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# **ACRONYMS**

AFCIA — Adaptation Fund Climate Innovation Accelerator

CTCN — Climate Technology Centre and Network

EMSAS — Empowering Communities with Sustainable Agricultural System

EU — European Union

**EWER** — Early Warning and Early Response

GIS — Geographic Information System

GIZ — Deutsche Gesellschaft für Internationale Zusammenarbeit

HEDA — Human and Environmental Development Agenda

I-CONS — I-WASH Continuity and Sustainability

IITA — International Institute of Tropical Agriculture

LGAs — Local Government Areas

NAFN — National Agricultural Foundation of Nigeria

NAIC — Nigerian Agricultural Insurance Corporation

NAPRI — National Animal Production Research Institute

NCAM — National Centre for Agricultural Mechanisation

NCCC — National Council on Climate Change

NGO — Non-governmental organisation

NIE — National Implementing Entity

NIHSA — Nigeria Hydrological Services Agency

NiMet — Nigerian Meteorological Agency

ODF — Open Defecation Free

RANETA — Radio-Internet Climate Technology for Agricultural Resilience

RUWASA — Rural Water Supply and Sanitation Agency

SCP — Seasonal Climate Predictions

SLAs — Service Level Agreements

SWG — Stakeholder Working Group

TA — Technical Assistance

UNEP — United Nations Environment Programme

VR — Virtual Reality

WAMSS — Water Maintenance and Support Service

WASH — Water Sanitation and Hygiene

WASHCOMS — Water Sanitation and Hygiene Committee

# 1.0 EXECUTIVE NOTE FROM THE EXECUTIVE DIRECTOR

Dear Friends and partners,

I present to you the 2024 Annual Report of GHI. As we reflect on 2024, I am filled with immense pride and gratitude for the strides we have made together at Green Habitat Initiative. The year 2024 has been marked by remarkable achievements, collaborative efforts, and an unwavering commitment to driving sustainable environmental impact in Nigeria and beyond.

First, I would like to extend my heartfelt appreciation to our dedicated staff: Ahmad, Aisha, Abimbola, Bamber, Bashar, Faruk, Friday, Hauwa, Hassan, Habib, Ikram, Kassim, Mohammed, Mustapha, Nasir, Samira, Sheriffdeen, Yamusa, and Yazid. Your resilience, innovation, and passion have been the cornerstone of our success. A big thank you to our board of advisors and board members, who always advise and counsel. To our donors, especially the United Nations Environment Program-Climate Technology Centre & Network (UNEP-CTCN), Adaptation Fund, and the European Commission, thank you for believing in our vision and empowering us to push the boundaries of what's possible. Our government partners, especially the Nigerian Meteorological Agency, Kubau LGA, MDAs of Kaduna State Government, MDAs of Kebbi State Government, National Water Research Institute, and Federal Ministry of Agriculture and Food Security, thank you for ensuring a conducive regulatory environment and harmonious working relationship with you.

In 2024, we achieved two significant milestones. We launched two groundbreaking projects on climate-smart agriculture, thanks to funding facilitated by UNEP-CTCN. The Radio and Internet Technology for Disseminating Agrometeorological Information (RANETA) with the Nigerian Meteorological Agency (NiMet) and the Solar-Powered Hydroponics Project (EMSAS-Hydroponics) with Kubau LGA, Kaduna State. These initiatives aim to equip rural farmers with sustainable practices and innovative tools to adapt to climate change while enhancing food security. These projects embody our mission of fostering resilience in communities most affected by the climate crisis. With all the projects due to conclude in 2025, do follow our social media handles to keep up with the achievements, especially the EMSAS Hydroponics. To our knowledge, we have built the largest greenhouse dedicated to providing training to local communities on sustainable agriculture practices.

December marked another highlight as we hosted our inaugural Climate Innovation Summit 2024. This summit brought together thought leaders, innovators, and policymakers to share knowledge and catalyze actionable solutions for a more innovative and greener future. The discussions and partnerships forged during the event reaffirmed the critical importance of collaborative efforts in tackling climate change.

Additionally, I had the honour of representing GHI in the Adaptation Fund seminar for Implementing Entities held in Johannesburg, South Africa. This opportunity allowed us to engage with global experts, share our experiences, and learn from other nations' adaptation strategies. Such engagements not only broaden our perspective but also enrich our work in Nigeria.

As we look ahead, we remain committed to scaling our impact, deepening our partnerships, and empowering more communities with sustainable solutions. None of this would be possible without your continued support and collaboration.

In 2025, we hope to advance our mission of empowering communities and cities to combat climate change and increase access to critical WASH services using innovative strategies such as virtual reality. We are planning for an exciting 2025. Do not miss boarding to join us on this journey. Together, we are building a resilient and sustainable future. Thank you for being an integral part of our journey.

Feel free to write to us about how we can partner with you.

With immense gratitude and hope,

Sadiq Abubakar Gulma, PMP

**Executive Director** 



## 1.1 OUR COLLECTIVE THOUGHTS: READ OUR LETTER



As the staff of Green Habitat Initiative, we take this opportunity to reflect on the progress we have made and the challenges we have overcome in 2024. We are proud of the strides we made, particularly in our RANETA and EMSAS Hydroponics projects, which have significantly contributed to improving the lives of communities in Kebbi and Kaduna States. These projects have not only enhanced agricultural resilience but also empowered local communities to adapt to climate change and achieve sustainable growth.

This year has been one of growth, both as individuals and as a team. Through our shared commitment to GHI's mission, we have fostered collaboration, built stronger relationships, and remained steadfast in our dedication to environmental sustainability. The lessons learned and achievements we have celebrated are a testament to the hard work and passion of each team member.

Looking ahead, we remain committed to advancing GHI's mission of building sustainable, climateresilient communities. With the continued support of our partners and stakeholders, we are determined to scale our impact and drive lasting change in the regions we serve. Together, we will continue to make strides toward a more sustainable and equitable future for all.

We hope that you enjoy reading GHI's 2024 Year in Review.

With gratitude and optimism,
Staff of GHI

# **1.2 GHI 2024 AT A GLANCE**



2

Grants received

3

Ongoing projects

7

Conferences/ seminars attended 7

Articles published

8

Communities impacted

20%

Online audience increase on our social media pages

2024 AT A GLANCE

60+

Smallholder farmers trained on climate smart agriculture

60 +

Beneficiaries trained on conflict mitigation for the EMSAS Project 1

World Water Week attended in Stockholm 1

Attended Adaptation Fund Seminar for Implementing Entities in Johannesburg 1

Climate Innovations Summit Hosted in Abuja 3

Presented our RANETA Project at 3 conferences

# 1.3 OUR FOOTPRINTS



As one of Nigeria's leading mission-driven organisations, some of our strategic mandates are to promote climate-smart agriculture and WASH services towards ensuring healthy and sustainable communities.

# 2.0 ABOUT GHI

## **MISSION**

Empowering cities and communities to combat climate change and enhance their access to water and sanitation services.

## **VISION**

A future with global equitable access to water, sanitation, food, energy, and resolved climate challenges where GHI serves as a lighthouse of transformative and sustainable environmental solutions.

# 2.2 OUR THEMATIC AREAS

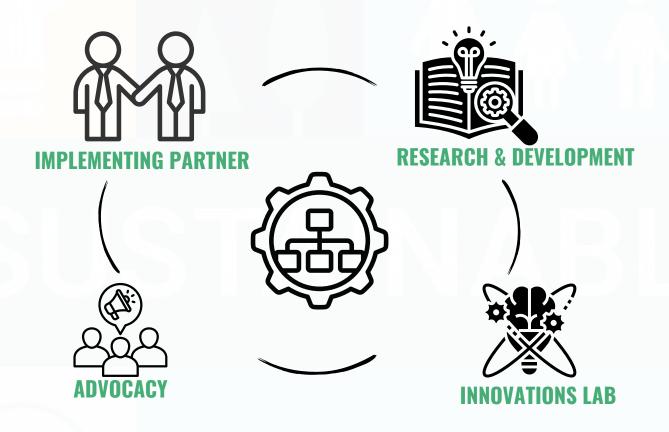








## 2.3 HOW WE DELIVER



# 2.4 IMPLEMENTATION APPROACH

GHI leverages the TIPS approaches for the implementation of its activities;

- Technology: Technology is an enabler and transformer. We utilise technology to make our work more accessible, and the output of the work reaches its full potential of changing lives.
- Innovation: We challenge the status quo by risking to design and deploy innovative solutions that promise better results than the existing situation.
- Partnership: With more partners, we can leverage each other's knowledge and resources to do more.
- Sustainability: It matters only if it is sustainable for the community, economy, and environment.

# 2.5 OUR THEORY OF CHANGE

#### **ACTIVITIES**

Publish policy briefs advocating for robust policies on WASH, climate change, sustainables cities and communities and clean energy.

Train local farmers on climate-smart agriculture, incorporating hydroponics, agroforestry, and other sustainable practices. Construct sustainable WASH (Water, Sanitation, and Hygiene) facilities, including boreholes and eco-friendly toilets. Provide technical assistance to governments and local organizations to design and implement sustainability policies, frameworks, and projects.

Delivery of training programs on climate-smart agriculture, waste management, to empower local farmers, women, youth, and community members. Construction of WASH facilities such as boreholes, eco-friendly toilets, and handwashing stations to improve access to clean water and sanitation in underserved communities.

#### **OUTPUTS**

Development of digital learning resources, including VR simulations and training manuals, to simplify complex sustainability concepts and make them accessible to diverse audiences.

Creation of VR-based storytelling experiences to illustrate the impacts of open defecation, climate change, and poor waste management while showcasing solutions. Establishing multistakeholder platforms that bring together governments, private companies, and grassroots organizations to drive collective action for sustainability.

#### **INTERMEDIATE OUTCOMES**

Increased adoption of sustainable farming techniques and energyefficient practices. Increased public awareness of the interconnectedness of water, sanitation, energy, and climate issues through impactful campaigns and VR-based advocacy. Availability of robust data and research outcomes, enabling informed policy formulation and program design to address water, energy, urban development, and climate resilience challenges.

Communities and local organisations develop the knowledge and tools needed to adapt to climate impacts, reducing vulnerability and increasing preparedness for climate-related risks.

#### **ULTIMATE OUTCOMES**

Populations, especially in vulnerable areas, are better equipped to adapt to and mitigate the impacts of climate change and environmental degradation.

Agriculture and other climate-sensitive sectors demonstrate resilience, ensuring food security and economic stability for future generations.

Reduced incidence of waterborne diseases and health issues related to poor sanitation, unsafe water, and environmental pollution, leading to healthier and more productive populations.

Women, youth, and marginalized groups become active contributors to and beneficiaries of sustainable development, ensuring equity in resource access and decision-making.

Strengthened regional and global collaboration, with GH serving as a model for innovative, technologydriven, and partnershipbased approaches to sustainability.



#### 2.6 GOVERNANCE STRUCTURE:

GHI has a governance structure comprising the governing board, the advisory board, and the management board. The Governing Board oversees the organisation's sustainability and accountability, overseen by the board chair. The Advisory Board provides expert recommendations on GHI's core focus areas. The Management Board oversees the organisation's day-to-day operations, headed by the CEO/President.

#### **GOVERNING BOARD**



Salmah Mohammed **Board Chair** 



**Dayo Olaide Board Member** 



Engr. Sadiq Abubakar Gulma, PMP



# Abdulmumin Tanko

**Board Member/Secretary/Co-founder** 

# **ADVISORY BOARD**



Maria Yetano Roche

Focus: SDG 7

# **MANAGEMENT/ OPERATIONS TEAM**



Engr. Sadiq Abubakar Gulma, PMP Executive Director



Samira Nyong Human Resources Officer



Mustapha Muhammad Dewu Head of Programs



Hassan Abbas
Finance / Compliance Officer



Ahmad Aliyu Office Manager



Sherriffdeen Muhammad Programs Formulation Officer



Ikram Abdulmajeed Senior Program Assistant



Aishat Yusuf Senior Program Assistant



Hawwa Suleiman Program Assistant

# RANETA PROJECT TEAM



Engr. Sadiq Abubakar Gulma Project Director



Yazid Haruna Shayau Project Manager



Yamusa Dalhatu Agrometeorology Solutions Engineer



Abimbola Ajayi Gender Specialist



Nasir Umar Stakeholder Engagement Expert



**Bashir Ahmed Transport & Logistics Officer** 

# **EMSAS-HYDROPONICS PROJECT TEAM**



Engr. Sadiq Abubakar Gulma Project Director



Mustapha Muhammad Dewu Project Manager



Habib Adamu Isah, PhD
Project Management Specialist



Ashabu Musa Muhammad Stakeholder Engagement Officer



Abimbola Ajayi Gender Specialist



Faruk Bala
Transport & Logistics Officer

# 3.0 PROGRAMS

Green Habitat Initiative is working towards the following SDGs:

- Clean Water and Sanitation (SDG 6): Ensure availability and sustainable management of water and sanitation for all through the I-WASH and ICONS projects.
- Affordable and Clean Energy (SDG 7): working towards ensuring universal access to reliable,
   sustainable, and modern energy sources to drive positive environmental and social impact.
- Sustainable Cities and Communities (SDG11): Through innovative projects and community engagement, we strive to build urban environments that are socially inclusive, environmentally conscious, and economically vibrant, contributing to a more sustainable and harmonious future. This is achieved through all projects we execute.
- Climate Action (SDG13): We actively pursue initiatives that mitigate carbon emissions, promote sustainability, and foster resilience, contributing to a more sustainable and climate-resilient future for our planet through our RANETA and EMSAS-Hydroponics projects.

PROGRAMMES	AREA OF FOCUS
RANETA	Climate-Smart Agriculture
EMSAS-Hydroponics	Climate-Smart Agriculture
ICONS	Clean Water/Social Enterprise

# 3.1 THE RADIO-INTERNET CLIMATE TECHNOLOGY FOR AGRICULTURAL RESILIENCE (RANETA) PROJECT

#### 3.1.1 OVERVIEW OF THE RANETA PROJECT

The Radio and Internet Technology for Disseminating Agrometeorological Information (RANETA): Harnessing the Combined Potential of Radio and Internet to Enhance Agricultural Resilience Against Climate Change Disasters Project is a technical assistance offered by GHI to the Nigerian Meteorological Agency (NiMet).

It is a bold step toward addressing the growing challenges posed by climate change to agriculture in rural Kebbi State, Nigeria. This innovative initiative, funded by the Adaptation Fund Climate Innovation Accelerator (AFCIA) through the United Nations Environment Program -Climate Technology Centre and Network (UNEP-CTCN), is designed to empower smallholder farmers by improving access to critical climate information through the combined power of radio and internet technology.

In Northwest Nigeria, smallholder farmers who form the backbone of the nation's agricultural sector face significant hurdles. Limited awareness of climate change impacts, insecure land tenure, market failures, and inadequate access to timely climate information have left these farmers vulnerable to the escalating effects of climate variability. Kebbi State, a key hub for rice and wheat production, has been particularly affected, with devastating flooding and erratic weather patterns disrupting farming activities. These challenges are compounded by gaps in early warning systems and ineffective communication of agrometeorological information, further threatening food security and livelihoods.

The RANETA project was conceived to address these pressing issues. In collaboration with the National Council on Climate Change (NCCC) and the Nigerian Meteorological Agency (NiMet), RANETA focuses on piloting a sustainable solution to deliver agrometeorological information in formats accessible and useful to farmers. The project involves defining, designing, and implementing a weather and climate information service system, coupled with building the capacity of state actors and system users to ensure long-term impact.

By leveraging technology to bridge the gap between researchers and end-users, RANETA is transforming how farmers access and utilise climate information. This initiative empowers smallholder farmers to adapt to climate variability, make informed decisions, and build resilience to future challenges.

RANETA is more than a project—it is a demonstration of Green Habitat Initiative's unwavering commitment to fostering sustainable practices and climate smart agriculture, promoting food security, and enhancing climate resilience at the grassroots level. Through initiatives like RANETA, we are taking meaningful strides toward a more sustainable and equitable agricultural sector in Nigeria.

#### 3.1.2 PROJECT DETAILS

The Radio and Internet Technology for Disseminating Agrometeorological Information (RANETA) project is a dynamic initiative by GHI aimed at improving agricultural resilience and climate adaptation in rural Kebbi State, Nigeria. The 18-month project which officially kick-off March 2024 to August 2025 seeks to ensure the effective dissemination of agrometeorological information from the Nigerian Meteorological Agency (NiMet) to smallholder farmers using the combined power of radio and internet technologies.

The RANETA project is built around seven major components, each addressing critical areas necessary for the successful delivery of the project's goals:

Component 1: Development of Implementation Planning and Communication Documents: This foundational component focuses on creating detailed plans and communication strategies to guide the project's implementation and ensure alignment with stakeholder expectations.

Component 2: Creation of a Steering Committee, Stakeholder Mapping, and Inception Meeting: To ensure inclusivity and collaboration, this component establishes a steering committee, identifies key stakeholders, and organises an inception meeting to kickstart the project effectively.

Component 3: Diagnosing Existing Dissemination Systems: An in-depth assessment of current systems for disseminating climate information is conducted to identify gaps and opportunities for improvement.

Component 4: Designing the Architecture of the New Dissemination System: Based on insights from the diagnosis, this component involves designing an innovative system architecture that integrates radio and internet platforms to effectively reach farmers

Component 5: Piloting the Technology in Kebbi State: The designed system will be tested in Kebbi State to evaluate its functionality, accessibility, and effectiveness in real-world scenarios.

Component 6: Implementation of the Final Prototype: Following the pilot phase, the refined prototype will be implemented, ensuring the system meets the needs of its users and stakeholders.

Component 7: Dissemination of Information to Future Users, Administrators, and Beneficiaries: The final component focuses on sharing the developed system and its benefits with future users, administrators, and beneficiaries to ensure widespread adoption and impact.

The expected results of the RANETA project are far-reaching, including improved access to weather and climate information, enhanced agricultural resilience, strengthened decision-making processes, increased adoption of climate-smart agricultural practices, improved food security, and livelihoods, and strengthened collaboration among stakeholders.

Through RANETA, GHI is addressing the critical need for effective climate information dissemination in rural Nigeria, empowering smallholder farmers to adapt to climate change and secure their livelihoods. This project is not just about innovation; it is about transformation, creating systems and solutions that build resilience and ensure sustainable development for communities at the grassroots.

### 3.1.3 KEY PROJECT HIGHLIGHTS AND ACHIEVEMENTS

#### a. Creation of a Steering Committee and Inception Meeting

As part of the early stages of the RANETA project, we undertook a comprehensive mapping of all relevant stakeholders, including key governmental institutions at both national and sub-national levels, alongside a variety of NGOs. This strategic stakeholder mapping ensured a broad base of support for the successful implementation of the technical assistance (TA) provided by the project. We established the Stakeholder Working Group (SWG), a focused steering committee comprising eight members from leading organisations, including NiMet, NCCC, Ministry of Agriculture Kebbi, Ministry of Information Kebbi, All Farmers Association of Nigeria (AFAN) Kebbi, Federal Ministry of Agriculture and Food Security, and International Fund for Agricultural Development (IFAD). The SWG has been instrumental in providing ongoing technical oversight and high-level guidance, ensuring the alignment of project activities with strategic objectives and fostering collaboration across all parties involved.

To officially kick off the project, we held an inception meeting with the SWG. This meeting served as an essential platform to introduce the expert team driving the RANETA project and outline the project's goals, key milestones, and anticipated deliverables. It also clarified the roles and responsibilities of the SWG members, ensuring that each stakeholder understood their contribution to the project's success. This alignment session marked a crucial step in setting the stage for effective project implementation and facilitated a collaborative approach that will drive the project's long-term success.



Photos from the project inception meeting with key stakeholders held in May 2024.



The RANETA Project Director (Middle) poses with stakeholders from Kebbi State at the inception meeting held in May 2024.

#### b. Validation Workshop for RANETA Project

We successfully hosted a validation workshop aimed at confirming the needs identified during our initial assessments. In collaboration with the Stakeholder Working Group (SWG), the workshop provided an opportunity to present the findings from our comprehensive needs assessment, which included input from future users (farmers) and system administrators (NiMet).

The validation workshop served as a critical platform for gathering feedback and input from key stakeholders. The findings, derived from extensive diagnostic efforts, were shared with the participants, who had the opportunity to validate and refine the identified needs. This collaborative process not only helped ensure the accuracy of the needs assessment but also strengthened stakeholder engagement and alignment with the project's goals. We ensured that the voices of those who would directly benefit from the project were heard, reinforcing the foundation of a user-centered approach to the design and implementation of the RANETA system. The valuable insights gathered from the workshop directly informed the next steps in the project's development and contributed to its overall success.



Group Picture of Stakeholders with GHI Staff after the validation workshop held on 25th of June 2024 in Kebbi State.

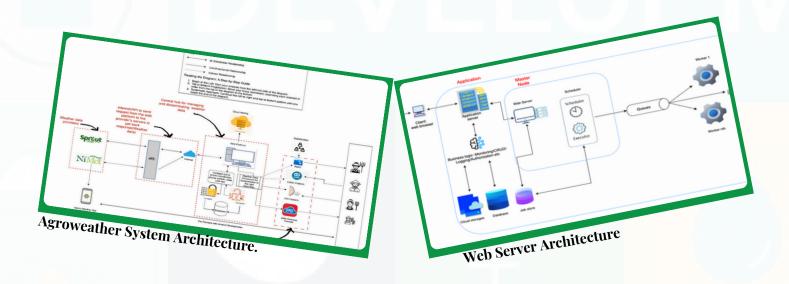
Group (I) during the breakout session held on 25th of June 2024 in Kebbi State

#### c. Architectural Design of the RANETA System

At GHI, we adopted an iterative approach in designing the architecture of the RANETA system, ensuring continuous engagement with key stakeholders throughout the process. By incorporating multiple feedback loops, we aimed to create a system that aligns with the objectives of the technical assistance (TA). This approach has been crucial in laying the foundation for a sustainable and effective agrometeorological information dissemination system.

The design process involved close collaboration with the Stakeholder Working Group (SWG) to ensure that all aspects of the system, including the web server, were carefully reviewed and aligned with the project's goals.

Currently, the development of both the system architecture and web server into a fully functional prototype is underway. This next phase marks an exciting step forward as we continue to refine and optimize the system for deployment, ensuring it meets the needs of farmers and stakeholders while driving the success of the RANETA project.



# d. Signing of Memorandum of Understanding (MoU) with NiMet for the RANETA Project

We formalised our role as the implementing partner for the RANETA Project through the signing of a Memorandum of Understanding (MoU) with the Nigerian Meteorological Agency (NiMet), the project proponent. This partnership aims to utilize NiMet's expertise in climate forecasting and agro-meteorological services, while GHI focuses on delivering impactful implementation at the community level. Together, we are working to enhance climate resilience, promote sustainable agricultural practices, and support rural communities with essential tools for adaptation and decision-making.



Signing of the MOU Between GHI and NiMet held on June 27th, 2024.



The RANETA Project Director with the DG of NiMet During the MOU Signing for the RANETA Project held on June 27th, 2024.



Group Picture with NiMet Staff after the MOU Signing held on June 27th, 2024.

#### e. Workshop on Sustainable Agricultural Practices

To help farmers mitigate the adverse effects of extreme weather events caused by climate change, GHI organised a workshop focused on sustainable and climate-smart agricultural practices. The workshop held in Farfajiya Argungu, brought together 60 smallholder farmers, comprising 29 women and 31 men.

The session featured expert-led discussions with three renowned resource persons: Malam Bala Muhammad, Kebbi State Program Officer (IFAD); Mr. Faruk Garba Illo, Director of Projects and Climate Change Specialist at the Ministry of Agriculture; and Dr. Muhammad Mansur Aliero, Deputy Dean at the Faculty of Agriculture, Kebbi State University of Science and Technology.

The smallholder farmers were introduced to resilient farming techniques, water conservation methods, soil management strategies, and crop diversification approaches. The interactive sessions fostered valuable knowledge-sharing, empowering farmers with practical tools for adopting environmentally sustainable practices and enhancing long-term agricultural resilience.



#### f. Conclusion

The RANETA project represents a collaborative effort to address the critical challenges faced by smallholder farmers in Kebbi State due to climate change. With the active participation of key stakeholders, including government institutions and local communities, significant progress has been made in laying the foundation for a robust agrometeorological information dissemination system. From stakeholder mapping and the formation of a dedicated steering committee to the validation of identified needs and the ongoing development of system architecture, each milestone achieved underscores the commitment to creating a sustainable and impactful solution.

As the project transitions into its next phases—piloting the technology, refining the system prototype, and disseminating information to future users and administrators—the focus remains steadfast on delivering tangible benefits. By ensuring that smallholder farmers receive timely, actionable agrometeorological information, the RANETA project aims to enhance agricultural resilience and improve livelihoods in the face of climate change.



# 3.2 EMPOWERING COMMUNITIES WITH SUSTAINABLE AGRICULTURAL SYSTEMS: PILOTING A SOLAR-POWERED HYDROPONICS SYSTEM (EMSAS-HYDROPONICS)

#### 3.2.1 OVERVIEW OF THE EMSAS-HYDROPONICS PROJECT

The Empowering Communities with Sustainable Agricultural Systems (EMSAS) project, funded through the European Union's Multi-Annual Indicative Programme (2021-2027) for Peace, Stability, and Conflict Prevention, addresses the complex challenges of climate change, food insecurity, and violent conflicts in Kubau Local Government Area (LGA), Kaduna State, Nigeria. Implemented in partnership with the Climate Technology Centre and Network (CTCN), Green Habitat Initiative serves as the National Implementing Entity (NIE) to deliver technical assistance for this transformative project. Spanning 12 months (May 2024 - April 2025), EMSAS aims to enhance agricultural resilience and promote sustainable development by piloting a small-scale hydroponics system tailored to the needs of conflict-affected communities.

Kubau LGA, faces significant socio-economic and environmental challenges, including reduced land and water resources due to climate-induced drought and desertification, exacerbating tensions between herders and farmers. These challenges are further intensified by insecurity, including farmer-herder clashes, cattle rustling, and criminal activities, which threaten livelihoods and food systems.

Through the EMSAS project, GHI aims to transform agriculture in Kubau LGA by introducing hydroponics systems, which operate in controlled environments, reducing dependency on unpredictable weather and shielding farming activities from conflict-related disruptions. The project integrates community engagement and capacity building, equipping beneficiaries with the skills and knowledge needed to adopt climate-smart technologies. This approach will address immediate food security needs and also fosters long-term resilience and stability in the region.

#### 3.2.2 PROJECT DETAILS

The project is structured into seven key components, each with specific activities designed to ensure effective implementation and sustainability:

Components 1: Baseline Assessments and Gender Analysis: Conducted to understand the community's agricultural practices and barriers, highlighting the potential impact of hydroponic systems.

Component 2: Capacity Building and Training:
Providing beneficiaries with hands-on training on
hydroponics technology and climate-smart
agriculture techniques.

Component 3: Construction of Hydroponics Facilities: Establishing a small-scale hydroponic screen house to demonstrate and promote the technology.



Component 4: Conflict Mitigation and Peacebuilding: Engaging stakeholders in workshops to address herder-farmer conflicts and establish Early Warning and Early Response (EWER) systems for conflict management.

Component 5: Community Engagement and Advocacy: Promoting the adoption of hydroponics through outreach programs and awareness campaigns.

Component 6: Monitoring and Evaluation:

Developing a robust framework to track progress,

assess impact, and ensure accountability.

Component 7: Strategic Roadmap Development:

Designing a blueprint for scaling and replicating
hydroponics systems across other regions in

Nigeria.

Through these components, the EMSAS project integrates innovative agricultural practices with conflict-sensitive strategies, equipping communities with tools to adapt to climate challenges while fostering stability and resilience.

#### 3.2.3 KEY PROJECT HIGHLIGHTS AND ACHIEVEMENTS

During the Technical Assistance Kick-off, we established a solid foundation for the project's successful execution by developing key activity documents that will guide the implementation of the TA. A detailed work-Plan that outlines all project activities, timelines, and resource allocations, ensuring organized and efficient delivery developed. A detailed Monitoring and Evaluation Plan was developed to facilitate effective tracking of progress and assess the project's effectiveness using the SMART indicators. The Initial Impact Statement serves as a baseline for evaluating project outcomes, while the Result Tracker, based on the European Commission's framework, enables stakeholders to monitor progress against predefined indicators. Additionally, a Technical Assistance Closure Report Template was prepared to guide the final project evaluation.

#### a. Project Inception Meeting and Stakeholder Engagement

The Empowering Communities with Sustainable Agricultural Systems (EMSAS) project commenced with an inception meeting held on May 26, 2024, in Kaduna. This meeting introduced the project team and outlined the goals, milestones, and implementation framework. A critical outcome of this session was the establishment of the Stakeholder Working Group (SWG), Comprising eight representatives from key organizations, including the National Agricultural Extension and Research Liaison Services (NAERLS), National Water Resources Institute (NWRI), Federal Ministry of Agriculture and Food Security (FMAFS), Nigerian Climate Change Coalition (NCCC), Kubau LGA, Small Women Farmers Organization of Nigeria (SWOFAN), Kaduna Agricultural Development Agency (KADA), and Ministry of Planning and Budget Commission (MOBP) Kaduna. The SWG plays a pivotal role in providing technical expertise, facilitating stakeholder engagement, and ensuring the successful delivery of the project's objectives.

# GALLERY HIGHLIGHT



GHI Staff with the Kubau Local Government Secretary During the EMSAS-Hydroponics Project Inception Meeting held on May 26,



The EMSAS-Hydroponics Project Director Giving a Presentation During the Inception Meeting held on May 26, 2024.



EMSAS-Hydroponics Project Director and Kubau Local Government Secretary During the EMSAS-Hydroponics Project Inception Meeting held on May 26, 2024.



Group Picture with the Stakeholder Working Group After the Inception Meeting held on May 26, 2024.

#### **b. Baseline Assessment and Gender Analysis**

As part of the EMSAS-Hydroponics Project, we conducted a Baseline Assessment, Gender Analysis, and developed a Risk Mitigation Plan to ensure an inclusive, data-driven approach to implementation. The baseline assessment revealed that 92.31% of respondents rely on agriculture as their primary livelihood but face challenges like limited access to land and extension services (53.16%). While 86.71% were unfamiliar with hydroponic farming, 93.71% expressed interest in training.

The gender analysis highlighted women's significant contributions to the local economy and the barriers they face in accessing resources. In response, we developed a Gender Action Plan to empower women, youth, and persons with disabilities through targeted interventions and capacity-building.

To mitigate risks, a Risk Analysis and Mitigation Plan was prepared, addressing technological, environmental, and social challenges. This comprehensive approach supports sustainable agricultural practices and resilience against climate change, ensuring long-term benefits for the community, especially vulnerable groups.

#### c. Study Tours: Exploring Hydroponics Innovations to Transform Agriculture

At GHI, we believe that knowledge exchange and innovation are key to transforming agriculture and building climate-resilient communities. To advance the implementation of the EMSAS-Hydroponics project in Kubau Local Government Area (LGA), KadunaState, we conducted impactful study tours to explore cutting-edge hydroponic farming practices both locally and internationally.

Our team visited prominent hydroponic farms across Nigeria, including the National Water Resources Institute in Kaduna, Gartner Callaway Farms in Lagos, Soilless Farm Lab, and BIC Farms in Abeokuta. These visits showcased innovative systems like hybrid and soilless farming methods, revealing their potential to revolutionize agriculture in resource-scarce environments. We gained invaluable insights into effective management strategies, community engagement, and sustainable practices that enhance productivity and food security.

Taking our exploration further, we embarked on a foreign study tour from October 6 to October 12, 2024, to Nairobi, Kenya, where we visited the Turkana Basin Institute, Thee Ngong Hydroponics, Agri-Plant Enterprises, Vertical Gardens, and the UNEP Headquarters. This experience exposed our team to global best practices in hydroponics and climate-smart agriculture. Our engagements with the UNEP-Climate Technology Centre and Network (CTCN) and other stakeholders solidified our commitment to scaling hydroponics as a sustainable solution for food security and climate resilience.

These tours have ignited a transformative vision for the EMSAS project. By integrating lessons learned, GHI is poised to implement innovative hydroponic systems that empower communities, boost agricultural resilience, and drive sustainable development in Nigeria. The future of farming is here, and we are excited to lead the charge.



GHI team exploring Trough farming at BIC farms in Ogun state during GHI's study visit on June 7th, 2024.



The EMSAS-Hydroponics project team during the study tour in a group photograph with the farm management of Thee Ngong hydroponics after touring the different hydroponics systems in the farm on 8th October, 2024.



Pest control using sticky traps at BIC Farms, Ogun State, during GHI's study visit on June 7th, 2024.



EMSAS-Hydroponics project team, representatives of the project proponent and the TBI team in a group photograph at TBI's head office in Nairobi, Kenya on 8th October, 2024



The EMSAS project team in a group photograph with Sharone Molly at UNEP's headquarters, Nairobi, Kenya on 10th October, 2024.

#### d. Signing of Memorandum of Understanding (MoU) with Kubau LGA

To establish a robust framework for the sustainability of the hydroponics systems, a Memorandum of Understanding (MoU) was signed between key stakeholders, including the Implementing Partner, Kubau LGA, and the Kaduna State Ministry of Planning and Commission. The MoU clearly outlines the roles, responsibilities, and commitments of all parties concerning system maintenance, security, and long-term sustainability.



Signing of the MOU with Kubau LGA on 3rd December 2024.



Signing Of the MOU with the General Manager of KADA, Kubau LGA Secretary and Project Director of EMSAS-Hydroponics Project on 3rd December 2024.



Signing of the MOU with Kubau LGA for the EMSAS-Hydroponics Project on 3rd December 2024.

#### e. Construction and Engineering Design of the Hydroponics System and Training Centre

Following the completion of the architectural and engineering design for the hydroponics system, GHI successfully completed the construction of the hydroponics system and training center in Kubau LGA as part of the EMSAS-Hydroponics project. The designs were tailored to local needs and utilised readily available materials to ensure cost-effectiveness and sustainability. deliverables included detailed schematics for components like growing trays, irrigation systems, and nutrient tanks, ensuring a seamless setup process.



During the construction of the Screen House for the EMSAS-Hydroponics Project in Kubau LGA. 16th December 2024



December 2024

Depicting the construction of the Screen House for the EMSAS-Hydroponics Project in Kubau LGA. 26th December 2024

This milestone represents a significant step in promoting innovative, climate-resilient agriculture in the community. The fully constructed center now stands as a hub for sustainable agricultural training and practice, reinforcing GHI's dedication to driving impactful, locally adaptable solutions.

#### f. Training of Community Beneficiaries

Following the completion of the architectural and engineering design for the hydroponics system, GHI successfully set up the system in Kubau LGA and engaged four key wards—Kubau, Zuntu, Dutsen Wai, and Anchau in Kaduna state to select 50 beneficiaries. This selection focused on inclusivity, with 33.33% women, and representation from minority groups and individuals with disabilities, with support from local traditional leaders.

To ensure sustainability, We launched a Training of Trainers (ToT) program, selecting ten trainers (two women and eight men) to equip others with essential skills to operate and maintain the system. This initiative fosters long-term community empowerment, amplifying the impact of the hydroponics system and contributing to sustainable agricultural practices in the region.



Group Picture with Facilitators and Beneficiaries After the Conflict Mitigation Workshop for the EMSAS-Hydroponics Project Kubau LGA Held in October 23-25, 2024.



Beneficiaries During the Conflict Mitigation Workshop Held in October 2024

#### g. Sensitisation Workshops on Conflict Mitigation and Prevention

Recognising the link between climate change and local conflicts, GHI hosted a dynamic three-day Conflict Mitigation and Management Workshop in Kubau LGA from October 23–25, 2024. The workshop engaged 42 participants from Zuntu, Kubau, and Anchau districts, addressing key topics such as the farmer-herder conflict, climate change impacts, and conflict management strategies like ADR.

A major outcome of the workshop was the establishment of community-based Early Warning and Early Response (EWER) structures in four districts. These grassroots systems are designed to identify and address potential conflicts, ensuring timely interventions. The workshops promoted resilience, peaceful coexistence, and collaboration, providing a solid foundation for hydroponics training and empowering communities to drive sustainable development and stability.

## h. Conclusion

The Empowering Communities with Sustainable Agricultural Systems (EMSAS)-Hydroponics project has made significant strides in addressing the intertwined challenges of climate change, food insecurity, and socio-economic disparities in Kubau Local Government Area, Nigeria. By championing hydroponics farming as an innovative and sustainable agricultural practice, GHI has fostered a wave of community-driven transformation, empowering local stakeholders to embrace climate-smart solutions for a resilient future.

Our efforts have extended beyond agriculture to address the underlying social dynamics that impact sustainable development. Through targeted conflict mitigation workshops and the establishment of Early Warning and Early Response (EWER) structures, we have strengthened local capacities to foster peaceful coexistence and mitigate the risks of farmer-herder conflicts aggravated by climate change.

The integration of local and international insights from our study tours has shaped a robust framework for hydroponics implementation, blending global best practices with tailored solutions for the Nigerian context. These efforts position the EMSAS-Hydroponics project as a blueprint for scalable and sustainable agricultural transformation.

In the coming months, GHI will intensify community training on hydroponics, equipping beneficiaries with the knowledge and tools to champion this innovative practice within their communities.

Additionally, we will prioritise the Project Sustainability Strategy and Close-up, ensuring that the progress achieved under EMSAS is solidified and extended well beyond the project lifecycle.

#### 3.3 I-WASH CONTINUITY AND SUSTAINABILITY (I-CONS) PROJECT

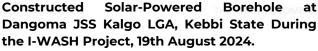
The I-WASH Continuity and Sustainability (I-CONS) Project, a self-funded initiative by the Green Habitat Initiative, was established to ensure the sustainability of key gains achieved during the I-WASH Activity. While not a contractual extension of I-WASH, the I-CONS project underscores GHI's commitment to safeguarding and enhancing the progress made in water, sanitation, and hygiene (WASH) across the Kebbi and Sokoto States. The project focuses on supporting sustainability components such as Water, Sanitation, and Hygiene Committees (WASHCOMs), Social Enterprises, and the Pumpview borehole monitoring system.

The WASHCOMs, established in each beneficiary community during the I-WASH Activity, have continued to play a critical role in ensuring the proper operation of water facilities while also promoting hygiene and sanitation practices. These community-based committees have fostered local ownership of WASH facilities and ensured that maintenance and sustainability remain priorities.

In 2024, one of the key activities of the I-CONS project was the repair and upgrade of the Pumpview monitoring system. Pumpview, a Geographic Information System (GIS)-enabled surveillance tool deployed during the I-WASH Activity, has been instrumental in reducing borehole downtimes by enabling preventive maintenance. However, technological challenges such as power losses and communication issues were identified during its use. To address these issues, we upgraded the system by replacing the Tuya App with a customized real-time database and a newly developed Data Hub. This upgrade eliminated reliance on mobile apps for monitoring, enabled remote sensor pairing, and significantly enhanced the reliability of the system. The improved Pumpview system is now better positioned to support sustainable WASH infrastructure management.







Another significant activity under I-CONS involved supporting the two social enterprises established during the I-WASH Activity: Water Maintenance and Support Service (WAMSS) in Kebbi State and FISTECH Nigeria Limited in Sokoto State. These enterprises operate on a subscription-based model, providing preventive and corrective maintenance services to the communities. In 2024, GHI conducted an advocacy visit to WAMSS to assess its progress, capturing lessons learned and supporting its operational growth. With 47 communities (34 in Kebbi State and 13 in Sokoto State) having signed Service Level Agreements (SLAs) with the social enterprises and WASHCOMs saving funds for facility maintenance, the model is proving to be a sustainable approach to ensuring the longevity of WASH interventions.

In addition, GHI collaborated with the Kebbi State Ministry for Local Government and Chieftaincy Affairs to secure funding for local government WASH units in Kalgo, Argungu, and Gwandu Local Government Areas (LGAs). These funds are being used to support routine monitoring of I-WASH communities, empowering them to achieve Open Defecation Free (ODF) certification at the state level. This initiative represents a significant step toward improving sanitation outcomes and ensuring the sustainability of WASH facilities in the long term.



GHI Staff During the Visit to Kebbi State Ministry for Local Government and Chieftaincy Affairs On 4th March, 2024.

The I-CONS Project exemplifies GHI's dedication to sustaining and expanding the impact of its interventions. By addressing technological challenges, strengthening partnerships, and promoting local ownership, the project ensures that the benefits of the I-WASH Activity continue to positively transform lives across the Kebbi and Sokoto States.

## **3.4 CLIMATE INNOVATION SUMMIT 2024**

In December, we wrapped up the year with our inaugural Climate Innovation Summit, proudly organised by GHI. The summit, themed "Increasing the Resilience of Nigeria's Agricultural Sector through Innovations in Climate Smart Agriculture," convened a diverse group of stakeholders, including policymakers, private sector leaders, development organizations, researchers, and grassroots actors. The event addressed the urgent need for resilience in Nigeria's agricultural sector amidst growing climate challenges.

The summit began with a welcome address emphasizing the importance of collaboration in tackling the impacts of climate change on agriculture. Discussions highlighted the Presidential Agenda on climate change and insights from global negotiations, showcasing Nigeria's commitment to transformative climate action. Expert presentations explored innovative approaches to supporting the agricultural sector, emphasizing the role of climate-smart initiatives in achieving food security and sustainable development.



During panel discussion on increasing the resilience of smallholder farmers to climate change through innovative practices and solutions held on 3rd, December, 2024 during the CIS2024



CEO of GHI with the Special Adviser to the President on the National Economic Council (NEC) and Climate Change.

The event featured two engaging panel sessions. The first focused on increasing the resilience of smallholder farmers to climate change through innovative practices and solutions. Stakeholders shared strategies to enhance productivity while mitigating climate risks. The second session explored the integration of climate finance and insurance solutions to enhance risk management, providing actionable recommendations for safeguarding farmers against climate-induced losses.

Interactive sessions and presentations underscored the importance of leveraging technology, fostering public-private partnerships, and promoting tailored financing models to support farmers. The summit provided a platform for participants to exchange knowledge, identify collaborative opportunities, and develop strategies to address systemic challenges such as access to innovations and resources vulnerable groups.



From the right; the RANETA Project Manager, CEO of GHI and the EMSAS-Hydroponics Project Manager during the CIS2024 held on 3rd, December, 2024



Group Picture After the CIS2024 Event held on 3rd, December, 2024



Group Picture with the Staff of GHI After the CIS2024 Event held on 3rd, December, 2024

# 4.0 EMPOWERING EXCELLENCE

### **4.1 CONFERENCES AND SEMINARS**

# a. World Water Week 25 - 29 August 2024: Bridging Borders: Water for a Peaceful and Sustainable Future. Stockholm, Sweden.

From August 25 to August 29, 2024, our CEO represented GHI at World Water Week in Stockholm, a global event featuring critical discussions on Sustainable Development Goal 6 (SDG6), focusing on progress made, persistent challenges, and innovative solutions. Key insights revealed that Nigeria must scale efforts by sixfold to achieve universal access to safely managed water services by 2030.



Mallam Aminu Dayyabu, coordinator of SURWASH Katsina state with GHI CEO at the World Water Week in Stockholm on August 25-29 2024.



GHI's CEO with participants from water organisations at the World Water Week in Stockholm on August 25-29 2024.

For sanitation, efforts need to multiply fivefold to reach 99% access to safely managed services, while hygiene shows relatively better progress, requiring a threefold increase, possibly due to enhanced handwashing practices promoted during the COVID-19 pandemic. During the event, our CEO engaged in a meeting with the Katsina State Coordinator of the SURWASH program, a \$700 million World Bank loan facility supporting the WASH sector, to discuss the performance of the seven participating states and explore areas for improvement.

# b. Representation at the Implementation Entities Seminar of Adaptation Funds. Johannesburg, South Africa. September 20-24, 2024.

Our CEO had the privilege of representing GHI at the Adaptation Fund Seminar for Implementing Entities, held in Johannesburg, South Africa 2024. This event provided a valuable platform for exchanging ideas, learning from global experiences, and showcasing GHI's innovative approaches to addressing climate challenges in Nigeria. The seminar emphasised that while climate threats are universal, the degree of vulnerability and the required responses differ across countries. It was enlightening to learn how nations experience climate change differently and the diverse innovative solutions they employ to adapt. This perspective reinforced the need for adaptability in crafting solutions that are not only innovative but also tailored to specific environments and communities.

A recurring theme during the discussions was the critical role of technology in enhancing resilience. Digital solutions emerged as a common thread in the strategies deployed by various organizations. This reaffirmed GHI's approach to integrating technology into our initiatives, particularly in strengthening the resilience of Nigeria's agricultural sector through projects like RANETA. The event also facilitated meaningful connections with key stakeholders, including colleagues from the Adaptation Fund in Washington, D.C., and UNEP representatives from Kenya. These interactions have opened opportunities for future collaborations, knowledge exchange, and partnerships to amplify GHI's impact.

During the seminar, our RANETA project was highlighted as a case study of innovative community development. The presentation sparked significant interest, as it demonstrated how combining radio broadcasts with additional dissemination channels ensures that agrometeorological information reaches even the most remote and underserved communities. The seminar underscored the importance of pushing boundaries, embracing bold innovation, and fostering partnerships. GHI is committed to integrating these lessons into our programs, continuing to learn from global best practices, and leveraging collaborations to advance our mission of empowering communities and combating climate change. This representation at the Adaptation Fund Seminar reflects GHI's commitment to staying at the forefront of global discussions on climate adaptation and using these insights to drive impactful change in Nigeria.

# GALLERY HIGHLIGHT



The CEO at the Implementation Entities Seminar of Adaptation Funds held in Johannesburg, South Africa. September 20-24, 2024.



A presentation session at the seminar of Adaptation Funds. Johannesburg, South Africa. September 20-24, 2024.



The CEO (second from right) and some participants during the seminar of Adaptation Funds. Johannesburg, South Africa. September 20-24, 2024.

### c. Visit to the National Agricultural Foundation of Nigeria (NAFN): 2024 National Agricultural Show

Green Habitat Initiative was honoured to be invited to the National Agricultural Show, an event organised by the National Agricultural Foundation of Nigeria (NAFN), where sustainability in agriculture took center stage. The event highlighted advancements in sustainable agriculture, including innovative technologies and practices aimed at boosting productivity, resilience, and sustainability.

The National Centre for Agricultural Mechanisation (NCAM), Ilorin, showcased resource-efficient technologies such as machines converting rice husks to cooking coal, biogas systems, and advanced tillers and threshers. The RICOWAS Project presented improved rice varieties and sustainable practices designed to enhance food security and climate resilience. Similarly, the National Animal Production Research Institute (NAPRI), ABU Zaria, demonstrated innovations in livestock production, focusing on enhanced rabbit and poultry species for sustainable farming.

At the Nigerian Agricultural Insurance Corporation (NAIC) stall, GHI engaged with the Managing Director to strengthen institutional ties and follow up on future collaborations. Additionally, exhibitions from various states featured improved crop varieties and agricultural innovations that underscored efforts to tackle climate challenges and enhance productivity across Nigeria. These engagements align with GHI's mission to promote sustainable practices and address climate challenges in agriculture.



GHI Staff at the Agricultural ShGHI Staff at the Agricultural Show held on 26, November 2024.



A Coal Making Machine from Rice Husk at the NAFN Show held on 26, November, 2024.

### d. National Agricultural Climate Change Summit: Transforming Agriculture and Food Systems

GHI was invited to deliver a presentation titled: "Climate Finance in Nigeria's Agricultural sector" at the National Agricultural Climate Change Summit, held in Abuja. The summit, co-funded by the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ, convened government leaders, international partners, researchers, and private sector innovators to address sustainable agriculture in the face of climate challenges.

The event featured discussions on food security, climate finance, and sustainable practices. GHI's presentation, delivered by our CEO, Sadiq Abubakar Gulma, focused on accessing climate finance to transform Nigeria's food systems and meet NDC commitments. GHI's innovative approaches and success stories drew significant interest, positioning the organisation as a leader in climate-smart agriculture.



GHI Staff with the IITA Representatives at the National Agricultural Climate Change Summit held on October 30th, 2024.

Keynote speeches and panel discussions explored actionable strategies, including enhanced agricultural planning, financial instruments for climate-smart practices. The summit underscored the need for collaborative efforts to transform Nigeria's agriculture and food systems, reaffirming GHI's role in driving impactful, sustainable solutions for a food-secure, climate-resilient future.

### e. Sahel Food Systems Changemakers Conference 2024: A Pathway to Food & Nutrition Security

Our team attended the Sahel Food Systems Changemakers Conference 2024, held in Abuja. The conference convened policymakers, researchers, development practitioners, and private sector leaders to explore innovative governance models for achieving food and nutrition security in Nigeria.

The event emphasised multi-stakeholder partnerships and adaptive governance as pivotal in transforming food systems. GHI had the opportunity to showcase its impactful projects, including the RANETA Project, which leverages radio and internet for climate information dissemination, and the EMSAS-Hydroponic Project, blending technology and indigenous knowledge for climate-smart agriculture. These initiatives garnered significant interest, with attendees expressing enthusiasm for potential collaborations.



GHI Staff Representatives at the Sahel Food Systems Conference on October 24, 2024.

The conference also provided valuable networking opportunities, connecting GHI with international development agencies, NGOs, and private sector stakeholders, laying the groundwork for future partnerships. GHI's participation reinforced its position as a leader in sustainable agricultural practices and food security initiatives. The insights and connections gained from the conference will further propel GHI's mission to drive impactful solutions for food and nutrition security in the Sahel region.

# f. African Climate Caravan: Spotlighting Climate Finance and Creative Advocacy. Abuja. November 05, 2024.

Green Habitat Initiative had the privilege of attending the African Climate Caravan in Abuja, an impactful pre-COP29 event hosted by GIFSEP with support from Oxfam. The event underscored the critical importance of climate finance, particularly the adoption of grants over loans, to empower communities in mitigating climate change and embracing smart practices for resilience.

The African Climate Caravan also showcased the intersection of creativity and advocacy, featuring stunning displays of artwork by students from Government Secondary Schools in Abuja. This "Arts for Climate" initiative poignantly illustrated the climate crisis through the eyes of young talents, demonstrating the power of art in driving awareness and change.

The event culminated in the Climate Media Spotlight Awards ceremony, which honored journalists in print and audiovisual media for their exceptional coverage of climate change-related stories. This recognition highlighted the essential role of the media in amplifying climate issues and inspiring collective action.



GHI Staff at the African Climate Caravan on November 5, 2024.



Pictures of Arts Displayed by Government Secondary School Students in Abuja at the African Climate Caravan on November 5, 2024.

# g. Participation in the Capacity Building Workshop on Seasonal Climate Predictions and Flood Forecasting . Abuja. December 17, 2024.

Green Habitat Initiative participated in a capacity-building workshop on the interpretation and utilisation of Seasonal Climate Predictions (SCP) and flood forecasting tools. The workshop, organised by the Human and Environmental Development Agenda (HEDA) in collaboration with the Nigerian Meteorological Agency (NiMet) and the Nigeria Hydrological Services Agency (NIHSA), aimed to equip participants with the skills to interpret climate and hydrological data and apply them across sectors such as agriculture, disaster management, and infrastructure development. The workshop provided us with a deeper understanding of climate and hydrological data collection, analysis, and application. NiMet highlighted the processes involved in generating seasonal climate predictions and weather forecasts, emphasising their role in supporting communities, including farmers and policymakers. NIHSA, on the other hand, focused on hydrological data, such as flood forecasts and water flow patterns, and its importance in mitigating flood risks and informing infrastructure planning.

GHI's RANETA Project Manager had the opportunity to present the RANETA project to workshop participants, showcasing its innovative approach to disseminating agrometeorological information to rural communities. This presentation resonated with attendees, particularly for its potential to enhance climate resilience in vulnerable areas. GHI gained valuable insights and reinforced its commitment to integrating climate and hydrological data into its initiatives to better support communities in addressing climate challenges.

# h. Participation in the 2025 Seasonal Climate Prediction Stakeholders Meeting. Abuja. December 17, 2024.

We participated in the 2025 Seasonal Climate Prediction (SCP) Stakeholders Meeting, organised by the Nigerian Meteorological Agency (NiMet). The workshop focused on presenting the seasonal climate predictions for 2025 and exploring their socio-economic implications across various sectors. Outputs from the workshop, including expert-driven advisories, will contribute to the final SCP 2025 document.

As part of the agricultural sector group, GHI actively participated in discussions alongside experts from academia, government, NGOs, and farmers. The group analysed key climate factors, including rainfall patterns (pre-onset, onset, dry spell, little dry season, and cessation), temperature trends, and their regional impacts. Sustainable agricultural practices, crop selection, and strategies for improving the dissemination of weather information were also addressed.

Key insights from the workshop emphasised the collaborative nature of developing the SCP document, with contributions from various sectors enriching its content. The meeting highlighted the critical need for more effective dissemination channels to ensure that climate predictions and advisories reach all relevant stakeholders.

# **4.2 WEBINARS**

### a. World Water Day Webinar

Water for Peace: Innovating to Close the Water Gap

In observance of World Water Day 2024, Green Habitat Initiative hosted a highly engaging webinar, "Water for Peace: Innovating to Close the Water Gap," which addressed the critical role of water in fostering peace and sustainable development. The webinar featured key speakers, including Jose Castro, CEO of Segura, who shared his insights on cutting-edge water technologies; Eng Hadiza Ajoge, a representative from the National Water Resources Institute who provided valuable perspectives on water resource management in Nigeria; and Ernest Nwachukwu, Senior Account Manager for West Africa at Grundfos who discussed innovative water pumping solutions.

The discussions highlighted the urgent need for innovation in water infrastructure, efficient management, and collaboration across sectors to close the water access gap and promote peace. Participants from various sectors—government, academia, and civil society were able to engage in a dialogue about scalable solutions to address water scarcity and inequality, aligning with SDG 6's goal to ensure universal access to water and sanitation.



### **b. World Toilet Day Webinar**

Toilets - A Place for Peace

On World Toilet Day 2024, the Green Habitat Initiative hosted another impactful webinar focusing on the intersection of sanitation and peace. The session, "Toilets – A Place for Peace," featured experts such as Victoria Imaji from Ecocyclers, who spoke about sustainable sanitation solutions, and Engr. Muhammad Gwandu, Director of RUWASA Kebbi, shared experiences from his work in improving sanitation facilities in rural areas. Ashabu Mohammed from GHI also presented the organisation's initiatives in providing improved sanitation services, particularly in underprivileged communities. The discussions emphasised the importance of equitable sanitation access in preventing social conflicts and improving public health. Speakers explored how safe and dignified toilets are essential for building peaceful communities, fostering health equity, and ensuring that no one is left behind. The webinar resonated with the audience, sparking conversations about overcoming barriers to access and finding innovative, sustainable solutions to the global sanitation crisis.



Both webinars drew a collective participation of over 100 attendees and sparked insightful conversations that will drive forward collaborative efforts to tackle the water and sanitation challenges facing Nigeria and the wider global community. It served as a platform for meaningful discourse and knowledge sharing, highlighting the critical role of innovation in advancing water security, sustainability, and sanitation. As GHI continues its efforts to empower communities and cities, events like these provide valuable opportunities to catalyse change, promote equitable access to clean water and safe sanitation, and drive progress towards a water and sanitation-secure future.

# **4.3 GUEST BLOGGING PLATFORM**

### LAUNCH OF THE GUEST BLOGGING PLATFORM

In 2024, Green Habitat Initiative proudly launched its Guest Blogging Platform, an innovative initiative designed to foster knowledge-sharing, promote sustainable practices, and engage a wider audience in meaningful conversations on environmental issues. The platform was introduced to provide a space for experts, thought leaders, and stakeholders from various sectors ranging from sustainability, climate change, and water management to agriculture and sanitation to contribute their insights and experiences on topics aligned with our mission and values.

### **PURPOSE AND VISION:**

The Guest Blogging Platform was established with the aim of amplifying voices advocating for a greener, more sustainable world. It serves as a hub for sharing diverse perspectives on the critical challenges and solutions surrounding global sustainability. A key focus of the platform is to offer students, especially those with innovative ideas but limited opportunities, the ability to showcase their work and publish and share their perspectives with a global audience. This initiative provides young people with a platform to contribute to important conversations on sustainability and environmental issues, empowering them to be part of the solutions.

### **CONTRIBUTIONS AND ENGAGEMENT:**

Since its launch, the platform has published over 10 articles from a wide range of contributors, including students from across the globe. These contributions have spanned diverse topics, such as sustainable urban development, innovative agricultural solutions, and the intersection of climate change and water resources. Students, in particular, have used the platform to express their ideas on pressing environmental challenges, drawing from their academic work, research, and personal experiences. This diverse array of articles has sparked discussions, broadened perspectives, and enhanced our understanding of the global impact of sustainability issues.

By providing an outlet for these voices, the platform has helped GHI engage with a larger and more diverse audience, build relationships with external stakeholders, and solidify our position as a thought leader in sustainability. The Guest Blogging Platform has also provided an opportunity for writers to share their experiences, research findings, and ideas, contributing to the collective knowledge on how to tackle the pressing environmental issues of our time.

### Impact:

The Guest Blogging Platform has played a significant role in enhancing GHI's digital presence and outreach. It has empowered contributors to share their valuable insights, providing a rich source of content that informs, educates, and inspires action. This initiative has strengthened GHI's commitment to providing accessible, impactful, and relevant information to the communities we serve. Going forward, the platform will continue to foster collaborations, generate engaging content, and create space for meaningful exchange on the journey toward a sustainable future.



### Gross Negligence: Open Defecation and its Heavy Burden on Nigeria!

June 26, 2024 / By admin

Open defecation is classified as unimproved sanitation. The practice of open defecation has several implications, as it pollutes both surface and groundwater sources, which subsequently facilitates the transmission of pathogens that cause waterborne diseases, especially diarrhoea. Diarrhoea disease is a leading cause of death among children significantly below five years.

Open Defecation Problems in Nigeria- A big thorn for Sanitation & Hygienel

Nigeria is faced with sanitation and hygiene issues, and open defecation is perhaps one of the biggest and most embarrassing. In 2019, it was reported that 47 million Nigerians (around 24% of the population) practised open defecation, ranking Nigeria second globally in terms of the number of people defecating in the open. Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, Consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, consequently, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola, children most especially are at risk of cholera, polio, typhoid, Ebola,



Sustainable Communities: Models for Resilient and

Sustainable Communities: Models for Resilient and

Thiving Societies

June 25, 2024 | By admin

While change begins with one person, a human cannot change the world alone. It takes

world population has compounded over the years, meaning that resources are getting

world population has compounded over the years, meaning that resources are getting

stretched with every additional person.

The climate is also taking a hit, with issues like global warming and the depletion of the necessary of the person of the surface of the person of t

# 4.4 INTERNAL MONTHLY LEARNING

The GHI Internal Monthly Learning initiative was developed to foster continuous learning and knowledge sharing within the organisation. Each month, a staff member takes the lead in selecting a relevant topic to present and facilitate discussions, with a focus on enhancing professional development and staying aligned with GHI's mission. The topics covered in these sessions are diverse, ranging from Time Management, Grant Writing, and Digital communications to more specialized themes like tracking progress on SDG 6, 7, 11, and 13. These sessions not only inform but also encourage staff to engage in meaningful dialogue and collaborate on finding solutions to challenges within their roles and the broader sustainability landscape.

The initiative has proven invaluable in equipping the GHI team with the tools and knowledge necessary to excel in their work. By addressing both technical and soft skills, the monthly learning sessions have contributed to the overall growth of the staff, enhancing their ability to meet organizational goals and adapt to emerging trends. The interactive nature of these sessions fosters a culture of collaboration, where knowledge is shared freely and learning is seen as a collective effort. Through this initiative, GHI continues to invest in its team's development, ensuring that every member is well-prepared to contribute to sustainable solutions for communities and cities.

# 4.5 TEAM BUILDING EVENT

Recognising that effective teamwork and collaboration are at the heart of every successful organisation, Green Habitat Initiative hosted a two-day team-building activity in 2024, facilitated by Kemi Self-Care Ltd. The event aimed to strengthen team cohesion, improve communication, enhance problem-solving skills, and promote overall well-being among staff. It is aligned with GHI's strategic objective of fostering a motivated and productive workforce that is committed to delivering impactful, sustainable development outcomes.

The team-building activities were designed to build trust, improve interpersonal relationships, and foster a collaborative work culture. Staff participated in self-reflection exercises, such as a self-assessment test and sessions focused on aligning personal goals with team objectives. Interactive activities like "Know Your Teammates" and the "GHI-THON" encouraged teamwork, while creative workshops and outdoor games helped to build stronger interpersonal connections and trust.

The event culminated in a Commitment Pledge Ceremony, where participants pledged to uphold teamwork and GHI's organisational values. The teambuilding event was а significant success, strengthening internal relationships and reinforcing the core values of GHI. It provided staff with an opportunity to relax, recharge, and focus on building a positive, collaborative work environment. The experience has reinforced GHI's commitment to its mission and the collective dedication of the team towards sustainable development goals.



GHI Staff at the Team Building Activity held on November 22-23, 2024.



Staff Painting Sessionat the Team Building Activity held on November 22-23, 2024.



held on November 22-23, 2024.



GHI Female Staff at the Team Building Activity held on November 22-23, 2024.



## **5.0 STAKEHOLDER CONTRIBUTIONS**

### **5.1 ACKNOWLEDGEMENT**

We are proud to work with an incredible array of partners at the global, national and local levels, without whom our impact would not have been possible. Our community has significantly increased over the years, and we will continue to expand our partnerships in the coming years.



























### **5.2 DONORS RECOGNITION**

In our journey towards success, we are immensely grateful for the support and collaboration of our valued partners.

As we move forward, we remain dedicated to nurturing these valuable connections and exploring new avenues for growth and innovation.











# **6.0 FUTURE INITIATIVES AND GOALS**

### **6.1 STRATEGIC PLANNING**

As the horizon of 2025 unfolds, Green Habitat Initiative is poised to deepen its impact, building on the foundation laid in previous years to drive sustainable development and transformative change. This year, our focus is twofold: to complete the projects we have initiated while leveraging the expertise and partnerships cultivated through these endeavours to scale new heights in addressing pressing global and local challenges.

Central to our 2025 vision is the completion of ongoing projects. These initiatives, already reshaping the communities we serve, stand as testaments to our commitment to tangible impact. By bringing these projects to fruition, we will cement the trust placed in us by our partners and beneficiaries while creating a blueprint for scaling up sustainable development interventions across Nigeria and beyond.

Aligned with Nigeria's efforts to achieve Sustainable Development Goals (SDGs) 6 (Clean Water and Sanitation), 7 (Affordable and Clean Energy), 11 (Sustainable Cities and Communities), and 13 (Climate Action), GHI will advance actions to address critical gaps in these areas. While progress is being made, challenges such as inadequate infrastructure, insufficient clean water and energy access, and vulnerabilities to climate change remain significant. GHI will work to bridge these gaps through innovative projects and collaborative efforts, ensuring that our interventions align with national and global priorities.

We aim to extend the reach of climate-smart agriculture by partnering with state governments across Nigeria. Harnessing the expertise gained from our ongoing projects, GHI will work collaboratively to empower farmers with innovative, sustainable practices that enhance productivity, conserve resources, and build resilience against climate shocks. This strategic focus on agriculture will serve as a bridge between economic growth and environmental stewardship.

In 2025, GHI will also actively seek new funding opportunities and secure grants to broaden our impact. We recognise the vital role of financial resources in advancing our mission, and we are committed to pursuing innovative and strategic funding pathways. Equally, we will prioritise strengthening partnerships with local NGOs, fostering collaborative frameworks that amplify our collective efforts in areas such as Water, Sanitation, and Hygiene (WASH), Climate Action, and Waste Management.

Another cornerstone of our outlook is a renewed emphasis on intellectual contributions. GHI will invest in producing rigorous research and policy briefs to shape discourse and inform decision-making at local, national, and global levels. By contributing evidence-based insights, we will cement our reputation as a thought leader in the sustainable development space while driving actionable change through informed policies.

With a steadfast commitment to collaboration, innovation, and impact, GHI embarks on 2025 with a vision to transform lives and strengthen resilience in the communities we serve. Together, we will continue to build a future where sustainable development is not just a goal but a lived reality.











# GREEN HABITAT INITIATIVE



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