Docusign Envelope ID: A3AAF9F9-6B4C-80CD-83C3-BC981A405BCE

UN Multi-Partner Trust Fund Office

General Information

Fund	MPTF_00282: Nature for Health (N4H) MPTF
FMP Record	MPTF_00282_00014: Nature for Health Ghana: Reducing Spillover Risk through a One Health Approach
MPTFO Project Id	
Start Date	
End Date	

Applicants

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Signature Process	Role	Name of Organization	Name	User Email
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Digital	Signatory	IUCN: International Union for Conservation of Nature	Dr Grethel Aguilar	grethel.aguilar@iucn.org

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Description

Nature for Health (N4H) Ghana aims to address the root environmental and socio-ecological factors that contribute to the emergence and spread of zoonotic diseases, strengthening the environmental dimension of the One Health approach in Ghana through upstream prevention. During a six-month scoping stage, opportunities and challenges to upstream zoonotic spillover prevention were identified using a systems thinking approach. After the scoping stage, additional consultations from the government of Ghana, and implementing partners, UNDP, IUCN, and the University of Ghana were conducted to finalize a two-and-a-half-year project implementation plan. This project will generate evidence and knowledge, build local capacity, strengthen governance structures, and enhance policies linking biodiversity, climate, and health to prevent zoonotic spillover. Collectively, these areas of work will support local communities and decision-makers to take preventative measures for disease risk reduction that mutually support the protection of biodiversity.

Universal Markers

Gender Equality Marker	Risk
• GEM1 - The Key Activity contributes to GEWE in a limited way	• Low Risk

Optional Markers

WB Income Category	• Lower Middle Income

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Fund Specific Markers	**N4H Funding Window**	**Window** • Biodiversity and Health for Pandemic Prevention		
Geographical Scope	**Geographical Scope**	**Name of the Region**	**Region(s)**	**Country**
	• Country	• West Africa	• Africa	• Ghana
Participating Organizations and their Implementing Partners	**UN Participating Organizations**	**Government/ Multilateral/ NGO/ Other**	**New Entities**	**Implementing Partners**
	• UNDP - UNDP (United Nations Development Programme (UNDP))	• IUCN - International Union for Conservation of Nature		University of Ghana

Programme and Project Cost	**Participating Organization**	**Amount (in USD)**	**Comments**
	Budget Requested		
	IUCN	$586,496.00	
	UNDP	$1,413,504.00	We are requesting 3 budget tranches , 1 per year
	Total Budget Requested	**$2,000,000.00**	
	Tranches		

Tranche 1		Tranche 2		Tranche 3	
IUCN (40%)	$234,598.40	IUCN (40%)	$234,598.40	IUCN (20%)	$117,299.20
UNDP (40%)	$565,401.60	UNDP (40%)	$565,401.60	UNDP (20%)	$282,700.80
Total:	**$800,000.00**	**Total:**	**$800,000.00**	**Total:**	**$400,000.00**

	Other Sources (Parallel Funding)	
	Total	**$2,000,000.00**

Thematic Keywords	• One Health • Systemic Practice • Systems Thinking	
Programme Duration	**Anticipated Start Date**	01-Jun-2026
	Duration (In months)	30
	Anticipated End Date	01-Dec-2028

Narratives

Title	Text

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Situation Analysis

Ghana is a hotspot for zoonotic diseases with many endemic and emerging pathogens being reported in livestock, wildlife, and humans, including Rabies, Anthrax, Brucellosis, Marburg virus, Mpox, Avian Influenza, and Lassa fever – several of which are nationally recognized priority zoonoses. The country has a One Health coordination platform, but it does not meet regularly due to financial and capacity constraints. To strengthen its function, and integrate One Health principles across government operations, Ghana drafted a national One Health Policy, but it has yet to be finalized.

The country's rich biodiversity is at risk. The spread of zoonotic pathogens is intrinsically linked to the natural environment and is significantly affected by anthropogenic changes that degrade ecosystems and destroy natural habitats. High levels of poverty and lack of economic opportunity can drive people to extractive industries that damage ecosystems and put people in contact with animals. Recent changes in land use and agricultural production systems, natural resource extraction (e.g., wildlife and rosewood harvest, mining, timber and logging) and an expansion of livestock production into wildlife habitats is altering ecosystems and likely increasing risk of zoonotic spillover. These activities, coupled with several climate shocks, including rising temperatures, less predictable rainfall, drought, and flooding are expected to influence the distribution and patterns of infectious diseases as well as human and animal movement.

Like many diseases, zoonoses often affect vulnerable local and indigenous communities the hardest. The term "indigenous peoples" is rarely used in Ghana, as "local communities" is the favoured term used by most people, including the government of Ghana and local NGOs, and is what is used throughout this IPD.

Quantitative data on vulnerable populations and their linkages to likely drivers of zoonotic spillover in Ghana is sparse or lacks granularity. Although factors such as land use change, deforestation, and bushmeat production are globally recognized as drivers of spillover, targeted studies in Ghana are lacking, including unknown effects of land use change on habitat suitability, species distribution and reservoir host abundance, microclimate changes, forest fragmentation, and socioeconomic and cultural practices that draw people, wildlife, and livestock closer together. Local communities and people likely at increased risk of zoonotic disease (due to human-wildlife-livestock interaction) and related ecological drivers is presented in Table 1.

Table 1. Populations likely at increased risk of zoonotic disease spillover in Ghana

Population	Description and Key information
People involved in the bushmeat value chain	• Hunters (commercial and subsistence hunters) bushmeat wholesalers, stockers (operators of wholesale storage facilities), market load carriers (popularly called "Kaya-ye" in Ghana), butchers, retailers, chop-bar operators, and consumers • Bushmeat is a popular form of animal protein perceived as healthy, natural, and locally sourced food, providing financial security to millions of people, especially rural citizens. • Popular animals include grasscutter, bushbuck, giant rat, and Maxwell's duiker, among others
Poultry and piggery farmers	• Privately or family owned large, medium and small-scale producers including free-range and confined production and animal husbandry • Pig and poultry production is steadily growing (the government launched an initiative to revitalize poultry farming, *Nkokɔ Nketenkete* • Estimated 240,000 pig farmers in Ghana (2021) • Commercial poultry farming is largely concentrated in the Ashanti, Bono/Ahafo, and Greater Accra regions
Cocoa, rubber, and oil palm producers	• Studies show all 3 industries are associated with deforestation (potential driver of spillover) including in protected areas. • Shifting agriculture is primary driver of deforestation (24% decrease in Ghana tree cover between 2001-2023) • Production is steadily growing for all 3 industries • Estimated 850,000 farm families involved in cocoa farming and related activities • Estimated 120,000 pam oil smallholder producers
Timber and logging	• Rosewood is the worlds most trafficked product (illegal logging) leading to deforestation • Around 35% of land area in Ghana is forested land

Through the N4H scoping process, many other vulnerabilities, systemic barriers, and potential drivers of disease emergence and spread were uncovered (Table 2). Although many of these barriers are present across Ghana, each region has specific challenges and unique ecological context. The Western Region has high levels of deforestation and an abundance of mining and forest operations including oil palm farming. Local communities involved in these extractive industries may be at increased risk of spillover due to their exposure to wildlife. The Ashanti region has the largest bushmeat market in the country. Participants in the bushmeat value chain (hunters, trappers, butchers, sellers, and consumers) rely on wild meat for sustenance, income, and cultural practices, but may also be exposing themselves to potentially harmful pathogens. The Savannah zone is home to the largest protected areas in the country (Mole National Park and Gbele Resource Reserve) and has many livestock farming communities that supply livestock to all over Ghana). Several local communities surrounding protected areas collaborate with local government to sustainably manage natural resources and create ecological corridors for wildlife. The Greater Accra Region hosts the national government, is the policy centre of Ghana, and is burdened by urbanized zoonoses, such as Lassa fever. Each of the 16 regions has their own cultural and ecological landscape, including varying climates, animal species distributions, and other factors that need to be accounted for when designing implementation activities.

Table 2. Systemic barriers and potential drivers of zoonotic disease emergence and spread identified during the N4H scoping process.

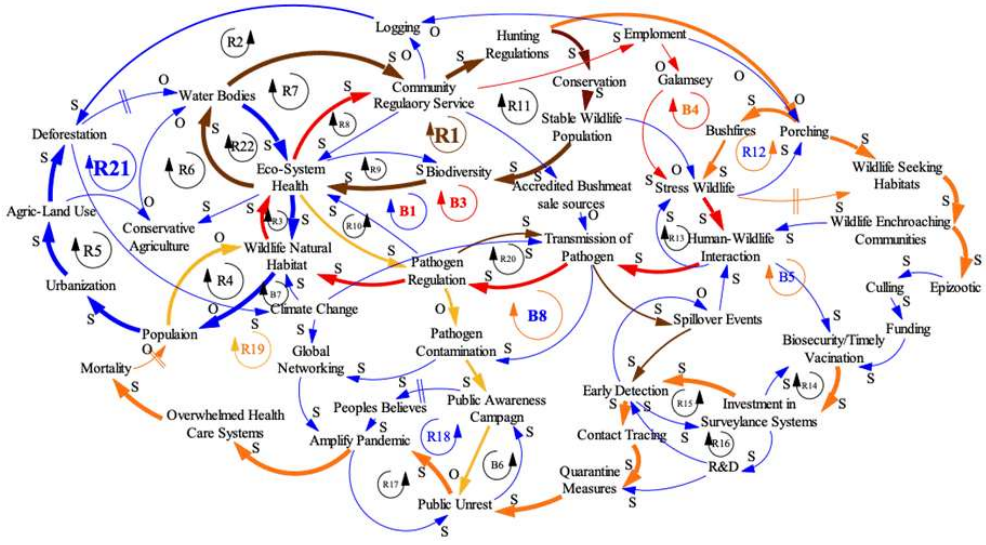
Systemic barriers to reducing spillover risk

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Lack of government resourcing, logistics, and funding for zoonoses prevention (e.g., husbandry and extension services for farmers, advanced in-service One Health training, staffing, laboratory capacity, etc.)
Unenforced regulation on wildlife hunting and keeping of wild animals, illegal mining and logging activities that put people in contact with wildlife
Poverty and lack of job opportunities lead people to work in natural resource extractive industries
Traditional and cultural beliefs and practices that involve close contact with wildlife
Lack of adequate government compensation for diseased animals can lead people to not report sick animals
Other vulnerabilities and potential drivers of zoonotic spillover
Limited knowledge of zoonoses, transmission pathways, and methods to protect individuals and communities from zoonoses
Lack of personal protective equipment across many settings where people come into contact with animals
Lack of standard operating procedures for biosecurity and select zoonoses
It is common for people to engage in activities where they encounter wildlife without biosecurity measures in place (e.g., bushmeat hunting, trading, and selling, mining, logging, and oil palm plantation farming)
Farming and fringe communities may enter protected wildlife areas with their domestic animals
Lack of standard operating procedures (e.g., biosecurity and animal welfare) in public and privately run zoo settings
Lack of climate change mitigation measures and unsustainable agricultural practices.

During the scoping stage, additional barriers were identified through a systems analysis (example causal loop diagram in Figure 1; full analysis in the Annex). Causal loop diagrams identified core drivers (e.g., population growth and urbanisation) that exacerbate subsequent factors (e.g., deforestation, ecosystem degradation, and increased human-wildlife contact) through reinforcing loops, while balancing loops showcase how healthy ecosystems can be well equipped to regulate wildlife populations and pathogen transmission through activities such as enforcement of wildlife/bushmeat hunting, monitoring animal populations, and training people on proper biosecurity to reduce disease risk. Many of the root causes and proximal entry points identified through this analysis are large and difficult to address (e.g., urbanisation and poverty).

Figure 1. Excerpt causal loop diagram from systems analysis conducted by scoping stage facilitator. Current state of zoonotic disease spillover in the Ashanti Region according to workshop participants based on the "Mental Model" activity.



Each arrow represents a causal link between two variables; Different colors and numbers are used to make it easier to visually differentiate between loops; B = Balancing loop; R = Reinforcing loop; The two vertical hash marks (||) represent a delay, where the situation takes time before the effect plays out.

Other activities identified through the scoping process – and through an additional consultation with new N4H convening partners, UNDP and IUCN, in November 2025 – were considered but not selected for implementation. These include development of disease specific guidelines (e.g., anthrax), and an analysis on data linkages between ministries. These were not selected as they did not address upstream drivers of zoonotic spillover and were considered less important, based on consultations with the Core Team.

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Project Description

Scoping Process (2024): Implementation Strategy Background

This implementation plan has been modelled after local and national priorities identified through the scoping stage and includes activities to address all levels of society with special attention to individuals and communities most at risk of zoonotic spillover.

The scoping stage consisted of four workshops that took place across different ecozones of Ghana. Each workshop used systemic practice activities (e.g., rich picturing, mental models) to: (1) identify the types and locations of interactions that exist between wildlife, domestic animals, and humans; (2) understand people's motivations (e.g., socioeconomic, cultural) for interacting with wildlife and livestock; and (3) identify what preventative practices are already in place and how they could be expanded to better protect the health of people, animals, and the environment. Workshop participants spanned the human-animal-environment sector spectrum (see the Stakeholders section for a list of workshop participants). Information shared by stakeholders, including regional and context-specific knowledge and priorities is the foundation for this implementation plan.

All scoping activities were designed and led by an interdisciplinary and gender balanced Core Team made up of representatives from the University of Ghana, Ministry of Environment, Science, Technology and Innovation (MEST), Ministry of the Interior through the National Disaster Management Organisation (NADMO), Ministry of Food and Agriculture through Veterinary Services Directorate (VSD), Ministry of Lands and Natural Resources through the Wildlife Division of the Forestry Commission (FC), and the Ministry of Health through Ghana Health Service (GHS). The Core Team was supported by N4H global partner (at the time) EcoHealth Alliance and two systems thinking and facilitation experts from Ghana Atomic Energy Commission and the University of Ghana.

Several key insights gained during the scoping phase are reflected in the design of this project plan. As demonstrated by the causal loop diagrams (example causal loop diagram in Figure 1; full analysis in Annex 2), there are many interactions between environmental degradation and economic and social factors. Tackling certain root causes, such as lack of employment activities require solutions, participation, and policy changes beyond the scope of N4H. The leverage points identified from the scoping phases include a mix of proximal and upstream factors shaping risk. For example, awareness of zoonotic disease risks was found to be limited among stakeholder groups, highlighting the importance of strengthening awareness as a foundation that can then enable co-design and uptake of risk reduction solutions. The inclusion of specific interfaces for characterising risks (e.g., protected areas, bushmeat markets, wetlands, and bat caves) provides entry points for more upstream interventions, e.g., ecosystem protection.

To operationalise findings from the scoping stage, the Core Team compiled qualitative data and outputs from the scoping workshops. The Core Team were also given the chance to propose additional activities for consideration based on the priorities of each government agency. This culminated in a list of 20 potential activities to pursue during the implementation stage. Activities were discussed and chosen during a 2-day "Implementation Plan Writeshop" – inspired by N4H Mongolia. Implementation activities were considered based on their alignment with the goals of N4H and Ghanaian government priorities, feasibility, logistics, and budget constraints. Activities that were considered but not selected included those deemed unfeasible (e.g., develop infrastructure), or only benefitting a single aspect of One Health (e.g., just human health. The Core Team also discussed how to ensure systemic practice will be continued through the implementation stage. The IPD was then submitted to the N4H Secretariat and TAG for review and feedback in October 2024.

IPD Update (2025): Post Secretariat and TAG Feedback

Following the first submission of the IPD, the previous convening partner, EcoHealth Alliance, was replaced by UNDP and IUCN as co-convening partners. To support their uptake of N4H implementation, a workshop was held in Accra in November 2025 to review the original IPD, conduct additional stakeholder consultations, and update the IPD for resubmission. During this workshop, significant emphasis was placed on refining implementation activities to incorporate interventions that target upstream drivers of zoonotic spillover and promote environmental and biodiversity conservation. Activities presented in the Intervention Logic section are intended to strike a balance between (1) stakeholder input gathered during the scoping stage; (2) feedback from the N4H Secretariat and TAG; (3) alignment with the outputs and outcomes of N4H and the priorities of the government of Ghana.

Implementation Strategy Overview

Implementation will begin with a one-day forum in Accra to present the implementation plan to central government directors and heads of department from key agencies, such as MEST, NADMO, VSD, FC, and GHS, to ensure continued engagement in N4H Ghana. Their support and engagement are crucial to incentivizing government participation and leadership. The forum will also set the expectations for reporting and crystallise opportunities to reinforce the importance of upstream spillover prevention.

The project has a mix of proximal and upstream spillover prevention interventions as well as activities dedicated to ensuring the project is delivered effectively while promoting best practices and lessons learned from N4H Ghana internationally. Activities have been harmonized to a small group of locations, when possible, e.g., Western Region, including Ankasa Game Reserve & Nini-Suhien National Park, Ashanti Region, and Greater Accra Region (Figure 2). This will help to maximize impact, ensure alignment between activities and implementing partners, and create budget efficiencies.

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Figure 2. Implementation activities have been harmonized to the Western Region, Ashanti Region, or Greater Accra Region, when possible, to maximize impact and ensure alignment between implementing partners.

The Western Region of Ghana is in the high forest zone, a large ecological region with substantial biodiversity. The region has some of the highest rates of deforestation due to pressure from timber logging, cocoa farming, and mining. It is home to several Key Biodiversity Areas, including Ankasa Game Reserve & Nini-Suhien National Park, which will be one of the main project sites. Several activities, including those focused on capacity development for protected area management and disease risk reduction, as well as site-specific ecological assessment will take place in and around Ankasa Game Reserve & Nini-Suhien National Park. Other activities, including a bushmeat market analysis, and advocacy for wildlife and conservation protections will take place in the Western Region. The coalescence of activities around the Western Region will create natural areas for coordination and cross-activity collaboration between implementing partners.

The Greater Accra Region will be the hub for national level activities and coordination, including support to revise and advocate for the passage of Ghana's National One Health policy, and provide support to the National One Health platform. The government ministries, University of Ghana, UNDP and IUCN county offices are all based in Accra making it a central location for project coordination. Many project meetings and technical review forums with implementing partners and government agencies will occur in Accra. The Ashanti Region, also part of the high forest zone, is another important project location. It is home to the second largest city, Kumasi, where Kwame Nkrumah University of Science and Technology (KNUST) and the Kumasi Zoo are located. Several activities will occur, at least in part, in the Ashanti region, including field work for the filovirus risk assessment, deployment of biosecurity guidelines, capacity development for agroforestry farmers, and development of the graduate One Health course at the University of Ghana and KNUST.

Although most activities will occur in the Western Region, Greater Accra Region, and Ashanti Region the team will remain flexible and responsive to new information and government priorities that may arise. For example, if the results of the ecological risk assessment and filovirus risk assessment highlight a different region of Ghana as being critically important for conservation or spillover prevention, the team may modify or expand planned activities into new locations while remaining committed to the project locations presented here.

Internationally, this project will support knowledge exchange and promote upstream spillover prevention by funding select project stakeholders to attend international conferences and meetings (e.g., UN CBD meetings, World One Health Congress,etc.). These events will showcase lessons learned, best practices for upstream spillover prevention within a local context and generate opportunities for attracting additional international funding for N4H upscaling. Project stakeholders will also participate in the N4H learning network to share experiences between N4H countries.

Overall, this implementation project will build local capacity, create awareness about the links between nature, climate, biodiversity, and health, enhance existing collaborations, and strengthen policy guidelines cutting across the four outputs of N4H. All data generated during this project will be owned and stored by Ghanaian institutions and, when possible, presented at local and global conferences, archived in open access repositories (e.g.,Zenodo), and published in international peer reviewed journals for wider dissemination.

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Intervention Logic	Activities were revised following Secretariat/TAG feedback to place greater emphasis on upstream spillover prevention. A Gantt chart outlining project sequencing is attached. The project will be managed by UNDP and IUCN as convening and implementing partners, with the University of Ghana as an implementing partner. Each activity has a lead institution with the others providing support. A description of the project management plan is provided in the section "Project Management and Governance". A systems approach informed the scoping process and will continue during implementation, supported by a dedicated systems-thinking consultant. **Output 1. Assess** **1.** Conduct a national risk assessment for filoviruses, outlining host-pathogen relationships, species habitat ranges, data on previous filovirus outbreaks in Ghana, and identifying known bat roost sites (bats are believed to be wild reservoir hosts). Field teams will visit suspected bat roosts and collect qualitative ecological data (e.g., presence of communities, farms, other wildlife species, extractive industries illegal timber logging, potential sources of bat food). Findings and policy implications will be discussed with government partners and integrated into community sensitization and awareness raising activities. **Lead Partner:** UG **2.** Conduct an ecological assessment to prioritize upstream prevention actions. Nationally, this will involve an analysis to identify trends in deforestation, habitat fragmentation, and ecosystem degradation mapping hotspots for degradation, restoration, and conservation. Maps will be overlaid with spatial data on human population density, urban areas, forest-dependent communities, protected areas, OECMs, and other key land-use concessions. To provide specific guidance for poultry farming, the national analysis will be overlaid with an ecological niche modelling of migratory bird species, support the development of poultry zoning that avoids overlap between poultry farms and migratory bird habitats to reduce spillover risk. National mapping will inform a fine-scale ecological assessment at Ankasa Game Reserve and Nini-Suhien National Park. This assessment will propose zoning measures to reduce contact between humans and wildlife, including identifying vegetative buffer zones to be strengthened to prevent cross grazing between domestic and wild animals. In addition, a socio-ecological behaviour study will be conducted in highly degraded areas to identify local practices that increase spillover risk, such as hunting and grazing. **Lead Partner:** IUCN **Output 2. Operationalize** **3.** Update farm biosecurity guidelines based on the IUCN-led ecological assessment to include land planning and ecological considerations. Host capacity building workshops with poultry and pig farming associations deploying the guidelines to reduce spillover risk. **Lead Partner:** UG **4.** Develop biosecurity guidelines for captive wildlife facilities, including quarantine operations, zoos, wildlife pet shops. Guidelines will integrate considerations for biodiversity conservation and provide information on risk reduction and risk communication. They will be disseminated through a capacity building workshop. **Lead Partner:** UG **Output 3. Enable** **5.** Conduct a bushmeat market analysis in collaboration with community workers and Wildlife Division staff to build capacity on species identification and qualitative biodiversity data collection. Host a workshop with stakeholders from across the bushmeat value chain to discuss animals they encounter, their cultural and economic significance, and gauge interest in alternative livelihood options. Community workers will collect data on species abundance which will be disseminated to stakeholders to discuss spillover risk reduction measures, biodiversity and wildlife protection, and alternative livelihood options. **Lead Partner:** UG **6.** Conduct wildlife surveillance for avian influenza at wetlands where fisher communities rear domestic birds and pigs. Given budget constraints and alignment to N4H outputs, UG will conduct surveillance using non-invasive environmental samples from wetlands (fresh faecal, soil or water) instead of direct biological samples from captured birds. Lab assessments will be conducted at UG West African Centre for Cell Biology of Infectious Pathogens, Noguchi Memorial Institute for Medical Research, or similar laboratory with BSL-3 capacity. Findings will be presented to communities near sentinel sites, including guidance on spillover risk reduction. **Lead Partner:** UG **7.** Based on the fine scale socio-ecological assessment performed in Ankasa Game Reserve and Nini-Suhien National Park,community sensitization and awareness raising materials and knowledge tools about preventing spillover, living safely with wildlife, biodiversity, climate change, and environmental drivers of zoonotic diseases will be created and deployed to people who may be at increased risk of spillover. This activity contributes to SDG Target 13.2 by raising awareness about the linkages between climate change and spillover prevention. **Lead Partner:** IUCN **8.** Support capacity development of rangers, conservation, and protected area staff on animal health surveillance and reporting using IUCN and WOAH guidelines related to wildlife disease prevention, detection, response, and recovery in protected areas. Localized guidelines will be submitted to Ghana's One Health Platform for consideration for official issuing and broader dissemination. **Lead Partner:** IUCN **9.** Update protected area management plans with a One Health lens and considerations for spillover prevention (monitoring wildlife mortality, tracking species populations, monitoring animal habitat ranges in relation to farms/people/tourists, zoning, and tourism activities). Conduct workshops to build capacity on implementing PA management plans. Support their integration into the Forestry Commission's Natural Resource Management Capacity Development Program. **Lead Partner:** UG **10.** Contribute to the development of graduate One Health courses at UG and Kwame Nkrumah University of Science and Technology (KNUST). Update learning modules and develop materials on the links between biodiversity, climate, and health. To ensure multidisciplinary and social science perspectives, UG will host meetings with One Health-related institutions, including the Centre for Climate Change and Sustainability Studies, Institute for Environment and Sanitation Studies, School of Veterinary Medicine, School of Public Health, and other departments. **Lead Partner:** UG **11.** Enhance Community Resource Management Areas (CREMAs) by integrating a One Health approach, promoting spillover prevention and risk reduction through education and awareness raising (including reporting unusual wildlife behaviour or mortality events) and biodiversity and land planning considerations for sustainable land management. **Lead Partner:** UNDP **12.** Stakeholder coordination and internal project alignment, monitoring, and review through a project kick-off meeting, quarterly Core Team meetings/retreats, annual project review meetings, and other meetings as necessary. The expertise of N4H TAG members and global partners will be welcomed to optimise project approaches and collective learning. **Lead Partner:** UNDP

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13. Develop an implementation monitoring, evaluation, and learning plan, and review project activities, indicators, and outputs during stakeholder meetings, including hiring an external evaluator to conduct a terminal evaluation and audit. **Lead Partner:** UNDP

Output 4. Sustain

14. Support Ghana's One Health platform, including convening meetings and supporting sessions on environmental and climate data integration, upstream spillover prevention, and environmental drivers of zoonotic spillover. Engage with the One Health platform, to understand the challenges and opportunities for strengthening it. Arrange a south-south N4H knowledge exchange on OH platforms (e.g., with Viet Nam) **Lead Partner:** UG

15. Support the process to review and update the national One Health policy, including mainstreaming biodiversity-health linkages and highlighting opportunities for upstream spillover prevention through environmental, wildlife, and ecosystem strengthening. Organize four technical forums to revise and update the policy. This will support overall efforts to mainstream One Health into National Development Plan and Budgeting Process contributing to SDG Targets 15.9 and 13.2 integrating biodiversity and climate change measures into national policy. **Lead Partner:** UG

16. Advocate to strengthen wildlife and conservation protections with Metropolitan, Municipal, and District Assemblies (MMDA) and local and traditional leaders. Advocacy will focus on enforcement of bylaws and policies, especially Act 1115: Wildlife Resource Management Act which promotes sustainable wildlife management and biodiversity conservation. Identify barriers to enforcement and potential incentives for local communities to follow legislation. This activity will contribute to SDG Target 15.9 to support biodiversity values into national and local planning processes through advocacy at the MMDA level. **Lead Partner:** UG Lead

17. Professional development and international recognition for N4H by funding select government and project stakeholders to attend international conferences and meetings (e.g., UN CBD meetings, World One Health Congress) for knowledge exchange (especially south-south knowledge exchange with other N4H countries) and to promote spillover prevention on a global scale. Events will showcase lessons learned, best practices for upstream spillover prevention, and generate opportunities to attract funding for N4H upscaling. **Lead Partner:** UNDP

18. Develop a project resource mobilization and sustainability strategy identifying opportunities to upscale activities beyond N4H.**Lead Partner:** UNDP

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Relevance to N4H Work	This implementation project document (IPD) was designed to address N4H's outputs, align with Ghanaian government priorities, and meet the requests of local stakeholders. The project will use multiple entry points to address spillover risks and integrate biodiversity and climate factors putting One Health approaches into action. It will strengthen capacity of local government and communities, develop and share knowledge, and reinforce governance structures to ensure ownership and ongoing sustainment and enhancement. The implementation project will address the environmental dimension of One Health in several ways. The ecological assessment will map environmental data and global drivers of spillover (areas of deforestation, densities of forest edges, amounts of core forest areas, human population, urban areas, forest communities, protected areas, OECMS and other important concessions) to better understand the ecological context nationally and target interventions. It will include a component on protected areas and drivers of habitat loss to identify the protected areas with the highest level of pressure. Following the national assessment, a site-specific ecological assessment at Ankasa Game Reserve & Nini-Suhien National Park will identify activities performed by the local communities that increase spillover risk, such as hunting, grazing, etc. This site will also be the host for capacity development on protected area management planning and risk reduction measures that integrate One Health and biodiversity, conservation, and climate change considerations. In support of N4H's aim to achieve reduced health risks emanating from animal husbandry and wildlife trade, the project will conduct several activities to reduce spillover risks between wildlife, livestock, and humans. These include developing, deploying, and building capacity on biosecurity guidelines for farming (poultry and piggery) and captive animals, as well as conducting wildlife surveillance for avian influenza to generate data and better understand the potential risks for avian influenza spillover to livestock and people. The project will also employ qualitative methods to generate evidence on the linkages between wildlife, the environment and people. As part of the filovirus risk assessment, field teams will identify bat roosting sites and document the ecological conditions (presence of deforestation, farming, proximity to communities, other wildlife, etc.) to validate the national level ecological analysis and identify areas with increased spillover risk. The biodiversity and species abundance data gathered during the bushmeat market analysis will be important in understanding human-wildlife interactions, sustainable wildlife consumption practices, and engaging in meaningful dialogue with local communities on the cultural and economic importance of bushmeat. Project activities, including supporting Ghana's One Health platform, updating and advocating for the national One Health policy, and advocating for wildlife and conservation protections are directly aligned with N4H's goals of supporting policies and governance structures that integrate environment and health dimensions. These activities emphasize intersectoral and multidisciplinary participation to generate collective understanding and buy-in for upstream prevention and environmental conservation. The community education and awareness raising component of this project (both as a standalone activity and embedded within several activities) will explicitly highlight the links between nature, health, living safely with wildlife, and the importance of biodiversity conservation for upstream spillover prevention. Community dialogue also offers opportunities to learn from local communities about their specific interactions with animals, both wild and domestic, to document context-specific zoonotic spillover risk factors that may not yet be known. The IPD is demand driven and a direct response to needs identified during the scoping stage with additional input from government partners during the final IPD revision workshop in November 20205. Activities proposed in the implementation plan have been identified by community, regional, and national stakeholders from across Ghana. The Project Steering Committee will have the power to modify activities to best meet local needs, within the allowable budget threshold. This response will help to foster on-the-ground action to reduce zoonotic spillover and will be overseen by a multisectoral Core Team with interdisciplinary expertise and implemented through a collaboration of One Health agencies in Ghana. The activities will demonstrate resource coordination from the field to the national policy levels, leveraging existing initiatives to show the additive value. Activities selected for implementation build on recent and ongoing interventions by both N4H partners and other actors. IUCN, and its member organizations in Ghana have worked with agroforestry communities. Each of UNDP, IUCN, and UG have longstanding relationships and projects in collaboration with the government, including on agroforestry, the CREMA initiative, wildlife surveillance, NBSAP development, bushmeat market analysis, and many other areas. N4H activities will leverage those strong relationships, utilize existing government data, and years of collaboration and expertise to complement other interventions. The proposed avian influenza surveillance in this project will be complementary to ongoing government work. N4H sentinel sites will pair with existing surveillance sites led by VSD, GHS, Noguchi Memorial Institute of Medical Research, and Ghana Military and prompting data sharing between wildlife and veterinary services. N4H's support of the CREMA initiative will be conducted in lockstep with the Forestry Commission who lead this initiative. N4H will take careful considerations to take best practices and lessons learned from other CREMA locations and apply them to the capacity development work that N4H will support. This project also builds on previous work by project partners, including an examination of environmental health capacity and the state of the knowledge on EID risks related to climate change in Ghana, both collaborative efforts of the University of Ghana, the UK government, and Ghanaian agencies; and epidemiological investigations into avian influenza in poultry and Marburg virus cases in humans by Ghanaian authorities and the University of Ghana in recent years. Regarding other actors, FAO is currently collaborating with the government of Ghana to update farm biosecurity guidelines, however their focus is on hygiene and veterinary practices. N4H will add key value to those efforts by focusing on the role of land use, land planning, wildlife interactions, and environmental health as important components of upstream spillover prevention. FAO is also already supporting capacity development of protected area staff, but their focus is surveillance data generation, not on spillover prevention. N4H will strengthen protected area personnel capacity and planning by integrating spillover prevention, risk reduction, land planning, and climate considerations into the Forestry Commission's Natural Resource Management Capacity Development Program and planning. Until the last few years, WHO was providing support to the government to update and advocate for the passage of the national One Health policy. That support no longer exists, so N4H will build on those efforts, including incorporating considerations for biodiversity-health linkages, climate change, and spillover prevention into the national One Health policy and with the national One Health Coordination Platform.

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Relevance to Regional, National or Subnational Priorities

This planned project activities are explicitly aligned with both national and regional strategies and priorities (Table 3). The project plan has been developed in close consultation with the Core Team made up primarily of national government representatives.

Table 3. National and regional strategies, priorities, and policies and their relevance to this implementation project plan

National Strategies, Priorities, and Policies	**Relevance to Proposed N4H Activities**
Priority zoonoses in Ghana	• Ghana has 6 nationally recognized priority zoonoses (anthrax, rabies, zoonotic influenza, zoonotic tuberculosis, viral haemorrhagic fevers, and trypanosomiasis) that have been identified through the US Centers for Disease Control and Prevention One Health Zoonotic Disease Prioritization tool • Avian influenza is both a priority disease and of great economic importance for a growing poultry industry. The project will conduct AI surveillance to generate data and support risk reduction measures for communities who may be at increased risk of spillover. • The ecological analysis will also provide important land planning information to support the government in zoning areas for poultry and pig farming to reduce zoonotic disease risk, including AI • The filovirus risk assessment (filoviruses cause viral haemorrhagic fever) will support the government to identify areas with likely increased spillover risk • All project activities are aligned with preventing these priority zoonoses
Wildlife Resources Management Act, 2023 (Act 1115)	• The Act promotes sustainable wildlife management, conservation, and community involvement in protecting Ghana's biodiversity • The project will directly support the implementation of this act by conducting advocacy with local government about the importance of enforcement • All of the capacity development activities included in this project plan will highlight the importance of conservation and build local knowledge and skills so communities can more sustainably manage the environment and wildlife
National One Health Policy	• The national One Health policy (when passed) will provide national guidance on program design and implementation and the need for multisectoral collaboration to achieve healthy outcomes for people, animals, and the environment. It will also advise local government to include One Health considerations in their annual planning and budgeting. • This is the core policy that N4H aims to support. N4H will directly collaborate with the government to update the policy, including mainstreaming biodiversity, health, and climate linkages. N4H will also organize a high-level engagement at the minister and parliamentarian level to garner national attention and support to hopefully get the policy passed through parliament.
Ghana Forest and Wildlife Policy	• This policy includes several guiding principles which align with planned project activities, including "(1) Promoting public-private sector partnerships and investment in forestry sector; (2) Promoting capacity development for stakeholders in the forestry and wildlife sector;" • N4H will support the implement this policy by providing capacity development to personnel within the Forestry Commission (including the Wildlife Division) through protected area management and risk reduction training. • Through the ecological analysis, N4H will also identify forested areas under high levels of anthropogenic pressure which will help the government identify priority areas for conservation
National Biodiversity Strategy and Action Plan	• Ghana is currently finalizing its next NBSAP. N4H will provide direct support to the Ministry of Environment to monitor implementation of the new NBSAP, especially on newly created biodiversity indicators adapted from the Global Biodiversity Framework. This includes capacity development at the district level to improve monitoring of new indicators. • When conducting awareness raising, community sensitization, and the bushmeat market analysis N4H will be mindful of GBF Target 5 which highlights the need to balance economic benefits with conservation and spillover risks. This nuance will be important in developing messaging for the awareness raising, education, and advocacy as well as discussions on alternative livelihood opportunities. • The NBSAP recognizes ecotourism as important economically and is estimated to continue to grow in Ghana. Providing in-service professional training, for park rangers, through this project will help promote safe ecotourism and disease prevention • The NBSAP mentions the need to create public awareness of the values of biodiversity. This will be explicitly incorporated into the project's educational and awareness raising activities by specifically highlighting the linkages between biodiversity and health
National Climate Change Policy (NCCP)	• This planned project will support the NCCP, especially NCCP Focus Area 5 which aims to improve management and resilience to ecosystems • Many of the challenges mentioned in the NCCP, including land degradation, are also globally recognized drivers of spillover. • Information and data on climate change will be an essential part of the ecological analysis and will be embedded in N4H's awareness raising activities. • Ecosystem resilience will be an essential element of capacity development work within N4H project site Ankasa Game Reserve & Nini-Suhien national park

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National Environmental Policy	• The policy states: "Public awareness will be raised, and institutional capacity building will be improved on environmental protection to effectively participate in the process of achieving the sustainable development goals." • Many of the activities are consistent with this declaration, including the N4H's awareness raising, education, and advocacy work streams.
Joint External Evaluation	• The JEE specifically mentions a need to strengthen collaboration between epidemiology, laboratory, public health and veterinary services • This entire project is interdisciplinary and will work to enhance the linkages between One Health institutions across all activities
Regional Strategies, Priorities, and Policies	**Relevance to Proposed N4H Activities**
Regional priority zoonoses	• ECOWAS has identified regional priority diseases which are similar to Ghana's and include both zoonotic influenza and viral haemorrhagic fevers which are endemic in the region. • As mentioned above, all N4H activities aim to reduce spillover risks, including particular emphasis on priority zoonoses of national and regional importance.
ECOWAS Regional Animal Health Information System	• SOPs, wildlife disease data collection sheet, and wildlife sampling data generated through N4H will be published and made available which will be beneficial to regional country partners when they also conduct wildlife surveillance

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Project management and governance

The project will be implemented in a period of 30 months under a Direct Implementation Modality (DIM) by UNDP. The main counterparts of the project are the Ministry of Environment, Science and Technology (MEST), Ministry of the Interior through the National Disaster Management Organisation (NADMO), Ministry of Food and Agriculture through Veterinary Services Directorate (VSD), Ministry of Lands and Natural Resources through the Wildlife Division of the Forestry Commission (FC), and the Ministry of Health through Ghana Health Service (GHS), UNDP, IUCN and the University of Ghana. During implementation, the project will coordinate directly with these institutions.

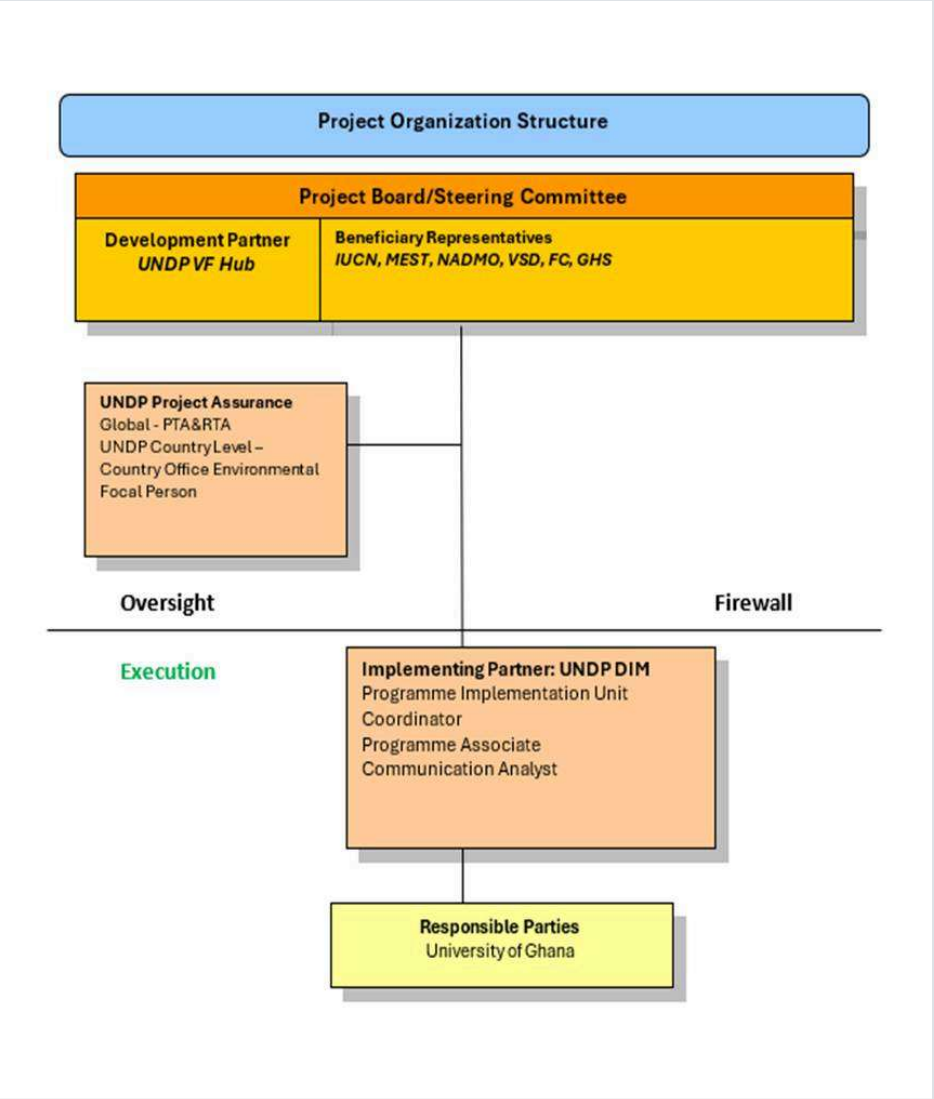
The management structure includes the following levels:

- **Decision-Making:** This includes the Project Board/Steering Committee responsible for strategic decision-making, as well as the UNDP Monitoring and Quality Assurance Unit, which will oversee activities in its role as the accredited entity, along with the Project Coordinator.
- **Project Management and Implementation Unit:** This includes the Project Management Unit (PMU), the Project Coordinator, an administrative and financial support assistant, and technical specialists. This unit will be responsible and accountable for managing this project, including the monitoring and evaluation of interventions, coordinating with the partners, achievement of project outcomes, and the effective use of project resources.
- **UNDP Monitoring and Quality Assurance Unit:** This includes monitoring and follow-up by the UNDP Country Office in Ghana.

Project governance structure

An overview of the project governance can be found in Figure 3.

Figure **3.** Project Governance Arrangements



Project Board (also known as Steering Committee): The Project Board (PB) is the highest level of review and decision-making regarding programming and achievement of results, responsible for reaching consensus on decisions when the Project Coordinator requires guidance. This includes recommendations to UNDP regarding the approval of project plans, budgets, and reviews. To ensure UNDP's accountability obligations, decisions of the Project Board will be made in accordance with standards that guarantee sound management of outcomes, best value for money, fairness, impartiality, integrity, transparency, and effective international competition.

Scope

The Steering Committee will be established at project initiation. In its first meeting, it will approve the programmatic planning and review the project budget. It will be composed of the following individuals: (i) Delegate of the Ministry of Environment, Science and Technology (MEST), (ii)Delegate of the Ministry of the Interior through the National Disaster Management Organisation

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(NADMO), (iii) Delegate of the Ministry of Food and Agriculture through Veterinary Services Directorate (VSD), (iv) Delegate of the Ministry of Lands and Natural Resources through the Wildlife Division of the Forestry Commission (FC), and (V)the Delegate of the Ministry of Health through Ghana Health Service (GHS); IUCN, UG and the UNDP Resident Representative; and it will be chaired by UNDP under the direct implementation modality

The Steering Committee will meet at least twice a year to review the progress of the current semester or year, make strategic and critical decisions for the project, and delegate authority to the Project Coordinator for implementing the work plan. The committee will be convened by the Project Coordinator in advance to give members enough time to schedule the meeting and agree on an agenda. The Project Coordinator will prepare minutes for each meeting. Extraordinary meetings of the committee will be called when necessary at the request of one of its members. When needed, the committee will invite key stakeholders to support specific topics (non-voting).

Responsibilities
Specific responsibilities of the Project Board include:

- Providing general guidance and direction to the project, ensuring it continues unimpeded;
- Addressing project situations raised by the Project Coordinator;
- Offering guidance on new project risks and agreeing on potential management measures and actions to address specific risks;
- Agreeing on project tolerances for the Project Coordinator as needed;
- Reviewing project progress and providing guidance and recommendations to ensure agreed-upon outputs are delivered satisfactorily according to plans;
- Evaluating the project's annual implementation report, including the quality evaluation report, and making recommendations for the work plan;
- Providing case-by-case guidance and advice for exceptional situations when the Project Coordinator's tolerances are exceeded;
- Assessing and deciding on the course of action for project changes through appropriate reviews.

The Project Coordinator will manage the daily operations of the project, with the primary responsibility of ensuring that the project delivers the results specified in the project document, according to required quality standards and within time and cost constraints.

Specific Responsibilities

- Providing direction and guidance to the project team's technicians and supervising the project's administrative and financial assistant;
- Liaising with the Project Board to ensure overall project direction and integrity;
- Serving as the main project contact for external communications;
- Identifying and obtaining any support and advice needed for project administration, planning, and control;
- Planning project activities and monitoring their progress against the project results framework and the approved annual work plan;
- Mobilizing staff, goods, services, training, and capital micro-grants for initiative activities, including drafting terms of reference and work specifications, and supervising all contractors' work;
- Monitoring events as specified in the project's monitoring plan/schedule and updating the plan as required;
- Handling requests for UNDP to provide financial resources through advances, direct payments, or reimbursements using fund authorization and expenditure certification;
- Monitoring financial resources and accounting to ensure accuracy and reliability of financial reports;
- Managing and monitoring project risks initially identified, raising new risks to the Project Board for consideration and decision on possible actions as needed, and updating the status of these risks by maintaining the project risk log;
- Collecting lessons learned during project implementation;
- Preparing the annual work plan and requesting its update from the Agency;
- Preparing the Annual Project Report and submitting the final report to the Project Board;
- Preparing progress reports upon request from the Secretariat, donor and/or UNDP, ensuring that the conditions defined by the donor for the respective disbursement are met;
- Identifying actions requiring follow-up and presenting them for the Project Board's consideration.

The **Administrative-Financial Assistant** will report to the Project Coordinator and provide support in project management and administration, as well as logistical support for the project's technical components.

The technical team of the **Implementation Unit** will be led by the Project Coordinator and will be responsible for implementing activities depending on the thematic areas, ensuring alignment with national policy objectives, relevance, effectiveness, and impartiality in the implementation process.

Project Assurance:

UNDP plays a three-level role in project oversight, control, and quality assurance, funded by the agency fee, performed by UNDP staff in Country Offices, regional, and central offices. Project Assurance should remain entirely independent of the Project Coordination function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project control and monitoring functions. This role ensures that the proper milestones in project coordination are handled and met.

UNDP will provide the following specific quality control and assurance services: (i) daily monitoring and supervision of project initiation and implementation; (ii) monitoring of project completion; and (iii) monitoring of project reports.

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Partners	N4H in Ghana has two convening partners, UNDP and IUCN, who will also be implementing partners. They will receive funding directly from the MPTF to implement activities. The University of Ghana (UG) will be a responsible party to implement select N4H activities. UG will undergo a micro assessment and HACT assessment to ensure eligibility for N4H funds as a Non-United Nations Organization. Every N4H activity will be led by UNDP, IUCN, or UG with targeted support from the other partners. All activities were carefully costed to ensure appropriate resources are available to implement each activity. The University of Ghana will have the largest role, leading a plurality of activities and will receive the largest amount of funding accordingly. Specific organizational roles for each activity are indicated in the Intervention Logic section. The University of Ghana is a public higher education training institute based in Accra, Ghana. UG serves as a key pipeline for workforce development and entry into public and private sector service. The UG project lead from the School of Veterinary Medicine, is well positioned to coordinate UG-led N4H activities as he successfully coordinated the N4H Ghana scoping phase. Other UG personnel, including from the School of Public Health, were involved in the scoping phase, facilitating workshops and providing strategic direction. Additional UG institutions, including the Centre for Climate Change and Sustainability Studies, and Institute for Environment and Sanitation Studies will be engaged during the implementation stage to develop UG as a One Health hub for N4H implementation, knowledge generation, and capacity development. UG has advanced, BSL-3 laboratory facilities at West African Centre for Cell Biology of Infectious Pathogens (WACCBIP) and at the School of Public Health (via the Noguchi Memorial Medical Institute) that can be utilized for avian influenza virus (AIV) screening under this project. The university fosters a pipeline of students and early career professionals that will benefit from exposure to the project's overall emphasis on risk reduction, One Health, and systems thinking. N4H will strengthen the UG graduate One Health course by integrating information on upstream spillover prevention and the linkages between biodiversity, climate, and health, which will have a lasting impact beyond the N4H implementation stage. The UG Office of Research, Innovation and Development which oversaw grant management, finances, and financial reporting during the N4H scoping phase, will provide the same support during the implementation phase. As a dedicated grant management and financial reporting office they will coordinate with UG Lead to ensure UG activities have careful financial oversight and are compliant with MPTF processes. Convening partner, UNDP, will also be available to provided ORID with guidance on N4H processes whenever needed. Government entities will be the conduit to private sector constituents and stakeholders, building on existing channels for outreach and collaboration. Where there are potential sensitivities (e.g. regulatory), University of Ghana serves as a neutral convener. The viability of this approach was demonstrated from the scoping workshops, which, through the Core Team's collective network, brought together a range of industry representatives (farmers, bushmeat association, etc.) to N4H. There is a possibility that other local NGOs, including the West African Primate Conservation Action (WAPCA), or IUCN member organizations will support targeted sub activities and receive funding (less than $10,000). For example, WAPCA may be subcontracted (or their staff will be paid a daily rate) to support the bushmeat market analysis and data collection. If this occurs, clear documentation and arrangements will be made to ensure all roles are clear.
Resource Mobilization	**Sustainability** A core tenet of this project is sustainability. Given the tumultuous global health funding landscape, many N4H activities have been carefully selected so they can be sustained without additional funding. The project includes several activities focused on the development of learning materials and guidelines that will be repeatedly used in Ghana post-N4H. The project will support the update of a graduate-level One Health course at the University of Ghana and Kwame Nkrumah University of Science and Technology (KNUST) to include learning modules on the links between biodiversity, climate, and health. Students who participate in this course (from multiple disciplines and university departments) will become the next generation of One Health practitioners in Ghana and carry that knowledge with them as they progress in their careers. N4H will also support the integration of One Health considerations into the Forestry Commission's Natural Resource Management Capacity Development Program. This will embed spillover prevention, biodiversity, and climate emphases into future trainings conducted by the Forestry Commission. The development of an online certificate will also allow people outside the Forestry Commission to participate in capacity development and learning and have a professional certificate to support their professional development. All learning and capacity development materials and guidelines developed through N4H, including the farm biosecurity guidelines and captive animal guidelines, will be co-created in collaboration with the government. N4H will ensure the government partners are well equipped to deploy these materials in the future. Other project outputs, including the filovirus risk assessment, ecological assessment, and bushmeat market analysis will clearly denote areas where spillover risk is likely higher, equipping the government with important information to target risk reduction interventions in the future saving government resources. There is a growing global interest in filoviruses as potential sources for future pandemics, and after the 2022 Marburg virus outbreak in Ghana (and current outbreak in Ethiopia) there is strong international interest in filovirus work which could attract additional funding. These activities will also generate data, best practices, and lessons that can be upscaled to other regions within Ghana. All community sensitization materials will be co-developed with Core Team agencies and at the end of the project all materials will be owned by the Core Team agencies for future use. Finally, if successful, the passage of Ghana's One Health policy will be a significant and long sustaining output of N4H that etches biodiversity-health-climate linkages and zoonotic spillover prevention considerations into national and regional planning and budgeting for years. **Resource Mobilization** To seek additional funding, dedicated budget will be allocated for an independent consultant to develop a resource mobilization strategy that identifies opportunities to upscale activities beyond N4H, including international aid agencies, global financing facilities, and private foundations. The topic of resource mobilization and sustainability will be a repeated and consistent focus during Core Team and annual project meetings to ensure sustainability remains a core focus of the project. N4H Ghana will also try to leverage the UNDP Small Grants Program to expand select project activities once N4H ends. For example, the Program could support communities to maintain vegetative buffer zones or promote alternative livelihoods, such as bee keeping.

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Stakeholders

The multi-disciplinary Core Team was established at the onset of the scoping stage to ensure One Health representation from across the human, animal, and environment spectrum was maintained throughout the scoping process. At that time, partner sensitization meetings were conducted in Accra with key government agencies to garner support for the initiative and better understand how N4H can support their institutional mandates and priorities. Shortly after, at the first Core Team meeting, we collectively developed a master spreadsheet of potential stakeholders to invite to each regional workshop, including representatives of government, NGOs, universities, intergovernmental organisations, trade associations (e.g., farming, mining, or bushmeat sellers associations) from across the One Health spectrum.

The four regional scoping workshops, covering the country's agro-ecological zones, garnered broad stakeholder engagement from more than 100 people across greater than 20 disciplines (Table 4). These workshops were specifically chosen to ensure that the project design reflects nationwide priorities and concerns - especially at the community level. Where required, the workshops were interpreted into the local language (Twi) to accommodate participants with limited understanding of the English Language. The Core Team took special care to make sure workshop participants felt valued and that there were no wrong answers to each activity, fostering an open dialogue.

Table 4. Regional scoping workshop participants

Region	Participating Organisations	
Ashanti Region	• Wildlife Division of the Forestry Commission • Veterinary Services Directorate • Animal Production Directorate • Ghana Health Service • Environmental Protection Agency • National Disaster Management Organisation (NADMO)	• Kumasi Centre for Collaborative Research (KCCR) • Regional Coordinating Council • Abattoir • Farmers associations (crop, poultry, and pig) • Small Scale Miners Association • Bush Meat Traders Association • A Rocha Ghana (NGO)
Savannah Zone	• Stakeholders from the Upper East and Upper West regions, including: • Veterinarians • Extension officers • Wildlife rangers • Park managers	• Farmers (crop and livestock) • Hunters • Ghana Health Service • Disaster Management Organisation • Environmental Protection Agency • NGOs (A Rocha Ghana, North Code, and Green for Change Ghana)
Western Region	• Veterinary Services Directorate • Ghana Health Service • Forestry Commission • University of Mines and Technology • Environmental Health and Sanitation Department • Environmental Protection Agency	• Department of Agriculture • Farmers • Bushmeat traders • Butchers • Loggers (Ayum Forest Products Ltd.) • NGOs (Leanita International, Progressive Network Forum, and West African Cooperatives Network)
Greater Accra Region	• Ministry of Food and Agriculture (Veterinary Services Directorate and Animal Production Directorate) • Veterinary Council • Ministry of Environment, Science, Technology, and Innovation (Environmental Protection Agency, CSIR Animal Research Institute, and Ghana Atomic Energy Commission) • Ministry of Lands and Natural Resources (Wildlife Division of Forestry Commission)	• Ministry of Health (Public Health Directorate, Health Promotion Directorate, Allied Health Directorate) • Ministry of the Interior (Disaster Management Organisation) • University of Ghana (Noguchi Memorial Institute for Medical Research, School of Public Health, School of Veterinary Medicine, Department of Nutrition and Food Science, Centre for Biodiversity Conservation Research, and Department of Sociology) • Communication for Change (NGO)

Although there has been a significant time gap between scoping and implementation (due to a change in convening partners), once project implementation begins, many of the same stakeholders will be engaged in the implementation process. We will inform key stakeholders, including the national government agencies and local governments in regions targeted for implementation about the project plan. At the start of project implementation, we will not be able to revisit each scoping workshop location in person but will notify them of the planned project activities electronically and keep them informed on project activities over the project period.

Many local communities and government personnel will benefit from N4H implementation (Table 5). In addition to positive outcomes for spillover risk reduction, attention will be given throughout the project to anticipate and minimise (and avoid where possible) possible negative consequences to stakeholders. For example, targeted approaches to awareness raising are necessary to ensure relevance and avoid potential cultural stigmas.

Table 5. Implementation project beneficiaries

Stakeholder	Project Beneficiaries

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Protected Area personnel, including Wildlife Rangers and Park Managers	Receive capacity development training on protected area management with a One Health lens, helping to protect wildlife health, prevent zoonotic spillovers, and promote sustainable conservation.
People across the bushmeat value chain	Trappers, hunters, chop bar operators, sellers, consumers will receive capacity development training on disease risk reduction measures
Farmers (especially poultry and pig farmers)	Farmers will receive capacity development training on disease risk reduction measures, which could also have economic benefits if it prevents animal disease transmission
Captive wildlife facility personnel and visitor	Staff will receive capacity development training on disease risk reduction measures; visitors will benefit from the implementation of risk reduction interventions
Local communities	Community members, including school children, farmers, hunters, bushmeat traders, miners, traders and those living around protected areas and community resource management areas will be engaged through awareness campaigns and community engagement activities towards increased awareness of zoonotic diseases, improved biosecurity measures, and training on best practices for disease prevention and control in their respective endeavours.
University students	Students participating in the UG or KNUST graduate One Health course will receive capacity development training on One Health concepts
Local governments	Receive capacity development training on spillover risk reduction, biodiversity conservation, land planning, and professional development opportunities such as participating in the planned online certificate or attending international events.
Veterinary professionals (VSD and community animal health workers)	Training, resources, and improved coordination with other personnel relevant to spillover risk reduction and disease detection.
Public health officials and community health workers	Improved capacity to detect, respond to, and prevent zoonotic diseases and collaboration with animal health and environmental health sectors, leading to better public health outcomes.
NGOs and Academia	Collaborate on research, capacity building, and community engagement, benefiting from shared knowledge and resources. Strengthened partnerships will lead to enhanced capacity to address zoonotic disease challenges.

SDG Targets

Target	Description
Main Goals	
Goal 3. Ensure healthy lives and promote well-being for all at all ages	
TARGET_3.d	3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
Goal 13. Take urgent action to combat climate change and its impacts2	
TARGET_13.2	13.2 Integrate climate change measures into national policies, strategies and planning
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertifi...	
TARGET_15.2	15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
TARGET_15.9	15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

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SDG Indicators

Indicator Code	Description
C130201	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhou
C150201	15.2.1 Progress towards sustainable forest management
C150901	15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020
C030d01	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness

Contribution to SDGs

Participating Organization	% TARGET_13.2	% TARGET_15.2	% TARGET_15.9	% TARGET_3.d	% Total
IUCN	25	30	25	20	100
UNDP	20	25	25	30	100
Total contribution by target	**45**	**55**	**50**	**50**	
Project contribution to SDG by target	**22.5**	**27.5**	**25**	**25**	**100**

Project Results

Outcome	Output	Description
The Implementation of One Health approaches in select jurisdictions contribute to the integration of environment (physical environment comprising ecosystems and other factors of nature) and health (human and animal) in sector policies in line with the GBF		
	Assess	1. Enhanced rationale for integrated environment and health policy and investment based on multidisciplinary evidence and knowledge generated and disseminated.

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Outcome	Output	Description			
	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	Conduct a national risk assessment for filoviruses.	Conduct a national risk assessment for filoviruses, outlining host-pathogen relationships, species habitat ranges, data on previous filovirus outbreaks in Ghana, and identifying known bat roost sites (bats are believed to be wild reservoir hosts). Field teams will visit suspected bat roosts and collect qualitative ecological data (e.g., presence of communities, farms, other wildlife species, extractive industries illegal timber logging, potential sources of bat food). Findings and policy implications will be discussed with government partners and integrated into community sensitization and awareness raising activities.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana

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Outcome	Output	Description			
	Perform ecological assessment.	Conduct an ecological assessment to prioritize upstream prevention actions. Nationally, this will involve an analysis to identify trends in deforestation, habitat fragmentation, and ecosystem degradation mapping hotspots for degradation, restoration, and conservation. Maps will be overlaid with spatial data on human population density, urban areas, forest-dependent communities, protected areas, OECMs, and other key land-use concessions. To provide specific guidance for poultry farming, the national analysis will be overlaid with an ecological niche modelling of migratory bird species, support the development of poultry zoning that avoids overlap between poultry farms and migratory bird habitats to reduce spillover risk. National mapping will inform a fine-scale ecological assessment at Ankasa Game Reserve and Nini-Suhien National Park. This assessment will propose zoning measures to reduce contact between humans and wildlife, including identifying vegetative buffer zones to be strengthened to prevent cross grazing between domestic and wild animals. In addition, a socio-ecological behaviour study will be conducted in highly degraded areas to identify local practices that increase spillover risk, such as hunting and grazing.	IUCN - International Union for Conservation of Nature		

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Outcome	Output	Description
	Operationalize	2. Preventative One Health actions and policies that sustainably integrate environment and health dimensions co-developed or enhanced and supported.

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Update farm biosecurity guidelines.	Update farm biosecurity guidelines based on the IUCN-led ecological assessment to include land planning and ecological considerations. Host capacity building workshops with poultry and pig farming associations deploying the guidelines to reduce spillover risk.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
Develop biosecurity guidelines for captive animal facilities	Develop biosecurity guidelines for captive wildlife facilities, including quarantine operations, zoos, wildlife pet shops. Guidelines will integrate considerations for biodiversity conservation and provide information on risk reduction and risk communication. They will be disseminated through a capacity building workshop.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana

	Enable	3. Capacity and knowledge management to implement preventative One Health policies and actions that integrate environmental dimensions enhanced.

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Outcome	Output	Description

Activities

Title	Description	Lead Participating Organization	Participating Organization	Other Organizations
Bushmeat market analysis and implementation of community risk reduction measures	Conduct a bushmeat market analysis in collaboration with community workers and Wildlife Division staff to build capacity on species identification and qualitative biodiversity data collection. Host a workshop with stakeholders from across the bushmeat value chain to discuss animals they encounter, their cultural and economic significance, and gauge interest in alternative livelihood options. Community workers will collect data on species abundance which will be disseminated to stakeholders to discuss spillover risk reduction measures, biodiversity and wildlife protection, and alternative livelihood options.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana

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Outcome	Output	Description			
	Conduct wildlife Surveillance	Conduct wildlife surveillance for avian influenza at wetlands where fisher communities rear domestic birds and pigs. Given budget constraints and alignment to N4H outputs, UG will conduct surveillance using non-invasive environmental samples from wetlands (fresh faecal, soil or water) instead of direct biological samples from captured birds. Lab assessments will be conducted at UG West African Centre for Cell Biology of Infectious Pathogens, Noguchi Memorial Institute for Medical Research, or similar laboratory with BSL-3 capacity. Findings will be presented to communities near sentinel sites, including guidance on spillover risk reduction.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
	Create and deploy community sensitization and awareness raising materials for local communities.	Based on the fine scale socio-ecological assessment performed in Ankasa Game Reserve and Nini-Suhien National Park, community sensitization and awareness raising materials and knowledge tools about preventing spillover, living safely with wildlife, biodiversity, climate change, and environmental drivers of zoonotic diseases will be created and deployed to people who may be at increased risk of spillover. This activity contributes to SDG Target 13.2 by raising awareness about the linkages between climate change and spillover prevention.	IUCN - International Union for Conservation of Nature		University of Ghana

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Outcome	Output	Description			
	Capacity development to protected area and other conservation staff and rangers	Support capacity development of rangers, conservation, and protected area staff on animal health surveillance and reporting using IUCN and WOAH guidelines related to wildlife disease prevention, detection, response, and recovery in protected areas. Localized guidelines will be submitted to Ghana's One Health Platform for consideration for official issuing and broader dissemination.	IUCN - International Union for Conservation of Nature		University of Ghana
	Capacity development to Protected Areas Management Plans.	Update protected area management plans with a One Health lens and considerations for spillover prevention (monitoring wildlife mortality, tracking species populations, monitoring animal habitat ranges in relation to farms/people/tourists, zoning, and tourism activities). Conduct workshops to build capacity on implementing PA management plans. Support their integration into the Forestry Commission's Natural Resource Management Capacity Development Program.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
	Enhance the CREMA concept supporting local communities in natural resource management.	. Enhance Community Resource Management Areas (CREMAs) by integrating a One Health approach, promoting spillover prevention and risk reduction through education and awareness raising (including reporting unusual wildlife behaviour or mortality events) and biodiversity and land planning considerations for sustainable land management.	UNDP - UNDP (United Nations Development Programme (UNDP))		

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Outcome	Output	Description			
	Contribute to a graduate level One Health course at UG and KNUST.	Contribute to the development of graduate One Health courses at UG and Kwame Nkrumah University of Science and Technology (KNUST). Update learning modules and develop materials on the links between biodiversity, climate, and health. To ensure multidisciplinary and social science perspectives, UG will host meetings with One Health-related institutions, including the Centre for Climate Change and Sustainability Studies, Institute for Environment and Sanitation Studies, School of Veterinary Medicine, School of Public Health, and other departments.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
	Organize stakeholder coordination meetings	Stakeholder coordination and internal project alignment, monitoring, and review through a project kick-off meeting, quarterly Core Team meetings/retreats, annual project review meetings, and other meetings as necessary. The expertise of N4H TAG members and global partners will be welcomed to optimise project approaches and collective learning.	UNDP - UNDP (United Nations Development Programme (UNDP))		
	Implementing, Monitoring, and Evaluation.	Develop an implementation monitoring, evaluation, and learning plan, and review project activities, indicators, and outputs during stakeholder meetings, including hiring an external evaluator to conduct a terminal evaluation and audit.	UNDP - UNDP (United Nations Development Programme (UNDP))		
	Sustain	4. Collaboration mechanisms or governance structures that facilitate the implementation of preventative One Health approaches that integrate environmental dimensions developed or strengthened.			

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Outcome	Output	Description			
	Activities				
	Title	**Description**	**Lead Participating Organization**	**Participating Organization**	**Other Organizations**
	Advocate to strengthen wildlife and conservation protections.	Advocate to strengthen wildlife and conservation protections with Metropolitan, Municipal, and District Assemblies (MMDA) and local and traditional leaders. Advocacy will focus on enforcement of bylaws and policies, especially Act 1115: Wildlife Resource Management Act which promotes sustainable wildlife management and biodiversity conservation. Identify barriers to enforcement and potential incentives for local communities to follow legislation. This activity will contribute to SDG Target 15.9 to support biodiversity values into national and local planning processes through advocacy at the MMDA level.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana

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Outcome	Output	Description			
	Review, update, advocate passage national One Health Policy.	Support the process to review and update the national One Health policy, including mainstreaming biodiversity-health linkages and highlighting opportunities for upstream spillover prevention through environmental, wildlife, and ecosystem strengthening. Organize four technical forums to revise and update the policy. This will support overall efforts to mainstream One Health into National Development Plan and Budgeting Process contributing to SDG Targets 15.9 and 13.2 integrating biodiversity and climate change measures into national policy.	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
	International recognition for N4H.	Professional development and international recognition for N4H by funding select government and project stakeholders to attend international conferences and meetings (e.g., UN CBD meetings, World One Health Congress) for knowledge exchange (especially south-south knowledge exchange with other N4H countries) and to promote spillover prevention on a global scale. Events will showcase lessons learned, best practices for upstream spillover prevention, and generate opportunities to attract funding for N4H upscaling.	UNDP - UNDP (United Nations Development Programme (UNDP))		

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Outcome	Output	Description			
	Provide support to Ghana's One Health platform.	Support Ghana's One Health platform, including convening meetings and supporting sessions on environmental and climate data integration, upstream spillover prevention, and environmental drivers of zoonotic spillover. Engage with the One Health platform, to understand the challenges and opportunities for strengthening it. Arrange a south-south N4H knowledge exchange on OH platforms (e.g., with Viet Nam)	UNDP - UNDP (United Nations Development Programme (UNDP))		University of Ghana
	Develop a project resource mobilization and sustainability strategy.	Develop a project resource mobilization and sustainability strategy identifying opportunities to upscale activities beyond N4H.	UNDP - UNDP (United Nations Development Programme (UNDP))		

Signature Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year
No signature indicators available.											

Imported Fund Outcome / Output Indicators

Docusign Envelope ID: A3AAF9F9-6B4C-80CD-83C3-BC981A405BCE

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
0.1 Number of operational collaborative structures that integrate environment and health dimensions strengthened or developed.		The number of One Health or similar multisectoral coordination mechanisms that are established or strenghtened as a result of N4H interventions.	* MoUs, signed agreements or establishment documents, collaborative strategic action plans * Meeting minutes and participant lists * Reports on implementation of joint initiatives. * Evaluation reports * etc	Capacity	Yearly	Country	Number	1	2025	5	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
0.2 Number of integrated health and environment policy frameworks officially proposed, adopted or implemented in relevant jurisdictions.		National, sub national or local policies that may include any guidelines, plans, strategies etc. designed to guide decision-making.	* Policy documents, legislation, strategies, action plans, guidelines proposed or adopted * Progress reports on policy or action plan implementation *	Policy	Yearly	Country	Number	1	2025	5	2028

Docusign Envelope ID: A3AAF9F9-6B4C-80CD-83C3-BC981A405BCE

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
0.3 Number of community groups, particularly IP and LC & other traditionally disadvantaged groups, benefitting from the implementation of strengthened policies & actions that integrate the environment & health & that include gender responsive approaches.		Number of community groups, particularly IP and LC & other traditionally disadvantaged groups (such as youth, women, ethnic minorities etc.), benefitting (deriving or receiving an advantage such as improved wellbeing, improved ecosystem services, improved health and other advantages) from the implementation of strengthened policies & actions that integrate the environment & health & that include gender responsive approaches.		Beneficiaries	Yearly	Country	Number	0	2025	10	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
	# of community groups that benefit from strengthened integrated policies and actions.	# of community groups (where a community group is a social unit of any size whose members reside in a specific locality or geography, share government, and a common cultural and/ or historical heritage- please specify) that benefit from strengthened integrated policies and actions.		Beneficiaries	Yearly	Country	Number		2023		2030
	# of new or strengthened integrated policies and actions that reflect gender-responsive approaches.			Beneficiaries	Yearly	Country	Number		2023		2030

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
1.1: Number of evidence and knowledge-based products, tools or models on the links between environment and health developed and disseminated.		Number of evidence and knowledge-based products, tools or models on the links between environment and health developed and disseminated.	E-platforms, websites, information tools, etc. Please indicate.	Other	Yearly	Country	Number	0	2025	11	2028

Docusign Envelope ID: A3AAF9F9-6B4C-80CD-83C3-BC981A405BCE

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
1.2: Number of sector and stakeholder groups substantively engaged in developing evidence and knowledge-based products, tools or models on the links between environment and health developed and disseminated.		Number of sector and stakeholder groups substantively engaged in developing evidence and knowledge-based products, tools or models on the links between environment and health developed and disseminated.	participations lists, meeting minutes and records, etc. Please indicate.	Other	Yearly	Country	Number	3	2025	16	2028
	1.2.1 # of human health sector groups	Please specify		Other	Yearly	Country	Number	2	2025	1	2028
	1.2.2 # of animal health sector groups	Please specify		Other	Yearly	Country	Number	1	2025	5	2028
	1.2.3 # of environment (plant or other natural environment) sector groups	Please specify		Other	Yearly	Country	Number	0	2025	2	2028
	1.2.4 # of IP or other identified local community	Please specify		Other	Yearly	Country	Number	0	2025	4	2028
	1.2.5 # of Youth groups	Please specify		Other	Yearly	Country	Number	0	2025	2	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
	1.2.6 # of Women's groups	Please specify		Other	Yearly	Country	Number		2023		2030
2.1 Number of integrated health and environment policies and actions proposed that incorporate the perspectives and participation of IPLCs and other disadvantaged groups in their formulation and implementation.				Policy	Yearly	Country	Number	0	2025	9	2028
	2.1.1 # of IP or other identified local community groups involved in policy/action formulation			Policy	Yearly	Country	Number	0	2025	4	2028
	2.1.2 # of IP or other identified local community groups involved in policy/action implementation			Policy	Yearly	Country	Number	0	2025	9	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
3.1: Number of governmental entities with increased capacity to implement preventative One Health approaches that integrate environmental dimensions		Number of governmental entities with increased capacity to implement preventative One Health approaches that integrate environmental dimensions.		Capacity	Yearly	Country	Number	0	2025	6	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
3.2 Number of stakeholder groups, including IP or other identified disadvantaged local community groups, with increased capacity to implement preventative One Health approaches that integrate environmental dimensions		Number of stakeholder groups, including IP or other identified disadvantaged local community groups, with increased capacity to implement preventative One Health approaches that integrate environmental dimensions		Capacity	Yearly	Country	Number	0	2025	29	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
3.3: Number of functional and effective knowledge management systems that integrate environment and health dimensions and actively used		Number of functional and effective knowledge management systems that integrate environment and health dimensions and actively used.		Capacity	Yearly	Country	Number	0	2025	1	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
4.1: Number of operational One Health collaboration or governance structures integrating environmental dimensions into decision-making in the public health and other development sectors				Investment	Yearly	Country	Number	1	2025	2	2028

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Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Targe Year
4.2: Amount of public or private funding and investment catalysed to sustain collaboration mechanisms and governance structures that effectively integrate environmental dimensions into in public health and other development sectors				Investment	Yearly	Country	Number	0	2025	150000	2028

Project Indicators

Indicator Title	Component Title	Description	Means of Verification	Category	Cycle	Scope	Value Type	Baseline Value	Baseline Year	Target Value	Target Year
No indicators available.											

Risks

Event	Category	Level	Likelihood	Impact	Mitigating Measures	Risk Owner
Potential change in government officials could affect government priorities and project continuity.	• Political	Low	Unlikely	Moderate	Project activities and personnel engaged are technical experts/heads of departments, not political appointees. We will conduct regular (quarterly Core Team meetings) and annual project review meetings with department heads to ensure all major stakeholders are aware of project activities and to address any concerns. Sensitization will be ongoing as needed.	UNDP

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Personnel turnover	• Operational	Low	Possible	Minor	Core Team and implementing organization members are organizational representatives; agencies can nominate/appoint replacements if needed. The project has a robust monitoring system to track project activities and effectiveness to keep the project on track.	UNDP
Core Team members and government agencies are needed to respond to unforeseen issues, e.g., disease outbreaks, delaying N4H activities	• Operational	Low	Possible	Minor	The project breadth provides flexibility in timelines and the collaboration among agencies built in ensures progress can continue even when some sectors have other pressing demands. The project's outputs may potentially be applied in real-time in some situations.	UNDP
Conflict between sectors or stakeholders	• Organizational	Low	Possible	Minor	Project reinforces a One Health approach, with a strong Core Team committed to multi-sectoral coordination and advancement of Ghana's One Health policy. Potential conflicts will be discussed by Core Team to determine the best course of action.	UNDP
Community Resistance and Cultural Barriers	• Social and Environmental	Medium	Possible	Minor	Co-develop messages with community leaders to ensure cultural sensitivity. Use participatory approaches, community dialogues, and local language communication.	UNDP
Safety Risks to Field Personnel	• Operational	Low	Possible	Minor	The project will mitigate safety risks to field personnel by ensuring PPE, biosafety training, and protocols for wildlife surveillance. Field safety risk assessments would be conducted before deployments.	UNDP
Extreme weather conditions could make it difficult to access ecological and surveillance sites	• Operational	Low	Possible	Moderate	Flexible scheduling of field visits based on weather conditions. Collaborate with local guides and Wildlife Division for safe access.	UNDP

Budget by UNSDG Categories: Over all

Budget Lines	UNDP (7%) *	IUCN (7%) *	Total
1. Staff and other personnel	$376,250.00	$305,108.90	$681,358.90
2. Supplies, Commodities, Materials	$72,500.00	$10,000.00	$82,500.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	$26,160.00	$0.00	$26,160.00
4. Contractual services	$234,481.00	$234,355.00	$468,836.00
5. Travel	$371,785.00	$89,670.00	$461,455.00
6. Transfers and Grants to Counterparts	$0.00	$0.00	$0.00
7. General Operating and other Direct Costs	$110,025.70	$38,823.28	$148,848.98
Project Costs Sub Total	**$1,191,201.70**	**$677,957.18**	**$1,869,158.88**
8. Indirect Support Costs	$83,384.12	$47,457.00	$130,841.12

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Budget Lines	UNDP (7%) *	IUCN (7%) *	Total
Total	**$1,274,585.81**	**$725,414.18**	**$2,000,000.00**

Budget by UNSDG Categories: 2026

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	IUCN (7%) *	Total
1. Staff and other personnel	2026	Refer to annexes for further details	$144,700.00	$160,064.00	$304,764.00
2. Supplies, Commodities, Materials	2026	Refer to annexes for further details	$24,500.00	$0.00	$24,500.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2026	Refer to annexes for further details	$11,160.00	$0.00	$11,160.00
4. Contractual services	2026	Refer to annexes for further details	$104,806.00	$34,750.00	$139,556.00
5. Travel	2026	Refer to annexes for further details	$101,468.00	$42,558.00	$144,026.00
6. Transfers and Grants to Counterparts	2026		$0.00	$0.00	$0.00
7. General Operating and other Direct Costs	2026	Refer to annexes for further details	$35,609.03	$20,878.65	$56,487.68
Project Costs Sub Total			**$422,243.03**	**$258,250.65**	**$680,493.68**
8. Indirect Support Costs			$29,557.01	$18,077.55	$47,634.56
Total			**$451,800.04**	**$276,328.20**	**$728,128.24**

Budget by UNSDG Categories: 2027

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	IUCN (7%) *	Total
1. Staff and other personnel	2027	Refer to annexes for further details	$144,700.00	$145,044.90	$289,744.90
2. Supplies, Commodities, Materials	2027	Refer to annexes for further details	$40,500.00	$10,000.00	$50,500.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2027	Refer to annexes for further details	$10,000.00	$0.00	$10,000.00
4. Contractual services	2027	Refer to annexes for further details	$59,775.00	$189,605.00	$249,380.00
5. Travel	2027	Refer to annexes for further details	$209,070.00	$40,108.00	$249,178.00
6. Transfers and Grants to Counterparts	2027				$0.00
7. General Operating and other Direct Costs	2027	Refer to annexes for further details	$39,883.33	$17,944.63	$57,827.96
Project Costs Sub Total			**$503,928.33**	**$402,702.53**	**$906,630.86**
8. Indirect Support Costs			$35,274.98	$28,189.18	$63,464.16
Total			**$539,203.32**	**$430,891.71**	**$970,095.02**

Budget by UNSDG Categories: 2028

Budget Lines	Fiscal Year *	Description	UNDP (7%) *	IUCN (7%) *	Total
1. Staff and other personnel	2028	Refer to annexes for further details	$86,850.00	$0.00	$86,850.00
2. Supplies, Commodities, Materials	2028	Refer to annexes for further details	$7,500.00	$0.00	$7,500.00
3. Equipment, Vehicles, and Furniture, incl. Depreciation	2028	Refer to annexes for further details	$5,000.00	$0.00	$5,000.00
4. Contractual services	2028	Refer to annexes for further details	$69,900.00	$10,000.00	$79,900.00
5. Travel	2028	Refer to annexes for further details	$61,247.00	$7,004.00	$68,251.00
6. Transfers and Grants to Counterparts	2028		$0.00	$0.00	$0.00
7. General Operating and other Direct Costs	2028	Refer to annexes for further details	$34,533.33	$0.00	$34,533.33
Project Costs Sub Total			**$265,030.33**	**$17,004.00**	**$282,034.33**
8. Indirect Support Costs			$18,552.12	$1,190.28	$19,742.40

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Budget Lines	Fiscal Year *	Description	UNDP (7%) *	IUCN (7%) *	Total
Total			**$283,582.46**	**$18,194.28**	**$301,776.74**

Performance-based Tranches Breakdown

Tranche			Total
Tranche 1	IUCN (40%)	$234,598.40	$800,000.00
	UNDP (40%)	$565,401.60	
Tranche 2	IUCN (40%)	$234,598.40	$800,000.00
	UNDP (40%)	$565,401.60	
Tranche 3	IUCN (20%)	$117,299.20	$400,000.00
	UNDP (20%)	$282,700.80	
			$2,000,000.00

Results based budget

Outcome *	Output *	Agency *	Budget (USD) *	% allocated to GEWE (if any)	
The Implementation of One Health approaches in select jurisdictions contribute to the integration of environment (physical environment comprising ecosystems and other factors of nature) and health (human and animal) in sector policies in line with the GBF		**Sub Total**	**$2,000,000.00**		**$138,314.71**
	Assess	UNDP (7%)	$56,415.15	0%	$0.00
	Assess	IUCN (7%)	$276,328.30	0%	$0.00
	Operationalize	UNDP (7%)	$198,681.05	2.5%	$4,967.03
	Enable	UNDP (7%)	$792,927.00	8.5%	$67,398.80
	Enable	IUCN (7%)	$310,167.87	11.6%	$35,979.47
	Sustain	UNDP (7%)	$365,480.63	8.2%	$29,969.41
Total			**$2,000,000.00**		

Budget per Gender (GEWE)

	IUCN	UNDP	Total $
$ Towards GEWE	**$38,498.04**	**$109,498.70**	**$147,996.74**
% Towards GEWE			**7.40%**

Programme Outcome Costs

Outcome	Output	Activity	Implementing Agent	Time Frame										
				2026			2027				2028			
				2	3	4	1	2	3	4	1	2	3	4
The Implementation of One Health approaches in select jurisdictions contribute to the integration of environment (physical environment comprising ecosystems and other factors of nature) and health (human and animal) in sector policies in line with the GBF														
	Assess													
		Conduct a national risk assessment for filoviruses.												
			UNDP	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
		Perform ecological assessment.												

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Outcome	Output	Activity	Implementing Agent	Time Frame										
				2026			2027				2028			
				2	3	4	1	2	3	4	1	2	3	4
			IUCN	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐
	Operationalize													
		Update farm biosecurity guidelines.												
			UNDP	☐	☐	☐	☐	☑	☑	☑	☑	☐	☐	☐
		Develop biosecurity guidelines for captive animal facilities												
			UNDP	☐	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐
	Enable													
		Bushmeat market analysis and implementation of community risk reduction measures												
			UNDP	☐	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐
		Conduct wildlife Surveillance												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
		Create and deploy community sensitization and awareness raising materials for local communities.												
			IUCN	☐	☐	☐	☑	☑	☑	☑	☐	☐	☐	☐
		Capacity development to protected area and other conservation staff and rangers												
			IUCN	☐	☐	☐	☑	☑	☑	☑	☐	☐	☐	☐
		Capacity development to Protected Areas Management Plans.												
			UNDP	☐	☐	☐	☐	☑	☑	☑	☑	☑	☑	☑
		Enhance the CREMA concept supporting local communities in natural resource management.												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☐
		Contribute to a graduate level One Health course at UG and KNUST.												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐
		Organize stakeholder coordination meetings												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
		Implementing, Monitoring, and Evaluation.												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
	Sustain													
		Advocate to strengthen wildlife and conservation protections.												
			UNDP	☐	☐	☑	☑	☑	☑	☑	☐	☐	☐	☐
		Review, update, advocate passage national One Health Policy.												
			UNDP	☐	☑	☑	☐	☑	☑	☐	☐	☐	☐	☐
		International recognition for N4H.												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑
		Provide support to Ghana's One Health platform.												
			UNDP	☑	☑	☑	☑	☑	☑	☑	☐	☐	☐	☐
		Develop a project resource mobilization and sustainability strategy.												
			UNDP	☐	☐	☐	☑	☑	☑	☑	☐	☐	☐	☐

Signatures

UNDP: UNDP (United Nations Development Programme (UNDP)) (Digital) Ms Midori Paxton Director midori.paxton@undp.org	**SIGNATURE:** Midori Paxton **DATE:** 08-06-2026

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Chair, Nature for Health (N4H) Steering Committee (Digital) Ms Doreen Robinson Division Deputy Director doreen.robinson@un.org	**SIGNATURE:** Doreen Robinson **DATE:** 08-06-2026
IUCN: International Union for Conservation of Nature (Digital) Dr Grethel Aguilar Director General grethel.aguilar@iucn.org	**SIGNATURE:** Signed by: C2F49C58F60841A... **DATE:** 16-Jun-2026 | 10:59 CEST