

Republic of Cameroon
Ministry of Public Health (MoPH)

**Health Security Program in Western and
Central Africa - Phase III (P508837)**

**ENVIRONMENTAL AND SOCIAL
COMMITMENT PLAN (ESCP)**

Negotiated

August 19, 2025

ENVIRONMENTAL AND SOCIAL COMMITMENT PLAN

1. The Republic of Cameroon (the Recipient) will implement the Health Security Program in Western and Central Africa - Phase III (P508837) (the Project) with the involvement of the Ministry of Public Health (MoPH), as set out in the Cameroon Financing Agreement and the Cameroon Grant Agreement (the “Agreements”). The International Development Association (the Association) and the International Bank for Reconstruction and Development (IBRD) (together, the “Bank”) have agreed to provide the financing for the Project, as set out in the Agreements.
2. The Recipient shall ensure that the Project is carried out in accordance with the Environmental and Social Standards (ESSs) and this Environmental and Social Commitment Plan (ESCP), in a manner acceptable to the Bank. The ESCP is a part of the Agreements. Unless otherwise defined in this ESCP, capitalized terms used in this ESCP have the meanings ascribed to them in the referred Agreements.
3. Without limitation to the foregoing, this ESCP sets out material measures and actions that the Recipient shall carry out or cause to be carried out, including, as applicable, their respective timeframes; institutional, staffing, training, monitoring and reporting arrangements; and grievance management. The ESCP also sets out the environmental and social (E&S) documents that shall be prepared or updated, consulted, disclosed and implemented under the Project, consistent with the ESSs, in form and substance acceptable to the Bank. Said E&S documents may be revised from time to time with prior written agreement by the Bank. As provided under the referred Agreements, the Recipient shall ensure that there are sufficient funds available to cover the costs of implementing the ESCP.
4. As agreed by the Bank and the Recipient, this ESCP will be revised from time to time, if necessary, to reflect adaptive management of Project changes or unforeseen circumstances or in response to Project performance. In such circumstances, the Bank and the Recipient agree to update the ESCP to reflect these changes through an exchange of letters signed between the Bank and the Recipient’s Representative specified in the Agreement or the Minister of Economy, Planning and Regional Development (MINEPAT). The Recipient shall promptly disclose the updated ESCP.
5. The subsection on “Indicators for Implementation Readiness” below identifies the actions and measures to be monitored to assess Project readiness to begin implementation in accordance with this ESCP. Nevertheless, all actions and measures in this ESCP shall be implemented as set out in the “Timeframe” column below irrespective of whether they are listed in the referred subsection.

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
IMPLEMENTATION ARRANGEMENTS AND CAPACITY SUPPORT ¹			
A	<p>ORGANIZATIONAL STRUCTURE</p> <p>a. Establish and maintain a Project Management Unit (PMU) with qualified staff and resources to support management of environmental, social, health and safety risks and impacts of the Project including one environmental specialist (with expertise in occupational health and safety), one social specialist, and one gender-based Violence (GBV) specialist.</p> <p>b. Cause Contractors to recruit social specialists with expertise in GBV and an environmental specialist with OHS expertise among their staff, to implement Project activities in compliance with their contracts.</p>	<p>a. Establish the PMU no later than the Project Effective Date, and hire the environmental specialist, social specialist, and GBV specialist, no later than one month after the Project Effective Date and maintain the PIU and these positions throughout Project implementation.</p> <p>b. Cause Contractors to hire E&S staff (Environment/OHS and Social/GBV) before the start of their performance.</p>	MoPH

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
B	<p>CAPACITY BUILDING PLAN/MEASURES</p> <p>Prepare and implement the capacity building plan focusing on:</p> <ul style="list-style-type: none"> • Implementation and monitoring of the Environmental and Social Commitment Plan (ESCP) • Implementation of the Stakeholder Engagement Plan (SEP) and its monitoring & evaluation, • Development and implementation of Labor Management Procedures (LMP) • Mitigation, prevention and response on the sexual exploitation and abuse (SEA)/sexual harassment (SH) front, assessment, development and implementation of the SEA/SH Action Plan. • On SEA/SH training, an accent will be placed on incident reporting and case management • Health, safety and security risks, including risks related to road traffic in the zones surrounding schools with high pedestrian traffic, safety related to transfer of biological materials (e.g. specimen sample transportation, etc.) • Project Grievance Mechanism (GM) to enable project-affected people to file complaints that could be quickly addressed should they have any grievance in relation to the project. • Development and implementation of security risks assessment and security management plan • HIV/AIDS, STIs and Hepatitis B control • Health and safety management (among others covering emergency response procedures, first aid administration, road safety in towns and villages, particularly for schoolchildren) • Waste management <p>Training sessions shall be organized for contractors, laborers and other Project workers working on Project sites, inspectorates' officials and workers (from Environment, Works, etc.), and GM committees who shall be responsible for field level implementation of the Project and GM activities respectfully. In addition, sensitization programs shall be organized for project and communities as relevant on the following aspects:</p> <ul style="list-style-type: none"> • Personal Protective Equipment (PPE) • Work-site risk management • Occupational accident prevention • Grievance management • Solid and liquid waste management • STI/HIV AIDS sensitization • GBV/SEA/SH sensitization, Codes of Conduct, GM, SEA/SH services available and other mitigation measures put in place by the Project both for workers and the community. 	<p>Prepare the capacity building plan no later than 120 days after the Project Effective Date and thereafter implement it throughout Project implementation.</p>	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
MONITORING AND REPORTING			
C	<p>REGULAR REPORTING</p> <p>Prepare and submit to the Bank regular monitoring reports on the environmental, social, health and safety (E&S) performance of the Project. The reports shall include:</p> <ol style="list-style-type: none"> Status of preparation and implementation of E&S instruments required under the ESCP. Summary of stakeholder engagement activities carried out as per the Stakeholder Engagement Plan. Complaints submitted to the grievance mechanism(s), the grievance log, and progress made in resolving them, including number of claims resolved within the timeframe of the Project GM. E&S performance of contractors and subcontractors as reported through monthly contractor and supervision firm reports. Number of RAPs without claims completed in the time foreseen. Number and status of resolution of incidents and accidents reported under action E below. Number of E&S non-conformities recorded by the supervising engineer during project execution, outstanding issues, and closures. 	<p>Submit quarterly reports to the Bank throughout Project implementation, commencing after the Effective Date. Submit each report to the Bank no later than 15 days after the end of each reporting period.</p>	MoPH/PMU
D	<p>CONTRACTORS' MONTHLY REPORTS</p> <p>Require contractors and supervising firms to provide monthly monitoring reports on ESHS performance in accordance with the metrics specified in the respective bidding documents and contracts and submit such reports to the Bank. This report shall also include labor management and OHS performance.</p>	<p>Submit the monthly reports to the Bank upon request and as annexes to the reports to be submitted under action C above.</p>	MoPH/PMU
E	<p>INCIDENTS AND ACCIDENTS</p> <p>Promptly notify the Bank of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including, inter alia, cases of sexual exploitation and abuse (SEA), sexual harassment (SH), and accidents that result in death, serious or multiple injury [e.g., road accident, or work accident]. Provide sufficient details regarding the scope, severity, and possible causes of the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and/or supervising firm, as appropriate.</p> <p>Subsequently, at the Bank's request, prepare a report which considers root-cause analysis on the incident or accident and propose some measures to address it and prevent its recurrence.</p>	<p>Notify the Bank no later than 48 hours after learning about the incident or accident and ideally within 24 hours but no more than 48 hours in cases of SEA/SH and fatality.</p> <p>Provide subsequent report to the Bank within 02 weeks after the incident.</p>	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
	<p>For incidents related to gender-based violence (GBV) or SEA/SH, the survivor should be immediately referred to relevant GBV services according to a survivor centered protocol that shall be developed in the Grievance Mechanism (GM) adapted to be able to address the above-mentioned SEA/SH or GBV (see Action 10.2).</p> <p>Note that for GBV incidents, confidentiality must be ensured for both the survivor and the alleged perpetrator without providing any identifying information. A report of the incident should be submitted by the Recipient, detailing the summary findings and the root cause analysis. A record of incidents shall be kept at the PMU.</p>		
ESS 1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS			
1.1	<p>ENVIRONMENTAL AND SOCIAL ASSESSMENT</p> <p>a. Prepare and implement an Umbrella Environmental and Social Management Framework (U-ESMF) for the Project, consistent with the relevant ESSs.</p> <p>b. Prepare, disclose, adopt, and implement any environmental and social impact assessments (ESIAs)/environmental and social management plans (ESMPs) or other E&S documents required for the respective Project activities based on the assessment process, in accordance with the ESSs, the UESMF, the WB EHSs, and other relevant Good International Industry Practice (GIIP) in a manner acceptable to the Bank to, for inter alia, ensure access to and allocation of Project benefits in a fair, equitable and inclusive manner, taking into account the needs of individuals or groups who, because of their circumstances, may be disadvantaged or vulnerable</p>	<p>a. The UESMF was disclosed by the Bank on 07/16/2025 and by the Recipient on 07/25/2025, and will be implemented throughout Project implementation.</p> <p>b. ESIAs/ESMPs/ E&S documents shall be prepared, consulted upon, disclosed, and adopted before carrying out Project activities for which such documents are required and before any procurement/ Request for Proposal (RFP) so that Project related E&S specifications are integrated in the bidding documents; thereafter implementation of the ESIAs/ESMPs throughout Project implementation.</p>	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
1.2	<p>MANAGEMENT OF CONTRACTORS</p> <p>Incorporate the relevant aspects of the ESCP, including, inter alia, the relevant E&S documents, the Labor Management Procedures, and code of conduct, into the ESHS specifications of the procurement documents and contracts with contractors and supervising firms. Thereafter ensure that the contractors and supervising firms comply and cause subcontractors to comply with the ESHS specifications of their respective contracts. Provide copies of the relevant contracts with contractors/subcontractors and supervision firms to the Bank.</p>	<p>As part of the preparation of procurement documents and respective contracts. Supervise contractors throughout Project implementation. Copies of relevant contracts provided to the Bank upon request.</p>	MoPH/PMU
1.3	<p>TECHNICAL ASSISTANCE</p> <p>Carry out the consultancy, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the Project in accordance with terms of reference acceptable to the Bank, that are consistent with the ESSs. Thereafter ensure that the output of such activities complies with the terms of reference</p>	Throughout Project implementation.	MoPH/PMU
1.4	<p>CONTINGENT EMERGENCY RESPONSE FINANCING</p> <p>a. Ensure that the CERC Manual includes a description of the ESHS assessment and management arrangements including, a standalone framework instrument for CERC (CERC ESMF) that will be included or referred to in the CERC Manual for the implementation of CERC Component, in accordance with the ESSs.</p> <p>b. Adopt any environmental and social (E&S) instruments which may be required for activities under CERC Part of the Project, in accordance with the CERC Manual and, a standalone framework instrument for CERC (CERC ESMF) and the ESSs, and thereafter implement the measures and actions required under said E&S instruments, within the timeframes specified in said E&S instruments.</p>	The preparation of the CERC Manual and the Emergency Action Plan, and if applicable, other E&S documents, as relevant in form and substance acceptable to the Bank is a withdrawal condition under Section III.B.1 of Schedule 2 to the Agreements.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
		CERC activation must adopt any required E&S documents and include it as part of the respective bidding process, if applicable, and in any case, before the carrying out of the relevant Project activities for which the E&S instrument is required. Implement the E&S instruments in accordance with their terms, throughout the life of the Project.	
ESS 2: LABOR AND WORKING CONDITIONS			
2.1	LABOR MANAGEMENT PROCEDURES Prepare and implement the Labor Management Procedures (LMP) for the Project, including, inter alia, provisions on working conditions, management of workers relationships, occupational health and safety (including personal protective equipment, and emergency preparedness and response), code of conduct (including relating to SEA and SH), forced labor, child labor, grievance arrangements for Project workers, and applicable requirements for contractors, subcontractors, and supervising firms.	Prepare, consult upon and disclose LMP no later than two months after the Project Effective Date and prior to engaging Project workers and thereafter adopt and implement the LMP throughout Project implementation.	MoPH/PMU
2.2	Require contractors to prepare and implement an Occupational Health and Safety Plan (OHSP) following the World Bank Group Environmental Health and Safety Guidelines (for construction/rehabilitation activities) and site-specific ESMPs.	OHS Plan and Site-specific ESMPs to be prepared by Contractors and shared with the Project for its approval prior to commencement of any civil works under the Project. Thereafter implemented throughout Project implementation.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
2.3	GRIEVANCE MECHANISM FOR PROJECT WORKERS Establish and operate a grievance mechanism for Project workers, as described in the LMP and consistent with ESS2.	Establish grievance mechanism prior to engaging Project workers and thereafter maintain and operate it throughout Project implementation	MoPH/PMU
ESS 3: RESOURCE EFFICIENCY AND POLLUTION PREVENTION AND MANAGEMENT			
3.1	WASTE MANAGEMENT PLAN Prepare and implement a Waste Management Plan (WMP), as part of the ESMP prepared for the Project, to manage hazardous and non-hazardous waste, consistent with ESS3.	Same timeframe as for the adoption and implementation of the ESMPs under action 1.1.	MoPH/PMU
3.2	RESOURCE EFFICIENCY AND POLLUTION PREVENTION AND MANAGEMENT Incorporate resource efficiency and pollution prevention and management measures in the UESMF and site-specific ESMPs to be prepared under action 1.1 above.	Same timeframe as for the adoption and implementation of the ESMF and ESMPs under action 1.1.	MoPH/PMU
ESS 4: COMMUNITY HEALTH AND SAFETY			
4.1	TRAFFIC AND ROAD SAFETY Incorporate measures to manage traffic and road safety risks as required in the UESMF and all ESMPs to be prepared under action 1.1 above.	Same timeframe as for the adoption and implementation of the ESMF and ESMPs under action 1.1.	MoPH/PMU
4.2	COMMUNITY HEALTH AND SAFETY Assess and manage specific risks and impacts to the community arising from Project activities including risks related to labor influx such as traffic and road safety risks, community exposure to noise and dust from construction, sexual abuse and exploitation (SEA), and the emergency response plan, as specified in the ESMP in action 1.1 and the SEA/SH Prevention and Response Plan (see action 4.3 below). Include mitigation measures in the ESMPs/ESMP Checklists to be prepared in accordance with the UESMF.	Same timeframe as for the adoption and implementation of the UESMF and ESMPs under action 1.1.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
4.3	<p>SEA AND SH RISKS</p> <p>a. Prepare and implement a SEA/SH Action Plan consistent with ESS4, to assess and manage the risks of SEA and SH.</p> <p>b. Ensure that measures related to community workers including vetting process and criteria when hiring community health workers are included in the Project Operations Manual (POM) and the implementation of these measures are monitored throughout Project implementation, all in a form and substance acceptable to the Bank.</p> <p>c. Ensure recruitment of a specialized GBV service provider, with qualifications and terms of reference acceptable to the Bank, to provide technical assistance for the implementation of the SEA/SH Action Plan including aspects relating to case management and Project Grievance Mechanism (GM), as well as support for monitoring related measures.</p>	<p>a. Prepare, consult upon, disclose and implement SEA/SH Action Plan no later than two months after the Effective Date and thereafter implement the SEA/SH Action Plan throughout Project implementation.</p> <p>b. At the same time as preparation and adoption of POM in accordance with the Financing Agreement and implemented throughout Project implementation.</p> <p>c. Before the start of field activities, and no later than 120 days after the Project Effective Date, and maintained throughout Project implementation.</p>	MoPH/PMU
4.4	<p>OCCUPATIONAL HEALTH AND SAFETY (OHS) MEASURES</p> <p>Incorporate OHS guidelines and Plans into all subproject ESMPs to be prepared under action 1.1 above</p>	Same timeframe as for the adoption and implementation of the ESMPs under action 1.1.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
4.5	<p>SECURITY MANAGEMENT</p> <p>Prepare, consult upon, and disclose (executive summaries of), security risk assessment (SRA) and security management plan (SMP) that cover the assessment and implementation measures to manage the security risks of the Project, including the risks of engaging security personnel to safeguard Project workers, sites, assets, and activities, guided by the principles of proportionality and GIIP, and by applicable law, in relation to hiring, rules of conduct, training, equipping, and monitoring of such personnel.</p>	Prepare, consult upon, and disclose a Security Risk Assessment (SRA) and Security Management Plan (SMP) no later than 2 months after the Project Effective Date, and thereafter implement the SRA and SMP throughout Project implementation.	MoPH/PMU
4.6	<p>INVOLVEMENT OF SECURITY PERSONNEL</p> <p>Ensure the following measures are carried out before deploying the security forces for the provision of security to Project workers, sites and/or assets, consistent with the ESSs:</p> <ul style="list-style-type: none"> a. Assess and implement measures to manage the security risks of engaging the security personnel as set out in the Security Management Plan and consistent with ESS4, guided by the principles of proportionality and GIIP, and by applicable law, in relation to screening, hiring, rules of conduct, training, equipping, and monitoring of the security personnel. b. Adopt and implement standards, protocols, and codes of conduct, as relevant, for the selection and assignment of the security personnel to the Project, and make reasonable inquiries to verify that security forces that are employed have not engaged in past unlawful or abusive behavior, including sexual exploitation and abuse (SEA), sexual harassment (SH) or excessive use of force as set out in the SMP and consistent with ESS4; c. Ensure that adequate instruction and training is provided to security personnel, prior to deployment and on a regular basis, on the use of force and appropriate conduct (including in relation to civilian-military engagement, SEA and SH, and other relevant areas), as set out in the SMP and consistent with ESS4; d. Ensure that the stakeholder engagement activities under the Stakeholder Engagement Plan (SEP) include communication on the involvement of security personnel in the Project; e. Ensure that any concerns or grievances regarding the conduct of the security personnel are received, monitored, and documented (taking into account the need to protect confidentiality) by the Project's grievance mechanism (see action 10.2 below), which shall facilitate its resolution, in accordance with ESS4 and ESS10. Notify the Bank after receiving the concern or grievance, as set out under action B above; and f. Where the Bank so requests in writing, after consultation with the Recipient: (i) promptly appoint a third- party monitor consultant, with terms of reference, qualifications and experience 	<p>Carry out a., b., and c. before deploying security personnel under the Project and implement throughout Project implementation.</p> <p>d. and e. as set out under actions 10.1 and 10.2 respectively. Notify the Bank after receiving a concern or grievance in the timeframe specified in action B above.</p> <p>f. within the timeframes requested by the Bank.</p>	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
	acceptable to the Bank, to visit and monitor the Project area where security personnel are deployed, collect relevant data and communicate with Project stakeholders and beneficiaries; (ii) require the third-party monitor consultant to prepare and submit monitoring reports, which shall be promptly made available to and discussed with the Bank; and (iii) promptly take any actions, as may be requested by the Bank upon its review of the third-party monitor consultant reports.		
ESS 5: LAND ACQUISITION, RESTRICTIONS ON LAND USE AND INVOLUNTARY RESETTLEMENT			
5.1	RESETTLEMENT PLANS Prepare, disclose, consult upon, adopt and implement a resettlement action plan (RAP) including a Livelihood Restoration Plan (LRP) for each activity for which such RAP is needed, and consistent with ESS5.	Prepare, disclose, consult upon, adopt and implement once sites for Project works are known, and before the start of related works, the respective RAP annexed with LRP, including ensuring that before taking possession of the land and related assets, full compensation has been provided and, as applicable, displaced people have been resettled and moving allowances have been provided. In addition, ensure that all measures planned in the Livelihood Restoration Plan shall be applied as necessary.	MoPH/PMU
5.3	GRIEVANCE MECHANISM Develop and implement the arrangements for the grievance mechanism for resettlement in accordance with the grievance mechanism under ESS10. The grievance mechanism (GM) to address resettlement related complaints should be described in the RAPs and USEP. Ensure that the RAPs and USEP provide detailed information on the grievance mechanism (GM) to which complaints and feedback on involuntary resettlement under the Project can also be directed.	The GM shall be operational before the start of resettlement activities under each investment and maintained throughout Project implementation.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
ESS 6: BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES <i>Not currently relevant to the Project</i>			
ESS 7: INDIGENOUS PEOPLES/SUB-SAHARAN AFRICAN HISTORICALLY UNDERSERVED TRADITIONAL LOCAL COMMUNITIES			
7.1	INDIGENOUS PEOPLES PLANS a. Conduct related social assessment and identify measures to address risks as part of ESIA/ESMP and Stakeholder Engagement Plan, consistent with ESS7. b. Prepare and implement an Indigenous Peoples Plan (IPP) for each activity under the Project for which such IPP is required, as set out in ESIA/ESMP and SEP consistent with ESS7.	Same timeframe as the ESIA/ESMP and SEP and once adopted, implement required actions throughout Project implementation. Prepare, consult upon, and disclose IPP before the start of activities in zones with IP presence.	MoPH/PMU
7.2	GRIEVANCE MECHANISM The grievance mechanism to address complaints submitted by Indigenous Peoples shall be described in the SEP and based on consultation with Indigenous Peoples and Indigenous Peoples representative organizations.	Same timeframe as section 10.3.	MoPH/PMU
ESS 8: CULTURAL HERITAGE			
8.1	CULTURAL HERITAGE RISKS AND IMPACTS Adopt and implement cultural heritage management measures as part of the UESMF and ESMPs, consistent with ESS8.	Adopt cultural heritage management measures as part of the UESMF and site specific ESMPs in accordance with the timeframes for the adoption and implementation of the UESMF and ESMPs under Action 1.1 and thereafter implement the CHMP throughout Project implementation.	MoPH/PMU
8.2	CHANCE FINDS Describe and implement the Chance Finds Procedures, as part of the UESMF and ESMPs of the Project.	Describe the chance find procedures in the UESMF and ESMPs. Implement the procedures throughout Project implementation.	MoPH/PMU

MATERIAL MEASURES AND ACTIONS		TIMEFRAME	RESPONSIBLE ENTITY
ESS 9: FINANCIAL INTERMEDIARIES [This standard is only relevant for Projects involving Financial Intermediaries (FIs).] <i>Not currently relevant to the Project</i>			
ESS 10: STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE			
10.1	STAKEHOLDER ENGAGEMENT PLAN a. Prepare and Implement an Umbrella Stakeholder Engagement Plan (SEP) for the Project, consistent with ESS10, which includes measures to, inter alia, provide stakeholders with timely, relevant, understandable and accessible information, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation. The communication activities of the Project, including citizen engagement, will align with the SEP's objectives, principles, procedures and implementation plan. b. Prepare and Implement a Country Stakeholder Engagement Plan (SEP) for the Project, consistent with ESS10.	a. The USEP was disclosed on 07/16/2025 by the Bank and on 07/25/2025 by the Recipient and shall be implemented throughout Project implementation. b. Prepare, consult upon, disclose and implement Country specific SEP no later than two months after the Effective Date and thereafter implement the SEP throughout Project implementation.	MoPH/PMU
10.2	PROJECT GRIEVANCE MECHANISM Establish, publicize, maintain, and operate an accessible grievance mechanism, to receive and facilitate resolution of concerns and grievances in relation to the Project, promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all Project-affected parties, at no cost and without retribution, including concerns and grievances filed anonymously, in a manner consistent with ESS10. The grievance mechanism shall be equipped to receive, register, and facilitate the resolution of SEA/SH complaints, including through the referral of survivors to relevant gender-based violence service providers, all in a safe, confidential, and survivor centered manner.	Establish the grievance mechanism before the start of field activities and thereafter maintain and operate the mechanism throughout Project implementation. Adopt GM of SENI plus (P181561) in line with SEF throughout project preparation till when project GM is deployed.	MoPH/PMU
INDICATORS FOR IMPLEMENTATION READINESS			
The following actions are indicators for implementation readiness: <ul style="list-style-type: none"> i. Recruitment and training of E&S staff within PMU, ii. ES assessments and plans to be prepared by the Recipient at the onset of implementation. 			

Climate Annex: CAMEROON

Abbreviations and acronyms

AMR	Antimicrobial Resistance
CERC	Contingency Emergency Response Component
FETP	Field Epidemiological Training Program
GHG	Greenhouse gas
IHR	International Health Regulation
IT	Information Technology
ND-GAIN	Notre Dame Global Adaptation Initiative
PHEOCC	Public Health Emergency Operations Coordination Center
SOP	Standard Operating Procedure
WASH	Water, Sanitation, and Hygiene

Climate Vulnerability and Contribution to Adaptation and Mitigation

The Project has been screened for short and long-term climate disasters and risks and has been found to be highly exposed, while the potential risk to project activities is moderate. Cameroon's five-year smooth annual temperature was 25.02°C in 2023, 0.73°C higher than 50 years ago. Temperatures are expected to increase by 3.9°C over the next 20 years under the worst climate scenario.² The average annual precipitation over Cameroon has declined by 2.9mm per decade since 1960.³ Precipitation is expected to increase by 5.8mm, although with great variation throughout the country.^{4,5} Cameroon is geographically and climatically diverse with hot and humid coastal and rainforest areas, mild mountains areas, and hot and dry desert. The Northern part of the country, which relies largely on agriculture is semi-arid and dry with temperatures ranging from 25-30°C and is highly vulnerable to strong winds, floods, landslides, erosion, drought and desert advancement.⁶ South Cameroon plateau is humid and equatorial with temperatures ranging from 20-25°C and is also exposed to heat waves, flooding, landslides, and erosion.^{7,8,9}

Climate change is already contributing to increased health burdens and health emergencies in Cameroon. In 2024, rises in water levels were particularly severe in Cameroon, affecting 400,000 people, and leading to displacement, and decreased access to safe water and food.¹⁰ The anticipated rise in the frequency and intensity of heavy rainfall and flooding will further strain health facilities, disrupt WASH (Water, Sanitation, and Hygiene) services, and damage isolation centers, exacerbating the risks of antimicrobial resistance (AMR) and infectious diseases such as waterborne diseases. It is estimated that at least 50% of health emergencies are climate-related in Cameroon, between 1980 and

² World Bank, Climate Knowledge Portal, Cameroon, Climatology (2023)

³ World Bank, Country Climate and Development Report, Cameroon (2022)

⁴ World Bank, Country Climate and Development Report, Cameroon (2022)

⁵ Cheo, A. E., Voigt, H.-J., & Mbua, R. L. (2013). Vulnerability of water resources in northern Cameroon in the context of climate change. *Environmental Earth Sciences*, 70(3), 1211–1217. <https://doi.org/10.1007/s12665-012-2207-9>

⁶ World Bank – CCKP. (2021). Current Climate – Cameroon. [Cameroon - Climatology | Climate Change Knowledge Portal](#)

⁷ World Bank, Country Climate and Development Report, Cameroon (2022)

⁸ Bassirou, Y., & Bitondo, D. (2023). Analysis of rainfall dynamics in the three main cities of northern Cameroon. *Environmental Monitoring and Assessment*, 195(6), 640. <https://doi.org/10.1007/s10661-023-11208-7>

⁹ World Bank – GFDRR. (n.d.). Think Hazard. Cameroon. [Think Hazard - Cameroon](#)

¹⁰ Rubaudo, C. (2025, March 12). *Cameroon: Comment se relever après les inondations*. Première Urgence Internationale. <https://www.premiere-urgence.org/actualites/cameroun-comment-se-relever-apres-les-inondations/>

2020, natural hazard risks constituted in epidemics (47%), floods (32%), drought (8%) and landslide (4%).¹¹ All those risks are expected to increase in frequency and severity as a result of climate change.¹²

Climate change is worsening the burden of existing infectious diseases and increasing the risk of emerging diseases in Cameroon. Several studies are anticipating major disruption caused by climate change on malaria incidence in Cameroon due to changes in temperature and rainfall patterns.^{13,14,15} Climate change is expected to cause 2.4 million additional malaria cases between 2026 and 2030, and 9 million between 2031 and 2050.¹⁶ The coastal regions of Cameroon in particular are expected to become malaria and dengue hotspots because of climate change by 2030 due to increased seasonal suitability.^{17,18} In total, infectious diseases account for 94 percent of the economic cost of the health impacts of climate change due to years of life lost in Cameroon, which is anticipated to reach almost US\$5.3 billion between 2031 and 2050 (dengue, diarrhea and malaria).¹⁹ Changes in seasonal patterns as well as extreme weather events such as floods and droughts are contributing to cholera incidence in Cameroon.^{20,21} A one degree increase in temperatures has also been proven to be positively associated with a 7% increase in monkeypox daily cases in West Africa.²² Cameroon is ranked 155 out of 187 countries by the ND-GAIN (Notre Dame Global Adaptation Initiative) climate matrix, denoting high vulnerability and low readiness. The vulnerability of the health sector is one of the main elements of that poor performance, due to projected changes in vector-borne diseases and low number of medical staff per 1,000 people.²³

Climate change threatens to exacerbate AMR and zoonotic diseases in Cameroon.²⁴ The African continent faces a high health burden related to climate-sensitive zoonotic outbreaks such as Ebola, Marburg, Lassa fever, and Rift Valley fever.²⁵ As climate change progresses, the frequency of emerging zoonotic events is estimated to continue increasing, disproportionately impacting Africa.²⁶ Climate change hence strengthens the case for a One Health approach, aiming

¹¹ World Bank Climate Change Knowledge Portal. Cameroon. Retrieved March 21, 2025, from <https://climateknowledgeportal.worldbank.org/>

¹² Intergovernmental Panel On Climate Change (ipcc). (2023). Climate Change 2022 – Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (1st ed.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>

¹³ Nyasa, R. B., Awatboh, F., Kwenti, T. E., Titanji, V. P. K., & Ayamba, N. L. M. (2022). The effect of climatic factors on the number of malaria cases in an inland and a coastal setting from 2011 to 2017 in the equatorial rain forest of Cameroon. *BMC Infectious Diseases*, 22(1), 461. <https://doi.org/10.1186/s12879-022-07445-9>

¹⁴ Tanga, M. C., Ngundu, W. I., Judith, N., Mbuh, J., Tendongfor, N., Simard, F., & Wanji, S. (2010). Climate change and altitudinal structuring of malaria vectors in south-western Cameroon: Their relation to malaria transmission. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 104(7), 453–460. <https://doi.org/10.1016/j.trstmh.2010.02.006>

¹⁵ Mbouna, A. D., Tamoffo, A. T., Asare, E. O., Lenouo, A., & Tchawoua, C. (2023). Malaria metrics distribution under global warming: Assessment of the VECTRI malaria model over Cameroon. *International Journal of Biometeorology*, 67(1), 93–105. <https://doi.org/10.1007/s00484-022-02388-x>

¹⁶ WBG, Climate Change & Health Vulnerability Analysis: Cameroon (2025)

¹⁷ Zermoglio, F., Ryan, S., & Swaim, M. (2019). *Shifting Burdens—Malaria Risks in a Hotter Africa*. USAID.

¹⁸ Sintayehu, D. W., Tassie, N., & De Boer, W. F. (2020). Present and future climatic suitability for dengue fever in Africa. *Infection Ecology & Epidemiology*, 10(1), 1782042. <https://doi.org/10.1080/20008686.2020.1782042>

¹⁹ WBG, Climate Change & Health Vulnerability Analysis: Cameroon (2025)

²⁰ *Cholera in Cameroon: When climate disaster unleashes an epidemic*. (n.d.). Retrieved April 1, 2025, from <https://www.gavi.org/vaccineswork/cholera-cameroon-when-climate-disaster-unleashes-epidemic>

²¹ Hameni Nkwayep, C., Glèlè Kakaï, R., & Bowong, S. (2024). Prediction and control of cholera outbreak: Study case of Cameroon. *Infectious Disease Modelling*, 9(3), 892–925. <https://doi.org/10.1016/j.idm.2024.04.009>

²² Rahman, A. R., Munir, T., Fazal, M., Cheema, S. A., & Bhayo, M. H. (2025). Climatic determinants of monkeypox transmission: A multi-national analysis using generalized count mixed models. *Journal of Virological Methods*, 332, 115076. <https://doi.org/10.1016/j.jviromet.2024.115076>

²³ Dame, M. C. W. // U. of N. (n.d.). *Rankings // Notre Dame Global Adaptation Initiative // University of Notre Dame*. Notre Dame Global Adaptation Initiative. Retrieved March 21, 2025, from <https://gain.nd.edu/our-work/country-index/rankings/>

²⁴ Regional evidence is displayed here considering (i) that AMR and zoonotic disease risks do not know borders and are better considered at the regional level; (ii) national level information was not available.

²⁵ Magiri, R., Muzandu, K., Gitau, G., Choongo, K., & Iji, P. (2020). Impact of Climate Change on Animal Health, Emerging and Re-emerging Diseases in Africa. In W. Leal Filho, N. Ogue, D. Ayal, L. Adelake, & I. Da Silva (Eds.), *African Handbook of Climate Change Adaptation* (pp. 1–18). Springer International Publishing. https://doi.org/10.1007/978-3-030-42091-8_19-1

²⁶ Carlson, C. J., Albery, G. F., Merow, C., Trisos, C. H., Zipfel, C. M., Eskew, E. A., Olival, K. J., Ross, N., & Bansal, S. (2022). Climate change increases cross-species viral transmission risk. *Nature*, 607(7919), 555–562. <https://doi.org/10.1038/s41586-022-04788-w>

at addressing the interface between human and animal health, especially considering that it is estimated to cost less than 1/20th of the value of lives loss prevented each year.^{27,28} In addition, climate change is also predicted to exacerbate AMR risks in Africa.²⁹ For instance, rising aerosol levels in Africa—driven by shifts in climate and land use—have been linked to changes in the patterns of antibiotic resistance.³⁰

The strengthening of health security through the implementation of early warning systems and disease surveillance is part of the National Adaptation Plan issued by the Government of Cameroon in 2015.³¹ The Country Climate Development Report developed by the World Bank in coordination with stakeholders from the Government of Cameroon also highlights the need to address structural vulnerabilities of the health system such as poor of basic medical equipment as well as weaknesses in emergency preparedness and response planning, biosafety, links between public health and security authorities during a public health emergency, and low infection control practices.³² The following adaptation and mitigation measures will be incorporated into the operation.

The project intends to implement measures to adapt to the impacts of climate change in Cameroon particularly extreme floods, extreme heat while employing measures to mitigate greenhouse gas (GHG) emissions as outlined in the climate adaptation and mitigation table.

Table 1: Climate Action per Component

Subcomponent	Climate Action
Component 1: Prevention of Health Emergencies (US\$3.43 million)	
Subcomponent: 1.1 Health Security Governance, Planning, and Stewardship (US\$2.66 million)	<p>Climate change is a primary driver of health emergencies in Cameroon (estimated to be at least 50 percent). Accordingly, health security governance, planning, and stewardship for climate change and response is a primary focus for this subcomponent. Activities funded through this subcomponent will help the country address the additional burden of disease from climate sensitive diseases and the additional impacts of more frequent and intense climate shocks (floods, extreme heat) on the health system. Adequate, focused capacity for response to the health impacts of climate shocks is critical for adaptation to these. In addition, Cameroon's National Compact mentions a need to establish a legal and regulatory framework for better integration of health and environmental management for increased adaptation to climate change.³³ The subcomponent will purposively incorporate climate change throughout the activities to address the risk of climate change to health security:</p> <ul style="list-style-type: none"> - Sectoral, multi-sectoral, and public health laws, policies, and regulations will be reviewed and drafted to ensure their contents support response to climate shocks, with specific sections and content on climate change. - The subcomponent will finance the elaboration of specific plans, guides, and standard operating procedures (SOPs) to prepare and respond to the health consequences of climate change in Cameroon, with specific sections and content on climate change.

²⁷ Bernstein, A. S., Ando, A. W., Loch-Temzelides, T., Vale, M. M., Li, B. V., Li, H., Busch, J., Chapman, C. A., Kinnaid, M., Nowak, K., Castro, M. C., Zambrana-Torrel, C., Ahumada, J. A., Xiao, L., Roehrdanz, P., Kaufman, L., Hannah, L., Daszak, P., Pimm, S. L., & Dobson, A. P. (2022). The costs and benefits of primary prevention of zoonotic pandemics. *Science Advances*, 8(5), eabl4183. <https://doi.org/10.1126/sciadv.abl4183>

²⁸ Alimi, Y., & Wabacha, J. (2023). Strengthening coordination and collaboration of one health approach for zoonotic diseases in Africa. *One Health Outlook*, 5(1), 10. <https://doi.org/10.1186/s42522-023-00082-5>

²⁹ Van Bavel, B., Berrang-Ford, L., Moon, K., Gudda, F., Thornton, A. J., Robinson, R. F. S., & King, R. (2024). Intersections between climate change and antimicrobial resistance: A systematic scoping review. *The Lancet Planetary Health*, 8(12), e1118–e1128. [https://doi.org/10.1016/S2542-5196\(24\)00273-0](https://doi.org/10.1016/S2542-5196(24)00273-0)

³⁰ Cáliz, J., Subirats, J., Triadó-Margarit, X., Borrego, C. M., & Casamayor, E. O. (2022). Global dispersal and potential sources of antibiotic resistance genes in atmospheric remote depositions. *Environment International*, 160, 107077.

³¹ Plan National d'Adaptation aux Changements Climatiques du Cameroun, Ministère de l'Environnement et de la Protection de la Nature et du Développement Durable (2015)

³² WBG, Country Climate & Development Report: Cameroon (2025)

³³ National Compact Between the Government of the Republic of Cameroon and its Partners of Development (2023)

	<ul style="list-style-type: none"> - The legal framework for health emergency management will be reviewed and adapted to allow for rapid and informed decision-making processes to respond to climate-shocks. Specific content on climate change will be included in legal frameworks. - The guide for multisectoral “One Health” coordination which will be updated to include specific sections on climate-related risks given that climate change exacerbates AMR and zoonotic diseases risks in Cameroon. - Governance frameworks for health data management will be strengthened to enhance data interoperability and allow for the use of meteorological data in health emergency preparedness, given that climate change is a primary driver of health emergencies in Cameroon. Specific content on climate change will be included in governance frameworks. - The subcomponent will finance monitoring/evaluation of IHR (International Health Regulation) implementation capacities for climate emergency preparedness and response. A specific tool to evaluate climate emergency preparedness will be identified. - All the other health security documents produced under that component will include specific sections on the preparation for and response to the health consequences of climate change (e.g. guide for multisectoral coordination of primary and community health services for climate-sensitive diseases, plan for care continuity during and after climate-related shocks, and plan for multi-sector mitigation of maternal and perinatal deaths in climate-related health emergencies).
Subcomponent: 1.2 Scaling-up One Health Agenda and combatting AMR (US\$0.77 million)	<p>This subcomponent aims to strengthen multisectoral collaboration embedded in the One Health approach, with the aim of preventing zoonoses-related outbreaks, AMR, and vector-borne diseases. Climate change is a primary driver of the One Health agenda in Cameroon, considering that most vector-borne and zoonotic diseases are climate-sensitive, and is a primary driver of risk communication activities on climate shocks and climate-sensitive diseases. Activities related to AMR risk reduction contribute to climate resilience in Cameroon.</p> <ul style="list-style-type: none"> - The national action plan to combat AMR will have specific sections on the impact of climate change on AMR and reducing these impacts, with a focus on climate shocks. - The subcomponent will finance the training of veterinary clinicians, veterinary auxiliaries, agronomists and producers on AMR risks.
Component 2: Detection of Health Emergencies (US\$40.8 million)	
Subcomponent 2.1: Collaborative Surveillance (US\$8.06 million)	<p>This component aims at converging human and animal disease surveillance. Considering that climate change is a driver for important vector borne diseases in Cameroon, this subcomponent will purposively support addressing climate change, as follows:</p> <ul style="list-style-type: none"> - Surveillance systems will be enhanced by the integration of weather data for preparedness and response to climate-related hazards such as floods and outbreaks of climate-sensitive diseases. - Community-based and event-based surveillance mechanisms will be updated to better prepare for and respond to climate-related health risks. Local linkages at the community level will enable to target the most vulnerable groups (children, women, elderly people, people with disabilities or pre-existing health conditions), in the context of health emergency response. - Human, animal, plant and environmental data will be integrated to better monitor health risks, in particular around AMR, zoonotic diseases, and climate-related diseases. - Cross border surveillance will screen for climate sensitive diseases. <p>The budget dedicated to mitigation activities under this subcomponent will be US\$10.9 million, consisting of:</p> <ol style="list-style-type: none"> i. Digitization of internal operations leading to substantial GHG emission reduction in travel and material use for a total budget of US\$8.32 million (digitization of health

	<p>surveillance databases, interoperability of health platforms and software - Mitigation List 10.4)³⁴,</p> <p>ii. Rehabilitation of buildings for points of entry screening using EDGE post-rehabilitation certification to strengthen cross border surveillance³⁵. Rehabilitation will incorporate climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods and reflective paint for high heat.</p> <p>iii. Purchase of equipment for Points of Entry (by land and in airports), with energy efficiency above national standards used as a rated procurement criterion³⁶ for a total budget of US\$1.48 million.</p>
Subcomponent: 2.2 Laboratory Quality and Capacity (US\$16.74 million).	<p>This subcomponent will focus on enhancing the quality of laboratory systems to ensure timely and accurate identification and characterization of infectious disease, including climate-sensitive diseases. It will purposively incorporate climate change with specific TA for the activities, as follows:</p> <ul style="list-style-type: none"> - Laboratory specimen transportation protocols will be updated to include specific sections on climate-related risks, such as contingency measures for transport during floods or extreme heat. - Human and veterinary laboratory data management systems will be integrated to facilitate real-time disease surveillance, especially in the context of climate-related extreme weather events. <p>The budget dedicated to mitigation activities under this subcomponent will be US\$3.554 million, consisting of:</p> <ul style="list-style-type: none"> i. Rehabilitation of veterinary laboratories using EDGE post-rehabilitation certification³⁷. Rehabilitation will incorporate climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods and reflective paint for high heat, and emergency power solutions in case of outages. ii. Purchase of laboratory equipment with energy efficiency above national standards used as a rated procurement criterion³⁸ for a total budget of US\$2.05 million,

³⁴ Digitization of internal operations is expected to substantially reduce greenhouse gas (GHG) emissions by reducing paper use, storage and transport within the country (totaling 94.03 metric ton CO₂eq fewer emissions per year, from 94.19 metric ton CO₂eq per year generated with paper-based emissions to 0.0078 metric ton CO₂eq per year with digitization). This move to digitization results in a greater than 20% reduction in GHG emissions compared to a baseline scenario, and it is projected to avert the printing of over 1.7 million paper sheets annually, which are transported by shared vans 27 times a year averaging 315 km per trip.

³⁵ The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of the points of entry buildings and to securing post-construction EDGE level 1 certification for the rehabilitation of the points of entry buildings. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards for an estimated total of US\$1.1 million, IDA. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for the points of entry buildings. The design and construction of the energy-efficient points of entry buildings will contribute to reductions in greenhouse gas emissions.

³⁶ Laboratory equipment purchased through this subcomponent for health facilities will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO₂e emissions compared to the current context in Cameroon, where such guidelines are absent. By introducing energy efficiency requirements into equipment specifications, the Project goes above and beyond current technology performance benchmarks. Energy Star efficiency standards, IEC energy efficiency standards, and similar viable standards for medical equipment will be used exceeding mandatory minimum energy performance standards set in Cameroon. The highest energy efficiency rating or labelling that allows to perform medical services adequately will be pursued. Rated criteria will be used in the procurement process to ensure that the highest energy efficiency rating or labelling that allows to perform quality medical adequately will be pursued.

³⁷ The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of the veterinary laboratories and to securing post-construction EDGE level 1 certification for the rehabilitation of the laboratories. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards for an estimated total of US\$0.764 million, IDA. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for the laboratories. The design and construction of the energy-efficient laboratories will contribute to reductions in greenhouse gas emissions.

³⁸ Laboratory equipment purchased through this subcomponent for health facilities will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO₂e emissions compared to the current context in Cameroon, where such guidelines are absent. By introducing energy efficiency requirements into equipment specifications, the Project goes above and beyond current technology

	iii. Purchase of solar panels and solar direct drive refrigerators to preserve samples before transport to the laboratory for a total budget of US\$0.74 million.
Subcomponent: 2.3 Multi-disciplinary human resources for health emergencies (US\$16.0 million).	<p>Cameroon faces shortages of health workers, hampering the country's ability to respond effectively to its health needs, even in the absence of shocks. This subcomponent aims to strengthen multi-disciplinary human resource capacities to prevent, detect, and respond to health emergencies. Climate change will be reflected through concrete activities including:</p> <ul style="list-style-type: none"> - It will include climate-sensitive information in formal training (e.g., Field Epidemiology Training Program, FETP) and as modules in operational training to frontline health workers, public health officials, animal and environmental health professionals, and other multisectoral actors. - A national strategy for workforce planning and surge capacity will be developed with specific deployment plans, guidelines, and procedures, including for deployment in climate shocks and in response to climate sensitive disease outbreaks. - Public health emergency management will be included in medical and health curricula and will include specific sections on climate change. <p>The budget dedicated to mitigation activities under this subcomponent will be US\$3.84 million, consisting of:</p> <ul style="list-style-type: none"> i. Rehabilitation of training schools for public health workers using EDGE post-rehabilitation certification³⁹. Rehabilitation will incorporate climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods and reflective paint for high heat. ii. Purchase of medical equipment for training purposes with energy efficiency above national standards used as a rated procurement criterion⁴⁰ for a total budget of US\$0.57 million, iii. Digitization with e-learning training for health security workers for a total budget of US\$0.26 million is expected to contribute to a substantial reduction in GHG emissions⁴¹.
Component 3. Health Emergency Response (US\$46.07 million).	
SC Subcomponent: 3.1 Health Emergency Management (US\$16.62 million)	The subcomponent will finance activities to strengthen preparedness and response for public health emergencies, of which at least 50% are estimated to be climate change related in Cameroon. Planned activities are consistent with Cameroon's National Adaptation Plan which

performance benchmarks. Energy Star efficiency standards, IEC energy efficiency standards, and similar viable standards for medical equipment will be used exceeding mandatory minimum energy performance standards set in Cameroon. The highest energy efficiency rating or labelling that allows to perform medical services adequately will be pursued. Rated criteria will be used in the procurement process to ensure that the highest energy efficiency rating or labelling that allows to perform quality medical adequately will be pursued.

³⁹ The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of the training schools and to securing post-construction EDGE level 1 certification for the rehabilitation of the training schools. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards for an estimated total of US\$3.0 million, IDA. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for the training schools. The design and construction of the energy-efficient training schools will contribute to reductions in greenhouse gas emissions.

⁴⁰ Laboratory equipment purchased through this subcomponent for health facilities will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO₂e emissions compared to the current context in Cameroon, where such guidelines are absent. By introducing energy efficiency requirements into equipment specifications, the Project goes above and beyond current technology performance benchmarks. Energy Star efficiency standards, IEC energy efficiency standards, and similar viable standards for medical equipment will be used exceeding mandatory minimum energy performance standards set in Cameroon. The highest energy efficiency rating or labelling that allows to perform medical services adequately will be pursued. Rated criteria will be used in the procurement process to ensure that the highest energy efficiency rating or labelling that allows to perform quality medical adequately will be pursued.

⁴¹ Digitization of health worker training is expected to substantially reduce greenhouse gas (GHG) emissions by reducing paper use, storage and transport within the country (totaling 42.88 metric ton CO₂eq fewer emissions per year, from 18.63 metric ton CO₂eq per year generated with in-person training to 0.16 metric ton CO₂eq per year with Digitization of health worker training). This move to Digitization of health worker training results in a greater than 20% reduction in GHG emissions compared to a baseline scenario, and it is projected to significantly reduce healthcare worker travel to health facilities, averaging 12 trips annually at a distance of 13.4 km per healthcare worker.

	<p>highlights health as a climate vulnerable sector and stresses the need to better address water and vector-borne disease transmission. Specific activities that the project will finance include:</p> <ul style="list-style-type: none"> - Climate change will be integrated into emergency immunization efforts for human and animal health, including during climate shocks, which are anticipated to comprise a significant percentage of overall health emergencies, to prevent outbreaks of climate sensitive diseases. - Emergency Operations Center and its rapid response teams will be strengthened to address climate-related shocks, including through the training of personnel, operational protocols with specific sections on climate change response - Emergency operations center rehabilitation will include climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods and reflective paint for high heat, and emergency power solutions in case of outages. - Community risk communication plans, guidelines, and policies will include specific sections on climate emergency preparedness, and the impacts of climate shocks on climate sensitive diseases raising awareness of how infections are transmitted. <p>The subcomponent will further finance the following mitigation activities:</p> <ol style="list-style-type: none"> i. The rehabilitation of the national Public Health Emergency Operations Coordination Center (PHEOCC) with post-construction EDGE certification⁴². Rehabilitation will incorporate climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods and reflective paint for high heat ii. The purchase of energy efficient medical equipment for the national PHEOCC such as communication and Information Technology (IT) equipment as well as ambulances or a total budget of US\$1.90 million.⁴³ iii. Solar direct drive refrigerators to preserve samples before transport to the laboratory for a total budget of US\$0.74 million. iv. Digital Ambulance Dispatch, with costs to be determined based on fleet expansion, is expected to result in a significant reduction in GHG emissions.⁴⁴
Subcomponent: 3.2 Health service delivery for health emergencies	<p>This subcomponent focuses on preparing the health system to ensure the maintenance of essential health services during a health emergency. In Cameroon, an estimated 50% of health emergencies are estimated to be driven by climate change. This subcomponent will purposively incorporate activities to address climate driven health emergencies in the IDA-funded activities, as follows:</p>

⁴² The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of the PHEOCC to be rehabilitated. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards. The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of the veterinary laboratories and to securing post-construction EDGE level 1 certification for the rehabilitation of the veterinary laboratories. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards for an estimated total of US\$2.7 million. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for the PHEOCC. The design and construction of the energy-efficient PHEOCC will contribute to reductions in greenhouse gas emissions.

⁴³ Laboratory and digitization equipment purchased through this subcomponent for health facilities will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO₂e emissions compared to the current context in Cameroon, where such guidelines are absent. By introducing energy efficiency requirements into equipment specifications, the Project goes above and beyond current technology performance benchmarks. Energy Star efficiency standards, IEC energy efficiency standards, and similar viable standards for medical equipment will be used exceeding mandatory minimum energy performance standards set in Cameroon. The highest energy efficiency rating or labelling that allows to perform medical services adequately will be pursued. Rated criteria will be used in the procurement process to ensure that the highest energy efficiency rating or labelling that allows to perform quality medical adequately will be pursued.

⁴⁴ The Digital Ambulance Dispatch is expected to substantially reduce GHG emissions by reducing paper use, storage and transport within the country (totaling 901 thousand metric ton CO₂eq fewer emissions per year, from 1.81 million metric ton CO₂eq per year generated with standard ambulance dispatch to 900 thousand metric ton CO₂eq per year with AI Health Emergency Management). This move to Digital Ambulance Dispatch results in a greater than 20% reduction in GHG emissions compared to a baseline scenario, and it is projected to significantly reduce average travel distance to hospitals for pregnant women, of which there are 1.3 million per year.

<p>(US\$29.45 million, of which US\$19.45 million IDA, US\$10.0 million GFF)</p>	<ul style="list-style-type: none"> - It will include the acquisition of medical countermeasures for cholera and monkeypox, which are climate sensitive, and the organization of immunization campaigns at the community level in case of outbreak, with a prioritization of climate-vulnerable population groups (e.g. children, women, elderly etc.). - A mobile hospital will be purchased for health emergency responses to allow for surge capacity in areas affected by climate shocks. - It will also include support for operational research in emergency situations, through Knowledge, Attitudes and Practices surveys and gender-sensitive implementation studies, with a particular focus on climate change related emergencies. <p>The budget dedicated to mitigation activities under this subcomponent will be US\$5.4 million, consisting of:</p> <ul style="list-style-type: none"> i. Rehabilitation of emergency rooms in hospitals, with post-construction EDGE certification⁴⁵. The rehabilitation will incorporate climate change resilience measures going beyond standard practice, such as extra drainage and wall protection for floods. ii. Purchase of solar direct drive fridges for vaccine cold supply chain for a total budget of US\$0.20 million
<p>Component 4: Program Management and Institutional Capacity (US\$9.7 million)</p>	
<p>This subcomponent will finance the management and implementation of the operation's climate activities and so should be prorated to the operation's other climate activities.</p>	
<p>Component 5: Contingency Emergency Response Component (CERC) (US\$0.0 million)</p>	

⁴⁵ The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO₂e emissions of training schools and to securing post-construction EDGE level 1 certification for the rehabilitation of emergency rooms in hospitals. As there are currently no energy efficiency standards in Cameroon, this goes beyond national standards for an estimated total of US\$5.2 million. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded greenhouse gas emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for emergency rooms. The design and construction of the energy-efficient emergency rooms will contribute to reductions in greenhouse gas emissions.