

# Local Adaptation Plan of Action for Nasarawa State



Embassy  
of the Federal Republic of Germany  
Abuja



NGYouthSDGs  
Network of Youth For Sustainable Initiative

## ATTENTION

---

The content of this Local Adaptation Plan of Action document, developed to address the peculiar impact of climate change in Nasarawa may be reproduced in full for research, advocacy, educational purposes and policy reforms only, provided they are not altered. Permission requests should be sent to [info@bbforpeace.org](mailto:info@bbforpeace.org)

### Contributors:

Shabu Tavershima Samson,  
*Building Blocks for Peace Foundation  
(BBFORPEACE)*

Tashi David Manasseh,  
*Ecosystem Sustainability Network  
(EcoSusNet)*

Shamsiyyah Umar,  
*The Special Physically Challenged Care Foundation  
(We Are Special Foundation)*

Samaila Ibrahim, Executive Director  
*Agama Centre for Peace and  
Development*

Jesse Gimba G, President  
*YALI Network, Nasarawa*

Buhari Usman Labaran, Programmes Manager  
*Our Mission Human And Social Impact Initiative.*

### Supported with funding from:

Network of Youth for Sustainable Initiative (NGYouthSDGs)  
Embassy of the Federal Republic of Germany in Nigeria



## ACKNOWLEDGEMENTS

---

This Local Adaptation Plan of Action for Nasarawa State was made possible through the generous funding and support of the Network of Youth for Sustainable Initiative (NGYouthSDGs) and the Embassy of the Federal Republic of Germany in Nigeria.

We extend our gratitude to the Nasarawa State Government, particularly the Honourable Commissioner of the Ministry of Environment and Natural Resources, for their leadership and commitment to advancing climate adaptation. We also thank the technical experts, community leaders, civil society organizations, and local government representatives whose contributions and collaboration have enriched this document.

Special appreciation goes to the residents of Nasarawa State for their active participation and invaluable insights, which have ensured the inclusiveness and relevance of this plan.

We acknowledge the dedication of the project team and supporting staff, whose hard work and expertise were pivotal to the timely completion of this LAPA. Finally we want to appreciate Dr Shakirat B. Ibrahim and Opeyemi Ogundeji for their support and guidance throughout the process of the LAPA creation.

Thank you!



# TABLE OF CONTENTS

---

♦	Attention:	i
♦	Acknowledgements	ii
♦	Table of Contents	iii
♦	Executive Summary	01
♦	Glossary	02
♦	Introduction	03
♦	1.1 Geographical, Socio-economic, and Environmental Background	03
♦	1.2 Background Information on Climate Change Impacts	05
♦	1.3 Rationale for Developing the LAPA	06
♦	1.4 Goals and Objectives of the LAPA	07
♦	Pre-LAPA Preparation	09
♦	2.1 Capacity Building with Nigeria Youth SDGs Network	09
♦	2.2 Step-Down Training for Civil Society Organizations	09
♦	2.3 Community Dialogue Overview	10
♦	2.4 Local Climate Experiences and Observations	10
♦	Adaptation Strategies	14
♦	3.1 Review of Nigeria's NAP and NDCs Frameworks	14
♦	3.2 Description of Proposed Adaptation Actions and Strategies	15
♦	3.3 Prioritization of Actions and Timeline for Implementation	17
♦	Monitoring and Evaluation Frameworks	20
♦	4.1 Strategy for Sharing the LAPA	20
♦	4.2 Measurable Indicators for Progress Tracking	22
♦	4.3 Recommendations for Stakeholder Monitoring and Evaluation	25
♦	Conclusion	29
♦	References	30
♦	Appendix	31

## EXECUTIVE SUMMARY

---

The Nasarawa State Local Adaptation Plan of Action (LAPA) seeks to address the climate change vulnerabilities of the state through tailored, localized strategies designed to enhance resilience and promote sustainable development. The LAPA outlines a set of adaptation actions focused on the state's priority sectors, including agriculture, water resources, infrastructure, health, and natural resources management. The objectives of the LAPA are to reduce the vulnerability of local communities to climate risks, improve their adaptive capacities, and ensure long-term environmental sustainability. The methodology employed in the development of the LAPA includes extensive consultation with local communities, government agencies, civil society organizations (CSOs), and other relevant stakeholders to ensure that the strategies reflect the realities and priorities of those most affected by climate change. Through stakeholder dialogues, focus group discussions, workshops, and surveys, key issues such as the impacts of flooding, gully erosion, water scarcity, and declining agricultural productivity were identified. The findings revealed that Nasarawa State is particularly vulnerable to these climate risks, with significant threats to its infrastructure, public health, and agricultural productivity. The LAPA proposes a multi-faceted approach to address these challenges, focusing on improving drainage systems, enhancing water conservation and sanitation, promoting climate-smart agriculture, and increasing forest cover. It also highlights the need for capacity-building among local stakeholders and strengthening governance structures to ensure the successful implementation of the adaptation strategies. Key recommendations include the establishment of robust monitoring and evaluation (M&E) frameworks, with measurable indicators to track progress and impact. Regular stakeholder consultations and feedback mechanisms are essential to ensure that the plan remains dynamic and responsive to changing circumstances. Additionally, effective communication strategies, including community outreach, media campaigns, and digital platforms, are vital for raising awareness and fostering participation in climate adaptation efforts. The involvement of local communities, particularly vulnerable groups such as women and youth, is crucial for the plan's success. The LAPA's success depends on strong partnerships between government agencies, CSOs, and community leaders, supported by appropriate funding and technical resources. The plan aligns with Nigeria's national climate policies, such as the National Adaptation Plan and Nationally Determined Contributions, and contributes to global climate resilience efforts. In conclusion, the Nasarawa LAPA provides a comprehensive framework for addressing the climate change challenges facing the state. By focusing on local priorities, strengthening stakeholder engagement, and integrating effective monitoring mechanisms, the LAPA will enhance the state's resilience to climate change and contribute to sustainable development for future generations.



## GLOSSARY

---

- ◆ **Adaptation:** Adjusting systems to reduce climate change impacts.
- ◆ **Capacity-Building:** Strengthening skills and knowledge to improve climate resilience.
- ◆ **Civil Society Organizations (CSOs):** Non-governmental groups working on social and environmental issues.
- ◆ **Climate-Smart Agriculture:** Farming practices that adapt to climate change and increase productivity.
- ◆ **Climate Resilience:** The ability to withstand and recover from climate change impacts.
- ◆ **Community Engagement:** Involving local communities in decision-making and action.
- ◆ **Drainage Systems:** Infrastructure for managing water flow to prevent flooding.
- ◆ **Drought-Resistant Crops:** Crops that can grow with minimal water.
- ◆ **Erosion Control:** Practices to prevent soil erosion, such as planting vegetation.
- ◆ **Flooding:** Overflow of water onto land, often due to heavy rainfall.
- ◆ **Gully Erosion:** Severe soil erosion forming deep channels or gullies.
- ◆ **Infrastructure Resilience:** The ability of infrastructure to withstand climate impacts.
- ◆ **Monitoring and Evaluation (M&E):** Tracking and assessing the progress of projects.
- ◆ **National Adaptation Plan (NAP):** A long-term strategy developed by countries to address climate change impacts and enhance resilience, guided by the principles of the Paris Agreement.
- ◆ **Nationally Determined Contributions (NDC):** Commitments made by countries to reduce greenhouse gas emissions and adapt to climate change, as part of the Paris Agreement.
- ◆ **Reforestation:** Planting trees to restore damaged or depleted forests.
- ◆ **Social Media Outreach:** Using digital platforms to spread awareness and engage communities.
- ◆ **Stakeholder:** Any individual or group with an interest in a project.
- ◆ **Sustainable Development:** Development that meets present needs without compromising future generations.
- ◆ **Vulnerability:** Susceptibility to the adverse effects of climate change.
- ◆ **Water Conservation:** Efficient use of water to reduce waste.
- ◆ **Waste Management:** The collection, disposal, and recycling of waste.
- ◆ **Youth Engagement:** Involving young people in climate actions.

# INTRODUCTION

## 1.1. Geographical, Socio-economic, and Environmental Background

Nasarawa State is located in the north-central region of Nigeria, sharing boundaries with the Federal Capital Territory (FCT), Kogi, Benue, and Plateau States. The state covers a landmass of approximately 27,117 square kilometers and is characterized by a mix of savannah and tropical climate zones. With a population of over 2.5 million people (2023 estimate), Nasarawa State is predominantly rural, with agriculture serving as the primary economic activity and main source of livelihood for the majority of its inhabitants. Staple crops such as yam, cassava, maize, rice, and millet dominate farming activities, alongside livestock rearing and artisan mining.

Despite its agricultural potential, the state faces several socio-economic challenges that contribute to its vulnerability to climate change. Poverty levels remain high, with limited access to quality education, healthcare, and social amenities in most communities. The lack of economic diversification means that a significant portion of the population is directly reliant on climate-sensitive sectors such as agriculture. Additionally, the state's rural population struggles with limited infrastructure, including poor road networks, inadequate access to clean water, and unreliable electricity, further hampering efforts to build resilience against climate risks.

Urban centres like Lafia, Keffi, and Akwanga, while slightly more developed, grapple with poor waste management systems. Waste accumulation in these areas has resulted in severe environmental degradation, clogging drainage systems and worsening flood risks. Rural areas face a different set of environmental challenges, including land degradation, deforestation, and soil erosion due to unsustainable farming practices and increasing population pressures. These factors significantly amplify the state's vulnerability to climate change impacts.





Climate change is already having significant impacts on the vulnerable communities of Nasarawa State, with increased flooding, erosion, and changes in agricultural patterns (IPCC, 2014). The region experiences more frequent and intense flooding due to erratic rainfall patterns and inadequate drainage infrastructure. These floods have a cascading effect, disrupting agricultural productivity, damaging critical infrastructure, and increasing the prevalence of waterborne diseases such as cholera and typhoid. Rising temperatures and prolonged dry spells have also affected crop yields, reduced water availability, and intensified resource conflicts between farmers and herders.



Community dialogues held across Nasarawa State as part of the LAPA process highlighted specific local vulnerabilities. Farmers reported declining agricultural yields due to shifting rainfall patterns, while urban residents pointed to blocked waterways and uncollected waste as key contributors to flood events. Women and persons with disabilities (PWDs), often among the most marginalized groups, face unique challenges during extreme weather events, including displacement, loss of livelihoods, and reduced access to emergency support systems.

Given these challenges, the need for a LAPA is critical. Nasarawa State's geographical location, reliance on climate-sensitive sectors, and existing socio-economic vulnerabilities make it imperative to develop targeted, community-driven adaptation strategies. By addressing these challenges, the LAPA aims to enhance the resilience of communities, foster inclusive economic growth, and promote sustainable environmental practices across the state. In alignment with Nigeria's National Adaptation Strategy and Plan of Action on Climate Change, the LAPA is designed to support the state's resilience efforts by implementing localized adaptation strategies (Federal Ministry of Environment, 2014).



## 1.2 Background Information on Climate Change Impacts

---

Community dialogues held as part of the LAPA development process revealed the significant and multifaceted impacts of climate change on the local environment and livelihoods in Nasarawa State. Climate change has brought about a range of adverse effects, including increased flooding, waste accumulation, prolonged droughts in some areas, and shifts in agricultural productivity. These changes are further compounded by pre-existing socio-economic and environmental vulnerabilities, making communities less resilient to climate shocks.

Flooding emerged as a dominant issue across most communities, driven by increasingly intense and erratic rainfall patterns. Poor drainage systems, particularly in urban areas such as Lafia, Keffi, and Akwanga, exacerbate this problem, causing water to accumulate rapidly during the rainy season. The resulting floods not only damage homes and infrastructure but also disrupt transportation networks and displace residents. In rural areas, flooding washes away topsoil, reducing soil fertility and further compromising agricultural productivity.

Agriculture, which is the backbone of Nasarawa State's economy, has been particularly hard hit by the impacts of climate change. Shifting weather patterns have made it increasingly difficult for farmers to predict crop planting and harvesting seasons. Prolonged dry spells in some areas and erratic rainfall in others have led to lower crop yields and, in some cases, crop failures. Livestock farmers also report challenges, including reduced access to water and grazing lands due to prolonged droughts and flooding. These challenges contribute to food insecurity, reduce household incomes, and heighten resource conflicts, especially between farmers and herders.

Waste accumulation, particularly in urban centres, has emerged as both an environmental and public health concern. Improper waste disposal and inadequate waste management infrastructure lead to blocked waterways, which exacerbate flooding and create breeding grounds for disease-carrying pests such as mosquitoes and rodents. Prolonged exposure to these conditions has resulted in an uptick in waterborne diseases such as cholera and typhoid, further straining the already limited healthcare resources in the state.

The health impact of climate change was also highlighted during the dialogues. Flooding and stagnant water from poor drainage systems contribute to the spread of waterborne diseases, while prolonged droughts and extreme heat events increase cases of dehydration and heat stress, particularly among vulnerable groups such as children, the elderly, and persons with disabilities. Additionally, changes in agricultural productivity have reduced the availability of nutritious food, leading to malnutrition and other diet-related health issues.

Women, youth, and persons with disabilities (PWDs) were identified as being disproportionately affected by these climate impacts. Women, who are often the primary caregivers and responsible for securing water, food, and energy for households, face heightened burdens during extreme weather events. Similarly, youth and PWDs reported limited access to resources and opportunities to adapt to the changing climate, underscoring the need for targeted support and inclusion in adaptation planning.

These insights highlight the urgent need for the LAPA to address local vulnerabilities and foster community resilience. By integrating local knowledge and experiences into the planning process, the LAPA aims to develop actionable and inclusive strategies that address the root causes of climate vulnerability while aligning with national frameworks such as the NAP and NDCs. Through collaborative and community-driven approaches, Nasarawa State can build adaptive capacity and mitigate the impacts of climate change, ensuring sustainable development for future generations.

## 1.3 Rationale for Developing the LAPA

---

In light of the escalating climate challenges affecting Nasarawa State, the development of a LAPA is both timely and essential. The impacts of climate change, such as flooding, waste accumulation, prolonged droughts, and shifts in agricultural productivity, have highlighted the urgent need for tailored, community-driven solutions. A LAPA provides a structured framework to address these challenges by leveraging local knowledge and experiences, fostering inclusive participation, and aligning with national and global climate policies.

Developing a LAPA allows for localized approaches to adaptation that resonate with the unique needs and vulnerabilities of the community. The process is deeply rooted in empowering residents, particularly marginalized groups such as women, youth, and persons with disabilities (PWDs), to take an active role in addressing climate challenges. By incorporating their voices and lived experiences, the LAPA ensures that proposed adaptation strategies are not only effective but also equitable and sustainable.

One of the primary motivations for creating a LAPA is the need to strengthen collaboration among diverse stakeholders, including community members, CSOs, traditional leaders, local government authorities, and relevant state agencies. Climate change is a complex issue that requires collective action, and the LAPA serves as a platform for fostering partnerships and building consensus on priorities. By working together, stakeholders can pool resources, share expertise, and develop innovative solutions to common challenges.

The LAPA also offers an opportunity to integrate short-term and long-term strategies for climate adaptation. While immediate actions, such as improving waste management systems and mitigating the impacts of flooding, are critical to reducing vulnerabilities in the short term, the LAPA places equal emphasis on long-term resilience. For instance, adaptation strategies may include reforestation programs to combat soil erosion, investment in climate-smart agricultural practices, and strengthening drainage infrastructure to withstand future extreme weather events. The implementation of climate-smart agricultural practices and community-led adaptation measures are essential to ensure long-term sustainability (World Bank, 2020).

Another significant rationale for developing the LAPA is its alignment with national climate policies, including NAP and NDCs. By localizing these frameworks, the LAPA ensures that Nasarawa State contributes meaningfully to Nigeria's broader climate action goals, including commitments under the Paris Agreement. Additionally, it provides a pathway for integrating local adaptation efforts into state and national development plans, enhancing the visibility and scalability of successful initiatives.

The LAPA process also creates a sense of ownership and accountability among local actors. By involving community members and stakeholders at every stage—from data collection and strategy development to implementation and monitoring—the LAPA fosters a shared responsibility for building resilience. This collaborative approach ensures that adaptation measures are not only implemented effectively but also maintained over time, laying the foundation for sustainable development in Nasarawa State.

The rationale for developing the LAPA is grounded in the need to address immediate and long-term climate challenges through localized, inclusive, and collaborative approaches. By doing so, the LAPA aims to empower communities, strengthen stakeholder partnerships, and contribute to broader climate resilience goals, ensuring a sustainable future for Nasarawa State.

## 1.4 Goals and Objectives of the LAPA

### Goal

The primary goal of the LAPA is to establish a robust, community-driven framework for climate adaptation that strengthens resilience to environmental challenges and enhances the socio-economic well-being of the people of Nasarawa State. This involves creating actionable strategies that align with national climate policies, such as the NAP and NDCs while integrating the unique needs and perspectives of local communities.



### Objectives



#### Enhancing Local Capacity to Respond to Climate Change

A key objective of the LAPA is to build the capacity of local communities, CSOs, and other stakeholders to effectively respond to climate change. This includes equipping individuals and groups with the knowledge, skills, and tools needed to identify vulnerabilities, implement adaptation strategies, and advocate for policy changes. Through step-down training, community dialogues, and capacity-building workshops, the LAPA seeks to empower grassroots actors as leaders in the adaptation process.



#### Promoting Sustainable Livelihoods

The LAPA aims to safeguard and promote sustainable livelihoods in the face of climate-induced challenges such as flooding, prolonged droughts, and declining agricultural productivity. By supporting the adoption of climate-smart agricultural practices, improving waste management systems, and enhancing local infrastructure, the LAPA seeks to mitigate the adverse impacts of climate change on livelihoods. Special emphasis is placed on protecting the most vulnerable populations, including women, youth, and persons with disabilities (PWDs), whose economic activities are disproportionately affected by environmental changes.





### **Ensuring Inclusive Community Involvement in Adaptation Processes**

Inclusive participation is central to the success of the LAPA. This objective prioritises the involvement of diverse stakeholder groups, including traditional leaders, local government officials, grassroots communities, and marginalized groups, in the co-creation and implementation of adaptation strategies. By fostering a sense of ownership and accountability, the LAPA ensures that adaptation measures are tailored to the unique needs of each community and are more likely to be sustainable in the long term.



### **Fostering Collaboration Among Stakeholders**

The LAPA seeks to promote strong partnerships among state and local governments, CSOs, traditional institutions, and private sector actors. Collaborative efforts are essential to pooling resources, sharing expertise, and ensuring a unified approach to climate adaptation. The LAPA serves as a platform for coordinated action, leveraging the strengths of each stakeholder to maximize impact.



### **Aligning Local Adaptation Efforts with National and International Climate Policies**

The LAPA aligns with the international climate commitments set by the Paris Agreement, reinforcing local actions as part of a global framework to combat climate change (UNFCCC, 2015). By integrating local adaptation strategies with Nigeria's NAP and NDCs, the LAPA ensures coherence with broader national and international climate action goals. This alignment enhances the credibility of the LAPA and facilitates access to funding and technical support from government agencies and international partners.



### **Strengthening Community Resilience to Climate Risks**

The LAPA is designed to address specific vulnerabilities identified during community dialogues, such as flooding, waste accumulation, and changing weather patterns. By prioritizing targeted interventions, the LAPA aims to reduce risks, improve preparedness, and enhance the resilience of communities to future climate impacts.

## PRE-LAPA PREPARATIONS

---

### 2.1. Capacity Building with Nigeria Youth SDGs Network

The preparation phase for the LAPA began with a series of capacity-building sessions facilitated by the Nigeria Youth SDGs Network. These sessions served as a foundational step in equipping participating CSOs with the skills, knowledge, and tools necessary to engage effectively in climate change adaptation processes.

The training emphasized key concepts such as the principles of climate adaptation, the role of local stakeholders in addressing climate challenges, and the alignment of local initiatives with national frameworks like the NAP and NDCs. Participants were guided on identifying climate vulnerabilities, understanding community dynamics, and fostering inclusive stakeholder engagement.

### 2.2 Step-Down Training for Civil Society Organizations

Following the capacity-building training conducted by Nigeria Youth SDGs Network, three (3) virtual and physical step-down trainings were conducted for a total of thirty (30) CSOs in Lafia, Akwanga, and Keffi, Nasarawa state. The trainings covered the following topics:

-  **Overview of Nigeria's Climate Policies:** Participants were introduced to the NAP and NDCs, emphasizing their relevance to local adaptation strategies and the importance of aligning community actions with national frameworks.
-  **Leveraging Advocacy and Research for Effective Climate Policy Implementation:** This session highlighted how CSOs can use evidence-based research and strategic advocacy to influence climate policy and ensure its effective implementation at the grassroots level.
-  **Managing Stakeholder Relations and Finances for Climate Impact:** This session equipped CSOs with tools to build and maintain strategic partnerships, engage diverse stakeholders, and ensure financial accountability while driving impactful climate initiatives.
-  **Advancing Impact through Communication for Climate Action:** Participants were trained on effective communication strategies, including the use of traditional and digital media, to promote awareness and inspire collective action against climate change.
-  **A Guide to Organizing Impactful Community Climate Campaigns:** Practical insights were provided on designing and executing climate campaigns tailored to local contexts, focusing on community mobilisation, messaging, and sustainable impact.

The aim was to educate CSOs on NAP and NDC and empower them on how to effectively advocate for climate action at the local level, organise campaigns, and engage in meaningful partnerships for sustainable development.



## 2.3. Community Dialogue Overview

---

Three (3) community dialogues were conducted in Lafia, Akwanga, and Keffi, with a total of 235 participants. Each community dialogue hosted not less than 70 participants, including traditional leaders, local and state government officials, business owners, religious leaders, youth, women, people with disabilities, and civil society organizations. Data collection was achieved through surveys, focus group discussions, and interviews, ensuring a comprehensive representation of issues faced by the community. These dialogues served as a platform to gather information on the local impacts of climate change and to identify actionable solutions that resonate with the community.

The dialogues served as a platform for inclusive engagement, empowering participants to share their perspectives and co-create actionable solutions. By bringing together diverse stakeholders, the sessions fostered collaboration and laid the groundwork for a unified approach to climate adaptation in Nasarawa State. This participatory approach ensures that the LAPA reflect the lived realities of community members and addresses their most pressing climate challenges while aligning with national adaptation goals.

## 2.4 Local Climate Experiences and Observations

Stakeholders in the community dialogues reported varied impacts of climate change, with particular emphasis on their livelihoods, health, and infrastructure. Key observations highlighted the interconnected nature of climate challenges, with significant disruptions to everyday life. These included:



### Changes in Crop Yields:

Many farmers expressed concerns over reduced agricultural productivity due to erratic rainfall patterns, dry spells, and unpredictable seasons, which have led to crop failures and food insecurity.

### Increased Health Challenges:

The changing climate has contributed to rising health issues, including waterborne diseases due to flooding and heat-related illnesses as temperatures rise. The health system is struggling to keep up with the growing demand for climate-related medical care.

### Deteriorating Public Infrastructure:

The impacts of flooding have significantly damaged roads, schools, and other public facilities, disrupting daily life and further stressing the state's limited infrastructure. The combination of these issues has made it increasingly difficult for communities to adapt to the ongoing climate changes.

### Rising Frequency of Flooding:

The increased frequency of flooding was a central concern raised during the dialogues. Nasarawa State suffers flooding in seven notable local government areas, including: Doma (Rukubi, Ijiwo, Olegokpa, Olegijamu, Ega Oleangbulu, Akpanaja, Ole Okeme, Agyima, Otiya, Obendo, Otaga, Anaoga, Odagede, Ibete, and Achepe), Awe (Wuse, Jangwa, Tunga, and Jimi), Lafia (Assakio, Tunga Nufawa, and Feferuwa), Obi (Ankani and Riri), Keffi (Angwan Kutare, Tudun Wada, Gangere Karof, Fadaman Tudun Kwofa, Yara Maji, and Agwan Yarbawa), Nasarawa (Loko), and Toto (Arikazi, Gidan-Sabo, Irleda-Eya, Dausu, Ogbapati, Igwa, Angura, Kanaworo, Oheni, Esinkara, Adayiba, Irlenokwo, Ogedede, Kaita-Egba, Kaita-Ebuwa, Abuja, Kaita-Ebeki, Kabawa, Ikpo, Irleda-Ogekwa, Irleda-Agatu, Irlehi-Wazobiya, Iyhamkpe, Iyhamkpe-Ebeki, Irlehi-Omadugu, Ogande, Irlama-Owhomkpa, Irlehi-Obutu, Iggi, Irlehi-Irlale, Gbagidigbo). Poor drainage systems and waste accumulation in urban areas such as Lafia, Keffi, and Akwanga were identified as key factors exacerbating the problem. Flooding not only disrupts agriculture and local economies but also damages homes, contaminates water sources, and poses significant health risks.

### Poor Waste Management:

Participants underscored the poor waste management systems as a major contributor to the state's vulnerability. In both urban and rural areas, improper disposal of solid waste clogs drainage channels, leading to flooding. Inadequate infrastructure for waste collection and disposal further compounds environmental degradation and public health risks.

## Erosion:

The incessant quarrying and mining activities were identified by participants as a contributing factor to land erosion, affecting agricultural lands, creating gullies that damage roads, and affecting water quality as sediments are transported into rivers and streams.

## Deforestation:

Participants highlighted the indiscriminate falling of trees and bush burning as part of the causes of hot weather conditions. It was observed that the majority of the community members depend on charcoal and firewood for cooking, causing a significant depletion of trees that should enhance carbon sequestration and neutralise wind rage.

## Impact on Livelihoods, Health, and Infrastructure:

As the community grapples with the worsening impacts of climate change, livelihoods are increasingly threatened. Smallholder farmers, particularly in rural areas, are finding it difficult to predict planting and harvesting cycles due to the unpredictable nature of weather patterns. This uncertainty hampers food production, which, in turn, affects food security for local communities. Health impacts also include an increased prevalence of waterborne diseases linked to flooding and the contamination of water sources. Infrastructure, especially roads and bridges, is deteriorating due to frequent flooding, making transportation difficult and limiting access to essential services like education and healthcare.



## Collaborative Solutions Identified

In response to these challenges, the community proposed several actionable solutions:

- **Enhancing Drainage and Waste Management:** Collaborative efforts to improve waste management and build efficient drainage systems were seen as a priority to reduce flooding risks.
- **Infrastructure Resilience:** Upgrading and reinforcing infrastructure, especially in flood-prone areas, to withstand extreme weather events was highlighted as a necessary step to safeguard public assets.
- **Climate-Smart Agriculture:** Providing farmers with climate-resilient agricultural practices, such as drought-resistant crops and water-efficient irrigation, was identified as a crucial step to protect livelihoods.
- **Construction of Drainage Systems and Gully Rehabilitation Programs:** Building proper drainage channels in urban and rural areas to control water flow and prevent gully erosion, as well as, restoring already degraded areas through engineering works.
- **Public Health Campaigns:** Raising awareness about the health risks associated with climate change and promoting preventive measures, such as better sanitation and access to clean water, was seen as essential.
- **Reforestation and Alternative Energy Sources:** Implementing large-scale tree planting campaigns, especially in degraded areas, to restore forest cover. Promoting the use of clean energy alternatives like briquette, solar, and gas to reduce reliance on firewood and charcoal for cooking.

These dialogues were instrumental in giving voice to community concerns and identifying sustainable solutions. The outcomes will directly feed into the LAPA, ensuring that the adaptation strategies proposed are community-driven, inclusive, and responsive to local realities.



## 3.1 Review of Nigeria's NAP and NDCs Frameworks

Nigeria's NAP and NDCs form the foundational frameworks for addressing climate change at the national level. While these documents outline comprehensive strategies for adaptation and mitigation, a gap exists between their high-level goals and their practical implementation at the local level, particularly in states like Nasarawa, where the direct effects of climate change are most acutely felt.

### National Adaptation Plan (NAP)

By drawing on Nigeria's NAP, the LAPA also ensures that local actions are aligned with national adaptation priorities (Nigerian National Adaptation Programme, 2017). The NAP is designed to integrate climate change adaptation into national development policies and strategies. It provides a roadmap for addressing the vulnerabilities of sectors such as agriculture, water resources, and infrastructure, all of which are critical to Nasarawa State. The NAP emphasizes climate-resilient development, aiming to enhance the nation's ability to cope with and recover from climate change impacts. However, the generalised approach of the NAP has limitations when applied to local contexts where the severity and nature of climate impacts vary. For instance, in Nasarawa, issues such as inconsistent rainfall, flooding, and waste management challenges require targeted interventions that go beyond the national-level provisions of the NAP. There is a need for regional and state-specific adaptations that build on the NAP's strategic objectives but cater to the unique vulnerabilities and capacities of local communities.

### Nationally Determined Contributions (NDCs)

The NDCs highlight Nigeria's commitment to mitigating greenhouse gas emissions while promoting adaptation. These contributions focus primarily on emission reductions, renewable energy, and forest conservation. The NDCs also prioritize actions that improve climate resilience across various sectors, including agriculture, infrastructure, and health. However, as with the NAP, the broad goals set in the NDCs often do not translate directly into actionable strategies for rural and underserved regions like Nasarawa. While mitigation is important, adaptation is a more immediate concern for communities already facing the impacts of erratic weather patterns, flooding, and agricultural disruptions.

### Need for Localised Strategies

There is a critical need to bridge the gap between these national frameworks and local realities in Nasarawa State. While the NAP and NDCs provide a nationally coherent vision, local climate adaptation plans, such as the LAPA, are essential to implement the strategies effectively and in a way that is contextually relevant.

This requires involving local stakeholders, including community leaders, CSOs, and government agencies, in a collaborative process to ensure that the adaptation measures are practical, feasible, and tailored to the vulnerabilities identified at the community level.

While Nigeria's NAP and NDCs provide a solid foundation for climate action, their national focus must be enhanced by local adaptations that account for the specific environmental, social, and economic challenges faced by communities in Nasarawa State. Localising these frameworks through the LAPA process will ensure that the climate resilience goals of the NAP and NDCs are effectively realised in Nasarawa State.



## 3.2 Description of Proposed Adaptation Actions and Strategies

In response to the feedback gathered from community dialogues, several adaptation actions have been proposed to address the climate challenges faced by communities in Nasarawa State. These strategies focus on enhancing local resilience, promoting sustainability, and improving the well-being of residents in the face of changing climate conditions. The proposed actions align with the national frameworks of the NAP and NDCs while tailoring solutions to the specific vulnerabilities of the state.



### **Widespread Education on Climate Change:**

A critical component of this adaptation plan is educating the local population on climate change. Through community workshops and awareness campaigns, we aim to provide climate literacy to both adults and children. This initiative will empower individuals to understand the causes and effects of climate change and its direct impacts on agriculture, health, and livelihoods. By increasing awareness, residents will be better equipped to make informed decisions and take actions that mitigate their environmental impact. The education strategy will also emphasise climate adaptation skills such as water conservation, waste management, and sustainable farming techniques, ensuring that the community can collectively respond to climate-related challenges.



### **Improvement of Water Conservation Techniques:**

Water scarcity is a pressing issue in many areas of Nasarawa State, particularly during the dry season. To address this, we propose the introduction of improved water conservation practices that will ensure an adequate supply of water throughout the year. This includes the installation of rainwater harvesting systems, the promotion of efficient irrigation methods for farmers, and the rehabilitation of existing water sources to reduce loss. These actions will contribute to water security in both rural and urban areas, ensuring that the community has access to water even during periods of drought. Additionally, the improvement of water management systems will support agriculture, which is the main livelihood for the majority of the population.



### **Vegetative Cover Restoration/ Construction of Erosion Control Structures:**

Soil erosion in Nasarawa State is largely attributed to intensive mining and quarrying activities. To address this enduring issue that cannot be ignored, it is pertinent to plant grasses, shrubs, and trees on degraded lands to stabilize the soil and reduce water runoff, introduce vetiver grass systems in erosion-prone areas to create natural barriers against soil loss, build check dams, gabions, and retaining walls to prevent gully expansion and control water flow and build drainage systems to control water flow.



### **Establishment of Climate-Resilient Infrastructure:**

The vulnerability of Nasarawa's infrastructure to climate change, especially flooding, has been a major concern. To address this, we propose upgrading drainage systems to accommodate increased rainfall and prevent flooding in urban and rural areas. These infrastructural improvements will not only help manage stormwater runoff but also protect critical infrastructure such as roads, bridges, and public buildings. In addition to flood management, the plan includes the construction of climate-resilient housing to withstand extreme weather events, ensuring that communities remain safe and functional during climate shocks.



### **Promoting Drought-Resistant Crops:**

Agriculture is a cornerstone of Nasarawa's economy, and erratic rainfall patterns and droughts have been affecting agricultural productivity. To mitigate these impacts, we recommend the promotion of drought-resistant crops that can thrive in water-scarce conditions. By diversifying crop choices and introducing resilient varieties, farmers can reduce the risk of crop failure and maintain food security. In addition, agriculture extension services will be expanded to provide farmers with the knowledge and resources necessary to implement climate-smart agricultural practices. This strategy will enhance the productivity and sustainability of farming in Nasarawa while improving the state's overall food security.



### **Strengthening Early Warning Systems:**

Given the unpredictability of climate change impacts, early warning systems are essential to prepare for and respond to extreme weather events. We propose the establishment of a localized early warning system that can alert communities to floods, droughts, and other climate hazards. This will enable timely evacuations, disaster preparedness, and effective responses to protect lives and property. Collaboration with national meteorological agencies and local authorities will ensure the accuracy and reliability of the early warning system, enhancing the community's capacity to adapt and respond to climate risks.



### **Reforestation and Development of Sustainable Energy Alternatives:**

Considering the incessant logging of trees and its attendant consequences, we suggest the establishment of community nurseries to grow indigenous and fast-growing tree species. Local communities should be engaged in planting and maintaining these trees in degraded areas, farmlands, and along rivers to restore forest cover. More so, incentives such as financial rewards or alternative livelihoods should be provided to encourage community participation. Similarly, we recommend the introduction and promotion of affordable and clean energy sources like solar cookers, briquettes, and biogas to reduce reliance on firewood and charcoal. More importantly, subsidies or micro-loans to make clean energy options accessible to low-income households should be provided. These actions will significantly address the issue of carbon emissions into the atmosphere.



### **Enhancing Waste Management Systems:**

Poor waste management is a significant issue in both urban and rural areas of Nasarawa, exacerbating the region's vulnerability to climate change. To combat this, we propose the introduction of sustainable waste management practices that will reduce the accumulation of waste, prevent land degradation, and minimize the environmental impact of waste. This includes the establishment of recycling initiatives, composting programs, and improved waste disposal systems, particularly in urban centres like Lafia, Keffi, and Akwanga. Additionally, community involvement in waste management will be encouraged through awareness campaigns, enabling residents to take ownership of waste reduction efforts and contribute to environmental conservation.

These adaptation strategies are designed to build resilience and sustainability in Nasarawa State, addressing both immediate and long-term climate change impacts. By focusing on education, infrastructure, agriculture, water management, and waste management, the proposed actions aim to enhance the community's ability to cope with the challenges posed by climate change.

The participatory approach to implementation, coupled with stakeholder collaboration, will ensure that these strategies are effective and aligned with the community's needs and capacities, contributing to a more climate-resilient Nasarawa State.

### 3.3 Prioritisation of Actions and Timeline for Implementation

To effectively tackle the climate-related challenges in Nasarawa State, the adaptation actions outlined in this plan will be prioritized based on their urgency, feasibility, and potential community impact. A clear timeline will be established to ensure the timely and coordinated execution of these actions while addressing both immediate and long-term climate risks. The prioritisation process will consider the local context, available resources, and the community's capacity to implement these actions.

## 01 | Immediate Priority Actions (0-2 Years)

### Flood Management Systems

One of the most pressing challenges identified by community members is the increasing frequency and intensity of flooding. This requires immediate action to prevent further damage to public infrastructure, agricultural productivity, and health systems.

- Action: Upgrade and expand the drainage systems in both urban and rural areas to prevent flooding, particularly in Lafia, Keffi, and Akwanga, where urbanisation and inadequate drainage exacerbate flooding.
- Timeline: Initial assessment and planning (Months 1-3); implementation of flood mitigation measures (Months 4-12); monitoring and evaluation (Months 12-24).

### Enhancing Agricultural Resilience

Changes in rainfall patterns have disrupted agricultural productivity, making it essential to strengthen the resilience of farming systems in Nasarawa State.

- Action: Introduce drought-resistant crop varieties and enhance local farmers' access to climate-smart agricultural techniques.
- Timeline: Training and outreach to farmers (Months 1-6); introduction of drought-resistant crop varieties (Months 6-12); ongoing support and monitoring (Months 12-24)

### Reforestation and Vegetative Cover Restoration

- Action: Launch tree-planting campaigns targeting deforested areas, degraded lands, and erosion-prone zones.
- Timeline: Aim to plant at least 100,000 trees by the end of the first year.

## Construction of Erosion Control Structures

- Action: Build check dams and retaining walls in identified gully erosion hotspots.
- Timeline: Identify hotspots within the first two months and complete initial structures within 6–12 months.



## 02 | Mid-term Priority Actions (2-5 Years)

### Water Conservation Techniques

As droughts become more frequent and intense, water conservation practices will be critical to ensuring the sustainability of agriculture and household water use.

- Action: Promote water conservation techniques, including rainwater harvesting systems and efficient irrigation practices.
- Timeline: Pilot programs and workshops (Months 1-12); full-scale adoption and infrastructure installation (Months 12-36); ongoing education and monitoring (Months 36-60).

### Strengthening Waste Management Systems

Sustainable waste management systems will need to be implemented to address the growing waste accumulation and its impact on the environment.

- Action: Establish recycling initiatives, promote composting programs, and improve waste collection systems in both urban and rural communities.
- Timeline: Planning and community awareness campaigns (Months 1-12); waste management infrastructure rollout (Months 12-36); ongoing community engagement and monitoring (Months 36-60).



## 03 | Long-term Priority Actions (5+ Years)

### Climate-Resilient Infrastructure

Building climate-resilient infrastructure will be a long-term goal to ensure the community's ability to withstand future climate shocks, such as extreme weather events, flooding, and drought.

- Action: Develop infrastructure that is resilient to climate impacts, including flood-resistant roads, climate-smart housing, and green infrastructure.
- Timeline: Initial planning and design (Months 1-12); construction and implementation (Months 12-60); ongoing evaluation and upgrades (Beyond Year 5).

### Establishing a Local Early Warning System

Given the unpredictable nature of climate change, establishing a reliable and localized early warning system will be vital to improving community preparedness and reducing risks.

- Action: Implement a localized early warning system that provides real-time alerts on flooding, droughts, and other climate-related hazards.
- Timeline: Collaboration with meteorological agencies for system design (Months 1-12); system installation and testing (Months 12-24); public awareness and training (Months 24-60); continuous monitoring and updates (Beyond Year 5).

## 04 | Cross-cutting Actions (Ongoing)

Throughout the implementation of these adaptation strategies, ongoing efforts will include:

- Community Education and Engagement: Continuous outreach and training on climate change impacts and adaptation strategies through workshops, public campaigns, and media channels.
- Monitoring and Evaluation: Establishing robust mechanisms for tracking progress, evaluating outcomes, and adjusting strategies as necessary based on feedback and changing conditions.

By prioritizing actions based on urgency, feasibility, and community impact and implementing them within a clear and structured timeline, we can ensure that Nasarawa State adapts effectively to the challenges posed by climate change. The phased approach will allow for immediate relief, mid-term resilience building, and long-term sustainability, ensuring a comprehensive response to the climate vulnerabilities identified in this plan.



## MONITORING AND EVALUATION FRAMEWORKS

---

### 4.1 Strategy for Sharing the LAPA

The LAPA will be disseminated through a comprehensive strategy designed to ensure broad visibility, engagement, and effective communication with all relevant stakeholders. This approach will facilitate awareness and buy-in from the community, government, and CSOs involved in climate adaptation.

The dissemination strategy includes the following key components:

#### 1. Stakeholder Dialogue and Community Meetings

##### Community Dialogues

We will organise community dialogues across Nasarawa State to ensure that local residents, particularly vulnerable groups, are aware of the LAPA's objectives and the adaptation strategies it proposes. These dialogues will be facilitated in collaboration with local CSOs and government officials, providing an opportunity for community members to voice their concerns and suggestions for further refining the LAPA.

##### Stakeholder Workshops

Special workshops will be organized for key stakeholders, including local government bodies, CSOs, youth groups, and women's associations. These workshops will allow for in-depth discussions and provide platforms for stakeholders to ask questions and make contributions to the LAPA.

## 2. Social Media and Digital Platforms

### Social Media Outreach

To ensure the LAPA reaches a wider audience, including youth and urban populations, the plan will be shared through multiple social media platforms such as Facebook, Twitter, Instagram, and LinkedIn. The goal is to raise awareness about the adaptation measures and generate conversations around climate action at the grassroots level.

### Online Information Hub:

A dedicated online platform or webpage will be developed where the full LAPA document and summary reports can be accessed by anyone interested. This platform will also host resources, updates, and success stories related to the implementation of the plan.

## 3. Local Government Channels

### Government Collaboration

The LAPA will be officially shared through local government channels such as local radio stations, community newsletters, and government websites. These platforms are ideal for reaching a broad demographic, including those who may not have access to digital media.

### Official Endorsement

The involvement of local government in sharing the LAPA will lend it official recognition and legitimacy, ensuring that the plan is embraced as part of the broader climate resilience strategy of Nasarawa State.

## 4. Collaboration with Local CSOs

### Strengthening CSO Networks

Collaborating with local CSOs will be essential for ensuring that the LAPA reaches all corners of the state, especially rural and underserved areas. CSOs will play a critical role in facilitating community awareness programs, holding focus group discussions, and distributing printed copies of the plan to residents in remote areas.

### CSO Capacity Building

Local CSOs will also be trained on how to communicate the LAPA effectively to their constituencies. This training will enable them to support the implementation and monitoring of the LAPA and advocate for its adoption at the local level.



## 5. Media Campaigns

### Radio and TV Broadcasts

In partnership with local media outlets, the LAPA will be highlighted through radio and TV broadcasts, ensuring that the message reaches a diverse audience. Special programs may be aired to discuss the climate change impacts faced by Nasarawa and how the LAPA can help mitigate these challenges.

### Print Materials

In addition to digital platforms, flyers, posters, and pamphlets summarising the key aspects of the LAPA will be printed and distributed to local community centres, schools, and health clinics. This ensures that the plan's goals and strategies are visible and accessible to all.

## 6. Feedback and Engagement Channels

### Community Feedback Mechanisms

To ensure continuous community engagement and participation in the LAPA process, feedback mechanisms such as suggestion boxes, surveys, and social media polls will be established. These will enable residents to provide ongoing input and ensure the LAPA remains relevant to their evolving needs.

### Periodic Stakeholder Consultations

Regular consultations with key stakeholders will be held to gather feedback on the plan's implementation and to update the community on progress.

By using a multi-pronged approach to dissemination, including direct community engagement, digital outreach, media campaigns, and collaboration with local CSOs and government bodies, we aim to ensure that the LAPA is widely shared, understood, and supported. This inclusive and participatory dissemination strategy will lay the groundwork for successful implementation and ownership of the plan, ensuring that the adaptation actions proposed are embraced by all stakeholders and contribute to building a climate-resilient future for Nasarawa State.

## 4.2 Measurable Indicators for Progress Tracking

To ensure effective implementation and to track the success of the LAPA, it is essential to establish clear, measurable indicators. These indicators will help monitor the progress of key adaptation actions and assess their impact on community resilience, health, infrastructure, and agriculture in Nasarawa State. The proposed indicators focus on infrastructure resilience, health outcomes, and agricultural productivity, which are central to the objectives of the LAPA.



## Infrastructure Resilience

### Drainage System Improvements:

- **Indicator:** Percentage increase in the coverage and capacity of improved drainage systems in key urban and rural areas, specifically targeting flood-prone regions.
- **Measurement Method:** Regular field assessments to track the expansion and functional upgrades to drainage systems. This could include data on the number of drainage structures installed, their operational status, and the frequency of flooding events before and after interventions.
- **Target:** Achieve a 30% reduction in flooding incidents in the affected areas within the first two years of LAPA implementation.

### Reduction in Gully Erosion Sites

- **Indicator:** Decline in the number and size of active gully erosion sites.
- **Measurement Method:** Conduct annual satellite imaging and on-ground surveys to assess gully dimensions and activity.
- **Target:** Reduce the size of active gully sites by 30% within 3 years.

### Increase in Forest Cover

- **Indicator:** Increase in percentage of land area covered by forests.
- **Measurement Method:** Use satellite imagery and remote sensing to map forest cover annually.
- **Target:** Achieve a 30% increase in forest cover within 5 years.

### Waste Management System Upgrades

- **Indicator:** Increase in the volume of waste collected and processed through sustainable waste management systems.
- **Measurement Method:** Track the volume of waste collected, recycled, and disposed of properly. This will involve collaboration with local government waste management services and CSOs to record waste metrics.
- **Target:** Establish at least three waste management centres and reduce improper waste disposal in urban areas by 20% within the first year.



## Health Outcomes

### Water Management and Sanitation Improvements

- **Indicator:** Reduction in waterborne diseases and improved access to clean water and sanitation.
- **Measurement Method:** Health surveillance will be conducted by local health departments in collaboration with community health workers. This will include tracking the incidence rates of diseases such as cholera, typhoid, and malaria before and after improvements in water and sanitation infrastructure.
- **Target:** Achieve a 20% reduction in the incidence of waterborne diseases within two years of implementing water conservation and sanitation measures.

## Health Awareness and Behavioural Change

- **Indicator:** Increase in the number of community members practicing improved sanitation and hygiene behaviours.
- **Measurement Method:** Surveys and focus groups will assess the level of understanding and behaviour change in the community related to hygiene practices, particularly those influenced by the LAPA's educational campaigns.
- **Target:** Increase community health knowledge and behaviour change by 20% as measured through surveys by the end of year one.



## Improved Agricultural Yields

### Adoption of Drought-Resistant Crops

- **Indicator:** Increase in the acreage of land cultivated with drought-resistant crop varieties and improvements in yield.
- **Measurement Method:** Agricultural productivity will be measured through yield surveys, field observations, and interviews with local farmers. This will track changes in crop varieties used, their growth patterns, and harvest sizes before and after the adoption of climate-resilient farming techniques.
- **Target:** Increase crop yields by 15% for farmers adopting drought-resistant varieties within the first growing season after training.

## Use of Climate-Smart Agricultural Practices

- **Indicator:** Percentage of farmers adopting climate-smart practices, such as improved water conservation, soil management, and agroforestry techniques.
- **Measurement Method:** Farm audits will be conducted annually to monitor the number of farmers applying these practices and assess their effectiveness on crop productivity.
- **Target:** Achieve a 30% increase in the adoption of climate-smart agricultural practices across Nasarawa State by year two of LAPA implementation.



## Community Engagement and Awareness

### Community Participation in Climate Adaptation Activities

- **Indicator:** Increase in the number of community members actively involved in climate adaptation programs and decision-making processes.
- **Measurement Method:** Track attendance records at community meetings, workshops, and training sessions. This will also include counting the number of local residents participating in community-led initiatives, such as flood prevention or water conservation campaigns.
- **Target:** Engage at least 30% of the community members in climate adaptation programs by the end of the first year.



## Capacity Building and Institutional Strengthening

### Training and Capacity-Building Initiatives

- **Indicator:** Number of stakeholders (community leaders, CSOs, government officials, and youth groups) trained on LAPA-related topics and climate resilience.
- **Measurement Method:** Maintain a training database to track the number and diversity of participants in LAPA-related educational programs. Evaluation surveys will also be used to assess the effectiveness of the training.
- **Target:** Train 1,000 community members and local stakeholders within the first year of implementation.

These measurable indicators will allow for comprehensive monitoring and evaluation of the LAPA's implementation, ensuring that the proposed adaptation actions are achieving their intended outcomes. By focusing on infrastructure resilience, health improvements, agricultural productivity, and community participation, these indicators will guide the successful adaptation of Nasarawa State to climate change. Regular data collection and analysis will also allow for timely adjustments and improvements in the strategy, making the LAPA a dynamic tool for climate resilience.



### 4.3 Recommendations for Stakeholder Monitoring and Evaluation

Effective monitoring and evaluation mechanisms, as suggested by O'Brien & Sygna (2013), are critical for tracking the success of adaptation initiatives. And for the LAPA to be successfully implemented and to ensure that adaptation strategies are effectively monitored and evaluated, it is crucial to establish a collaborative monitoring framework that involves all key stakeholders. These stakeholders, including state ministries, CSOs, and community leaders, will play a critical role in overseeing the progress of adaptation actions, tracking outcomes, and ensuring that interventions align with the goals of the LAPA.

# 1. Role of Stakeholders in Monitoring and Evaluation

## • Role of Stakeholders in Monitoring and Evaluation

**Ministries of Environment, Agriculture, and Health** will oversee the implementation of climate-related projects and track their alignment with national and state climate policies. These ministries will collect data on infrastructure improvements, health impacts, and agricultural yield changes.

### Action Items

- Provide technical support and funding for adaptation projects.
- Coordinate and evaluate climate resilience efforts across sectors.
- Monitor key performance indicators (KPIs) related to infrastructure, water management, and public health outcomes.

## • Civil Society Organizations (CSOs)

CSOs will support local-level engagement and serve as intermediaries between government bodies and community members. They will facilitate data collection, particularly through surveys, focus groups, and community meetings, and will assist in disseminating information about progress to the broader community.

### Action Items

- Implement and monitor local-level adaptation strategies (e.g., waste management and flood mitigation).
- Advocate for policy changes based on data and community feedback.
- Provide training and educational outreach to community members on climate resilience.

## • Community Leaders

**Community leaders** will serve as key facilitators of community dialogues, ensuring active participation of residents and addressing local concerns. They will also play an essential role in gathering qualitative data on the impacts of climate change in their respective areas.

### Action Items

- Engage in regular consultations with residents to identify new challenges and assess the effectiveness of ongoing projects.
- Help communicate LAPA goals and progress to the broader community.
- Facilitate community-led initiatives, such as clean-up campaigns, flood prevention efforts, and water conservation programs.

# 2. Proposed Monitoring and Evaluation (M&E) Structure

To ensure systematic and efficient monitoring, the following structure will be adopted:

## • Quarterly Progress Reviews:

Stakeholders will participate in quarterly meetings to review the progress of adaptation actions, assess the status of key projects, and discuss any emerging challenges. These reviews will also involve updating and revising the M&E framework, ensuring that KPIs remain relevant to the evolving needs of the community.

- **Annual Evaluation Reports:**

An annual report will be produced to provide a comprehensive overview of progress made over the year. This report will analyze the data collected against the measurable indicators outlined in the LAPA, assess the effectiveness of different strategies, and highlight areas for improvement.

- **Feedback Loops:**

Continuous feedback loops will be established between state ministries, CSOs, and community members to allow for the adaptation of strategies based on real-time information. This process ensures that any necessary adjustments can be made quickly to stay on course with the LAPA's goals.

### 3. Capacity Building for Effective Monitoring

To ensure that monitoring and evaluation efforts are carried out effectively, it is important to provide capacity-building initiatives for all stakeholders involved in the M&E process. The following steps will be undertaken:

- **Training on Data Collection and Analysis:**

Stakeholders will be trained in data collection techniques, such as survey administration, focus group facilitation, and field assessments, ensuring that they can contribute to the M&E process. Specific focus will be placed on using digital tools for real-time reporting and data analysis.

- **Workshops on Reporting and Accountability:**

Training will also be provided on how to prepare monitoring and evaluation reports and how to share findings with stakeholders in a transparent and accessible manner. This will encourage accountability and allow stakeholders to track the effectiveness of the LAPA in real-time.

### 4. Ensuring Sustainability and Long-Term Impact

- **Integration with Local Governance Structures:**

To ensure the sustainability of the monitoring and evaluation efforts, state and local government authorities will be integrated into the long-term M&E framework. This will allow for continued oversight of the LAPA's goals even after the initial implementation phases have concluded.

- **Community Ownership of Monitoring Efforts:**

A key component of the LAPA's success is community ownership. The active involvement of community members in monitoring efforts will be encouraged by building local capacity and fostering a sense of responsibility. This will help create a sustainable monitoring system that remains effective in the long term.

- **Leveraging Technology for Data Collection and Reporting:**

Digital tools and mobile platforms will be utilised to facilitate real-time data collection and reporting. This can include SMS surveys, mobile apps, and online dashboards to help streamline the collection and sharing of data.

## **5. Recommendations for Enhancing Stakeholder Participation**

- **Inclusive Stakeholder Engagement:**

It is important to ensure that all community members, especially vulnerable groups such as women, youth, and people with disabilities (PWDs), are actively involved in the monitoring process. Special efforts will be made to ensure that these groups are represented in the feedback and decision-making processes.

- **Strengthening Multi-Stakeholder Partnerships:**

Strengthening partnerships between government bodies, CSOs, and community leaders will foster collaboration, ensure comprehensive oversight, and improve the overall success of the LAPA.

The comprehensive Monitoring and Evaluation framework outlined above will be crucial to the successful implementation of the LAPA. By ensuring that stakeholders are actively involved in both the implementation and monitoring of adaptation strategies, we will build a strong foundation for achieving long-term climate resilience in Nasarawa State. Through robust data collection, continuous feedback, and strategic adjustments, the LAPA will contribute to the sustainable development of the community and enhance its ability to withstand the impacts of climate change.





## CONCLUSION

---

The Nasarawa State Local Adaptation Plan of Action (LAPA) presents a comprehensive framework to address the growing impacts of climate change on the state's vulnerable communities. By incorporating local knowledge, national strategies, and global best practices, the LAPA provides tailored, actionable solutions for enhancing resilience across key sectors such as agriculture, health, infrastructure, and natural resources. Successful implementation requires the active involvement of diverse stakeholders, including local communities, government bodies, civil society organizations, and the private sector.

To ensure the long-term effectiveness of the LAPA, it is recommended that continuous monitoring and evaluation processes be prioritized, with clear, measurable indicators for tracking progress. Stakeholder engagement should remain inclusive and participatory, especially focusing on vulnerable groups. Strengthening partnerships between government, CSOs, and local communities will be essential for achieving sustainable outcomes. Additionally, leveraging technology for data collection and real-time feedback will enhance adaptive capacity and ensure the plan's responsiveness to evolving climate challenges.

Ultimately, by fostering collaboration and empowering communities, the LAPA will contribute to a climate-resilient future for Nasarawa State, ensuring that future generations are better equipped to withstand the challenges of climate change.

## REFERENCES

---

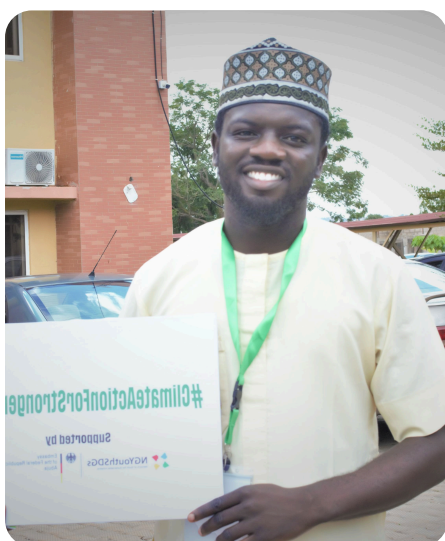
1. Intergovernmental Panel on Climate Change (IPCC). (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. <https://www.ipcc.ch/report/ar5/wg2/>
2. Federal Ministry of Environment, Nigeria. (2014). National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CC). Federal Government of Nigeria. <https://www.fmenv.gov.ng/>
3. UNFCCC (United Nations Framework Convention on Climate Change). (2015). Paris Agreement. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
4. World Bank. (2020). Climate Change and Development: Perspectives from the Global South. World Bank Group. <https://www.worldbank.org/en/topic/climatechange>
5. O'Brien, K., & Sygna, L. (2013). Global environmental change and human security. In A. D. S. Zetter & H. M. Butler (Eds.), *The Handbook of Human Security* (pp. 151-171). Routledge. <https://www.routledge.com>
6. Nigerian National Adaptation Programme (NAP). (2017). National Adaptation Programme of Action on Climate Change (NAPA) for Nigeria. <https://www.adaptation-undp.org>
7. Ministry for Special Duties, Humanitarian Services, and NGOs. (2024). Need Assessment Report. Nasarawa State Government.

---

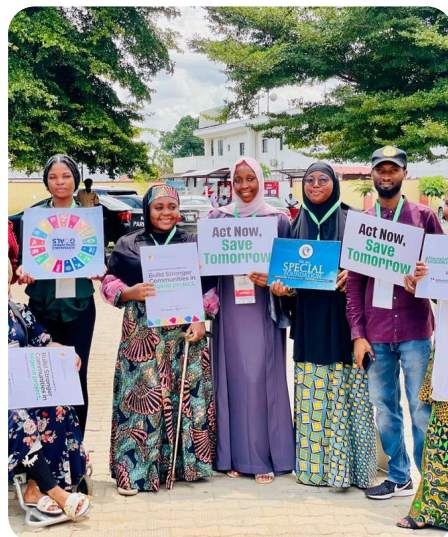
# APPENDIX

---













Visit to:

**Hon Jafaru Ango**

Commissioner for Youth & Sport Development,  
Nasarawa state



Visit to:

**Hon. Hamza Awe**

Special Advisor to the  
Governor of Nasarawa state on Disability

Visit to:

**Emir of Keffi's palace**

*Together with*

Ahmad Ahmad Sarki  
**Dan Maje of Keffi and**

**Secretary of the palace**  
Tijjani Muhammad Umar

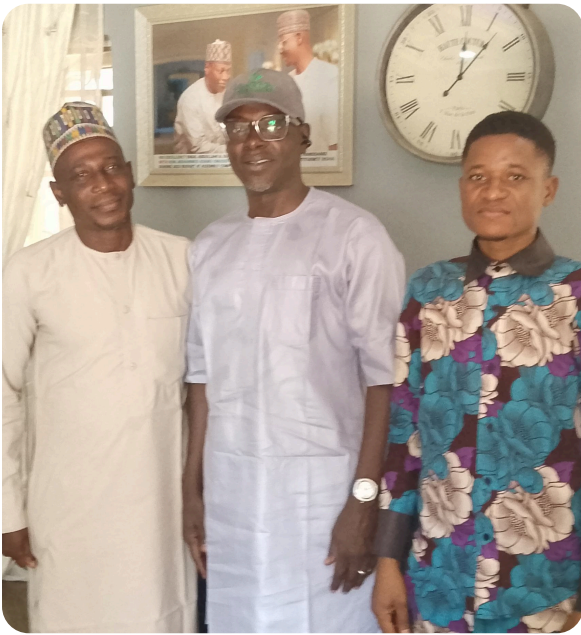








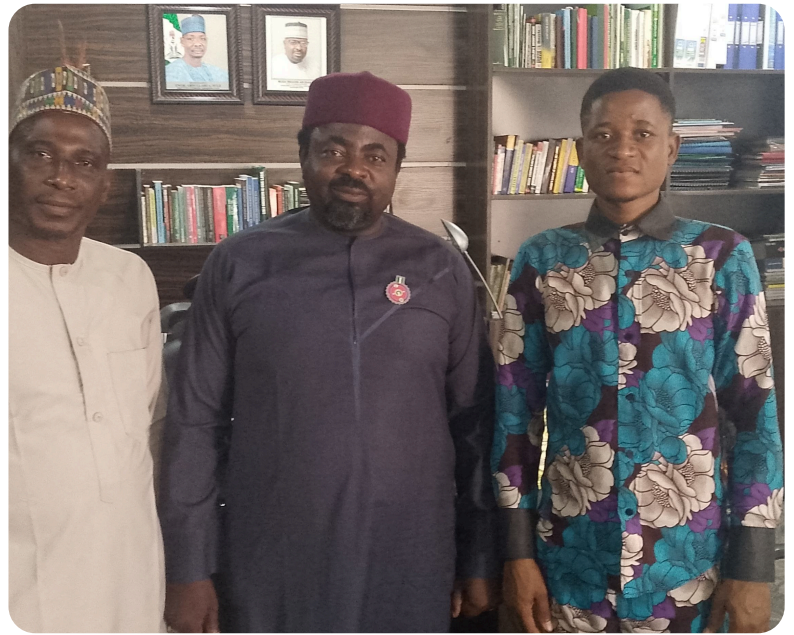




Visit to:

**Hon. Muhammad Adamu Omadefu**

Chairman House Committee on Environment,  
Nasarawa State House of Assembly



Visit to:

**Hon. Ibrahim Abubakar**

Member Representing Doma South  
(Former Commissioner for Environment)  
Nasarawa State House of Assembly

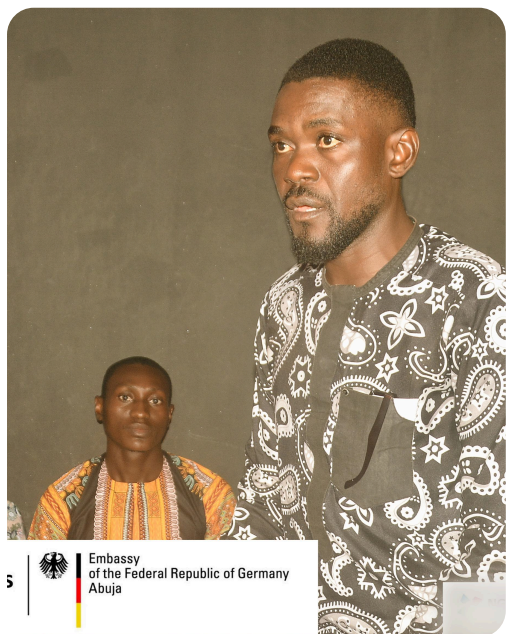


Visit to:

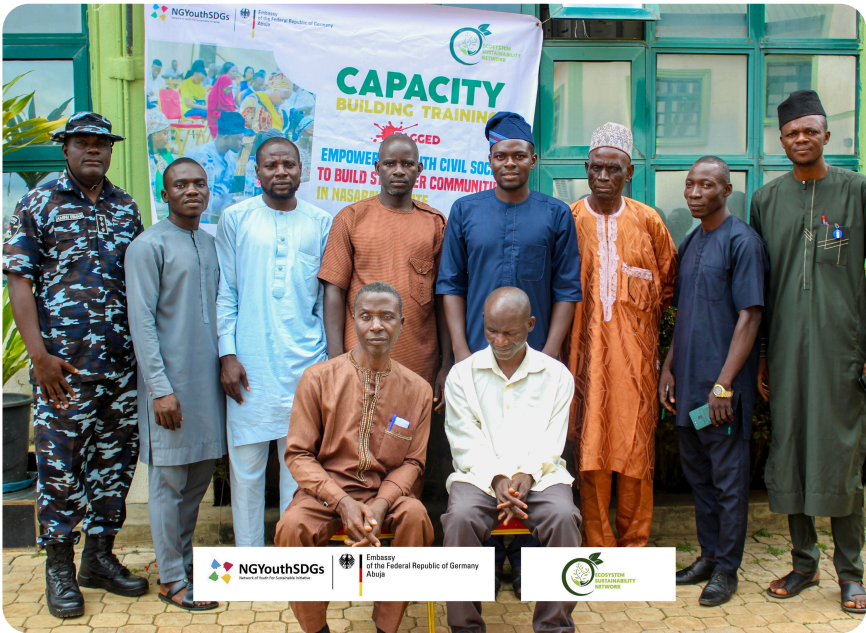
**Hon. Ibrahim Abubakar**

Member Representing Doma South  
(Former Commissioner for Environment)  
Nasarawa State House of Assembly









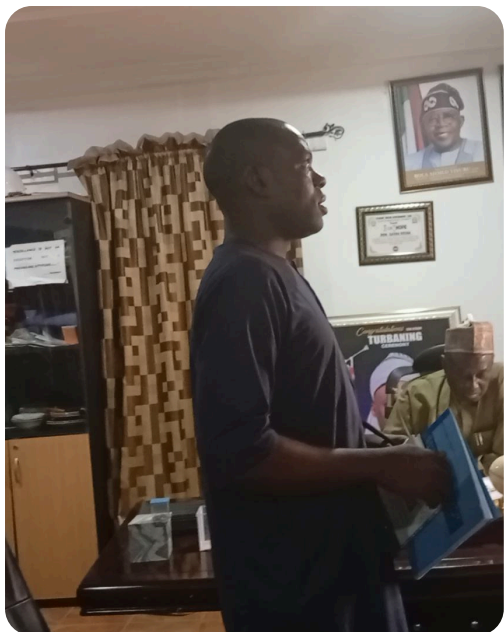




EcoSusNet team members during an advocacy visit to the office of Jaamatu Nasril Islam, Nasarawa State Chapter



A group photograph with the Permanent Secretary, Directors and Heads of Units of Ministry of Environment during the advocacy visit



EcoSusNet Project Officer Tashi Manasseh and team members during an advocacy visit to the Ministry of Environment, Nasarawa State



EcoSusNet team members during an advocacy visit to the Chairman Christian Association of Nasarawa state Nigeria (**V.Rev. Dr.Sunday Emmah**)



# Connect With Us

## Facebook

Building Blocks for Peace Foundation  
Ecosystem Sustainability Network  
We Are Special Foundation

## Instagram

@ecosusnet  
@bbforpeace  
@Wearespecialfoundation\_

## LinkedIn

- Building Blocks for Peace Foundation
- Ecosystem Sustainability Network
- We Are Special Foundation

## Twitter

- @ecosusnet
- @bbforpeace
- @wearespecial4

Embassy of the Federal Republic of Germany in Nigeria

Instagram: [@auswaertigesamt](#)

LinkedIn: [@Auswärtiges Amt \(Federal Foreign Office\) Germany](#)

Twitter: [@GERinNigeria](#)

Network of Youth for Sustainable Initiative (NGYouthSDGs)

Instagram: [@ngyouthsdgs](#)

Twitter: [@NGYouthSDGs](#)

LinkedIn: [Nigeria Youth SDGs Network](#)

Facebook: [@NGYouthSDGs](#)