition to non-traditional livelihoods, hindering their ability to contribute fully to community development. Approximately 10–15% of the direct beneficiaries in these regions will be indigenous peoples. By targeting these regions, the programme aims to address the unique vulnerabilities of indigenous populations<sup>34</sup>.

Kavango West is situated in northeastern Namibia, bordering Angola to the north and Kavango East region to the east. The region is predominantly rural, with 123,266 inhabitants who mainly rely on subsistence farming. Despite its proximity to the Kavango River, the region faces significant challenges related to drought, impacting water availability and agricultural productivity.<sup>35</sup> The region experienced below-normal rainfall during the 2022/2023 season, with prolonged dry spells in December and February, that reduced agricultural productivity and pasture establishment. The region's limited rainfall, averaging only 40mm during the 2023/2024 season, has further worsened food insecurity. Despite the challenges, households in Kavango West region primarily cultivate maize and small grains and raise cattle, goats, and poultry. However, crop production has been significantly impacted by the erratic rainfall, and livestock body conditions remain poor across much of the region<sup>17</sup>. The region faces acute child food insecurity and limited access to essential services

Table 1: Characteristics of selected Regions

Region	Multidimensional Poverty Index (MPI)	Unemployment (%)	Rainfall Performance (mm) - 2023/2024	Population with high to very high drought vulnerability level	Severe Child Food Poverty (%)	Access to improved sanitation facilities (%)	Percentage of under 5s with Diarrhea	Access to Essential Health Services (%)	Women reproductive age 15 – 49 years	Children under 5 years
Kavango West	79.6	33.8	40	79,610	62.8	19	28.2	54	31,168	3,253

<sup>37</sup> Ministry of Health and Social Services: District Health Information Software 2. 2023

Kavango East	70	48.7	60	72,459	44.5	39	10.7	61	55,228	5,764
Zambezi	60.7	39.9	20	49,180	78.8	12	22.8	68	35,999	3,757
Ohangwena	56.6	33.1	100-120	211,978	37	29	9.1	57	85,396	8,912
Oshikoto	50	35.3	60	127,685	65.8	38	8.8	80	65,060	6,790
Otjozondjupa	40.5	41.5	100	25,335	52.9	55	18.9	52	55,833	5,827
Kunene	74.1	45	80 - 100	34,451	64.9	28	16.5	58	30,535	3,187
Omaheke	51.4	50.2	80	6,975	58.8	40	27.7	72	26,014	2,715

## 2. Kavango East region

Kavango East region is bordered by the Kavango River and Angola to the north. Kavango East region is predominantly rural with 218,421 inhabitants mainly relying on subsistence farming. The region faces significant climatic challenges, including erratic rainfall and recurring droughts, which severely affect agricultural productivity and exacerbate food insecurity.<sup>38</sup>

The region experiences inconsistent and unpredictable rainfall patterns, with an average of 60 mm recorded during the 2023/2024 rainy season. The erratic rainfall has significantly affected food production, leading to frequent food shortages and increased reliance on external food aid.

Kavango East region has one of the highest unemployment rates in Namibia, which further limits the region's economic stability. Severe child food poverty is also prevalent indicative of the ongoing household challenges with securing adequate nutrition. The District Health Information System platform (DHIS) 2 data indicates that cases of malnutrition in under five children increased from 884 in 2022 to 978 in 2023. Maternal health services are in high demand, as evidenced by 8,054 deliveries recorded in 2023 and neonatal mortality rate of 10.1% recorded in 2023, equating to 81 neonatal deaths. Malaria remains a persistent health threat, with 882 cases reported in 2023<sup>39</sup>. There is limited access to WASH services in the region, while 10.7% of under five children suffer from diarrhea due to poor hygiene and sanitation conditions<sup>17</sup>. The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 682 cases and two deaths.

## 3. Zambezi region

The Zambezi Region lies in the far northeastern corner of Namibia, bordered by Angola and Zambia to the north, Botswana to the south, and Zimbabwe to the east and has 142,373 inhabitants. The Zambezi and Kwando rivers, which flow through the region, provide essential water resources but also contribute to seasonal flooding. As Namibia's most fertile region, Zambezi region supports agricultural livelihoods; however, its geographic location and environmental conditions leave it highly susceptible to climate variability impacting agriculture and the predominantly rural population.<sup>40</sup> Additionally, flooding, coupled with poor land management, has led to land degradation, further diminishing agricultural potential<sup>41</sup>.

Socio-economic factors further impact the health outcomes in the region. Zambezi region has a high Multidimensional Poverty Index (MPI) of 60.7% and an unemployment rate of 39.9%, indicative of widespread economic hardship. Despite having a relatively higher rate of access to essential health services than some regions, gaps in healthcare access remain, especially during climate-related disruptions. In 2023, malaria remained a significant public health issue, with Zambezi reporting the highest malaria cases in the country at 6,608 cases in 2023. Only 12% of the population have access to improved sanitation facilities. The poor WASH infrastructure contributes to high rates of diarrheal diseases, affecting 22.8% of under-five children<sup>17</sup>. The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 558 cases and one death.

## 4. Ohangwena Region

Ohangwena Region is located in northern Namibia, bordering with Angola in the north. Ohangwena region is predominantly rural and has a high population density, making it the second most populated region in Namibia,

<sup>38</sup> Kavango East Regional Council, 2023

<sup>39</sup> Ministry of Health and Social Services; District Health Information Software 2, 2023

<sup>40</sup> Legal Assistance Centre and Desert Research Foundation of Namibia, 2014 Scraping the Pot" San in Namibia Two Decades After Independence

<sup>41</sup> Zambezi Regional Council, 2024

with 337,729 inhabitants, or 11.2% of the national population, and the highest population density at 26.7 people per km<sup>21</sup>. The region faces significant socio-economic challenges<sup>17</sup> and is highly vulnerable to the effects of climate change, particularly droughts and erratic rainfall. Additionally, the region is prone to flooding, especially in low-lying areas, disrupting livelihoods and infrastructure. The climate challenges have worsened food insecurity, with 37% of under five children experiencing severe food poverty.<sup>17</sup>

Flooding in Ohangwena region presents severe challenges to the healthcare system, particularly in low-lying areas where infrastructure, including roads and healthcare facilities, is frequently submerged or damaged. The January 2023 floods affected 2,190 individuals including 582 people (111 households) whose homes were entirely submerged and 1,608 individuals (327 households) whose homes were partially flooded. Displacement affected families, disrupted schools, and damaged critical infrastructure, heightening vulnerability to climate-related health risks like waterborne diseases<sup>13</sup>.

Health service demands in Ohangwena region are further intensified by cross-border migration from Angola, which strains existing resources and contributes to an already burdened healthcare system. In 2023, OPD cases of malnutrition in under five children increased from 997 in 2022 to 1,038. The region also recorded 8,889 deliveries in 2023, with a significant portion attributed to patients from Angola, highlighting the impact of migration on health services. Malaria is a major concern, with 1,464 cases reported in 2023, the second-highest incidence in Namibia<sup>39</sup>. Ohangwena region is one of the regions with the highest proportion of women reporting geographical barriers to accessing health services at 51.5%<sup>33</sup>. The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 3454 cases and six deaths.

## **5. Oshikoto region**

Oshikoto Region is located in the northern part of Namibia and has 257,302 inhabitants. It is bordered by Angola to the north and the regions of Ohangwena, Oshana, and Otjozondjupa. Oshikoto is predominantly rural, with its economy relying on agriculture and livestock farming<sup>35</sup>. Despite its central location and relatively better infrastructure compared to neighboring regions, Oshikoto faces significant socio-economic challenges, particularly related to food insecurity, malnutrition, and climate variability.

Women, particularly pregnant and lactating mothers, face considerable nutritional deficits affecting both their health and that of their children. Under five children are especially vulnerable, with high rates of diarrhea due to inadequate WASH conditions, further compromising their health. These vulnerabilities are intensified during extreme weather events, as droughts and floods place additional strain on already limited resources<sup>17</sup>. DHIS2 data indicated that malnutrition in under five children increased from 452 cases in 2022 to 470 in 2023. Oshikoto also reported the highest neonatal mortality rate in the country, with 106 neonatal deaths, accounting for 12.1% of births in 2023. The region recorded a total of 8,310 deliveries in 2023, with a significant proportion involving teenage pregnancies, further stressing maternal and child health services. Immunization coverage stands at 71.5% in Onandjokwe district within Oshikoto, indicating room for improvement in preventive health measures<sup>37</sup>. The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 446 cases and five deaths.

## **6. Otjozondjupa Region**

Otjozondjupa region is located in central Namibia, neighboring Botswana to the east and has with 220,811 inhabitants. The region is particularly vulnerable to the effects of climate change, including erratic rainfall, increasing temperatures, and prolonged droughts. Otjozondjupa region is one of the key agricultural regions in the country, with commercial farms producing livestock, maize, and other crops. However, the region's agricultural productivity is threatened by climate variability, particularly droughts that have become more frequent in recent years.<sup>42</sup>

Across the region, only 27% of the population has access to improved sanitation facilities, contributing to widespread issues with waterborne diseases, particularly among vulnerable populations such as under five children, who are at high risk of diarrhea and malnutrition<sup>17</sup>. In rural areas, healthcare access is limited, with many communities having to travel long distances to reach health facilities. Outpatient department records indicate a significant increase in malnutrition cases for under five children, rising from 462 in 2022 to 681 in

---

<sup>42</sup> Otjozondjupa Regional Council, 2024

2023, underscoring the urgent need for strengthened healthcare and nutritional support within the region and the refugee camp<sup>37</sup>.

Osire Refugee Camp, located in Otjozondjupa region, is accommodating nearly 7,000 refugees and asylum seekers, primarily from Angola and other neighboring countries. The camp's healthcare facilities are limited, and during periods of drought or heavy rains, access to these services becomes even more restricted. Refugees, especially women and children, are particularly vulnerable to malnutrition, poor health outcomes, and waterborne diseases due to inadequate WASH infrastructure. The healthcare system in the camp is further strained by the growing refugee population and the increasing frequency of extreme weather events.<sup>43</sup> The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 71 cases.

## **7. Kunene region**

Kunene region, located in northwestern Namibia, spans an area of approximately 115,293 km<sup>2</sup>, making it one of the largest and most rugged regions in the country. The region is home to with 120,762 inhabitants. The landscape is characterized by mountainous terrain, arid deserts, and remote communities. Kunene is highly vulnerable to the impacts of climate change, particularly due to prolonged droughts and rising temperatures, which have increased over the past few decades. These conditions have resulted in reduced water sources, loss of grazing land, and severe impacts on agricultural productivity, particularly livestock farming, which is a mainstay of the region's economy.<sup>44</sup>

Kunene region is home to vulnerable populations, including marginalized indigenous groups such as the Ovahimba. They face unique challenges due to the region's harsh climatic conditions, isolation and limited access to resources and essential services. The frequent and severe droughts have not only led to economic losses but have also escalated food insecurity, disproportionately affecting vulnerable groups like women, children, and the elderly.<sup>45</sup>

Kunene Region faces significant challenges in healthcare access and WASH infrastructure, particularly in remote, drought-affected areas. Despite these obstacles, Kunene has the highest ratio of health facilities to population in Namibia, with 3.22 facilities per 10,000 residents. While this infrastructure density supports the population, it remains insufficient given the vast distances and environmental challenges across the region. Only 58% of the population has regular access to essential health services, with accessibility further restricted during extreme weather events<sup>17</sup>. DHIS2 Data from OPD records indicate a rise in malnutrition cases for under five children, from 770 cases in 2022 to 861 in 2023<sup>39</sup>. Immunization coverage stands at 72.9% in the Khorixas district, reflecting room for improvement in preventive health measures. Sanitation coverage is notably low in Kunene, with just 28% of households having access to improved sanitation facilities, contributing to high rates of waterborne diseases. Diarrhea remains prevalent, disproportionately affecting children and worsening malnutrition risks. The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 78 cases.

## **8. Omaheke Region**

Omaheke region, located in eastern Namibia, spans an area of approximately 84,981 km<sup>2</sup> with 102,881 inhabitants. It borders Botswana to the east and is adjacent to the regions of Otjozondjupa, Khomas, and Hardap. Known as Namibia's "Cattle Country," Omaheke is predominantly a livestock-farming area with expansive grazing lands. The semi-arid climate in Omaheke makes the region highly susceptible to drought, which has increased in frequency and severity due to climate change. These harsh conditions place further strain on pastoral livelihoods, as water sources and grazing lands become increasingly scarce.<sup>46</sup> The region is home to a mix of communities, including the San, one of Namibia's most marginalized indigenous groups, who face significant challenges in accessing resources, services, and economic opportunities. The San communities, traditionally rely on small-scale agriculture and foraging, are especially vulnerable to the impacts of these

---

<sup>43</sup> Healthcare needs of displaced women: Osire refugee camp, Namibia, 2016

<sup>44</sup> Kunene Regional Council, 2024

<sup>45</sup> Climate Adaptation in Namibia's Drought-Stricken Kunene Region, 2023

<sup>46</sup> Omaheke Regional Council, 2023

environmental changes, with limited options to adapt or find alternative income sources.<sup>47</sup>

Omaheke has a MPI of 51.4%, indicating widespread poverty and limited access to basic services. Severe child food poverty affects 58.8% of under five children, highlighting the region's critical levels of food insecurity. Healthcare facilities are sparsely distributed, requiring many residents, to travel long distances for medical care, which becomes even more challenging during periods of drought and other extreme weather events. These vulnerabilities disproportionately impact the San communities, who often lack stable income sources and face difficulties in maintaining food security and access to health services.<sup>48</sup> Access to healthcare and WASH services is restricted across Omaheke region, particularly in rural and isolated areas. Only 30% of households have access to improved sanitation facilities, contributing to high rates of waterborne diseases such as diarrhea, which predominantly affect children.<sup>17</sup> The region is currently responding to a malaria outbreak that started 4<sup>th</sup> November 2024 and has so far reported 15 cases.

#### Programme Objectives:

**Objective 1:** Strengthen the evidence base to anticipate and mitigate health impacts of climate change

**Objective 2:** Stimulate sustainable local sanitation and hygiene management

**Objective 3:** Strengthen the resilience of health facilities to ensure continuity of quality health services

**Objective 4:** Strengthen governance to mitigate the impacts of climate change on health

#### Project/Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected concrete outputs	Amount (US\$)
1. Strengthen the evidence base to anticipate and mitigate health impacts of climate change	1.1 Evidence based approaches in mitigating the health impacts of climate change institutionalized.	<p><b>1.1.1 Evidence generated to inform decision making, planning, implementation, and monitoring of relevant plans (including Contingency plans).</b></p> <p>1.1.1.1: Assessments: Baseline assessments; Vulnerability and risk assessment; multi-hazard risk assessments; Regular stress testing to identify vulnerabilities and develop mitigation strategies proactively; Climate change health infrastructure risk assessment to define the risk of health infrastructure.</p> <p>1.1.1.2: Support relevant research to address evidence gaps.</p> <p>1.1.1.3: Document and disseminate lessons learnt</p> <p><b>1.1.2 Strengthened Surveillance Systems that enable early detection and response to emerging and re-emerging health threats including climate change.</b></p> <p>1.1.2.1: Establish interoperable, interconnected electronic surveillance systems for both human and animal health, capable of sharing real time data with different stakeholders.</p> <p><b>1.1.3 Strengthen the climate monitoring center.</b></p> <p>1.1.3.1: Build capacity for climate (rainfall patterns, floods, drought) monitoring; improve accuracy of climate change projection and understanding</p> <p><b>1.1.4 Enhanced Modelling Capacity</b></p> <p>1.1.4.1: Conduct short training courses on modelling</p> <p>1.1.4.2: Develop, pilot and implement a training modelling module as part of pre-service training of public health training</p>	2,580,000
2. Sustainable local sanitation and hygiene management	2.1 Sustained community engagement and ownership in sanitation and hygiene practices	<p><b>2.1.1. Strengthened capacity of local communities and schools to participate in improving sanitation and hygiene management.</b></p> <p>2.1.1.1: Set up/strengthen community structures (involving, women, youth and other vulnerable groups) to champion Water, sanitation and hygiene activities in their communities.</p> <p>2.1.1.2: Through strong partnerships, identify and support civil society organizations at the grass root to mobilize communities to improve WASH</p> <p><b>2.1.2: To ignite locally built and sustainable markets for sanitation solutions/technologies.</b></p>	2,143,832

<sup>47</sup> "Scraping the Pot" San in Namibia Two Decades After Independence, 2014

<sup>48</sup> Uplifting the lives of marginalised communities in Omaheke, 2023

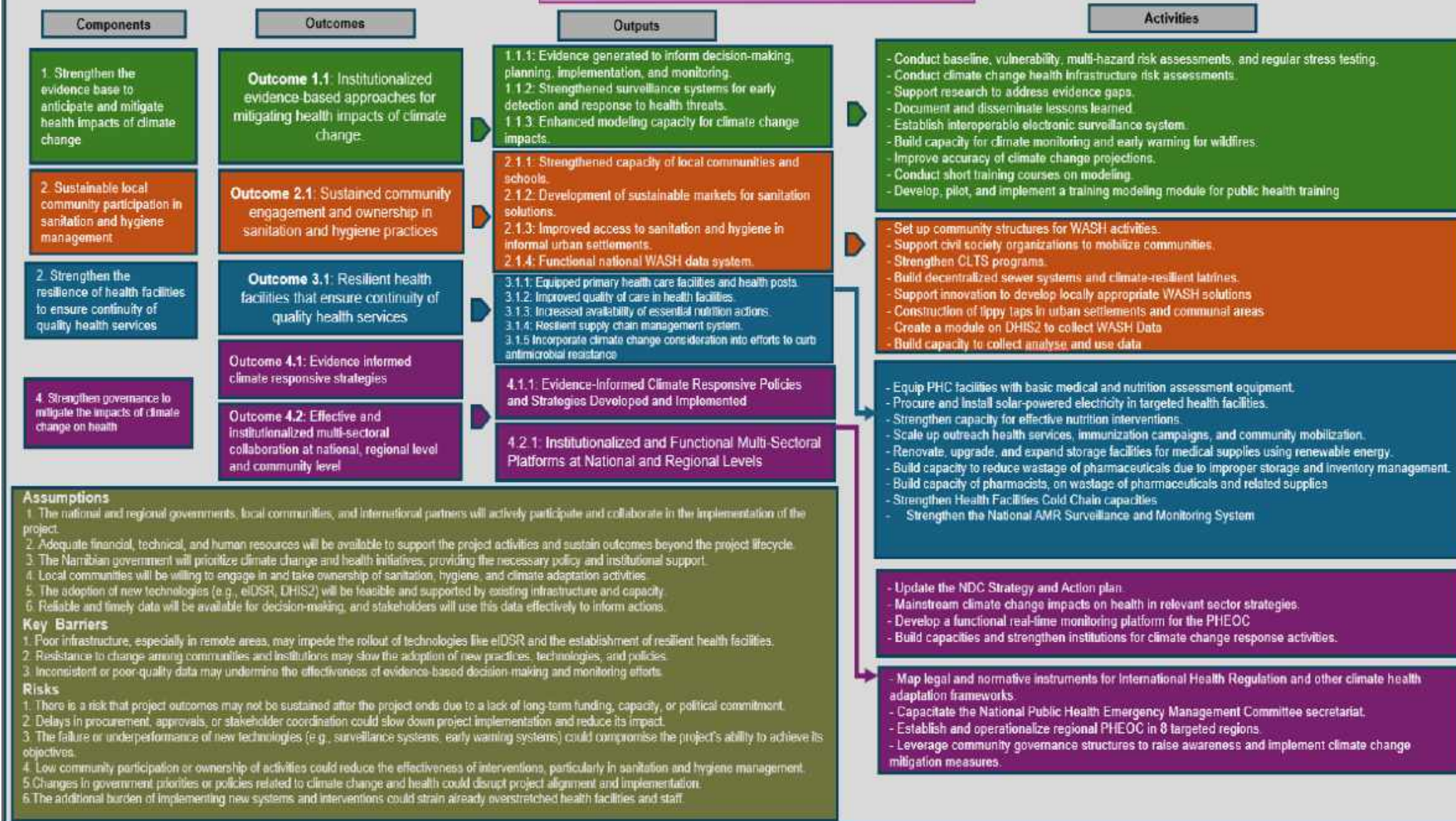
		<p>2.1.2.1 Assessment of existing sludge treatment methods</p> <p>2.1.2.2 Development of innovative sludge management solutions</p> <p><b>2.1.3. Improved access to sanitation and hygiene in informal urban settlements</b></p> <p>2.1.3.1: Construction of tippy taps in urban settlements and communal areas.</p> <p>2.1.3.2: Development of media content on the importance of hand wash/ hygiene.</p> <p><b>2.1.4. Functional national WASH data system</b></p> <p>2.1.4.1 Define indicators and draft data collection tools.</p> <p>2.1.4.2 Create a module on DHIS2 to collect WASH related data.</p> <p>2.1.4.3 Build capacity to collect analyse and use data.</p>	
	2.2 Improved sanitation in health facilities	<p>2.2.1. Strengthen WASH in health facility</p> <p>2.2.1.1. Upgraded climate-resilient WASH facilities in health care facilities</p> <p>2.2.1.2. Upgrade climate-resilient WASH and energy facilities in hospital pharmacies</p>	
3. Strengthen the resilience of health facilities to ensure continuity of quality health services	3.1 Resilient health facilities that ensure continuity of quality health services	<p><b>3.1.1 Equipped primary health care facilities and health posts in underserved areas</b></p> <p>3.1.1.1: Equip PHC facilities and Health posts with basic medical and nutrition assessment equipment</p> <p>3.1.1.2 Support implementation of the digital community system (DCS)</p> <p>3.1.1.3 Procure and install solar-powered electricity in health facilities in targeted regions</p> <p><b>3.1.2 Improved Quality of care in health facilities</b></p> <p>3.1.2.1: Develop of the IPC legal framework</p> <p>3.1.2.2 Support implementation of National health facility Quality standards</p> <p>3.1.2.3: Enhance capacity for implementing the community-based health strategy</p> <p>3.1.2.4: Strengthen health facility waste management systems</p> <p>3.1.2.5: Improve decontamination and reprocessing processes for health facilities</p> <p><b>3.1.3. Increased availability of Essential Nutrition Actions for effective prevention, detection and treatment of malnutrition.</b></p> <p>3.1.3.1 Strengthen the capacity of health facilities to deliver effective nutrition interventions</p> <p>3.1.3.2 Establish community-based women gardens for enhanced nutrition and food Security</p> <p>3.1.3.3 Scaled-up capacity of health service provision including outreach health services, immunization campaigns and community mobilization interventions</p> <p><b>3.1.4 Enhance Resilient Vaccine Distribution to Ensure Uninterrupted Access to Essential Vaccines, Even During Emergencies</b></p> <p>3.1.4.1 Strengthen Health Facilities Cold Chain capacity</p> <p>3.1.4.2 Develop the National Pharmaceutical Waste Management Guidelines</p> <p><b>3.1.5 Incorporate climate change consideration into efforts to curb antimicrobial resistance</b></p> <p>3.1.5.1 Strengthen the National AMR Surveillance and Monitoring System</p> <p>3.1.5.2 Development of the second edition of the National AMR Action Plan</p> <p>3.1.5.3 Increase Public awareness on the impact of AMR</p>	3,250,000
4. Strengthen governance to mitigate the impacts of climate change on health	4.1 Evidence informed climate responsive strategies	<p><b>4.1.1. Evidence informed climate responsive policies and strategies developed and implemented</b></p> <p>4.1.1.1 Update the National Climate change strategy and action plan and mainstream climate change and its impact on health in strategies of relevant sectors.</p> <p>4.1.1.2 A functional real time monitoring platform for the public health emergency operation center.</p> <p>4.1.1.3 Building relevant capacities at all levels and strengthening institutions to ensure successful implementation of climate change response activities.</p> <p><b>4.2.1 Strengthen multi sectoral collaboration at the national and regional levels.</b></p> <p>4.2.1.1 Conduct a mapping of relevant legal and normative instruments and policies for International Health Regulation (2005) implementation and other legal frameworks related to climate health adaption to inform the development of a legal framework for the National institute of public health and the National public</p>	915,000

	4.2 Effective and institutionalized multi-sectoral collaboration at national, regional level and community level	health emergency operation center 4.2.1.2 Capacitate the National public health emergency management committee secretariat. 4.2.1.3 Establish and operationalize regional public health emergency operational centers in the 8 targeted regions 4.2.1.4 Leverage governance structures at the community level to raise awareness on the impacts of climate change and implement mitigation measures.	
5. Programme Execution cost (9.5%)			327,758
6. Total Programme Cost			9,216,590
7. Programme Cycle Management Fee charged by the Implementing Entity (8.5%)			783,410
<b>Amount of Financing Requested</b>			<b>10,000,000</b>

**Projected Calendar:**

<b>Milestones</b>	<b>Expected Dates</b>
Start of Programme Implementation	November 2025
Mid-term Review	January 2028
Programme Closing	April 2029
Terminal Evaluation	July 2030

**Impact Statement: Mitigate the health impacts of climate change through evidence-based approaches, community participation, resilient health facilities, and effective governance**



**Figure 1 Theory Of Change (ToC) - Climate Resilient Health Systems**

## PART II: PROGRAMME JUSTIFICATION

### **A. Describe the programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience**

Climate changes cause devastating public health consequence resulting in severe morbidity and mortality if the health system is not resilient to prepare, respond and recover from them. The World Health Organization (WHO) emphasizes the importance of strengthening health systems to cope with the impacts of climate change. This programme will enable the health system to recognize its risks and capacities and make evidence informed decisions to anticipate, mitigate and respond to climate change risks and threats, thereby limiting their negative impacts on the economy and health of the Namibian people.

#### **Component 1: Strengthen the evidence base to anticipate and mitigate health impacts of climate change**

##### **Outcome 1.1: Evidence based approaches in mitigating the health impacts of climate change institutionalized.**

##### **Output 1.1.1: Evidence Generation for Decision Making, Planning, Implementation, and Monitoring**

Evidence unearths vulnerabilities, risks and health system weaknesses that need to be addressed to build resilience. Evidence allows for informed policy decisions, public awareness campaigns, and targeted interventions to protect human health from the impacts of a changing climate, including curbing the spread of infectious diseases, and disruptions to food security. Evidence can also elucidate our understanding of the linkages between climate and health and various health risks, can serve as a baseline analysis against which changes in disease risk and protective measures can be monitored and strengthen the case for investment in mitigating the impacts of climate change on health. Evidence also facilitate coalition building among key stakeholders to advance sustainability and climate resilience building.

This output will generate evidence on climate-related vulnerabilities and risks to the health system and the population. Evidence generated will inform policy and programmatic decisions (including the development of policies and strategies) and support the sustainability and scalability of climate adaptation efforts within the relevant sectors.

##### **Activity 1.1.1.1: Assessments**

Three nationwide Vulnerability and Risk Assessments (VAA) (over a five-year period of this programme) will be conducted to identify at-risk areas and populations and inform targeted adaptation strategies to enhance preparedness and response efforts. These assessments will also inform policy decisions regarding livelihood resilience and food insecurity and provide primary data for the Integrated Food Security Phase Classification (IPC). Public health risk assessments using the Strategic Tool for Assessing Risks will evaluate combined risks of natural and human-induced hazards (including climate change), providing a comprehensive risk profile to guide development of contingency plans for prioritized hazards. Regular stress testing will be performed at facility level to identify vulnerabilities and proactively develop mitigation strategies. Climate change health infrastructure risk assessments will define risks to health infrastructure. Standardised Monitoring and Assessment of Relief and Transitions (SMART) survey to assess the prevalence of malnutrition in high-risk areas will be conducted. Two assessments will be conducted over the life span of this programme.

##### **Activity 1.1.1.2: Support relevant research to address evidence gaps.**

Knowledge, attitude and behavioural studies will be conducted to inform designing of information, education and communication (IEC) materials. Studies on the economics of climate change and health will be undertaken to support advocacy efforts to ensure sustainability of adaptation fund achievements.

##### **Activity 1.1.1.3: Document and disseminate lessons learnt**

The documentation and dissemination of lessons learned from the 8 target regions will provide valuable insights into the effectiveness, challenges, and best practices of implementing climate-resilient health system interventions. Key lessons will focus on the role of data-driven decision-making in improving early warning systems, the integration of digital health solutions for enhanced surveillance, and the importance of stakeholder engagement in strengthening health monitoring. Insights will also be drawn from community-led initiatives in sanitation and hygiene management, including behavioral change strategies and public-private partnerships that support the adoption of

sustainable WASH solutions. Lessons will also capture the impact of resilient health facilities, implementation of innovative service delivery models and workforce capacity-building on mitigation and adaptation to impacts of climate changes.

Best practices on establishing and operationalizing public health emergency operations centers (PHEOCs) at a subnational level (regional) will be documented and shared. Lessons in operationalizing multisectoral collaboration will also be documented. By consolidating these findings into several knowledge translation products, the program will facilitate knowledge sharing among national and international stakeholders.

**Output 1.1.2: Strengthened Surveillance Systems that enable early detection and response to emerging and re-emerging health threats including climate change.**

Strong surveillance systems will enable effective surveillance of climate sensitive diseases and conditions, and enhance the capacity to monitor, anticipate, manage and adapt to the health risks associated with climate change. The interoperable eIDSR system facilitates multi-sectoral collaboration and data sharing, enabling a comprehensive understanding of climate-related health risks and informing adaptive measures to build resilience.

**Activity: 1.1.2.1: Establish interoperable, interconnected electronic surveillance systems for both human and animal health, capable of sharing real time data with different stakeholders.**

An Electronic Integrated Disease Surveillance and Response (eIDSR) system will be developed as an integral component of District Health Information System 2 (DHIS2). This system will transition from paper-based to electronic reporting for timely detection, reporting, and response to health events, including climate-sensitive conditions. Three programmers will be recruited at the national level and data servers will be purchased to complement the existing server for DHIS2 at the MoHSS based on the feasibility assessment that will be conducted. The system will be rolled out in eight targeted regions, with plans for government expansion to other regions. The system will be interoperable, allowing real-time data sharing across human and animal health sectors, facilitating multi-sectoral detection of climate-related events and informing climate adaptation measures. Gender disaggregation will be ensured in the data collection tools and data analysis dash boards developed to routinely track the impact of the program on women, children, boys and girls and vulnerable populations.

**Output 1.1.3: Strengthening the Climate Monitoring Centre**

Through the strengthening of early warning systems and fostering global partnerships this output ensures that climate-related hazards are identified and communicated in a timely manner, supporting strategies to reduce vulnerabilities and build resilience to climate change in the target regions.

**1.1.3.1: Build capacity for climate monitoring; improve accuracy of climate change projection and understanding**

Monitoring equipment will be upgraded and maintained to strengthen data storage and sharing. A training program will be established to build the capacity of all staff at national level on data analysis, visualization and use. Interoperable data management systems will be implemented, and data quality control measures will be enhanced. Early warning systems for climate-related hazards will be strengthened, and protocols for timely dissemination will be developed. Partnerships with international organizations and participation in global climate monitoring networks will be fostered to share knowledge and experiences.

**Output 1.1.4: Enhanced Modelling Capacity**

Climate change modelling will enable the country to predict impacts of climate change, guide adaptation decisions and set mitigation targets. The ability to model and predict health risks associated with climate change will enable policymakers and health practitioners to design and implement proactive, data-driven interventions for the target region.

**Activity 1.1.4.1: Conduct short training courses on modelling**

The University of Namibia's (UNAM's) capacity in modelling will be strengthened through a short course for faculty and researchers. Training will focus on predictive and analytical modelling, focusing on techniques like epidemiological modelling, climate-health risk assessment, and scenario-based forecasting.

**Activity 1.1.4.2: Develop and implement a training modelling module as part of pre-service training of public health training.**

Through a partnership with the University of Namibia (UNAM), a training module on climate change and health and epidemiological modelling will be developed. The module will be integrated into relevant academic programs, to

ensure that future graduates are equipped to address climate-related health challenges.

## **Component 2: Sustainable local community participation in sanitation and hygiene management**

### **Outcome: 2.1: Sustained community engagement and ownership in sanitation and hygiene practices**

#### **Output 2.1.1: Strengthened capacity of local communities and schools to participate in improving sanitation and hygiene management.**

This output strengthens community and school capacity for sustainable sanitation and hygiene, enhancing resilience to climate-related health risks. It responds to earlier identified pitfalls of improving sanitation in communities where freely provided toilets were not used due poor community education. The government emphasizes the need to ensure training of communities on the use and maintenance of WASH facilities<sup>49</sup>. Learning from previous experiences in Namibia, communities are key in sustaining sanitation infrastructure and hygiene practices. By fostering local ownership through training and participatory planning, communities are better equipped to maintain their own sanitation systems and respond effectively to climate-induced challenges.

##### **Activity 2.1.1.1: Set up/strengthen community structures (involving, women, youth, and other vulnerable groups) to champion Water, sanitation and hygiene activities in their communities.**

The programme will implement interventions that foster behavioral change at household and community level to ensure sustainability of the gains. Local governance structures at community level will be funded and supported to mobilize communities in planning interventions, lead implementation of intervention, organize and conduct awareness campaigns and monitor behavioral change at household level. Engagements with diverse members of the community, including households, schools, churches and traditional leadership structures, will guide the selection of type latrines design and materials that work best for sanitation infrastructure in the different contexts. Households that can afford the costs of local technologies or to construct their own sanitation facilities will be encouraged to do so. A total of 17129 households will be mobilized to participate in improving sanitation and hygiene practices.

To strengthen community structures and promote active participation in WASH activities, the program will conduct community mapping exercises to identify potential women groups and youth leaders for inclusion in WASH committees in the eight targeted regions. Committee members will be equipped with essential skills in basic sanitation management and hygiene promotion, ensuring they can effectively champion WASH initiatives in their communities. Culturally appropriate IEC materials will be developed and disseminated to support educational and mobilization efforts within communities by the community WASH champions. Regular community meetings will be conducted to plan, monitor, and evaluate ongoing WASH activities.

In partnership between the United Nations in Namibia and Mobile Telecommunications Limited (MTC), mobile applications or Short Message Service (SMS-)based platforms will be introduced, enabling community members, including women and youth to report WASH-related challenges, exchange solutions, and receive real-time hygiene guidance.

##### **Activity 2.1.1.2: Through strong partnerships, identify and support civil society organizations at the grass root to mobilize communities to improve WASH**

The program will train 20 WASH champions per region, including Women and youth groups, to apply Community-Led Total Sanitation (CLTS) methods based on their unique challenges. In total, 180 champions will be trained by the end of the programme, of which 90 will be females, and 90 will be from rural areas.

The program will collaborate with grassroots civil society organizations (CSOs) to construct 10 prototype Ventilated Improved Pit (VIP) latrines in each region. These prototypes will be strategically located at sites such as pre-primary schools, churches, and informal open markets, selected in consultation with local authorities and community leaders. Boards will display the construction details and costs for each type of VIP latrine. While the underground design for all VIP latrines will remain uniform, the above-ground structures will utilize various materials such as bricks, corrugated iron sheets, and locally sourced wood to provide cost-effective options for communities. By showcasing affordable and sustainable sanitation solutions, the initiative encourages improving sanitation practices within communities. Ten local artisans and small enterprises per region will be enlisted to build low-cost, climate-resilient VIP latrines, ensuring affordability and durability. The program will subsidize severely poor households, ensuring

---

<sup>49</sup> Namibia Water Sector Support Program (NWSSP) 2020 - 2026

equitable access to sanitation facilities. The criteria for implementing these subsidies will align with government guidelines, promoting fairness and transparency in their distribution.

The prototype latrines built by the programme will be handed over to the institutions where they are built for ownership and management. The latrines built by the community will be built and owned by the community members. Public VIP latrine sites will be equipped with tippy taps to promote hand washing after toilet use.

**Output 2.1.2: To ignite locally built and sustainable markets for sanitation solutions/technologies.**

The private sector plays a crucial role in developing climate-friendly technologies. This output seeks to leverage the private sector to develop innovative and contextually relevant waste management and sanitation solution. Women and youth groups will be skilled and availed employment opportunities to produce and market WASH solutions. This will contribute to diversifying sources of income for women who predominantly rely of climate sensitive subsistence farming.

**Activity 2.1.2.1: Activity Assessment of existing sludge treatment methods**

This programme will build a vibrant local industry producing contextually suitable low-cost innovative sanitation solutions/technologies, including fecal sludge processing markets. An assessment of the existing methods of sludge treatment–will be conducted to inform the development of environmentally acceptable innovative solutions for sludge treatment, management and disposal. These solutions for sludge management will ensure sustained functionality during floods and in arid areas with limited water availability.

**Activity 2.1.2.2 Development of innovative sludge management solutions**

Organized youth and women groups, along with local artisans, will be identified and supported through skills training and startup grants to develop innovative environmentally friendly sludge treatment methods and sludge WASH innovations. Trained people are capacitated with skills that will allow them to earn an income. This will be implemented through a comprehensive Regional Sanitation and Hygiene Development Plan (RSHDP) for both urban and rural areas, and the Community Youth Employment Model (CYEM) approach approved by the Cabinet as per the National Youth Policy.<sup>59</sup> The programme will train 500 entrepreneurs and young people in WASH markets and the design and construction of WASH innovations.

Through Memoranda of Understanding (MoUs) with Vocational Training Centers (VTCs) and other relevant partners, these young people will gain practical skills and form small enterprises or cooperatives to build and maintain WASH infrastructure independently. This approach strengthens community-level capacities and creates sustainable employment opportunities, ensuring the long-term viability of sanitation improvements.

**Output 2.1.3: Improved access to sanitation and hygiene in informal urban settlements**

Climate change significantly impacts the urban informal sector, primarily through recurring droughts and increased flooding events, which exacerbate existing challenges like lack of access to basic infrastructure, water insecurity, and poor housing conditions in informal settlements, making residents particularly vulnerable to the effects of climate change. This vulnerability is further compounded by limited income sources and lack of resilience within the informal economy. This output promotes locally driven, climate-adaptive solutions to improve hygiene access in urban settlements, ensuring effective responses to climate impacts.

**Activity 2.1.3.1 Construction of tippy taps in urban settlements and communal areas.**

The programme will partner with local small and medium-sized enterprises (SMEs) to design and construct tippy taps. The constructed tippy tap structures will be distributed to selected household in urban informal areas in the targeted regions. The beneficiary households will be identified with the local authority and regional councils. It is expected that 10,000 households will benefit from the distribution of tippy taps. Selecting individuals and entrepreneurs to fabricate the tippy taps will target women-owned SMEs, women-organized groups, unemployed youths, and entrepreneurs with disabilities. These will be selected in collaboration with government departments.

**Activity 2.1.3.2 Development of media content on the importance of hand wash/ hygiene.**

The Information, Education, and Communication (IEC) materials will be developed to promote hand hygiene practices and behavioral change. These IECs will especially be developed for distribution on social media platforms such as TikTok, X, Facebook, Instagram, WhatsApp and Snapchat because the majority of youth utilize social media daily as a means of communication. The materials will also include educational television (TV) videos/jingles, newspaper adverts, and radio audio to reach those not utilizing social media platforms. These communication materials will be

developed in English and translated into local languages. These will be developed in collaboration with the MoHSS and wash hygiene stakeholders. IEC materials will reach and benefit 1,218,836 individuals in the target regions.

#### **Output 2.1.4 Functional national WASH data system**

This output establishes a national WASH data system for evidence-based decision-making, ensuring effective responses to climate impacts. Availability of timely relevant data on climate change, coupled with building analytical capacity, will provide information for early health interventions, monitoring implementation and impact of intervention as well as achievements of this programme.

##### **Activity 2.1.4.1: Defining indicators and draft data collection tools**

A stakeholder consultative workshop will be organized with the MoHSS, Ministry of Agriculture, Water, and Land Reform (MAWLR), Ministry of Urban and Rural Development (MURD), Ministry of Education, Arts and Culture (MEAE), Regions, United Nation (UN) agencies, other health partners, and relevant CSOs to identify essential WASH data elements for monitoring and reporting. The workshop will develop indicators reflecting national priorities, international standards, local context, and gender considerations. A follow-up validation workshop will be scheduled, attended by the same stakeholders to gather critical feedback, achieve consensus, and finalize the indicators with clear definitions, data sources, reporting mechanisms, and designated data-collection entities.

##### **Activity 2.1.4.2: Create a module on DHIS2 to collect WASH related data.**

Following the finalization of the WASH indicators, the programme will support the programming and integration of the indicators into a dedicated WASH module within DHIS2. Technical specialists will be engaged to configure the new WASH module, including data elements, indicators, dashboards, and user roles. Forms and workflows will be developed to support offline data entry, which is particularly important in rural areas with limited internet connectivity. Using DHIS2 platform is optimal for developing the WASH tracker because there is existing local technical expertise on the system programming and maintenance that will be leveraged.

A phased approach will be employed to roll out implementation of the WASH module in the targeted region. Four regions will be onboarded first and lessons learned during the first phase will be documented to support a more effective national rollout. Digital dashboards will be developed to help decision-makers monitor WASH trends at the national, regional, and facility levels. In addition, regular software upgrades and maintenance schedules will be planned to ensure the long-term sustainability of this new module, thereby strengthening Namibia's overall health information system.

##### **Activity 2.1.4.3 Build Capacity to Collect, Analyze, and Use Data**

Training will be conducted for sanitation officers, environmental health practitioners, and data managers in the targeted eight regions on WASH data collection, analysis and use. The training sessions will include practical exercises on data entry and using mobile devices for real-time data submission. Partnerships with Vocational Training Centres and youth cooperatives will be encouraged, equipping them with data literacy skills to track and support community-level WASH improvements. A total of 300 personnel will be trained in the collection and analysis of data for the WASH indicators.

Table 2: Beneficiaries for the WASH interventions

Output	Intervention	Beneficiaries
2.1.1. Strengthened capacity of local communities and schools to participate in improving sanitation and hygiene management.	Households mobilized to participate in improving sanitation and hygiene management.	17129 (households)
	Expansion of the CLTS program to households	17129 (households)
	Training of CLTS wash champions	160
2.1.2. To ignite locally built and sustainable markets for sanitation solutions/technologies.	Entrepreneurs and young people are trained in WASH markets and the design and construction of WASH innovations.	- 4 youth groups per targeted region (total 32) - 4 women groups per region (total 32) 500
2.1.3 Improved access to sanitation and hygiene in informal urban settlements	Households benefiting from the construction of tippy taps	10000
2.1.4 Functional national WASH data system	People receiving the developed WASH IEC promotional materials	1,218,836
	Personnel trained in functional WASH data systems.	300

## **Outcome 2.2: Strengthen WASH in sanitation in health facilities**

### **Output 2.2.1. Upgraded climate-resilient WASH facilities in health care facilities provided.**

This output enhances climate-resilient WASH and energy infrastructure in health facilities, ensuring safe sanitation, hygiene, and uninterrupted healthcare services during droughts or floods. Inadequate WASH is linked to several diseases as well as infections in health facilities and poor health outcomes. Safe WASH is not only a prerequisite to good health, but it contributes to livelihoods, school attendance and dignity and it helps to create resilient communities living in healthy environments.

#### **Activity 2.2.1.1. Upgraded climate-resilient WASH facilities in health care facilities**

The programme will install climate-resilient WASH facilities in health care settings to ensure safe and hygienic environments. Activities include drilling solar-powered boreholes and connecting tapped pipeline waters to fifteen health posts lacking portable water access. Additionally, the installation of water storage tanks, and VIP latrines with septic tanks will enhance water security and sanitation. Solar-powered lighting and energy-efficient sanitation solutions will be integrated to reduce carbon footprints. These initiatives improve resilience to climate change by ensuring reliable water supply during extreme weather events, ultimately enhancing the sustainability and functionality of healthcare facilities.

#### **Activity 2.2.1.2 Upgrade climate-resilient WASH and energy facilities in hospital pharmacies**

To ensure adherence to infection prevention and control (IPC) measures, the programme will provide basic WASH amenities and uninterrupted power supplies to the selected 20 hospital pharmacies. This programme will equip hospital pharmacies with handwashing stations, particularly in areas where compounding occurs, to ensure that IPC measures are properly followed.

## **Component 3: Strengthen the resilience of health facilities to ensure continuity of quality health services**

### **Outcome 3.1: Resilient health facilities that ensure continuity of quality health services**

#### **Output 3.1.1: Equipped health facilities and health posts in underserved areas**

Ensuring continuity of health services during floods and drought is key to attaining universal health coverage (UHC). Functional infrastructure is a prerequisite to sustaining high quality health service provision. This output will ensure safe and reliable environmentally friendly energy options in health facilities, and availability of basic equipment to manage climate variability sensitive diseases.

#### **Activity 3.1.1.1: Equip PHC facilities and Health posts with basic medical and nutrition assessment equipment**

The MoHSS plans to strengthen Primary Health Care (PHC) services at the grassroots level through the implementation of community-based health care and outreach as well as mobile health services.<sup>12</sup> A Health Post is a PHC facility located at the community level, serving areas that are remote or difficult to access. These health posts are typically smaller than a clinic and are staffed by community health workers (CHWs) who deliver basic PHC services both at the health posts and directly at households within the community. This programme will equip 23 PHC facilities and 42 health posts with basic medical assessment and nutrition equipment in eight targeted regions. Each of these facilities will be equipped with the following; three weighing scales, three weighing trousers, five Child & Adult MUAC tapes, two portable baby/child/adult length measuring systems, two portable baby/infant/adult length-height measuring system, two scale mother/child 250kg batteries, one scale for infant, clinic beamtype, 16kg x 10g x 70, one first aid kits, three Blood Pressure (BP) monitors, two examination beds, three procedure trollies and three Blood sugar monitors. The health posts are expected to reach at least 60% (611,890) of the rural population including women and children under five in the eight targeted regions.

**Table 3: Total estimated number of the Rural population in the eight targeted regions**

Region	No. of health posts	No. PHC facilities	Total population	Rural Population	Male in Rural Area	Female in Rural Area	Children <5 years	60% of rural population estimated to be reached by the programme
Kavango West	5	6	123,266	112,788	54,369	58,419	20,585	67,673
Kavango East	4	1	218,421	94,139	44,096	50,044	34,511	56,484
Zambezi	9	3	142,373	94,109	46,268	47,841	22,922	56,465
Ohangwena	14	2	337,729	288,758	136,544	152,214	54,712	173,255

Oshikoto	2	3	257,302	210,216	104,065	106,151	37,823	126,130
Otjozondjupa	1	3	220,811	81,921	42,027	39,894	30,693	49,153
Kunene	3	3	120,762	80,065	40,160	39,905	19,201	48,039
Omaheke	4	2	102,881	57,819	30,542	27,277	15,535	34,691
Total	42	23	1,523,545	1,019,816	498,071	521,745	235,982	611,890

#### Activity 3.1.1.2: Support implementation of the digital community system (DCS)

The program will equip CHWs with mobile devices to facilitate data collection through the Digital Community System (DCS). The integration of mobile technology facilitates better communication and coordination between CHWs and the formal health system, ensuring that critical health data is seamlessly shared and utilized for decision-making. A total of 1297 CHW will be equipped with mobile devices and training will be provided on the use of the devices.

**Table 4: Total number of CHW beneficiaries per region**

Region	Kavango West & East	Zambezi	Ohangwena	Oshikoto	Otjozondjupa	Kunene	Omaheke	Total
Number of CHWs per region	173	214	290	90	192	181	157	1297

#### Activity 3.1.1.3: Procure and install solar-powered electricity in health facilities in targeted regions

The program will support the installation of solar-powered electricity in 24 health posts across seven targeted regions, ensuring reliable and sustainable energy access. This initiative enhances the functionality of health facilities in underserved areas and delivers significant climate change benefits by reducing reliance on fossil fuels and lowering greenhouse gas emissions.

#### Output 3.1.2 Improved Quality of care in health facilities and at community level

Functional basic infrastructure is indispensable to sustaining the provision of high-quality health services. This programme will contribute to climate change resilience by strengthening IPC measures, strengthening community-based interventions, safely managing waste to reduce carbon emissions, and improving medical device decontamination to extend the life of equipment and lowering reliance on disposable items, thereby reducing waste and incineration needs. Overall carbon footprint associated with manufacturing, transporting, and disposing of medical devices, will be reduced.

#### Activity 3.1.2.1: Develop of the Infection Prevention and Control (IPC) legal framework

The programme will initiate the groundwork for developing a national Infection Prevention and Control (IPC) legal framework to improve the quality of care in health facilities, strengthen community-based infection prevention efforts, and enhance resilience against health emergencies. While the programme will lay the foundation for this critical initiative, the timeframe and complexity involved in developing a legal framework may prevent its full completion within the project duration. Additionally, the programme will include equipping health workers with tools and training to ensure relevance to evolving health and climatic challenges.

#### Activity 3.1.2.2: Support implementation of National health facility Quality standards

The program will support the rolling out of the Quality Information System (CoQIS) in 20 hospitals and 23 PHC facilities in the eight regions. In collaboration with the Council for Health Service Accreditation of Southern Africa (COHSASA), the programme will facilitate comprehensive training for healthcare workers on the effective use of CoQIS. This training will equip facility staff with the skills necessary to leverage the platform for continuous quality improvement, enabling them to identify gaps, prioritize interventions, and make data-driven decisions. By ensuring that quality health care services are reliable and adaptable to climate-related challenges, the program aligns health service provision with broader environmental sustainability objectives.

**Table 5: Beneficiaries in the targeted regions**

Region	Hospitals per region	HC per region	Total	Male	Female	Children <5 years
Kavango West	3	6	123,266	59,420	63,846	20,585
Kavango East	2	1	218,421	102,310	116,111	34,511
Zambezi	1	3	142,373	69,997	72,376	22,922

Ohangwena	3	2	337,729	159,701	178,028	54,712
Oshikoto	3	3	257,302	127,374	129,928	37,823
Otjozondjupa	4	3	220,811	113,280	107,531	30,693
Kunene	3	3	120,762	60,573	60,189	19,201
Omaheke	1	2	102,881	54,346	48,535	15,535
Total	20	23	1,523,545	747,001	776,544	235,982

#### **Activity 3.1.2.3: Enhance capacity for implementing the community-based health strategy**

The programme will support building capacity of the community-based health programme to deploy skilled CHWs adequately and equitably in the eight targeted regions. The programme will provide the needed equipment and support ongoing supportive supervision, mentoring and coaching, as well as monitoring and evaluation of their programme activities.

The scope of work for CHWs will be expanded to address climate change threats. Key interventions will include revising the CHW onboard training curriculum from 6 months to 12 months and facilitating its accreditation with the Health Professions Council of Namibia (HPCNA). CHWs will also benefit from regular skill enhancement opportunities through clinic attachments, ultimately improving the quality-of-service delivery at the community level. The program will provide first aid training to 1,297 CHWs across the 8 targeted regions, equipping them to respond effectively to emergencies at the community level.

#### **Activity 3.1.2.4: Strengthen health facility waste management systems**

The programme will procure and install small-scale Solar-Powered Modular Biomedical Waste Incinerators (SPMBWI) in 42 health posts across seven regions, ensuring sustainable and climate-resilient waste management solutions that enhance IPC. Secure steel mesh storage areas will be set up for hazardous waste to prevent exposure and contamination at each health post.

The program will procure 20 large scale SPMBWI for the 20 targeted hospitals in the eight regions. These climate-friendly incinerators will leverage the country's abundant sunlight to provide a sustainable solution for managing healthcare waste. By reducing reliance on fossil fuels, these incinerators will minimize greenhouse gas emissions and support Namibia's climate goals. The initiative will enhance IPC measures, ensuring safe and environmentally responsible disposal of biomedical waste while building the resilience of healthcare facilities to operate effectively in remote and underserved areas. Existing hospitals' waste storage facilities will be renovated by the program to ensure they meet safety and environmental standards.

The program will conduct comprehensive training for operators and healthcare staff, thus ensuring effective use and maintenance of solar-powered modular biomedical waste incinerators – see Table 5. The training will focus on proper operation, routine maintenance, safety protocols, and troubleshooting of the incinerators. Additionally, partnerships with local service providers will be established for regular maintenance and technical support, ensuring the long-term functionality and sustainability of the incinerators.

#### **Activity 3.1.2.5: Improve decontamination and reprocessing processes for health facilities**

The programme will procure and install two climate-friendly autoclaves for the 20 targeted hospitals across eight regions. These advanced autoclaves will ensure effective sterilization of medical instruments, thereby reducing the risk of healthcare-associated infections and supporting Namibia's climate resilience goals by utilizing energy-efficient technologies.

#### **Output 3.1.3: Increased availability of Essential Nutrition Actions for effective prevention, detection and treatment of malnutrition.**

Nutrition interventions reduce climate change risks by strengthening community resilience, health outcomes, and food security. They enhance immunity, prevent malnutrition, and reduce disease vulnerability. By promoting micronutrient supplementation, dietary diversification, and climate-smart agriculture, these interventions ensure sustainable access to nutritious foods, reducing hunger, economic instability, and healthcare burdens amid climate disruptions.

**Activity 3.1.3.1: Strengthen the capacity of health facilities to deliver effective nutrition interventions**

District hospitals in the targeted regions currently refer severely malnourished children to referral hospitals due to limited capacity and resources to manage such cases. The programme will build the capacity of district hospitals to manage severe malnutrition. Activities will include procuring essential equipment for each district hospital paediatric ward, including three paediatric BP machines, four intravenous infusion pumps, two baby warmers, and three incubators for each hospital. Additionally, Rundu and Onandjokwe Intermediate hospitals will receive one fluid warmer each to enhance their treatment capabilities. As an innovative approach, the programme will support the outreach services of specialist pediatricians to conduct visits to district hospitals, providing on-the-job mentorship and building capacity on the management of severely malnourished babies with complications. This initiative will benefit approximately 40% of the 235,982 children under five, approximately 94,400 children across the 8 targeted regions.

**Activity 3.1.3.2 Community-based women gardens for enhanced nutrition and food Security**

The programme will establish community women gardens to improve nutrition and food security within indigenous communities in eight regions. In collaboration with the World Food Programme (WFP), local authorities and community leaders, suitable land near schools, maternity waiting shelters, and PHC facilities will be identified. Women groups will be empowered through comprehensive training sessions on climate-smart agricultural practices. To facilitate successful cultivation, the programme will provide women-led groups with essential seeds, tools, and basic farming equipment. Garden produce will be allocated to support community soup kitchens, school feeding schemes, and maternity waiting shelters. Furthermore, collaboration with local health workers will promote nutritional education and cooking demonstrations, utilizing the fresh produce from the gardens to enhance community health and awareness.

**Activity 3.1.3.3 Scaled-up capacity of health service provision including outreach health services, immunization campaigns and community mobilization interventions**

The programme will strengthen outreach health services in six districts without health posts in targeted regions. An Integrated Mother and Child Health Week will serve as a cornerstone for raising awareness and delivering key preventive interventions, such as deworming, vitamin A supplementation, malnutrition screening, family planning, and immunization support at community level. These efforts will primarily benefit women of reproductive age and children under five, complementing the MoHSS by providing additional human resources capacity while MoHSS supplies medications and commodities.

**Output 3.1.4 Enhance resilient vaccine distribution to ensure uninterrupted access to essential vaccines, even during emergencies**

Changes in climate disrupt supply chains for essential supplies and medicines. Ensuring continuity of essential services amidst climate change threats and response to climate change related disease outbreaks requires sustainable availability of quality and affordable essential medicines and vaccines. Strengthening cold chain capacity is vital for maintaining vaccine efficacy, especially in areas with unreliable electricity or extreme weather such as the eight targeted regions. By improving cold chain resilience and pharmaceutical waste management, this approach helps healthcare systems adapt to climate change, ensuring vaccines remain effective and minimizing environmental impact, even during extreme conditions or emergencies.

**Activity 3.1.4.1: Strengthen health facilities cold chain capacity**

Environmentally friendly vaccine freezers and medical refrigerators with automated temperature sensors will be provided to 11 hospitals and 15 HCs lacking functional units. Paediatric, maternity, intensive Care Units (ICUs), and neonatal wards in 20 hospitals will receive medication refrigerators, while nine hospitals and eight HCs with existing freezers and refrigerators will be equipped with temperature sensors. Cooler boxes will be provided to 20 districts in targeted regions for outreach programmes and to maintain the cold chain during stock transfers between facilities. All air conditioning systems in hospital pharmacies and warehouses will be assessed for proper cooling and the programme will provide air conditioners to facilities needed new units to ensure that health products are kept at the manufacturers' recommended temperatures.

Capacity building will be provided to ten district administrators who will be responsible to configure users, sensors and gateways; and facility managers (62 pharmacists and 40 pharmacists' assistants) in the eight regions, who receive the alerts and once a week they receive a report with the temperatures of their facility sensor.

#### Activity 3.1.4.2: Develop the National pharmaceutical waste management guidelines

The programme will develop and implement climate-resilient Pharmaceutical Waste Management Guidelines to improve the storage, collection, and disposal of pharmaceutical waste, including vaccines. These guidelines will promote sustainable practices and strengthen healthcare facilities' waste management, particularly in the face of climate challenges. The programme will also train the pharmaceutical workforce to ensure effective implementation and incorporate climate change and its impact on health in training programmes.

#### Output 3.1.5: Incorporate climate change consideration into efforts to curb antimicrobial resistance

Recognizing that climate impacts can increase resistance through changes in microbial patterns, pathogen spread, and healthcare disruptions, this output will integrate climate change into the National Plan to combat AMR. This ensures that the National Strategy remains relevant and adaptive, addressing the broader environmental factors that contribute to the rise of AMR. Raising public awareness on AMR in the context of climate change helps communities understand the urgency of responsible antimicrobial use to prevent resistance.

#### Activity 3.1.5.1: Strengthen the National AMR surveillance and monitoring system

The programme will support the development of a national Antimicrobial Resistance (AMR) surveillance system by establishing AMR surveillance sites at laboratories in eight regions. An initial assessment will be carried in the 20 hospitals to map laboratory networks and inventory labs capable of pathogen identification and Antibiotic Susceptibility Testing. A capabilities assessment will evaluate specimen management, quality systems, equipment, information systems, and personnel training. One laboratory per region will be strengthened as an AMR testing site, ensuring broad geographic and demographic representation. The programme will further strengthen laboratory surveillance to monitor pathogens in drinking water for AMR by developing a sampling strategy and testing standards for antimicrobial residues.

#### Activity 3.1.5.2: Development of the second edition of the National AMR Action Plan

The programme will support the review of the National AMR Action Plan to mainstream climate change considerations in AMR mitigation measures. Climate change and its health impacts will be incorporated into awareness and capacity-building initiatives to ensure the National AMR Action Plan's relevance to evolving health challenges.

#### Activity 3.1.5.3: Increase public awareness on the impact of AMR

The programme will support community-based awareness initiatives led by community healthcare workers trained as AMR champions, to educate the poor and vulnerable, including mothers and children, on the impact of AMR. The focus will be on promoting rational antimicrobial use and proper IPC and WASH strategies, particularly in rural areas across the eight regions. At least 1,523,545 people are expected to directly benefit from this intervention, with 51% and 67% of the beneficiaries being women and residing in rural areas, respectively.

**Table 6: Targeted population for the AMR awareness educational campaigns in the eight regions**

Targeted Regions	Direct beneficiaries	No. of Female Beneficiaries	Rural Population	Indirect Beneficiaries	No. of Female Indirect Beneficiaries	Rural Population Indirect Beneficiaries
Kavango East	123,266	116,111 (94%)	94,139 (76%)	<i>The remaining six regions</i>	<i>The remaining six regions</i>	<i>The remaining six regions</i>
Kavango West	218,421	63,846 (29%)	112,788 (52%)			
Zambezi	142,373	72,376 (51%)	94,109 (66%)			
Ohangwena	337,729	178,028 (53%)	288,758 (85%)			
Oshikoto	257,302	129,928 (50%)	210,216 (82%)			
Otjozondjupa	220,811	107,531 (49%)	81,921 (37%)			
Kunene	120,762	60,189 (49%)	80,065 (66%)			
Omaheke	102,881	48,535 (47%)	57,819 (56%)			
<b>Total</b>	<b>1,523,545</b>	<b>776,544 (51%)</b>	<b>1,019,815 (67%)</b>	<b>1,498,856</b>	<b>771,633</b>	<b>443,182</b>

**Table 7: Number of trainees per activity under component Three**

Activities	Numbers of trainees per region								Total
	Kavango East	Kavango West	Zambezi	Ohangwena	Oshikoto	Otjozondjupa	Kunene	Omaheke	
CHWs training on the use of mobile devices and digital community system	173		214	290	90	192	181	157	1,297
CHWs training on the use of mobile devices	173		214	290	90	192	181	157	1,297
Health Care workers on IPC Training	90	40	40	120	90	120	90	40	630
Quality Information System training	26	14	14	40	26	40	26	14	200
Training on the use and maintenance of solar-powered waste incinerators.	10	7	4	10	10	12	10	4	67
Training on the use of autoclaves	3	2	1	3	3	3	3	1	19
Training sessions on climate-smart agricultural practices (Women groups per region)	4	4	3	6	6	2	3	4	32
Use and maintenance of automated temperature sensors training	15	7	7	20	15	20	8	10	102
CHWs training as AMR champions	173		214	290	90	192	181	157	1,297
Training on Pharmaceuticals waste guidelines	90	40	40	120	90	120	90	40	630

#### **Component 4: Strengthen governance to mitigate the impacts of climate change on health**

This programme will strengthen governance and build institutional capacity to plan, implement and coordinate activities to mitigate the impacts of climate change on health at the national, regional and community level.

##### **Outcome 4.1.1: Evidence informed climate responsive strategies**

##### **Output 4.1.1.1: 4.1.1 Evidence informed climate responsive policies and strategies developed and implemented**

Climate resilience approach requires leadership and strategic planning to address the complex and long-term nature of climate change risks. Policies and strategies from relevant sectors need to reflect climate change and health considerations both in relation to adaptation and mitigation.

##### **Activity 4.1.1.1: Update the National Climate change strategy and action plan and mainstream climate change and its impact on health in strategies of relevant sectors.**

The timing is opportune for Namibia to mainstream climate change consideration in sector strategies. The country is launching the sixth National Development plan by April 2025. Following this, all sectors have been tasked to update their sector strategies. The programme will support review of completed strategies and generation of relevant evidence on climate change and health and, development of updated strategies that mainstream mitigation measures of impacts of climate change on health. The programme will support consultative processes at community and regional level in the in the eight targeted regions, and at national level to ensure a participatory process in the review and development of sector strategies. Six strategies are due for update by the different line Ministries of Health and Social Services; Education; Environment, forestry and tourism (in charge of the National climate change strategy and action plan); Agriculture, water and land reform; Office of the Prime Minister (OPM) (in charge of Disaster Risk Management strategy). The Health National Adaptation Plan (HNAP) will be developed to address climate-related health risks comprehensively. Environment impact assessments will be sustained as a core component of policy development and approval of development projects. Evidence informed participatory processes that are aligned will ensure coherence in mitigating the impact of climate change on health across government.

##### **Activity 4.1.1.2 A functional real time monitoring platform for the public health emergency operation center.**

A functional real time monitoring platform for the PHEOC will be established in partnership with the private sector. Discussions are underway between the network provider, MTC and the OPM and the National Planning Communication (NPC) to sign a memorandum of understanding to develop an Early warning system, leveraging MTC's network, to ensure timely dissemination of critical environment alerts. Funding will go towards development of relevant applications, dissemination of information and provision of technical expertise on digital solutions.

**Activity 4.1.1.3 Building relevant capacities at all levels and strengthening institutions to ensure successful implementation of climate change response activities.**

Institutional capacity will be built at the national, regional and community level to ensure successful implementation of climate change response activities. Efforts will focus on operationalizing the multi sectoral structures detailed in the National Public Health Emergency Management structure and the National Disaster Risk Management organogram and Channels of Communication – Figure 1. At all levels, teams will be oriented on issues of climate change and health. They will be technically capacitated to lead assessments, planning, implementation, monitoring and coordination of actors and climate change mitigation activities in their areas of jurisdiction. Their skills in data analyse, interpretation and use of evidence will be enhanced to engender an evidence-informed dialogue in decision making and planning. Relevant tools will be developed and disseminated to ensure quality and comprehensive approaches to mitigating climate change impacts like data collection tools that collect disaggregated data to enable monitoring and addressing gender considerations. Mechanisms will be instituted to ensure the coordination structures are accountable through for example regular reporting and feedback, supervisory support and mentoring, creation of dashboards.

**Outcome 4.2: Effective and institutionalized multi-sectoral collaboration at national, regional level and community level**

**Output 4.2.1 Strengthen multi sectoral collaboration at the national and regional levels.**

Political leadership to address the health risks of climate change is essential to ensure implementation across the full range of programmes for climate sensitive health risks. This includes ensuring collaboration between all relevant health divisions as well as line ministries. Multisectoral collaborations contribute to the resilience of health systems in adequately managing climate health induced public health events. It particularly calls for collaboration to develop a shared vision among diverse stakeholders and coordinated cross-sectoral planning to ensure that policies are coherent and health promoting, particularly in sectors that have a strong influence on health, such as water and sanitation, nutrition, energy and urban planning.

**Activity 4.2.1.1 Conduct a mapping of relevant legal and normative instruments and policies for International Health Regulation (2005) implementation and other legal frameworks related to climate health adaption that will inform the development of a legal framework for the National institute of public health and the National public health emergency operation center.**

Mapping of all existing legal frameworks and policies in the country that are related to climate change and health will be undertaken by a multi-disciplinary team. The mapping exercise will identify the gaps, areas of legal overlap and opportunities withing the climate health legal framework in the country. The findings of the mapping will inform the development of a comprehensive legal framework for the NIPH and PHEOC that will include aspects of climate change for health in the public health sector.

**Activity 4.2.1.2 Capacitate the National public health emergency management committee secretariat.**

The Public Health Emergency Management Committee (PHEMC) is mandated to coordinate the preparedness, response, and recovery of public health emergencies and health consequences arising from natural disasters including those caused by climate change. This committee is replicated at National, regional and health district levels. The committee develops prepares, response and recovery plans for public health events including for outbreaks such as malaria which is a climate sensitive disease. To ensure that these multi-sectoral committees are functioning optimally as mandated by the National Multi-Hazard Health Emergencies Preparedness and Response Plan, there is a need to capacitate the secretariat to carry out their duties effectively. Regular training for all secretariat members on the functions and roles and responsibilities of the committee will be conducted in all the eight targeted regions.

**Activity 4.2.1.3 Establish and operationalize regional public health emergency operational centers in the eight targeted regions**

The programme will support the repurposing of available infrastructure in three regions to become Regional Public Health Emergency Operation Centers (RPHEOC). The RPHEOC will provide a structural place for the coordination of public health emergencies including those induced by climate change for example malaria outbreaks. The RPHEOC will be established in Kavango East, Zambezi and Otjozondjupa regions. These three are selected based on availability of infrastructure that can be repurposed and rehabilitated. The RPHEOC will be equipped with phone operator both

to receive toll free calls, information display screens, furniture, internet, and video conferencing equipment. A software will be developed that will allow the REPHEOC to be connected and linked to the nation PHEOC to allow faster transmission of information. Partnerships with MTC will be leveraged to provide internet and telephonic connections to the RPHEOCs. Personnel that will be assigned to these facilities will be trained on the Incident Management Systems and Public Health Emergency Operation Centers framework to equip them with skills and knowledge to manage the RPHEOCs. The RPHEOC will also be equipped with the early warning surveillance systems to ensure prompt detection and response to climate health sensitive diseases.

**Activity 4.2.1.4 Leverage governance structures at the community level to raise awareness on the impacts of climate change and implement mitigation measures.**

At the community level, constituency development committees (CDC) (comprised of traditional leaders, representatives of churches, police, regional councilors, and the mayor) will be engaged to mobilize communities to actively engage in implementation of interventions in this programme and all climate change mitigation measures. Interventions to be implemented include 1) awareness raising through IEC to understand the impact of climate change on health and livelihoods, and the role of communities in mitigating these. The MTC's platforms will be leveraged to reach communities given the mobile phone penetration rate of 87.68 mobile phone subscriptions per 100 inhabitants<sup>50</sup> 2) mobilize communities to embrace behavioral change to curb risk to the environment for example, open defecation, uptake of interventions (in objectives 2 & 3), participate in implementation and monitoring of interventions in this programme and health development in general.

**Table 8: Beneficiaries for Component 4**

	Targeted Region	Direct beneficiaries			
4.1 Evidence informed climate responsive strategies	National level	3,220,000			
4.2 Effective and institutionalized multi-sectoral collaboration at national level	National level	3,220,000			
4.2 Effective and institutionalized multi-sectoral collaboration at regional level and community level	Regional level (8 targeted regions)	1,523,545			
	Targeted Region	Direct beneficiaries	Indirect beneficiaries		
Regional public health emergency operational centers (PHEOC) instituted	Kavango East,	218,421	Total population of the 11 Regions 2,638,395		
	Zambezi	142,373			
	Otjozondjupa	220,811			
	Targeted Region	Number of constituencies	Direct beneficiaries		Indirect beneficiaries
Leverage governance structures at the community level to raise awareness on the impacts of climate change and implement mitigation measures	Kavango West	8	123,266	Erongo (7 constituencies)	240,206
	Kavango East	6	218,421	Khomas (11 Constituencies)	494,605
	Zambezi	9	142,373	Ikaras (8 Constituencies)	109,893
	Ohangwena	12	337,729	Hardap (8 Constituencies)	106,680
	Oshikoto	12	257,302	Omusati (12 Constituencies)	316,671
	Otjozondjupa	7	220,811	Oshana (12 Constituencies)	230,801
	Kunene	8	120,762		
	Omaheke	7	102,881		
	Total	69	1,523,545		

This programme will provide valuable lessons thus documentation will be a core component of sharing lessons that can be scaled up within the country and within the WHO Africa Region. Other regions that are not specifically targeted by this program will benefit through scaling up of good practices.

**B. Describe how the programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups**

<sup>50</sup> <https://www.statista.com/statistics/509593/mobile-cellular-subscriptions-per-100-inhabitants-in-namibia/>

**within communities, including gender considerations. Describe how the programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.**

The programme will provide direct benefits to 1,325,484 people and indirect benefits to 1,304,004 people across Namibia, with particular focus on vulnerable communities, including women, children, Indigenous populations, and people with disabilities. It will enhance climate resilience in the health sector by strengthening healthcare infrastructure, sanitation, and disease surveillance systems while ensuring socioeconomic and environmental sustainability. The table below presents the total number of key beneficiaries for the entire project, disaggregated by under 5, women, vulnerable populations, including the San, Ovatie, and Ovatombe communities, people living with disabilities, and the elderly population (persons aged 60 years and above).

**Table 9: overall project beneficiaries**

	Overall Project Beneficiaries	Under 5	Women rural settings	Elderly (60+)	Marginalized	People Living with Disabilities
Direct	1,325,484	235,982	675,593	90,795	198,823	77,313
Indirect	1,304,004	183,244	671,321	91,498	N/A	N/A

The term "indigenous" is not commonly used or generally accepted in Namibia. The government of Namibia refers to these groups as marginalized communities. Therefore, for the purposes of this concept note, vulnerable groups will include the San, Ovatie, and Ovatombe communities, people living with disabilities, and the elderly population (persons aged 60 years and above). These groups face socio-economic marginalization, limited access to essential services, and heightened vulnerability to climate impacts.

#### **Social benefits**

- The programme will enhance healthcare access and quality for 1,325,484 people, including 675,593 women, 235,982 children under five, 198,823 San, Ovatie, Ovatombe and Ovatombe population, 90,795 elderly population and 77,313 persons living with disability. It will equip 611,890 underserved individuals, covering 60% of the rural population, with primary healthcare services, while 1,232,446 people will benefit from strengthened vaccine distribution, ensuring uninterrupted immunization during climate-related disruptions.
- Gender-responsive approaches will empower women in decision-making, sanitation, and health service delivery. Indigenous communities in Zambezi, Kunene, and Omaheke will receive equitable healthcare, nutrition support, and culturally sensitive outreach. health services 77,313 people with disabilities will benefit from inclusive sanitation, health services, and emergency planning.
- Additionally, 1,101,631 people will benefit from disease surveillance, improving response to malaria, diarrheal diseases, and respiratory infections. Improved sanitation and hygiene facilities will reach 65,090 people, including 38,000 individuals in informal settlements, reducing waterborne disease risks.

#### **Economic benefits**

- The programme will foster economic resilience, job creation, and cost savings by strengthening climate-resilient health services and sanitation initiatives. Investments in disease prevention and climate-adaptive healthcare will reduce household medical expenses and prevent income loss from climate-related health disruptions. This will benefit 1,325,484 people by lowering treatment costs, reducing work absences, and increasing economic productivity.
- The programme will create 500 direct jobs, benefiting local artisans, engineers, small enterprises, unemployed youths, and women entrepreneurs. Additionally, 500 women will generate income through smart gardening initiatives. Engineers will install incinerators and autoclaves, while workers will construct waste cages, repair WASH facilities, and support health infrastructure upgrades. Given that MoHSS outsources these services, private companies will also benefit. Additionally, 1,900 indirect beneficiaries will gain from locally built sanitation markets, improving affordability in informal settlements. This initiative enhances local economies, service delivery, and sustainable healthcare infrastructure.

#### **Environmental benefits:**

- The programme will promote environmental sustainability and climate adaptation by integrating sustainable waste management, water conservation, and clean energy solutions in healthcare facilities. The installation of

climate-friendly autoclaves and low-emission incinerators will reduce medical waste pollution and enhance infection control. Safe pharmaceutical waste and healthcare disposal will prevent soil and water contamination. Health posts water management will ensure clean water access, while solar-powered systems and energy-efficient medical equipment will cut greenhouse gas emissions, reducing healthcare's carbon footprint and strengthening climate resilience.

#### Equitable distribution of benefits

- The programme prioritizes equity and inclusivity, ensuring that vulnerable populations benefit from climate-resilient interventions. Rural communities, covering 60% of the target areas, will gain access to healthcare, WASH improvements, and adaptive infrastructure. Women and girls will receive targeted support in sanitation, community leadership, maternal and sexual reproductive health care services. Indigenous groups, including the San and Ovahimba communities, will benefit from culturally sensitive interventions in nutrition, vaccine access, and disease prevention. Additionally, people with disabilities will receive inclusive healthcare and WASH services, ensuring accessibility and dignity.

#### Mitigation of negative impacts

- To ensure compliance with the Adaptation Fund's Environmental and Social Policy and Gender Policy, the programme will implement measures to mitigate risks and promote inclusivity. Environmental and social impact assessments will be conducted to identify and address potential risks, while gender-sensitive implementation will prioritize women's leadership and participation. Indigenous perspectives will be integrated to ensure culturally appropriate interventions. Additionally, sustainable waste management solutions will be introduced to prevent pollution and ecosystem degradation. A community grievance mechanism will be established to enhance transparency and accountability, ensuring equitable access to programme benefits.

### C. Describe or provide an analysis of the cost-effectiveness of the proposed project/programme.

Component	AF Proposed solutions	Alternative approaches
<b>Component 1:</b>	The project will strengthen climate-health resilience by enhancing evidence generation, digital surveillance, climate monitoring, and predictive modeling. VRAs, SMART surveys, and public health risk profiling will guide policy decisions. A real-time eIDSR system will track climate-sensitive diseases, while UNAM training will build climate-health modeling capacity, ensuring early warning and proactive adaptation.	Namibia's current health surveillance systems are primarily reactive, focusing on addressing health issues as they arise rather than anticipating them. This approach often leads to delayed responses to climate-induced health risks, resulting in higher morbidity and mortality rates. The lack of integrated climate-health data systems hampers the ability to predict and manage health crises effectively.
	<b>Cost effectiveness comparison:</b> Investing in predictive modeling and integrated data systems is a cost-effective long-term strategy, as it enables early detection and prevention of climate-related health crises rather than reactive management. By shifting to a proactive approach, the project will reduce healthcare expenditures on emergency responses and treatments, minimize disease outbreaks, and enhance resource efficiency. This data-driven strategy ensures timely interventions, lowers the burden on healthcare infrastructure, and optimizes public health investments, ultimately leading to sustained cost savings and improved health outcomes for Namibia's most vulnerable populations.	
<b>Component 3:</b>	The programme will equip health facilities, strengthen digital health systems, install solar power, and establish climate-resilient infrastructure for sustainable essential health services. It will adopt environmentally friendly waste management and enhance vaccine cold chain systems, ensuring uninterrupted healthcare and immunization services during climate-related disruptions.	In Namibia, many health facilities rely on unreliable grid electricity, with diesel generators as costly backups. Diesel-operated waste incinerators struggle to handle medical waste during climate-induced emergencies, posing health risks. Overused hospital incinerators emit excessive smoke, highlighting overcapacity and environmental hazards, exacerbating pollution and sustainability challenges in healthcare waste management.
	<b>Cost effective comparison:</b> Investing in renewable energy and resilient health infrastructure lowers operational costs, reduces environmental impact, and ensures sustainable healthservice delivery during climate emergencies. In contrast, reliance on diesel generators and outdated waste systems increases expenses, pollution, and service disruptions,	

	making solar power and sustainable waste management a cost-effective, climate-resilient solution for underserved areas.	
<b>Component 4:</b>	The AF programme - seeks to enhance governance by fostering multi-sectoral collaboration, mainstreaming climate change considerations in sector policies building institutional capacity, and developing real-time monitoring systems to manage climate-related health risks effectively	Namibia's existing governance structures for addressing climate change and health impacts are often fragmented, leading to uncoordinated efforts and inefficient resource use. Policies may lack integration across sectors, and there is limited capacity for real-time monitoring and response.
	<b>Cost effectiveness comparison:</b> Strengthening governance and coordination mechanism leads to more efficient resource utilization, government coherence in mitigating climate change impacts and timely interventions, reducing the costs associated with delayed or duplicated efforts. Improved governance ensures that interventions are sustainable and aligned with national priorities.	

**D. Describe how the project/programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.**

Namibia's commitment to sustainable development and climate resilience is embedded in its national policies, including the Namibia's Climate Change Adaptation Communication<sup>31</sup>, Namibia's long-term vision for sustainable development -Vision 2030, the Sixth National Development Plan (NDP6)<sup>51</sup>, Namibia's Climate Change Adaptation Communication<sup>31</sup>, the Disaster Risk Management Policy and Strategy, UHC Policy Framework, and the National Climate Change Strategy and Action Plan (NCCSAP). These policies emphasize the need for integrated, multi-sectoral approaches to mitigate and address climate change impacts and, build the capacity of health systems to ensure continuous and equitable access to quality health services, particularly for the most vulnerable populations.

The Namibia's Nationally Determined Contribution (NDC)<sup>18</sup>, outlines the country's commitment to addressing climate change challenges, including water and sanitation availability, extreme weather events, human nutritional status, and the distribution high incidences of vector-borne diseases due to changing temperature and rainfall patterns that result in floods and droughts. The NDC also aims for a significant reduction in greenhouse gas emissions, with a target of 96% of energy generation coming from renewable sources, primarily solar energy, by 2030. The AF programme contributes to Namibia's NDC commitments through the following interventions:

- **Water and Sanitation:** Strengthening community involvement in WASH activities, supporting CLTS, and promoting innovative sanitation solutions to improve water access and sanitation, particularly in vulnerable communities.
- **Extreme Weather Events:** Strengthening cold chain capacity in health facilities and installing solar-powered equipment to reduce reliance on non-renewable sources of energy, enhancing climate resilience and supporting the NDC's emissions reduction goals.
- **Human Nutrition:** Building capacity for nutrition actions and integrating WASH and community gardens addresses food security and malnutrition, especially in these drought-prone regions.
- **Greenhouse Gas Emissions:** Solar-powered systems in health facilities and energy-efficient sanitation solutions contribute to the NDC's renewable energy target of 96% by 2030.
- **Evidence Generation:** Strengthening surveillance systems for climate-related health threats supports adaptive responses to emerging health risks.
- **Mobilizing Communities:** The program strengthens community involvement in WASH by engaging women and youth and supporting civil society organizations to mobilize communities for sanitation improvements.

The AF programme will further provide essential funding to address the existing funding gap, as the NDC is currently only 5% funded, helping to fulfill Namibia's climate commitments.

<sup>51</sup> Republic of Namibia (2024); The Sixth National Development Plan (NDP6) Formulation White Paper

This programme aligns with the several articles in the Constitution of Namibia which denote the country's commitment to ensuring gender equity. Article 10 of the Constitution states that: "All persons are equal before the law. No persons may be discriminated against on the grounds of sex, race, colour, ethnic origin, religion, creed or social or economic status".

#### **Component 1: Strengthen the evidence base to anticipate and mitigate health impacts of climate change**

Namibia's National Development Plan (NDP6), the Climate Change Adaptation Communication, The Disaster Risk Management Policy and Strategy all identify a gap in data availability to anticipate the health impacts of climate change. MoHSS National Health Policy framework seeks to operationalize the early warning system through a multi sectoral approach. The UHC Policy Framework recognizes the need to establish an eHealth system that enables evidence-based decision-making based on individual and aggregate data<sup>52</sup>. The National eHealth Strategy emphasizes the need for a functional eHealth platform. The National Action Plan for Health Security (NAPHS) iterates the need to strengthen and sustain efficient core capacity for timely detection, reporting and effective multi sectoral, national and international response to public health emergencies.<sup>53</sup> The NDC<sup>18</sup> highlights the existing lack of activity data required specifically for compiling Greenhouse Gas (GHG) inventories, tracking mitigation and adaptation actions, assessing needs and reporting on support received.

This objective aligns with these frameworks and relevant Project Outputs are: 1.1.1., 1.1.2, 1.1.3 and 1.1.4.

#### **Component 2: Sustainable local sanitation and hygiene management**

The Namibia vision 2030 seeks to ensure that people have access to safe drinking water, adequate housing, and sanitation by 2030. The National health policy framework also seeks to promote access to safe Water, Sanitation, and Public Hygiene. The National policy for climate change<sup>54</sup> and the Namibia's National Sanitation and Hygiene Strategy highlighted the need to install appropriate sanitation systems that are resilient to climate changes. (, The Harambee Prosperity Plan II (HPP2) highlights the need for deployment, capacitation and strengthening of Community Health Workers (CHWs) to implement health, WASH and development activities. The project's approach to involve youth and local communities aligns with Namibia's Vision 2030. The Relevant Project Outputs are 2.1.1, 2.1.2, 2.1.3, 2.1.4.

#### **Component 3: Strengthen the resilience of health facilities to ensure continuity of quality health services**

The UHC Policy Framework and NDP6 place a strong emphasis on the resilience of health infrastructure and health systems. The National Quality Management Policy and IPC framework emphasize the need for providing resilient quality healthcare services. The programme will contribute to the NDC's ambition for reduction of emissions and a 96% energy generation from renewable sources mainly through solar energy by 2030.

The National Medicines Policy aims to ensure the continuous availability of essential health products across all levels of the supply chain. The programme aligns with the Namibia National AMR Action Plan which aims to ensure sustained availability of safe medicines that are quality assured.

This objective supports these frameworks and relevant Outputs are 3.1.1, 3.1.2, 3.1.3, and 3.1.4.

#### **Component 4: Strengthen governance to mitigate the impacts of climate change on health**

Namibia's National Climate Change Strategy and Action Plan (NCCSAP) and the NAPHS call for enhanced multi-sectoral collaboration to address the cross-cutting impacts of climate change on health, agriculture, and other sectors and the need to mainstream climate resilience into national and sub-national strategies. Namibia's NDC<sup>31</sup> and the National policy on climate change<sup>54</sup> seek to effectively integrate climate change into existing policy, institutional and development frameworks of the different sectors, coupled with coherent and integrated implementation.

This objective aligns with these frameworks and relevant outputs: Outputs 4.1.1, 4.1.2, and 4.1.3.

### **E. Describe how the project/programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies**

<sup>52</sup> Ministry of Health and Social Services (2021): National eHealth Strategy 2021 – 2025; <https://hivpreventioncoalition.unaids.org/en/resources/namibia-national-ehealth-strategy-2021-2025>

<sup>53</sup> Republic of Namibia (2021); National Action Plan for Health Security, (NAPS) 2021 – 2015; <https://www.afro.who.int/sites/default/files/2021-01/NAPS%20Final.pdf>

<sup>54</sup> Ministry of environment and tourism (2011); NATIONAL POLICY ON CLIMATE CHANGE FOR NAMIBIA; file:///C:/Users/nabyongaj/OneDrive%20-%20World%20Health%20Organization/Desktop/National%20Policy%20on%20Climate%20Change%20for%20Namibia%202011(1).pdf

## with the Environmental and Social Policy of the Adaptation Fund.

### The proposed programme is consistent with the AF's environmental and social policy.

National Technical Standards	Project Alignments	Compliance by the programme
Environment Impact Assessments	Under Namibia's Environmental Management Act, 2007 (Act No. 7 of 2007), certain activities require an Environmental Clearance Certificate (ECC) prior to commencement. The Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012) outline listed activities necessitating an EIA.	The programme will assess environmental and social risks for borehole drilling, WASH upgrades, solar installation, and medical waste disposal, ensuring compliance with Namibia's Environmental Management Act (2007) and obtaining Environmental Clearance Certificates (ECCs) before implementation. The activities that will require an EIA to be conducted include activities 2.2.1.1, 2.2.1.2, 2.2.1.3, 3.1.1.3 & 3.1.2.4.
Building Codes and Standards	Namibia has no formal building codes, however, follows various Acts for construction and renovation. The Local Authorities Act, 1992 empowers local authorities to enforce regulations, while South African building codes, such as the National Building Regulations and Building Standards Act, 1977, provide technical guidance.	<p>The programme will align with municipal and local government regulations under the Local Authorities Act, 1992, ensuring that all renovation of health infrastructure meets safety, sanitation, and zoning requirements set by local authorities. Necessary permits and approvals will be obtained before any construction begins. The project will apply gender-sensitive approaches as well as ensuring equal participation of women, youth, and vulnerable groups in decision-making.</p> <p>Furthermore, the programme will ensure climate-adaptive infrastructure by integrating energy-efficient materials, and sustainable water systems in all health facility renovations. Work will be performed by qualified professionals who adhere to recognized engineering and safety standards, ensuring quality control and compliance with best practices in health infrastructure development.</p> <p>Since Namibia references South African building codes, the project will follow the National Building Regulations and Building Standards Act, 1977, ensuring technical compliance with structural integrity, fire safety, and ventilation standards.</p> <p>The programme will ensure that the regulations are adhered under the following; activities 2.2.1.1, 2.2.1.2 Activity 3.1.1.3, 3.1.2.4 &amp; 3.1.2.5</p>
Water quality standards and guidelines	<p>Namibia's water quality standards ensure safe drinking water, sustainable resource management, continuous monitoring, risk mitigation, and compliance with environmental and health regulations. Water quality testing includes assessments of physical and organoleptic properties, organic and inorganic determinants, microbiological requirements, radioactivity, and corrosive or scaling properties for potable water, groundwater, and treated surface water.</p> <p>Namibia does not have a sampling strategy and testing standards for antimicrobial residue in water and need to be developed under the AF project.</p>	Namibia's Water Quality Standards will apply to the project by ensuring that all water-related activities align with national regulations for safe, sustainable water use and management. The AF Programme will develop the sampling strategy and testing standards for antimicrobial residue in water (3.1.5.2)
Water Resources Management Act 11 of 2013	The Act establishes a regulatory framework for water abstraction, groundwater protection, pollution control, and licensing to promote safe, reliable, and climate-resilient water supply for all.	<p>Borehole drilling at health posts requires licensing, environmental protection, and sustainable use compliance. The project will have to secure permits, use licensed drillers, monitor groundwater, and follow pollution control to ensure long-term water sustainability and safety. Other activities applicable to these standards will include Surveillance and Waterborne disease prevention (Activity 1.1.2.1)</p> <p>Sanitation and hygiene in communities (Activity 2.1.3.1 &amp; 2.1.4)</p> <p>Safe drinking water in health facilities (Activity 2.2.1.1 &amp; 2.2.1.2)</p>
Waste Management Standards	Waste management framework follows the National Solid Waste Management Strategy, aligning with the Environmental Management Act (2007). It regulates waste disposal, hazardous waste, and electronic waste while empowering local authorities to enforce waste management during construction, ensuring environmental sustainability.	<p>Strengthening health facility waste management systems activity (3.1.2.4) will have to align with national waste management regulations. This involves proper segregation, handling, treatment, and disposal of medical and hazardous waste to minimize environmental impact.</p> <p>Ensuring safe waste management in health facilities and communities to prevent environmental contamination and protect patients, healthcare workers, and surrounding communities from hazardous waste.</p>

		Training healthcare workers on infection prevention, medical waste segregation, and emergency preparedness to enhance resilience.
Equipment Installation and Maintenance Standards	Technical standards on autoclaves and waste incinerators cover installation, operation, and maintenance, ensuring compliance with health, safety, environmental, and infection prevention regulations. Key laws include the Public and Environmental Health Act (2015), which regulates their use in healthcare facilities, and the National Health Facility Quality Standards, which mandate regular maintenance and operational monitoring. The Hazardous Waste Management Regulations (2007) oversee the safe treatment and disposal of medical waste, ensuring pollution control and air quality compliance. Additionally, the National Solid Waste Management Strategy promotes the adoption of climate-friendly, energy-efficient autoclaves and low-emission incinerators to reduce environmental impact and greenhouse gas emissions.	The programme will ensure safe autoclave and incinerator installation, sustainable medical waste management, and compliance with national health and environmental regulations. It will promote climate-friendly technologies, renewable energy, and continuous waste treatment to strengthen infection prevention and climate resilience in healthcare facilities. Targeted activities 3.1.2.4 and activity 3.1.2.5.

#### F. Describe if there is duplication of project/programme with other funding sources, if any.

The health development partner landscape in Namibia is relatively small. The Health Development Partners' Forum is a platform aimed to coordinate partner's investments and activities in the national health sector. Through monthly meetings, this platform facilitates discussion of project objectives and interventions to address overlap or enhance complementarity among initiatives. This forum will serve as a means to share all activities related to this programme and ensure complementarity with activities of other partners. There will be no co-financing for this programme.

**Table 10 Financial Implications and Gaps, Existing Interventions and Programme Complementarity**

Funding Source	Level of Support	Proposed Interventions	Required Amount (US\$)	Funding Gaps (US\$)	AF Project's Complementarity
GRN Drought Relief Program (DFP) <b>Running from July 2024 to June 2025</b>	Nationwide	<ul style="list-style-type: none"> <li>Health and Nutrition (Therapeutic Food)</li> <li>Food Assistance to 341,855 households (inclusive of 33,105 marginalized households and 1,835 Malnutrition households)</li> <li>Livestock support Programme</li> <li>Seed and horticulture provision</li> <li>Water Provision</li> </ul>	US\$ 46,736,910	US\$ 27,144,225	<ul style="list-style-type: none"> <li>The GRN's drought relief program is providing Therapeutic Food across all 14 regions as from July 2024 to June 2025. The AF project will complement this by building capacity for Essential Nutrition Actions to prevent, detect, and treat malnutrition, and offering outreach health services in the eight targeted regions.</li> <li>The Drought Relief Program primarily focuses on immediate humanitarian needs, including food distribution and water supply interventions, targeting the most vulnerable populations in severely affected regions. The AF programme will also compliment DFP programme through the provision of water at the health posts.</li> <li>The AF programme will strengthen health facilities and community health workers to manage malnutrition and build climate-resilient systems. It complements the drought relief program by focusing on sustainable solutions, reducing dependency on aid, and addressing systemic gaps like health infrastructure and waste management.</li> </ul>
<b>No existing funding for this project</b>	Nationwide	<ul style="list-style-type: none"> <li>Procurement of incubators</li> <li>Capacity building for CHWs</li> <li>Digitalization of CHBP</li> </ul>	US\$ 41,769,611	US\$ 41,769,611	<ul style="list-style-type: none"> <li>The MoHSS has developed a <b>resource mobilization document</b> outlining additional funding requirements for critical activities and interventions for health system strengthening over the 2023/2024 to 2027/2028 financial years<sup>55</sup>. While this document identifies priority activities, no funding has been secured for their implementation. The programme will support the implementation of some</li> </ul>

<sup>55</sup> Ministry of Health and Social Services (2022); Proposal for mobilisation of additional funding for critical activities and interventions for health system strengthening over the period 2023/2024 to 2027/2028 financial years

		<ul style="list-style-type: none"> <li>• Construction and equipping of Health Posts and PHC facilities.</li> <li>• Upgrading and construction Medical Waste Management Infrastructure (Incinerators)</li> <li>• Establishment of National Public Health Institute</li> <li>• Maintenance of Infrastructure and facilities</li> </ul>			of the activities in component 2, 3 & 4, ensuring alignment with national health priorities while avoiding duplication. Thus far no additional funding has been acquired.
Namibia Red Cross Society (NRCS) <b>Running from July 2024 to June 2025</b>	Kavango West, Zambezi, Omusati, Ohangwena, Kunene regions	<ul style="list-style-type: none"> <li>• Support 140,000 people (34,146 households) through distribution of food aid, water supply interventions, and livelihood protection activities</li> </ul>	US\$ 848,417.00		<ul style="list-style-type: none"> <li>• The NRCS Emergency Appeal to supports <b>four</b> of the eight targeted regions with food aid, water supply, WASH, and livelihood protection, supplementing the Government's Drought Relief Program. NRCS focusing on water point rehabilitation and construction of new water infrastructures.</li> <li>• The AF programme will compliment NRCS with focusing on strengthening WASH interventions the eight regions.</li> <li>• The project is currently on suspension due changes in US policy on foreign Aid. Awaiting further guidance from US government.</li> </ul>
Japanese Supplementary Budget through UNICEF <b>Running from January to December 2025</b>	Zambezi, Kavango East Kavango West regions	<ul style="list-style-type: none"> <li>• Equipping pediatric wards with handwashing facilities.</li> <li>• Procuring of Ready to Use Therapeutic Food (RUTF) for Nutrition</li> <li>• Water purification tables in the communities</li> </ul>	US\$ 450,000		<ul style="list-style-type: none"> <li>• The JSB Project focuses on equipping pediatric wards with hand washing facilities, procuring of RUTF and water purification tables in the <b>three</b> regions.</li> <li>• The AF programme will complement this by equipping PHC facilities with medical and nutrition assessment tools and promoting sustainable WASH practices, including Community-Led Total Sanitation and a national WASH data system.</li> <li>• Additionally, the AF project will boost public awareness of AMR's impact, particularly in underserved areas with poor water and sanitation, reinforcing UNICEF's efforts to improve WASH infrastructure and reduce infections.</li> </ul>
ECHO through UNICEF, UNDP and WFP <b>(Running from January 2025 – December 2027)</b>	Khomas, Zambezi, Kavango East, Kavango West, Omusati, Kunene regions	<ul style="list-style-type: none"> <li>• Capacity Building on Mother and Child Feeding</li> <li>• Procurement of Therapeutic Food</li> <li>• Rehabilitating WASH facilities, mainly in the pediatric wards</li> <li>• Outreach services</li> <li>• Social protection</li> </ul>	US\$ 680,000		<ul style="list-style-type: none"> <li>• The ECHO grant is a one-year project targeting four of the eight regions for the AF project. The AF project will extend interventions for greater impact and complement ECHO by enhancing capacity on Essential Nutrition Actions for malnutrition prevention, detection, and treatment, and providing outreach health services. It will also improve care quality in health facilities through National Health Facility Quality Standards, beyond just the pediatric wards targeted by ECHO.</li> </ul>
Pandemic Fund - Multi-country <b>Awaiting Budget Allocation</b>	Nationwide	<ul style="list-style-type: none"> <li>• One Health Surveillance and Early Warning Systems</li> <li>• Cross-Border Surveillance and Capacity Building</li> <li>• Emergency Preparedness and Response (EPR)</li> <li>• Subregional Networks and International Partnerships</li> </ul>			<ul style="list-style-type: none"> <li>• The AF Project focuses on strengthening national health systems, climate-health adaptation, and legal frameworks, providing the essential infrastructure for Namibia to manage climate-health risks and emergencies. In contrast, the Pandemic Fund targets cross-border health surveillance, pandemic preparedness, and regional emergency response, with an emphasis on One Health and zoonotic diseases. The AF Project establishes the necessary national foundations, while the Pandemic Fund builds on this by enhancing regional surveillance and response systems. In essence, the AF Project serves as a</li> </ul>

					critical precursor to the Pandemic Fund, enabling it to make effective regional contributions. Without the AF Project's work in strengthening national systems, data management, and legal frameworks, the Pandemic Fund would face challenges in achieving its goals of cross-border surveillance and regional preparedness.
Global Fund CRM19 2024-2025	National Level	<ul style="list-style-type: none"> <li>•Strengthen Early warning surveillance by developing a National and regional e-IDSR</li> <li>•IEC materials for Influenza and other surveillance priority diseases</li> <li>•Support Supervisory Visits</li> <li>•Deployment of rapid response</li> <li>•Dissemination of National Event-based Surveillance and the National Influenza Sentinel Surveillance Protocol</li> </ul>	US\$ 543,822		<ul style="list-style-type: none"> <li>•The AF project proposes to establish interoperable, interconnected electronic surveillance systems for both human and animal health, capable of sharing real time data with different stakeholders, this is to complement the development of e-IDSR.</li> <li>•Strengthening of the early warning and surveillance systems proposed in the AF project will enable the timely dissemination of event based and influenza sentinel surveillance protocols which are activities covered by the CR-19 project.</li> <li>•The AF proposes to strengthen governance structures such as the Public Health emergency Management Committee which enhances the committee's capacity to respond to disasters and public health events including the rapid deployment of staff which is an aspect covered by the CR-19 project.</li> </ul>
Namibia "Solar For Health" Project (UNDP) <i>Pilot Project</i>  <i>(The proposal has not yet been approved and are awaiting outcome from potential Funder)</i>	National Level	<ul style="list-style-type: none"> <li>•Feasibility Study and Sustainable Financing Models</li> <li>•Solar Energy for Health Facilities</li> <li>•Health Service Continuity</li> <li>•Reduction of the health sector CO2 emission</li> </ul>			<ul style="list-style-type: none"> <li>•The UNDP project aims to ensure constant and cost-effective access to electricity for uninterrupted health services. The AF Project focuses on upgrading healthcare facilities with climate-resilient systems, including solar-powered water and energy solutions, waste management, and sanitation, ensuring reliable healthcare delivery and facility resilience to climate change impacts. It expands on the UNDP Project, a pilot project which initially provides solar energy solutions to health facilities, however, requires a sustainable business model considering different innovative financing options. While both projects support cold chain management, the AF Project enhances the UNDP's efforts by introducing environmentally friendly vaccine freezers and medical refrigerators with automated temperature sensors that integrate with the solar energy systems. Together, they complement each other by strengthening healthcare systems' climate resilience. The proposal also included strengthening integrated surveillance and information systems to facilitate climate informed health services, health risk management and community action.</li> </ul>

**G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.**

1. **Comprehensive Monitoring and Evaluation Framework:** The programme will implement a comprehensive monitoring and evaluation (M&E) framework that will assess outputs, outcomes and impacts regularly. This framework will include specific indicators to measure success and identify areas for improvement. Tools will be developed and mechanisms for data collection put in place to ensure that relevant data is collected and analysed. By conducting the baseline assessment, Mid-term Review, and End of Project Evaluation, the project will be able to capture lessons learned and adapt strategies accordingly. In addition, annual performance reports will be compiled and disseminated.
2. **Comprehensive Documentation:** The programme team will systematically document all activities, challenges, lessons learnt and successes throughout the programme lifecycle as part of the routine work in implementing

this programme. This will include creating detailed reports, undertaking case studies, and a project journal that captures insights and reflections. In addition, papers will be published in scientist journals and presented in national and international conferences to reach a global audience. National and sub national actors will be encouraged to write and publish their work in several formats. One writing workshop will be held once in the lifetime of the project to train technical teams on writing scientific papers, policy briefs and blogs. Policy briefs will be prepared and shared with stakeholder; blogs will be published on different blog platforms.

3. **Workshops and Training Programs:** The programme will organize workshops and training sessions bringing together national and regional stakeholders aimed at sharing lessons learned with all involved parties. These interactive sessions will encourage participants to discuss best practices, innovative solutions, and strategies for overcoming challenges.
4. **Utilization of Digital Platforms:** Existing WHO platforms and websites will be utilized to serve as a repository for all project-related knowledge. These platforms will host resources such as reports, guidelines, training modules, and updates, ensuring they are easily accessible to all stakeholders. Further, lessons emanating from the program will be shared on the Africa Health observatory.
5. **Establishment of Feedback Mechanisms:** Continuous feedback loops will be integrated into the programme's operations. Dash boards will be developed that report on key indicators on programme performance in Real-time. The dashboard will be monitored by the technical team. Stakeholders will be encouraged to provide real-time feedback on various aspects of the project, allowing for immediate adjustments based on lessons learned. This responsiveness will enhance the programmes adaptability and effectiveness in addressing emerging challenges.
6. **Social Media Engagement:** The programme will actively use social media platforms (like Facebook, Twitter, and Instagram) to share updates, success stories, and lessons learned. Regular posts will highlight key achievements, lessons and insights, encouraging community engagement and feedback. Social media will also serve as a tool for networking with other organizations and stakeholders, broadening the reach of the programmer's impact.
7. **Engaging the local media:** Updates will be provided to the local media regularly to increase visibility of the programme but also to mobilize communities take up good practices and positive lessons from the targeted regions
8. **Lessons to be gathered and disseminated**

See details under Activity 1.1.1.3: Document and disseminate lessons learnt -Section A

**H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund**

**Table 10: Stakeholders consulted.**

Dates	Stakeholders	Topics discussed and issues raised	Recommendations	Target Groups and Gender Considerations
Oct 2024 & Jan 2025	Development partners	<ul style="list-style-type: none"> <li>UNICEF-supported WASH and Nutrition projects focus on funding, interventions, strategy, locations, and proposed AF-aligned initiatives.</li> </ul>	As detailed in the programme outputs.	<ul style="list-style-type: none"> <li>Key target groups; women of reproductive age, children &lt;5 years, and vulnerable communities.</li> </ul>
03 Jan 2025, 21-25 Jan 2025, 31 Jan 2025, 03 Feb 2025	Ministry of Environment Forestry and Tourism and Ministry of Gender Equality, Poverty Eradication and Social Welfare	<p><b>AF priority interventions discussed</b></p> <ul style="list-style-type: none"> <li>PHC, Quality of care, nutrition, data systems, WASH, Health posts.</li> <li>Eco friendly waste disposal interventions,</li> <li>AF priority interventions relating to floods, surveillance, and emergency response</li> <li>Governance of climate health, early warning systems and evidence generation to monitor climate change.</li> <li>Amount for Grant and NDC 3.0 development</li> <li>Strengthening quality of services delivery and supply chain</li> </ul> <p><b>Issues raised</b></p> <ul style="list-style-type: none"> <li>Malnutrition and inadequate nutrition services, requiring strengthened interventions.</li> <li>Limited healthcare access, especially for the San community, elderly, women, and children.</li> <li>Delayed reporting and paper-based surveillance, hindering outbreak response and malaria case management.</li> <li>Impact of climate change on health - in the malaria affected regions due to currently ongoing floods.</li> <li>Weak health system resilience, needing stronger health posts, surveillance, and emergency response.</li> <li>Poor WASH improvements in health facilities, outreach points, and health posts</li> <li>Pediatric health risks, including hypothermia due to extreme weather and lack of equipment.</li> <li>Poor application of IPC measures.</li> <li>Limited quality care, need for capacity building and improved service delivery.</li> <li>Poor healthcare waste management</li> <li>No electricity at some of the health posts, affecting healthcare services.</li> <li>Need for stronger governance and capacity building on climate adaptation.</li> <li>Highlighted complementarity with the Pandemic Fund project</li> </ul>	<ul style="list-style-type: none"> <li>As detailed in the programme outputs.</li> <li>Need to align with One Health, finalize COP26 health commitments, integrate community-based surveillance, and assess climate change vulnerability in the health sector</li> <li>Efforts should also focus on climate-resilient health posts, multi-sectoral collaboration, and increasing shaded areas for pregnant women and children</li> </ul>	<ul style="list-style-type: none"> <li>Key target groups; women of reproductive age, children under five, and indigenous communities by health emergencies.</li> <li>Rural populations in malaria-endemic areas face high infection risks, pregnant women, the elderly, nomadic groups, and other vulnerable populations at greater risk of severe complications</li> <li>Communities accessing outreach points and health posts, women groups, youth groups.</li> <li>Clients seeking care from health facilities, marginalized and remote populations</li> </ul>
04-05 Feb 2025	Kavango East, Oshikoto, Kunene,	<p><b>AF priority interventions discussed</b></p> <ul style="list-style-type: none"> <li>WASH, nutrition, health service delivery,</li> </ul>	<ul style="list-style-type: none"> <li>Refer to details in the programme</li> </ul>	<ul style="list-style-type: none"> <li>Key target groups: women include pregnant women, boy</li> </ul>

	Omaheke, Zambezi, Ohangwena and Otjozondjupa regions	<ul style="list-style-type: none"> <li>• Employment opportunities, vulnerable communities, community ownership, women gardens</li> </ul> <b>Issues raised</b> <ul style="list-style-type: none"> <li>• Limited opportunities for women's empowerment</li> <li>• Exclusion of the boy child from job opportunities and national programs.</li> <li>• Need for creating youth employment, and skill development.</li> <li>• WASH challenges, including open defecation, lack of potable water, and inadequate sanitation.</li> <li>• Limited healthcare access for the elderly, disabled, and marginalized groups including the Ovatjimba, Ovazemba, San, and Ovatue communities.</li> <li>• Ambulance dependency due to poor healthcare access in remote areas.</li> <li>• Need for climate-resilient surveillance to monitor climate-sensitive health conditions.</li> <li>• Lack of latrines, disproportionately affecting elderly and disabled populations.</li> </ul>	<p>outputs with emphasis on inclusion of disabled community.</p> <ul style="list-style-type: none"> <li>• Namibia should provide shade and clean water at remote facilities, promote biogas, plant shade trees, and strengthen climate-related surveillance.</li> <li>• Priority should be given to building flood-resistant toilets, engaging unemployed youth in community projects, ensuring clean water access, establishing health posts in remote areas, and expanding latrine coverage.</li> <li>• Further consultations requested to detail the needs further. Appreciates further engagement with the director in the affected regions.</li> </ul>	child, people living with disability, elderly, indigenous communities and youth groups.
05 Feb 2025	Vulnerable groups representatives: Rundu Rural, Onayena, Gobabis, Onayena and Epupa constituencies	<b>AF priority interventions discussed</b> <ul style="list-style-type: none"> <li>• Community ownership and Maintenance of community-based sanitation facilities</li> <li>• WASH, nutrition, vulnerable communities' initiatives</li> <li>• Youth and women employment opportunities</li> <li>• Community gardens</li> </ul> <b>Issues raised</b> <ul style="list-style-type: none"> <li>• Remote and vast terrain, making healthcare access difficult for marginalized communities in Kunene region</li> <li>• Limited healthcare facilities, with few clinics and long distances to services in Omaheke and Kunene</li> <li>• Severe water shortages, restricting access to potable water for daily needs Kunene</li> <li>• Inadequate sanitation, with many households lacking latrines, leading to open defecation.</li> <li>• Elderly and disabled populations face heightened vulnerability due to poor sanitation and healthcare access Oshikoto region</li> <li>• High dependence on ambulances, as many cannot reach healthcare facilities independently.</li> <li>• Malnutrition and poor WASH conditions, exacerbating health risks Kunene and Omaheke regions.</li> <li>• San community faces extreme healthcare barriers, with women, children, and the elderly most affected in Omaheke.</li> </ul>	<ul style="list-style-type: none"> <li>• Prioritization of access to clean water, establishing health posts for outreach in remote areas, and ensuring latrine access for all community members, not just vulnerable groups.</li> <li>• Prioritization to be given to building toilets. Additionally, community projects should target unemployed young people, most who have are school dropout</li> <li>• As detailed in the programme outputs with emphasis on inclusion of disabled community.</li> </ul>	• Project is aligned with the target groups and the community needs.

06 Feb 2025	Civil Society Organizations: Namibian Rural Women's Assembly (NRWA), National Youth Climate Action Network of Namibia (Youth4CAN), Rural Peoples' Institute for Social Empowerment in Namibia (RISE – Namibia and Epumba Integrated Project eco-village	<p><b>AF priority interventions discussed</b></p> <ul style="list-style-type: none"> <li>• nutrition, vulnerable communities, women smart gardens and training, employment opportunities,</li> <li>• Focus areas include sanitation and hygiene (VIP toilets), climate-smart farming, and urban agriculture, increasing access to health services</li> </ul> <p><b>Issues raised</b></p> <ul style="list-style-type: none"> <li>• NRWA: focuses on empowering rural women and improving their living conditions across Namibia.</li> <li>• Youth4CAN: engages in youth-led climate action, finance, biodiversity conservation, and policy implementation, emphasizing evidence-based solutions.</li> <li>• RISE – Namibia: supports households and grassroots CBOs to enhance livelihoods and resilience through sanitation (VIP toilets), climate-smart farming, and urban agriculture</li> <li>• Epumba Integrated Project Eco-Village: focuses on skills transfer and local capacity building, promoting sustainable practices and economic growth, particularly for women in Kavango west region.</li> </ul>	<ul style="list-style-type: none"> <li>• As detailed in the programme outputs.</li> <li>• Appreciates the interventions proposed in the AF project, especially on WASH.</li> <li>• Epumba will provide capacity building to women and unemployed youth and people with disability in smart gardening.</li> <li>• Comprehensive participatory research should be conducted on San women and girls' livelihoods, health, employment, decision-making, and development involvement to identify empowerment strategies across all sectors.</li> </ul>	Women in the rural communities, youth, vulnerable and marginalized communities with special focus on women and girls, pregnant women and children.
-------------	---	--	---	--

## **I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.**

### **Component 1: Strengthen the evidence base to anticipate and mitigate health impacts of climate change (US\$2,580,000).**

**Baseline Scenario:** Namibia's healthcare system is increasingly vulnerable to climate change, which worsens existing health challenges and introduces new risks. The lack of comprehensive data on climate-related health impacts hinders effective decision-making and planning. Current surveillance systems are fragmented and outdated, limiting prompt detection and response to health threats. Reliance on paper-based reporting tools and insufficient capacity to process and analyze data further exacerbate these issues. Health workers often lack the training and resources needed for effective data utilization, resulting in missed opportunities for early intervention and mitigation.

**AF Project Scenario:** The proposed program aims to generate robust evidence to inform health-related climate adaptation strategies. Key activities include conducting various risk assessments to identify health system vulnerabilities and performing regular stress testing and infrastructure risk assessments for proactive mitigation. The program will adapt and scale up eHealth technologies, support relevant research, and document lessons learned. Strengthening surveillance systems by establishing interoperable electronic systems for real-time data sharing is another critical component. The program will enhance the climate monitoring center's capacity by improving climate monitoring, early warning systems for wildfires, and the accuracy of climate projections. Analyzing health sector climate risks and instituting mitigation measures will be integral. Finally, the program will enhance modelling capacity through short training courses and developing a training module for public health professionals

### **Component 2: Sustainable local community participation in sanitation and hygiene management (US\$2,143,832)**

#### **Component 2: Stimulate sustainable local community participation in sanitation and hygiene management**

**Baseline Scenario:** Open defecation is a persistent problem practiced by 43% of the population, more in rural areas (65%) compared to urban areas (23%). Access to basic sanitation is low at only 34% of households nationwide having access to sanitation facilities that meet the UN-SDG standards for basic sanitation, 13.4% of rural households have basic toilet facilities compared to 63.2% in urban areas<sup>12</sup>. Poor WASH results in many cases of diarrhea, malaria and death in children under five years old. According to the 2023 national census, an estimated 62.6% of households in the targeted regions do not meet the basic sanitation standards<sup>1</sup>.

**AF Project Scenario:** The programme will build the capacity of community members, entrepreneurs, self-employed individuals, and unemployed youth and women's groups to take responsibilities and play roles, thereby strengthening the capacity of local communities and schools to take charge in improving sanitation and hygiene practices. This fosters a culture of community-focused and self-relied solving based on local context, ownership and belonging in the communities, and recognition of the health-related benefits associated with improved WASH practices such as significant reduction in WASH related sickness in the most vulnerable populations in the communities.

### **Component 3: Strengthen the resilience of health facilities to ensure continuity of quality health services (US\$3,250,000)**

**Baseline Scenario:** Namibia's healthcare system faces significant challenges worsened by climate change. The PHC system reform process, including scaling up the CHW program, highlights critical gaps such as the need for solar-powered health posts with WASH facilities in hard-to-reach areas. Rising temperatures and prolonged droughts are worsening malnutrition, highlighting the urgent need to strengthen health facility capacity to prevent, identify, and manage cases effectively.

Climate change has also amplified health system vulnerabilities, including outdated medical waste incinerators, which emit toxic gases to the environment. Replacing these with eco-friendly alternatives is crucial for mitigating environmental and health risks. The national quality health standards are currently implemented in 10 out of 36 hospitals and 10 PHC facilities. Scaling up the implementation of these standards nationwide is critical to addressing infrastructure and resource gaps, ensuring consistent quality healthcare services, and building resilience to climate-induced challenges across Namibia. Furthermore, vaccine and pharmaceutical cold chain management is manually monitored, making it susceptible to out of range temperature fluctuations and unrecorded periods. AMR surveillance is hindered by limited laboratory capacity and reliance on a single referral lab, despite 36 satellite labs, including 20 in the targeted regions, delaying effective monitoring and timely therapeutic decisions. MoHSS lacks pharmaceutical

waste management guidelines, leading to improper disposal practices that pose significant environmental and public health risks, likely contributing to pollution and undermining efforts to mitigate climate change impacts.

**AF Project Scenario:** The program will equip primary healthcare facilities and community health posts with essential resources to improve access to quality services in underserved areas. Renewable energy solutions, such as solar-powered systems, will ensure reliable energy supply while contributing to climate mitigation efforts. National quality health standards will be expanded to additional facilities, supported by a digital platform for real-time monitoring and quality improvement. Environmentally sustainable waste management systems will be introduced, aligning healthcare practices with climate resilience objectives.

These activities will ensure that the program achieves its adaptation goals, building a sustainable and climate-resilient healthcare system for Namibia's vulnerable populations. Additionally, the programme will strengthen supply chain resilience, enabling timely and efficient distribution of medical commodities even during climate-related disruptions. By integrating digital systems and increasing storage capacity, the program ensures sustainability and preparedness, fostering long-term adaptability in the face of evolving health challenges.

#### **Component 4: Strengthen governance to mitigate the impacts of climate change on health (US\$915,000)**

**Baseline Scenario:** Recurrent gaps the country hampering effective implementation of climate change adaptation inadequate human capacity, lack of coordination and conflicting programme implementation, framing of climate change as a solely environmental issue, lack of effective decentralization and limited institutional capacity at the local level. Coordination response to public health events at the national level is suboptimal due to the inadequate capacity of the NPHEOC. Multi-sectoral collaboration is noted as weak at the national level and non-existent in some of the regions. The lack of in-depth vulnerability studies and relevant evidence negatively impacts the development of climate responsive strategies. The One Health (OH) concept which aims to engender a multi- sectoral collaboration to tackle the impacts of climate change on health, remains fragmented.

**AF Project Scenario:** This programme will support the development of evidence informed strategies for relevant sectors to ensure mainstreaming of mitigation measures of impacts of climate change on health. The Health National Adaptation Plan (HNAP) will be developed to address climate-related health risks comprehensively. Environment impact assessments will be sustained as a core component of policy development and approval of development projects. A functional real time monitoring platform for the PHEOC will be established. Institutional capacity building efforts will focus on operationalizing the multi sectoral structures detailed in the National Public Health Emergency Management structure. Regional PHEOCs will be instituted in three out of the eight selected regions.

#### **J. Describe how the sustainability of the programme outcomes has been taken into account when designing the programme.**

The project leverages strong partnerships with national ministries, aligns with the country's development priorities, and integrates climate-health policies within existing governance frameworks. The proposed interventions are informed by existing national strategic plans, aligning the project with Namibia's established priorities and policy objectives. This alignment enhances coherence across sectors and reinforces the project's relevance to the country's sustainable development agenda. These strategic approaches enhance institutional support and increase the potential for further funding, establishing a foundation for sustained impact well beyond the project's lifespan.

Sustainability has been central to the project's design, with each project component aimed at fostering long-term resilience within health systems and communities affected by climate change. The sustainability strategy is detailed below for each component, addressing the economic, social, environmental, institutional, and financial dimensions critical to fostering resilience and self-sufficiency beyond the project's duration.

### Component 1: Strengthen the evidence base to anticipate and mitigate health impacts of climate change

Key areas of sustainability	Sustainability of the project outcomes
Institutionalized evidence generation and use	Climate impact studies, including multi-hazard and vulnerability assessments, are designed to be integrated into national and regional planning efforts. The development of adaptable, evidence-based contingency plans ensures that public health authorities can proactively identify climate-related health risks, allowing for continuity even after the project's end. Additionally, by supporting research to fill evidence gaps, the project enables ongoing updates to health risk data, informing sustainable health policy adaptations.
Sustainable Surveillance Systems	Establishing interoperable electronic surveillance systems, capable of real-time data sharing across human and animal health, ensures that early detection and response to climate-driven health risks become part of regular practice. By building capacity among national and regional health authorities to operate these systems, the project enables, long-term impact that supports both immediate health interventions and future planning.
Building and Institutionalizing Climate Monitoring and Modelling	Strengthening the climate monitoring center, along with capacity building in climate modelling, creates a sustainable source of climate and health risk data. Training in climate projection and early warning systems enables proactive management of health infrastructure vulnerabilities. Integrating modelling modules into pre-service training ensures that future professionals are equipped with the skills to continue these efforts, promoting sustainability through institutional skills retention.
Economic, Environmental, and Institutional Sustainability	By embedding climate-health monitoring and modelling in the health system, the project reduces the future cost of health interventions, enhancing economic sustainability. Regular stress testing of health infrastructure, combined with predictive modelling, provides the environmental resilience necessary for facilities to withstand climate impacts. Institutionalizing these practices within health ministries and educational curricula strengthens governance, allowing for replication, scaling, and maintenance of project outcomes through local funding and expertise.

### Component 2 – Stimulate sustainable local community participation in sanitation and hygiene management

Key areas of sustainability	Sustainability of the project outcomes
Community Ownership of WASH activities	By establishing and supporting local community structures, including women's and youth groups, the project promotes long-term engagement in WASH activities. Community-Led Total Sanitation (CLTS) and school programs empower local champions, fostering a culture of hygiene and sanitation ownership. Working closely with local groups ensures these efforts are sustained through ongoing local leadership and awareness.
Sustainable Market for Sanitation Solutions	Supporting locally adapted WASH solutions in partnership with the private sector and organized youth and women groups builds a foundation for sustainable sanitation markets. Training local artisans and entrepreneurs to construct high-quality, climate-resilient latrines (such as ECOSAN) creates a skilled workforce that can meet sanitation needs beyond the project period. Fostering local markets for fecal sludge management also enhances economic sustainability, allowing small enterprises to thrive and generate ongoing income through WASH services.
Sustainable access to sanitation and hygiene in informal urban settlements	The project includes building decentralized sewer systems in informal urban settlements and new housing areas, which are designed for durability and ease of maintenance. These systems will not only improve immediate WASH access but also serve as replicable models for similar regions.
Economic, Social, Environmental, Institutional, and Financial Sustainability	The project's multi-level approach fosters economic sustainability through job creation in WASH services and supports social sustainability by empowering communities to prioritize sanitation and hygiene. Environmentally, climate-resilient infrastructure, helps mitigate climate impacts. Institutionally, integrating WASH data into national systems and strengthening community and private sector partnerships create governance structures for continuity. Financial sustainability is addressed by establishing viable WASH markets and potential local funding for infrastructure maintenance, ensuring that benefits endure well beyond the initial project funding

### Component 3 – Strengthen the resilience of health facilities to ensure continuity of quality health services

Key areas of sustainability	Sustainability of the project outcomes
Resilience of Health Infrastructure	Equipping primary healthcare facilities with essential medical and nutrition assessment tools ensures that facilities remain functional and capable of meeting health demands even under challenging climate conditions. Installing solar-powered pumps in underserved areas provides a sustainable energy source that minimizes reliance on grid electricity, ensuring continuity of WASH services and healthcare operations in remote locations. The climate-resilient WASH facilities reduce vulnerability to climate impacts, supporting the health system's ability to respond effectively to community needs.

Capacity Building for Community and Health Facility Staff	Strengthening the capacity of health workers is central to the project's long-term sustainability. Training healthcare providers to implement the community-based health strategy and to identify climate-exacerbated health threats will prepare them to handle local climate impacts independently. Additionally, community health workers will be trained to provide emergency first aid, enhancing local responsiveness to climate-related health events. Establishing a digital community system (DCS) supports efficient and sustainable data management, allowing healthcare providers to monitor and respond to health trends in real-time.
Resilient Vaccine Distribution and Increased Antimicrobial Resistance Fight	A resilient vaccine distribution with proper waste management ensures continuity in health service provision even during emergencies. Creation of awareness on AMR and infection prevention mechanisms through community led-program create ownership and recognition of the interventions at individual and community-levels ensuring sustainability of the initial efforts.

#### **Component 4 - Strengthen governance to mitigate the impacts of climate change on health**

<b>key areas of sustainability</b>	<b>Sustainability of the project outcomes</b>
Sustainable evidence informed climate responsive policy development	By embedding climate-responsive policy creation and implementation as ongoing practices, public health institutions gain the ability to independently update and adapt climate-responsive strategies over time. Updating the National Climate Change Strategy and integrating health impacts into sectoral strategies fosters a coordinated and enduring approach to managing climate-related health challenges. Establishing a real-time monitoring platform within the PHEOC and comprehensive staff training, provides structure that supports autonomous, ongoing surveillance and rapid response to climate-induced health risks. These components together ensure that public health institutions are prepared to manage and mitigate climate-related health emergencies, reinforcing the project's legacy in strengthening climate resilience within the health sector.
Functional Multi-Sectoral Platforms	The establishment of functional platforms such as the National Institute of Public Health and the National PHEOC includes a solid legal framework that supports their continued operation and alignment with national health priorities. This foundation provides stability for long-term functionality and institutional resilience. Strengthening the National Public Health Emergency Management Committee Secretariat by equipping staff with relevant skills, tools, and guidelines enhances sustainable emergency response capabilities, ensuring that the governance structures remain effective and adaptable. Furthermore, operationalizing regional PHEOCs with built-in observatory and response capabilities allows local institutions to coordinate, monitor, and respond to health events and climate-induced hazards. This approach not only sustains public health resilience at both the national and regional levels but also establishes a self-sufficient framework for ongoing community and regional health support.
Economic, Social, Environmental, Institutional, and Financial Sustainability	Fostering multi-sectoral collaboration, the project reduces long-term response costs and enhances health outcomes through proactive climate-health management. This approach minimizes the need for reactive expenditures and maximizes resource efficiency, providing an economically viable model for sustained resilience. By prioritizing vulnerable groups, the project supports community health equity and reinforces local capacity for self-sustained adaptation and response. Aligning health and climate change policies promotes a sustainable model for ecosystem management, ensuring that health resilience measures respect and preserve environmental resources. Climate-resilient practices within healthcare services reduce environmental impact while enhancing the durability of health infrastructure under changing climate conditions. By including climate-health governance within institutional practices, the project strengthens the adaptability and longevity of health structures, making them capable of handling evolving climate challenges.

**K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project/programme.**

Annex 5 to QPC Amended in October 2017

The project will be carefully executed and monitored in accordance with Namibia's national standards and legislation, fostering a cohesive approach to environmental and social sustainability. It will integrate strategies designed to protect the interests of vulnerable communities while ensuring equal opportunities across genders, with a particular focus on empowering women in rural areas. The planned extensive consultations that will be part of the proposal development will further assess any environmental and social risks in a participatory manner.

The project will adhere to the highest standards in healthcare delivery, resource management, and community health practices. It will be characterized by a participatory and consultative process that actively considers the concerns of local communities and health authorities. Additionally, the project is committed to preventing any adverse impacts on critical health resources, the environment, local communities and identified vulnerable groups. Continuous monitoring and adaptive management will be employed to ensure compliance with the Environmental and Social Policy of the Adaptation Fund, fostering resilience and sustainability in the targeted regions. Based on a preliminary review of the principles of the adaptation fund's environmental and social policy, this proposal can be determined as Category B.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
<i>Compliance with the Law</i>	X	Low RiskThe proposed project aligns with Namibia's national laws and regulations, including the Environmental Management Act of 2007 and the Public Health Act of 2015. It ensures that all activities comply with legal standards and frameworks governing climate change adaptation and public health.
<i>Access and Equity</i>	X	<b>Low risk:</b> The project aims to ensure equitable access to basic health services, clean water, sanitation, energy, education, and housing. However, there is a risk that certain decision-makers and community members may benefit more than others due to entrenched systems of privilege, access, and authority. Transparent planning processes and active engagement with marginalized groups (e.g., indigenous populations and women) together with active monitoring will mitigate risks of inequitable benefit distribution. Specific measures will include targeted subsidies and community participation.
<i>Marginalized and Vulnerable Groups</i>		Vulnerable populations, such as indigenous groups (San, Ovaherero, and Ovambo) and Low risk: women, face systemic barriers to accessing services and resources. There is a risk that these groups may not benefit equally. The program will engage these communities further ensuring that interventions will address these challenges, including training in sustainable livelihoods, representation in governance, and equitable access to project benefits through subsidies and skills development. An Assessment needed to tailor activities (e.g., hygiene training, health services) for vulnerable groups, such as low-income communities, ensuring they benefit equally from Program outcomes.
<i>Human Rights</i>		<b>No Risk:</b> The program will support the rights to health, water, and a clean environment in line with the Constitution of Namibia by improving access to essential services and promoting inclusive participation in decision-making. Empowering communities, especially vulnerable groups, will strengthen the realization of internationally recognized human rights.
<i>Gender Equality and Women's Empowerment</i>		<b>Low risk:</b> The program promotes gender-sensitive approaches, actively involving women in sanitation and climate-related health initiatives. However, the presence of women in local governance remains weak especially at the local level. Continued engagement and specific measures will be implemented to empower women and address gender inequalities. Women's leadership will be promoted through training and inclusion in governance structures. Activities will include support for women entrepreneurs, training in WASH management, and ensuring gender-disaggregated data collection to monitor outcomes. Gender-sensitive project design will align with the Adaptation Fund's Gender Policy and mitigate risks of GBV.
<i>Core Labour Rights</i>	X	No risk: National and local-level governments, along with vulnerable communities, will actively participate in the operation and maintenance of project interventions. While unlikely, there is a potential risk of accidents during the implementation of these interventions. Core labor rights will be fully respected and integrated into the design and implementation of the project. To ensure adherence to relevant labor legislation, all stakeholders will be actively engaged in the design of project activities.
<i>Indigenous Peoples</i>	X	<b>No Risk:</b> The program will engage indigenous communities, ensuring their rights and cultural values are respected. Consultation processes will incorporate indigenous knowledge and perspectives, especially

		in areas impacting natural resources they traditionally manage. Indigenous groups will be involved in decision-making and receive targeted support, such as subsidies for WASH infrastructure.
<i>Involuntary Resettlement</i>	X	No Risk: The project does not require involuntary resettlement. Should future circumstances necessitate land access, strict standards will be followed to avoid displacement, ensuring compliance with resettlement policies if needed.
<i>Protection of Natural Habitats</i>	X	No Risk: Program planning will actively prevent any adverse impacts on nearby natural habitats. Health facility upgrades, sanitation interventions, and other construction activities will be carefully sited to avoid encroaching on protected areas or disturbing local ecosystems.
<i>Conservation of Biological Diversity</i>	X	No Risk: The program will actively prevent adverse impacts on nearby natural habitats. Health facility upgrades, sanitation interventions, and other construction activities will be carefully sited to avoid encroaching on protected areas or disturbing local ecosystems Sanitation and waste management systems will be designed to minimize ecological disturbances, protecting local biodiversity.
<i>Climate Change</i>	X	Low/No Risk: The program will align with local climate adaptation policies, ensuring health facilities are climate-resilient and capable of supporting vulnerable communities. Additionally, the program will enhance resilience to climate impacts, such as droughts and floods, through climate-resilient infrastructure (e.g., solar-powered health facilities) and sustainable practices. Emission reductions will be achieved through renewable energy use, aligning with global climate adaptation and mitigation goal.
<i>Pollution Prevention and Resource Efficiency</i>		Low Risk Renewable energy solutions (e.g., solar-powered systems) and improved waste management practices will minimize pollution and optimize resource use. Training of local operators will ensure the long-term efficiency and sustainability of systems. However, while the project aims to minimize pollution, potential concerns include smoke pollution from incinerator malfunctions and waste leakage due to system failures. These risks will be managed through careful planning and monitoring.
<i>Public Health</i>	X	No Risk: By strengthening healthcare access, disease surveillance, and WASH infrastructure, the project will address public health risks exacerbated by climate change. Resilient infrastructure will ensure continuity of services during extreme weather events and any emergencies thus improving health outcomes.
<i>Physical and Cultural Heritage</i>	X	No Risk: Activities will respect cultural and physical heritage by consulting communities and avoiding infrastructure placement in culturally significant areas. Indigenous practices will be acknowledged and integrated into project planning.
<i>Lands and Soil Conservation</i>		Low Risk Sustainable WASH solutions and innovative sludge management will prevent soil contamination and degradation. Construction will follow best practices to ensure minimal disruption to land resources, promoting soil conservation.

## PART III: IMPLEMENTATION ARRANGEMENTS

The World Health Organization (WHO) will assume full responsibility for managing and overseeing the project, including its financial, monitoring, and reporting aspects. WHO will also be responsible for collaborating with the Executing Entity (EE), government agencies, and other partners to facilitate smooth project implementation. WHO will adhere to internationally accepted procurement principles, good practices, and regulations, maintaining the highest ethical standards throughout the procurement and execution of adaptation activities of the project.

The MoHSS will serve as the Executing Entity (EE) responsible for implementing the project at national and subnational levels under WHO's guidance and support. The MoHSS's role will include executing activities outlined in the section II.A, such as infrastructure upgrades, training programs, and system-strengthening interventions. Other EE will be Ministry of Agriculture, UNICEF and WFP. The Ministry of Agriculture will partner with UNICEF on the implementation of WASH activities, and with WFP to establish women's gardens. WHO will set up a Project Management Unit in collaboration with the MoHSS including staff recruited and embedded in the MoHSS to execute the project. Procurement and funds disbursement for any activity will be done according to WHO policies and procedures. Given the project's cross-sectoral nature, relevant institutions such as Ministries of Energy, Rural Electrification, and Environment and Water will also contribute to its execution. A Project Board/Project Steering Committee will be set up to govern the project, convening quarterly to review progress and make decisions. Co-chaired by WHO and the Ministry of Health, the committee's membership will include relevant ministries, National Implementing Entities (NIEs), and the National Designated Authority (NDA). Quarterly reports from both MoHSS,

Ministry of Agriculture, UNICEF and WFP will detail achievements, expenditures, and challenges, enabling MoHSS to consolidate these into the overall project framework for effective monitoring and evaluation, and submission to WHO.

Additionally, a Technical Working Group (TWG) comprising technical partners from the government, civil society, research institutions, and the private sector will provide expert advice and recommendations to the committee on project-related technical matters. Collaboration and reporting mechanisms will include regular coordination meetings between the IE, UNICEF, WFP, and the Ministry of Agriculture to ensure seamless implementation. The EEs will submit quarterly progress reports detailing achievements, challenges, and financial updates, while collaborative decision-making processes will guide project adjustments, ensuring alignment with strategic objectives. The project integrates gender-responsive approaches by ensuring active participation of women in all project activities.

## A. Demonstrate how the project/programme aligns with the Results Framework of the Adaptation Fund

The project aligns with the Adaptation Fund (AF) Strategic Results Framework by enhancing climate resilience in health systems, communities, and governance. **Component 1** supports Outcome 7 by improving climate policies and Outcome 1 by strengthening surveillance (Output 1.1.2) and climate monitoring (Output 1.1.3). **Component 2** aligns with Outcome 3 by improving sanitation and hygiene management by supporting community WASH structures (Output 2.1.1) and local sanitation markets (Output 2.1.2). **Component 3** contributes to Outcome 4 by increasing the climate resilience of health facilities through climate-smart infrastructure (Output 3.1.1). **Component 4** strengthens governance under Outcome 7 by integrating climate resilience into policies (Output 4.1.1) and enhancing multi-sectoral collaboration (Output 4.1.2)

Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
<b>Component 1. Strengthen the evidence base to anticipate and mitigate health impacts of climate change</b>				
<b>Outcome 1:</b> Evidence based approaches in mitigating the health impacts of climate change.	Proportion of planned surveys that are conducted.	<b>Outcome 7:</b> Improved policies and regulations that promote and enforce resilience measures	1. Climate change priorities are integrated into national development strategy	2,580,000
<b>Component 2. Sustainable local community participation in sanitation and hygiene management</b>				
<b>Outcome 2:</b> Sustained community engagement and ownership in sanitation and hygiene practices	Proportion of Community structures championing Sanitation and Hygiene Practices	<b>Outcome 3:</b> Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	2,143,832
<b>Component 3. Climate resilient health facilities</b>				
<b>Outcome 3:</b> Resilient health facilities that ensure continuity of quality health services	Proportion PHC Facilities in targeted regions that are Resilient	<b>Outcome 4:</b> Increased adaptive capacity within relevant development sector services and infrastructure assets	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	3,250,000
<b>Component 4. Strengthen governance to mitigate the impacts of climate change on health</b>				
<b>Outcome 4:</b> Effective and institutionalized multi-sectoral collaboration	<b>Indicator 1.</b> Proportion of Sector strategies that have mainstreamed Climate change considerations	<b>Outcome 7:</b> Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	915,000
	<b>Indicator 2.</b> Functional Multisectoral platforms at national and targeted Regions	<b>Outcome 4:</b> Increased adaptive capacity within relevant development sector services and infrastructure assets	4.1. Responsiveness of development sector services to evolving needs from changing and variable climate	
Project Output(s)	Project Output Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
<b>Component 1. Strengthen the evidence base to anticipate and mitigate health impacts of climate change</b>				
<b>Output 1.1.1</b> Evidence generated to inform	<b>Indicator 1.</b> Percentage of Planned Assessments	<b>Output 1.2:</b> Targeted population groups covered by adequate risk reduction	No. of projects/programmes that conduct and update risk and	

planning, implementation, and monitoring of relevant plans	Completed	systems	vulnerability assessments (by sector and scale)	
	<b>Indicator 2.</b> Percentage of Facilities with functional eHealth Systems		No. of early warning systems (by scale) and no. of beneficiaries covered	
<b>Output 1.1.2</b> Strengthened Surveillance Systems that enable early detection and response to emerging and re-emerging health threats including climate change.	<b>Indicator 1.</b> An Interoperable interconnected electronic surveillance system established (Y/N)	<b>Output 1.2:</b> Targeted population groups covered by adequate risk reduction systems	No. of early warning systems (by scale) and no. of beneficiaries covered	
<b>Output 1.1.3</b> Strengthen the climate monitoring system in Namibia.	<b>Indicator 1.</b> Number of Personnel Trained in Climate Monitoring as a percentage of individual planned to be trained (disaggregated by gender)	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
<b>Output 1.1.4</b> Enhanced Modelling Capacity to predict potential	<i>Indicator 1.</i> Number of Training Courses Conducted on Modelling	<b>Output 2.1.</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
	<i>Indicator 2.</i> Modelling Training Module Integrated into the pre-service training Curriculum (Y/N)		2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	
<b>Component 2. Sustainable local community participation in sanitation and hygiene management</b>				
<b>Output 2.1.1</b> Strengthened capacity of local communities and schools to participate in improving sanitation and hygiene	Indicator 1. Number of community Structures supported to champion WASH	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
	<i>Indicator 2.</i> Number of CSOs identified and Supported to Mobilize communities on WASH	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
	<i>Indicator 3.</i> Number of VIP prototype toilets built in targeted Regions	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
<b>Output 2.1.2</b> To ignite locally built and sustainable markets for sanitation solutions/technologies.	Indicator 1 Number of youth and women organized groups that are supported to innovate and produce local sanitation solutions	<b>Outcome 8:</b> Support the development and diffusion of innovative adaptation practices, tools and technologies	8.1. No. of innovative adaptation practices, tools and technologies accelerated, scaled-up and/or replicated	
	<i>Indicator 2.</i> Number of (ocal artisans Trained for high-quality toilet design and construction	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.2.1. Type of income sources for households generated under climate change scenario	
<b>Output 2.1.3</b> Improved access to sanitation and hygiene in informal urban settlements	<i>Indicator 1.</i> Number of tippy taps constructed and distributed	<b>Output 6:</b> Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1. No. and type of adaptation assets (tangible and intangible) created or strengthened in support of individual or community livelihood strategies	
	<i>Behaviour Change in Targeted population (by Gender)</i>	<b>Output 3.2:</b> Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate	3.2.1 No. of technical committees/associations formed to	

Annex 5 to OPG Amended in October 2017				
		knowledge and learning	ensure transfer of knowledge	
<b>Output 2.1.4</b> Functional national WASH data system	Indicator 1. WASH DHIS 2 Module Created and functional (Y/N)	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
	Indicator 1. - Number of users (out of planned) trained on the WASH data system (by gender)		2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
<b>Component 3. Climate resilient health facilities</b>				
Output 3.1.1 Equipped PHC facilities and health posts in underserved areas	Indicator 1. Proportion of PHC Facilities and health posts that are equipped	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
	Indicator 2. Proportion of community health workers equipped with mobile devices and other essential resources	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
	Indicator 3 Proportion of Equipped PHC Facilities with solar-powered energy	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
	Indicator 1. Proportion of PHC Facilities providing quality nutrition interventions	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	4.1.1. No. and type of development sector services modified to respond to new conditions resulting from climate variability and change (by sector and scale)	
	Indicator 21. Proportion of PHC Facilities rolling out the Quality Information System (CoQIS)	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.1. No. and type of development sector services modified to respond to new conditions resulting from climate variability and change (by sector and scale)	
	Indicator 32. Proportion of health posts installed with scale solar-powered waste Incinerators	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
	Indicator 3. Proportion of Hospitals installed with install two climate-friendly autoclaves	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
	Indicator 41. Proportion of Facilities with Upgraded WASH facilities	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
<b>Output 3.1.3</b> Build the capacity of health workers to mitigate the impacts of climate change	Indicator 1. – Proportion of CHWs able to provide emergency first aid	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
	Indicator 2. – proportion of facility staff able to identify health threats made worse by climate change and climate related events (by gender)	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender)	
<b>5</b> Output 3.1.4 Enhance Vaccine distributions to	Number of facilities provided with cold chain equipment	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets	4.1.2. No. of physical assets strengthened or constructed to	

ensure uninterrupted Access to essential vaccines		strengthened in response to climate change impacts, including variability	withstand conditions resulting from climate variability and change (by sector and scale)	
	Indicator 2 Percentage of Laboratories with enhanced AMR testing capacity	<b>Output 4:</b> Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by sector and scale)	
<b>Component 4. Strengthen governance to mitigate the impacts of climate change on health</b>				
Output 4.1.1 Enhanced technical capacity to develop and implement evidence informed climate responsive policies and strategies	Indicator 1. National Climate change strategy and action plan updated	<b>Output 7:</b> Improved integration of climate-resilience strategies into country development plans	7.1. No. of policies introduced or adjusted to address climate change risks (by sector)	
Output 4.1.2 Institutionalized and functional multi sectoral platforms at the national and regional levels	Indicator 3. Real-time Monitoring platform for the PHEOC developed and being used	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	
	Indicator 4. Proportion of functional PHEOC at Regional Level	<b>Output 2.1:</b> Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	
Output 4.1.3 Document and disseminate lessons learnt	Indicator 1 Number of Knowledge Products generated and disseminated	<b>Output 3.1:</b> Targeted population groups participating in adaptation and risk reduction awareness activities	3.1 No. of news outlets in the local press and media that have covered the topic	

## PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

### A. Record of endorsement on behalf of the government

### B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Namibian Constitution 1990, Environmental and Public Health Acts, 2015, WASH Standards 2008, Disaster Risk Management Strategy 2011, First Adaptation Communication Namibia's Climate Change Adaptation Communication to the United Nations Framework Convention on Climate Change (UNFCCC) (2021), UHC Policy framework, National Health Policy Framework) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
Dr. Richard Banda, WHO Country Representative, Namibia Implementing Entity Coordinator	
Date: 6 <sup>th</sup> February	World Health Organisation; UN House, 2nd Floor 38 Stein Street Klein Windhoek. PO Box 3444 Windhoek Namibia Tel: +26461255121; Mobile: +264811501733 Email: <a href="mailto:bandar@who.int">bandar@who.int</a>
Project Contact Person: Dr. Juliet Nabyonga	
Tel: +26461255121 ; Mobile: +264816672313 Email: <a href="mailto:nabyongaj@who.int">nabyongaj@who.int</a>	

<sup>1</sup> The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology, but the overall principle should still apply



REPUBLIC OF NAMIBIA

## MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

Tel: (00 264) 61 284 2111  
Fax: (00 264) 61 232 057

Cnr Robert Mugabe &  
Dr Kenneth Kaunda Street  
Private Bag 13306  
Windhoek  
Namibia

03/10/2024

To: The Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)  
Fax: 202 522 3240/5

Subject: **Endorsement for Building Climate Resilient Health Systems in Namibia**

In my capacity as designated authority for the Adaptation Fund in Namibia, I confirm that the above national project proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the country.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the World Health Organization and executed by Ministry of Health and Social Services, Namibia.

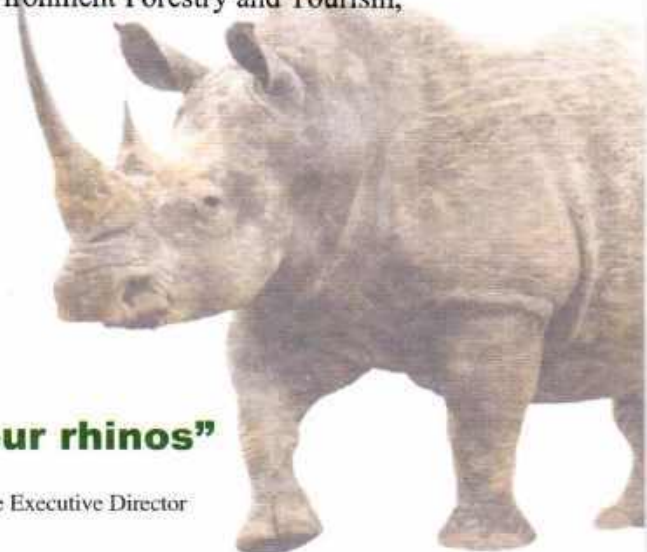
Sincerely,

  
Teofilus Nghitila  
Executive Director,  
Ministry of Environment Forestry and Tourism,



**“Stop the poaching of our rhinos”**

All official correspondence must be addressed to the Executive Director





**Revised PFG Submission Form<sup>1</sup> (additions in red)**

**Project Formulation Grant (PFG)**

**Submission Date:** 07 January 2025

**Adaptation Fund Project ID:**

**Country/ies:** Namibia

**Title of Project/Programme:** Building Climate Resilient Health Systems

**Type of IE (NIE/RIE/MIE):** Multilateral Implementing Entity (MIE)

**Implementing Entity:** WHO Namibia Country office

**Executing Entity/ies:** Ministry of Health and Social Services

**A. Project Preparation Timeframe**

<b>Start date of PFG</b>	Upon concept note approval
<b>Completion date of PFG</b>	8 months after concept note approval

**B. Proposed Project Preparation Activities (\$)**

<b>List of Proposed Project Preparation Activities</b>	<b>Output of the PFG Activities</b>	<b>US\$ Amount</b>	<b>Budget note<sup>2</sup></b>
Assessments	<ol style="list-style-type: none"><li>1. Knowledge attitude and Practice (KAP) studies will be conducted to provide baseline data, inform decision-making, tailor interventions, prioritize resource allocation, monitor and evaluate impact, and engage the community effectively.</li><li>2. Other baseline assessments will generate information that will inform refining of activities and setting targets</li></ol>	70,000	

<sup>1</sup> As presented in AFB/PPRC.33/40 Annex 1.

<sup>2</sup> The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

Gender Analysis	<p>Gender analysis will assess the following</p> <ol style="list-style-type: none"> <li><b>1. Governance and Management:</b> <ul style="list-style-type: none"> <li>• Inclusion of gender perspectives in leadership, decision-making and policy formulation.</li> <li>• Inclusion of women in governance structures at community level</li> </ul> </li> <li><b>2. Access to Resources and Services:</b> <ul style="list-style-type: none"> <li>• Addressing gender-specific barriers to healthcare access.</li> <li>• Addressing gender-specific barriers to resources including economic opportunities</li> <li>• Ensuring water and sanitation needs are met for women.</li> </ul> </li> <li><b>3. Impact of Climate Change on Health:</b> <ul style="list-style-type: none"> <li>• Conducting gender specific challenges.</li> </ul> </li> <li><b>4. Monitoring and Evaluation:</b> <ul style="list-style-type: none"> <li>• Ensuring gender-sensitive data collection and analysis.</li> <li>• Mainstreaming gender consideration in routine monitoring processes of relevant sectors.</li> </ul> </li> </ol>	20, 000	
Workshops	<ul style="list-style-type: none"> <li>- Stakeholders' consultation workshop for all line ministries</li> <li>- Stakeholders' consultation workshop targeting regional councils, office of Governors and Regional local authorities</li> <li>- Stakeholder Consultations workshop targeting Community Members</li> <li>- Stakeholder Consultations workshop targeting women</li> </ul>	10,00 * 3 Consultations = 30,000	

Travel and Participation	All costs related to travel and technical support incurred by the Implementing Entity (IE	13,000	
Design of the full project proposal	A comprehensive document, including the technical outcomes of assessment studies, will be developed and validated before submission to the Adaptation Fund (AF).	12,000	
Other Costs	Management Fee	5,000	
<b>Total Project Formulation Grant</b>		150,000	

Please describe below each of the PFG activities and provide justifications for their need and for the amount of funding required:

#### **Justification**

##### **1. Assessments (US\$ 70,000)**

#### **Description:**

- **Knowledge, Attitude, and Practice (KAP) Studies:** These studies aim to gather baseline data on community perceptions, practices, and knowledge related to the project's thematic areas.
- **Other Baseline Assessments:** These assessments will generate specific data in the targeted regions to assess the status of implementation against all programme strategies, and selected indicators to guide refinement of activities and setting of targets.

#### **Justification:**

- The KAP studies will ensure that project activities are evidence-based and tailored to address real, contextual needs. For example, understanding gaps in awareness or misconceptions can inform targeted educational campaigns.
- Other baseline assessments are critical to provide an objective reference for measuring progress and project impact over time. This data will also guide the prioritization of interventions to optimize resource allocation and increase efficiency.

By anchoring project activities in robust data, these assessments enhance project accountability and contribute to achieving measurable, sustainable outcomes.

##### **2. Gender Analysis (US\$ 20,000)**

#### **Description:**

- This activity focuses on evaluating gender dynamics and inequalities across governance, resource access, and climate resilience. The review will focus on the following aspects;

**Governance and Management:** Will assess the extent to which women participation is ensured in decision-making and policy formulation and leadership roles.

**Access to Resources and Services:** Addressing gender-specific barriers to healthcare access and ensuring water and sanitation needs are met for women

**Impact of Climate Change on Health:** Gender-sensitive vulnerability is considered in various climate change related assessments. This will inform the development of equitable adaptation strategies.

**Monitoring and Evaluation:** Ensuring gender-disaggregated data collection and the use of gender-specific indicators for progress tracking.

Justification:

- Gender analysis is essential to address structural inequalities that disproportionately affect women and other marginalized groups, ensuring that interventions do not inadvertently perpetuate discrimination.
- Evaluate gender-specific barriers and inequalities in accessing essential services, such as healthcare, education, water, and sanitation, while identifying opportunities for promoting equitable access for all.
- Incorporating gender-sensitive approaches strengthens the project's alignment with global commitments, such as the Sustainable Development Goals (SDGs), particularly SDG 5 (Gender Equality).

### **3. Workshops (US\$ 30,000)**

**Description:**

**Stakeholder Consultation Workshops:**

- Workshops for line ministries to ensure intersectoral collaboration and alignment with national priorities.
- Workshops with regional councils, Governors' offices, and local authorities to localize project interventions and gather on-the-ground insights.
- Community-level consultations to ensure that the voices and concerns of local populations are integrated into project planning.

**Justification:**

- Stakeholder engagement promotes ownership, accountability, and sustainability of project outcomes. Engaging line ministries ensures that the project aligns with existing policies and avoids duplication of efforts.
- Regional and local consultations provide an opportunity to address specific challenges unique to different contexts, promoting tailored interventions.
- Community consultations help incorporate indigenous knowledge and practices, building trust and ensuring cultural relevance, which increases the likelihood of success and community buy-in.

### **4. Travel and Participation (US\$ 13,000)**

**Description:**

This budget covers travel expenses for the Implementing Entity (IE) staff to provide technical support, participate in stakeholder engagements, and oversee field activities.

**Justification:**

- Field visits are crucial to ground-truth data collected during assessments and ensure that proposed interventions are contextually appropriate.
- Travel for technical support ensures high-quality outputs, adherence to Adaptation Fund guidelines, and the effective facilitation of PFG activities.
- Direct engagement with stakeholders at various levels fosters collaboration and builds trust, which is vital for long-term project success.

**5. Design of the Full Project Proposal (US\$ 10,000)****Description:**

A comprehensive project proposal will be developed, incorporating technical outcomes from assessments, stakeholder inputs, and validated recommendations.

**Justification:**

- A well-designed project proposal is essential to secure funding and effectively communicate the project's vision, objectives, and implementation strategy.
- By integrating assessment findings and stakeholder feedback, the proposal ensures alignment with community needs, national priorities, and donor requirements.
- Validation by stakeholders enhances credibility and commitment, ensuring that the proposal reflects a collective vision and has buy-in from all relevant parties.

**6. Other Costs: Management Fee (US\$ 8,000)****Description:**

This fee covers operational and administrative costs, including project coordination, reporting, and compliance with financial and administrative requirements.


**Justification:**

- Proper management and coordination are critical for the seamless execution of PFG activities.
- These costs ensure timely reporting, effective resource utilization, and compliance with donor requirements.
- By covering these essential operational needs, the project team can focus on delivering high-quality outcomes without administrative disruptions

**Implementing Entity**

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

Implementing Entity Coordinator, IE Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
---	-----------	-------------------------------	------------------------------	-----------	------------------

<p>Dr. Richard Banda, WHO Country Representative, Namibia  World Health Organisation  UN House, 2nd Floor 38 Stein Street Klein Windhoek  PO Box 3444 Windhoek Namibia  Tel: +26461255121  Mobile: +264811501733  Email: <a href="mailto:bandar@who.int">bandar@who.int</a></p>		<p>01/07/2025</p>	<p>Dr. Juliet Nabyonga</p>	<p>+26461255121</p>	<p>nabyongaj@who.int</p>
---	---	-------------------	----------------------------	---------------------	--------------------------