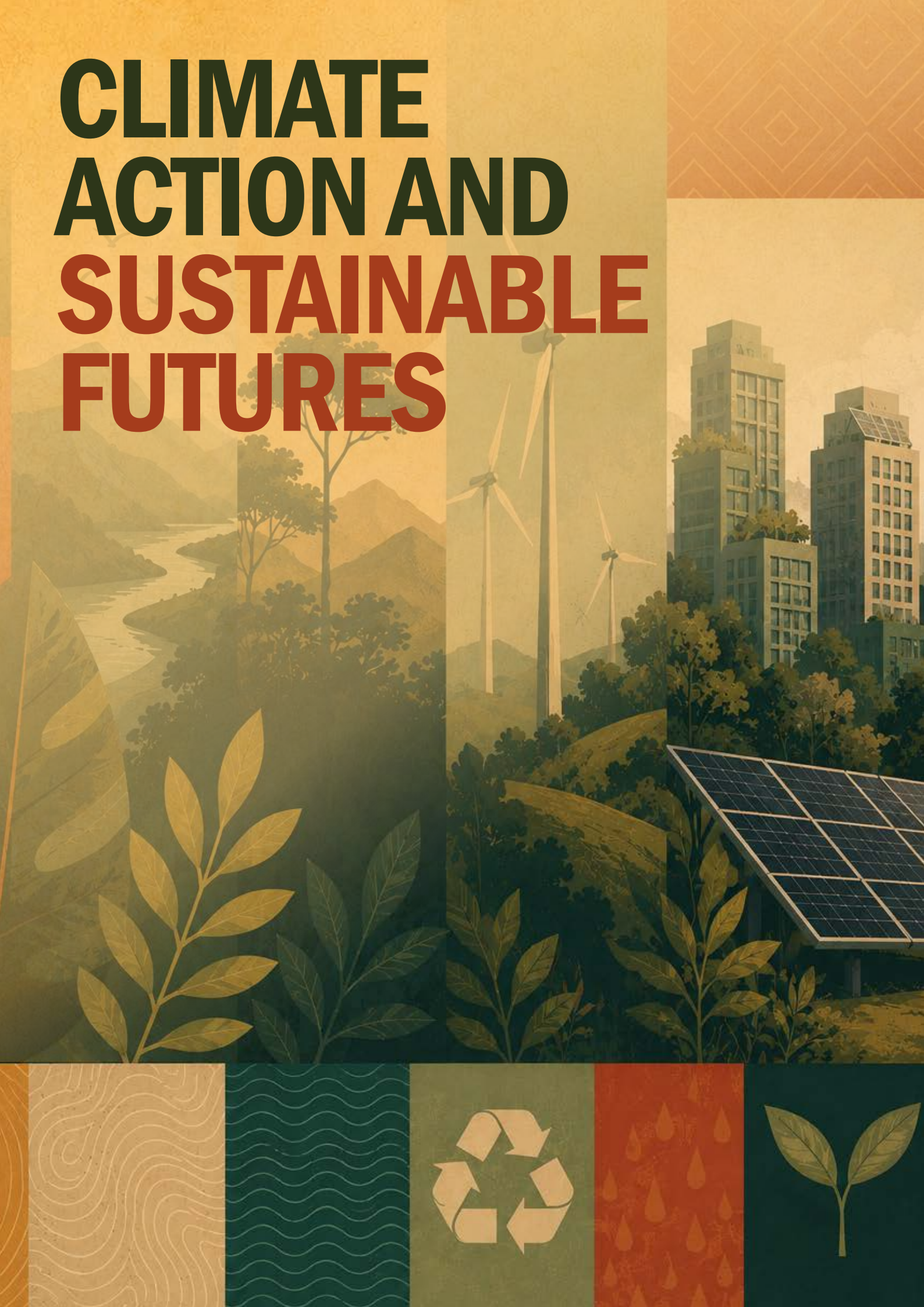


CLIMATE ACTION AND SUSTAINABLE FUTURES



CLIMATE ACTION AND SUSTAINABLE FUTURES

Providing integrated climate and sustainability solutions across energy, agriculture, environment, and resilience. Our work addresses climate risks while advancing sustainable growth, ecosystem protection, and community resilience.

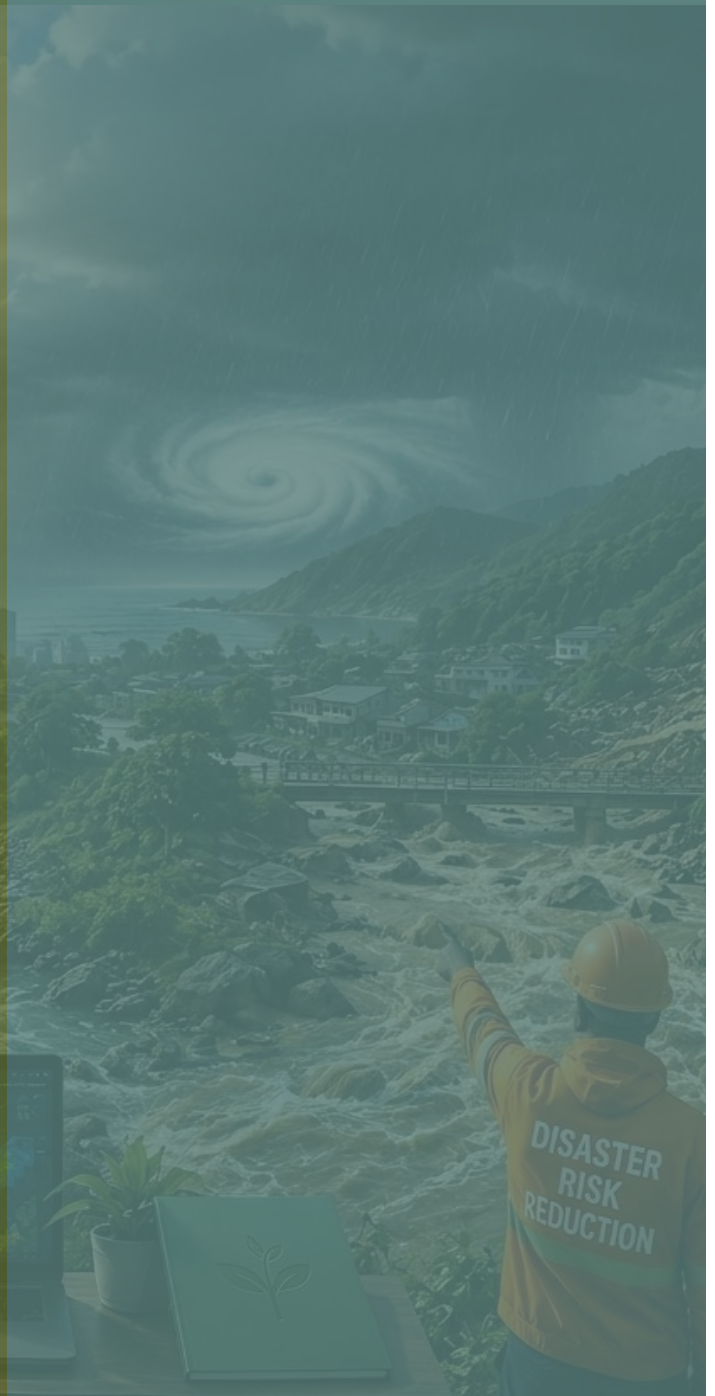
OUR EXPERTISE



CLIMATE & ENVIRONMENTAL TECHNOLOGIES



DISASTER RISK REDUCTION



CLIMATE & ENVIRONMENTAL TECHNOLOGIES

Advancing climate resilience through innovative technologies, climate intelligence, sustainable infrastructure, and data-driven environmental solutions.

Climate Risk Observatory & multi-hazard risk mapping for 9 Pilot Cities/ MMDA's in Ghana, Green Cities and Infrastructure Programme



2014- 2026



Ghana



FCDO

Ghana's urban centres are facing the twin pressures of rapid urbanisation and escalating climate risks. The project focuses on strengthening data-driven urban resilience by supporting inclusive, climate-smart planning, early warning systems, and resilient infrastructure to address rapid urbanisation and rising climate risks.

As a core technical partner, alongside PwC UK and Triple Line Consulting, we are leading the development and operationalisation of a multi-hazard climate risk assessment framework in pilot cities of Northern Ghana.



DESIGNING A ROBUST RISK MAPPING METHODOLOGY

Developing an evidence-based framework to identify high-risk zones and support strategies to reduce Loss and Damage.



BUILDING A DYNAMIC CLIMATE RISK DASHBOARD

Developing an AI-powered city-level dashboard to visualise risks, support decision-making, and integrate with the Ghana Urban Risk Observatory.



TRAINING & CAPACITY BUILDING

Providing toolkits and training to help local institutions conduct climate risk assessments and use the dashboard effectively.

1,89,33,711+

people expected to benefit from enhanced climate resilience

36,39,573+

women targeted through inclusive urban risk planning

\$300 million+

in potential annual Loss and Damage costs projected to be averted



Ghana Urban Risk Observatory (GUO)



2026-2027



Ghana



European Union - AFD

The Ghana Urban Observatory (GUO) Digital Platform will serve as a centralised data and analytics hub, integrating spatial, statistical, and climate data to enable evidence-based urban planning, climate risk assessment, and resilient decision-making.

We are providing end-to-end technical assistance to design, develop, and operationalise the Ghana Urban Observatory Digital Platform, building the country's first integrated urban data and analytics infrastructure to support evidence-informed planning, climate resilience, and sustainable urban development.

**URBAN DATA
ARCHITECTURE AND
INTEGRATION**

Design and operationalise a centralised urban data system integrating national and local data to support evidence-based planning, policy, and risk-informed decision-making.

**SERVICE LEVEL
INDICATOR PLATFORM**

Develop dashboards, map portals, and spatial tools to monitor urban services, climate risks, and infrastructure gaps.

**SPATIAL PLANNING
MODULE**

Integrate climate risk analytics and AI-powered modelling for hazard mapping, scenario analysis, and anticipatory planning.

**URBAN FORESIGHT AND
SCENARIO MODELLING**

Build urban foresight and scenario modelling capabilities to enable stakeholders to assess future growth patterns and prioritise resilient infrastructure and investment interventions.

**CITY PERFORMANCE
REPORTING AND
KNOWLEDGE
REPOSITORY**

Support reporting and decision-support functions, including city scorecards, performance tracking, and knowledge repositories.

**SYSTEM TESTING,
TRAINING, AND POST-
DEPLOYMENT SUPPORT**

Conducting functional, integration, and user acceptance testing across all modules; delivering targeted training and providing post-deployment technical support.

100+ municipalities covered under the observatory framework

1.51 million+ women across 6 target cities benefiting from improved urban services and climate-resilient planning

\$108 million+ in annual Loss and Damage costs projected to be averted

>40% of Ramsar sites can be restored

6 priority cities supported through advanced urban analytics and evidence-based planning systems



Delivery of Services towards the Strengthening Early Warning Systems for Anticipatory Action using Machine Learning Model



2026-2028



Africa and East Asia



World Food Programme

This initiative strengthens early warning systems across Africa and East Asia by integrating AI and machine learning with traditional climate models to improve forecasting, support anticipatory humanitarian action, and build resilience among vulnerable communities.

As a core implementing partner, we are advancing AI and ML-enabled climate and weather intelligence by integrating physics-based and data-driven models to strengthen early warning systems, risk assessment, and anticipatory humanitarian action across Africa and Eastern Asia.



DATA INTEGRATION

Integrate climate, satellite, hazard, geospatial, and socio-economic data with physics-based models for accurate impact-based forecasting.



NUMERICAL WEATHER PREDICTION (NWP) MODELLING & MULTI-MODEL INTEGRATION

Combine NMHS models with geospatial and socio-economic data to deliver localised early warnings through an API-driven system integrated with national and WFP platforms.



MODEL TRAINING & CALIBRATION

Train and calibrate hybrid AI/ML models to improve forecast accuracy, reduce uncertainty, and minimise Loss and Damage risks.



DOCUMENTATION & TRAINING

Provide documentation and capacity building to support system adoption, long-term sustainability, and institutional preparedness for Loss and Damage management.

\$1.5 billion in potential Loss and Damage costs that could be averted

100 million people in climate-sensitive areas expected to benefit from enhanced climate resilience and early warning coverage

Multi-country early warning coverage across Africa and Eastern Asia through AI - ML enabled forecasting systems



Mobilising Investment for NDC Implementation - Understanding the Ethiopian Regulatory Environment in Relation to Mini-Grids



2018-2019



Ethiopia



International Climate Initiative

The overarching objective of the project was to support both the public and private sectors in creating enabling environments to mobilise private-sector financing for NDC implementation. In Ethiopia, the project specifically aimed to de-risk investments, address institutional barriers, and scale up climate-aligned financing to accelerate the transition to low-carbon and climate-resilient development.



CLIMATE FINANCE READINESS ASSESSMENT

Conducted a comprehensive climate finance readiness assessment to support the development of an investment platform and project pipeline aligned with the Ethiopia IKI MI workplan.



INSTITUTIONAL & CAPACITY STRENGTHENING

Identified institutional and capacity gaps across key agencies, including the Ethiopian Energy Authority (EEA), Ethiopian Electric Utility (EEU), and other stakeholders, constraining access to climate finance and the development of bankable low-carbon energy projects.



INVESTMENT-READY SOLUTIONS

Provided early-stage technical guidance on de-risking instruments and innovative off-grid financing and business models to enhance the commercial viability of mini-grid projects.

Market Assessment for the Ethiopia Off-Grid Credit Facility



2019-present



Ethiopia



AfDB

The project supported Ethiopia's transition towards universal, affordable, and reliable electricity access by assessing the country's off-grid renewable energy market to inform sector development, investment, and low-carbon, climate-resilient growth.



MARKET ASSESSMENT

Analysed Ethiopia's off-grid renewable energy ecosystem, including private sector enterprises, cooperatives, microfinance institutions (MFIs), and energy product markets.



POLICY & REGULATORY ANALYSIS

Assessed the policy and regulatory landscape to identify opportunities and strengthen the enabling environment for off-grid renewable energy.



SECTOR DEVELOPMENT & INVESTMENT PLANNING

Evaluated market opportunities and implementation challenges to inform sector development strategies and investment priorities.



Framework Agreement for Technical Services to Support Climate Adaptation in the Food Security Sector

 2024-2026

 Africa and South Asia

 Global Centre on Adaptation

This initiative supports climate adaptation in agriculture and food security systems across Africa and South Asia by integrating Digital Climate Advisory Services (DCAS), climate risk analytics, and climate-resilient seeds into investment projects and private sector initiatives to strengthen climate resilience



CLIMATE RISK ASSESSMENTS

Conducts climate risk assessments for the agriculture sector to inform climate-resilient investment planning.



CLIMATE ADAPTATION INTEGRATION

Develops technical guidelines and recommendations to embed digital adaptation solutions and climate-resilient practices into project design and implementation.



CAPACITY BUILDING & TECHNICAL ADVISORY

Delivers stakeholder training, knowledge transfer, and technical advisory support to agribusinesses, development banks, and private sector actors to scale climate-smart agriculture and strengthen resilient food systems.



DISASTER RISK REDUCTION

Strengthening resilience through disaster risk assessments, early warning systems, climate-smart planning, and resilient infrastructure.

Assessing Urban Disaster Risks and Investment Options for Urban Disaster Risk Reduction

 2024-2025  South Sudan  The World Bank

The project assessed climate and urban disaster risks in South Sudan to generate evidence for resilient urban planning, strengthen institutional capacity, and guide climate-smart investments for sustainable development.



CLIMATE RISK ASSESSMENT

Conducted a comprehensive assessment of climate hazards, exposure, vulnerability, and risk by integrating geospatial and socio-economic data to identify urban hotspots most vulnerable to climate-related disasters.



RESILIENCE PLANNING

Delivered an adaptation and resilience assessment outlining priority measures to reduce climate and disaster risks across housing, water infrastructure, drainage, and social services.



CLIMATE-SMART INVESTMENT PLANNING

Assessed disaster risk reduction and climate adaptation investment options, identifying scalable, context-specific interventions aligned with national priorities and World Bank frameworks.



Diagnostic Work for Climate Resilient Urban Development

 2025  Somalia  The World Bank

Delivered city-level flood risk and climate resilience diagnostics for Mogadishu and Hargeisa to strengthen urban resilience, improve flood risk management, and support climate-responsive urban planning in Somalia and Somaliland.



FLOOD RISK & URBAN ANALYSIS

Conducted flood hazard and risk modelling under current and future climate scenarios, alongside urban growth, land-use, and asset-based risk assessments, supported by household and business surveys in flood-prone areas.



RESILIENCE & INVESTMENT PLANNING

Identified and prioritised structural and non-structural mitigation measures, and developed city-specific resilience roadmaps and investment strategies.



INSTITUTIONAL STRENGTHENING & STAKEHOLDER ENGAGEMENT

Assessed institutional capacities and facilitated stakeholder engagement to support the implementation of climate-resilient urban solutions and future investment planning.



Green Cities and Infrastructure Programme (GCIP) Ghana Urban Work Package

 2024-2026  Ghana  FCDO- PwC

The initiative provided technical assistance under the FCDO-funded Green Cities and Infrastructure Programme (GCIP) in Ghana to strengthen urban climate resilience and unlock investment for green and inclusive urban development.



CLIMATE
INVESTMENT
PLANNING

Prepared detailed feasibility studies to mobilise climate and development finance for improving water security in Wa Municipality and enhancing flood resilience in Sekondi Takoradi Metropolitan Assembly (STMA).



CLIMATE RISK
& URBAN
ANALYTICS

Developed urban data systems, climate risk mapping methodologies, and evidence-based planning tools to support climate-responsive urban planning.



RESILIENT
URBAN
SYSTEMS

Strengthened urban service delivery and infrastructure prioritisation to enhance climate resilience across municipalities in Ghana.

DISASTER RISK REDUCTION





ABOUT US

Committed to advancing Africa's bold vision

We are a wholly owned subsidiary of the IPE Global Group, an international development consulting firm, blending global expertise with on-the-ground experience.

Drawing on 27+ years of expertise, we deliver scalable, evidence-based solutions across Africa, strengthening local capacity and supporting national development priorities.

INTERNATIONAL LOCATIONS

New Delhi, India (HQ) | Phnom Penh, Cambodia | Addis Ababa, Ethiopia | Hamburg, Germany | Nairobi, Kenya | Manila, Philippines | London, United Kingdom

INTEGRATED GROUP STRUCTURE



Expanding Horizons. Enriching Lives.



Expanding Horizons. Enriching Lives.

TRIPLELINE

SAMRIDH
IMPACT SOLUTIONS
IPE Global Group Company

CONTACT US



www.ipeafrica.com



ipe@ipeafrica.com

