



INSURANCE SCHEME FOR WATER SUPPLY FACILITIES

Guarantees Reliable Water Services Delivery.
Build Resilience.

*"Securing safe water systems
against shocks and failures."*



Asunafo North
Municipal
Assembly



What is the Insurance Scheme for Water Supply Systems?

The Insurance Scheme for Water Facilities is an innovative solution designed to mitigate operational and environmental risks faced by rural and small-town water systems. The scheme protects both infrastructure and service continuity by covering critical risks like mechanical breakdowns, borehole collapse, and theft of parts. The scheme was developed in partnership with local insurers, donors, and community leaders, the Regional Co-ordinating Council, Community Water and Sanitation Agency (CWSA). Ahafo Regional Coordinating Council and the private sector in a co-creation process. It supports water service providers to recover faster after earthquakes, reduce downtime, and maintain trust with communities.



Damaged solar panel



Damaged submersible pump



Damaged solar panel



Damaged water meter

An Illustration of water system failures and how insurance claims can cover losses and reduce Impact



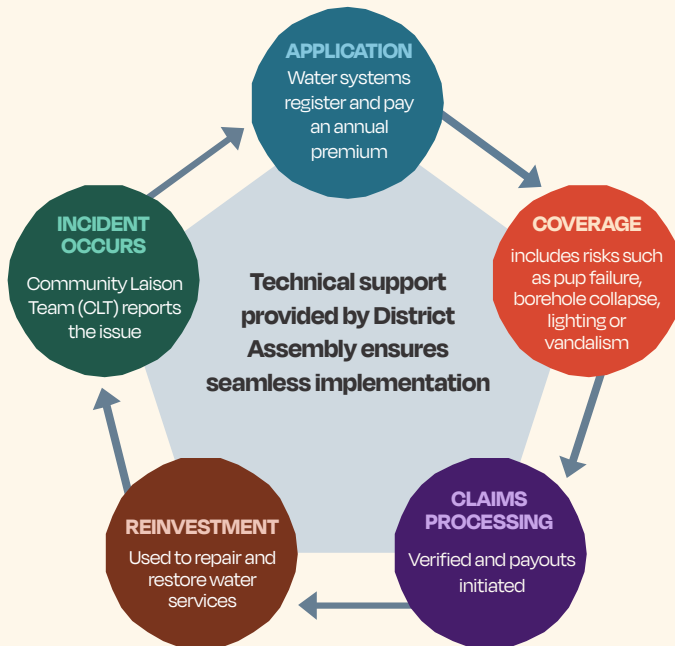
OUTCOMES

Efficient Uptimes for Water Supply Systems - Increased Community Confidence - Long-term Sustainability

How the Scheme Works

The scheme works in five simple steps: **(1) Application** – Water supply systems are registered, and annual premiums are paid as coverage towards any losses. **(2) Coverage** – includes risks such as Sudden pump failures, borehole collapses, Fire, Flooding, Vandalism, solar power malfunctioning, or storage tank bursts and breakages. **(3) Incident Occurs** – Community Liaison Team (CLT) Members reports the issue. **(4) Claims Processing** – verified and payouts initiated. **(5) Reinvestment** – used to repair and restore water services. Technical support provided by the District Assembly ensures seamless implementation.

A flow diagram illustrating how the scheme works



How the Insurance Scheme Was Designed

The Design of the Insurance Scheme for Water Facilities follows the process below:

Step 1: Ground-Level Data Collection and Diagnostics

The process begins with extensive field data collection across target districts to assess the operational conditions of rural and small-town water systems. Data collected includes: system types, service reliability, tariffs, maintenance practices, and vulnerability to external shocks (e.g., pump failure, borehole collapse, vandalism, fire etc.). This information formed the evidence base for identifying risk factors and potential insurance needs.

Step 2: Risk Assessment and Profiling

World Vision Ghana in collaboration with the Municipal/District Assembly conducted a comprehensive risk assessment to categorize the types of risks that commonly disrupt water service delivery. Risks were grouped into natural hazards (e.g., drought, flooding, lightning), technical failures (e.g., solar inverter damage, pump breakdown), and socio-economic risks (e.g., theft, vandalism). This process quantified risk frequency, severity, and financial impact on service continuity.

Step 3: Stakeholder Consultations and Participatory Evaluation



Multi-stakeholder forums were convened at both the community and national levels to validate findings from the risk assessment and explore how insurance could be integrated into rural water management. Participants included Regional Coordinating Council, Community Water and Sanitation Agency (CWSA), District Assemblies, community water management teams, water

board members, local NGOs, financial sector actors, and development partners. These dialogues ensured the scheme would be context-sensitive, socially acceptable, and operationally realistic.

Step 4: Definition of Insurable Components

Based on the field evidence and stakeholder inputs, the design team identified specific insurable components that would deliver maximum value to water system operators. These included:

- Mechanical and electrical pump failures
- Solar panel and inverter damage
- Borehole collapse
- Theft or vandalism of equipment
- Climate-related service interruptions

Each component was assessed for its insurability, documentation requirements, and repair cost thresholds.

Step 5: Identification and Engagement of Insurance Partner

Following a transparent evaluation of potential underwriters, NSIA Insurance Ltd was selected as the core insurance partner. Their experience in micro and parametric insurance products, combined with their operational presence in Ghana, made them a suitable collaborator.



A Memorandum of Understanding was signed to formalize the partnership and co-develop suitable products.

Step 6: Product Development and Customization

Working with NSIA, a series of insurance products were co-designed to address the identified risks. These included:

- »» A basic policy covering mechanical/electrical failures
- »» An enhanced policy including theft, vandalism, and climate-related damage
- »» Options for custom deductibles and claim limits based on system value

All products were crafted to be simple, affordable, and verifiable, with fast claim processing timelines.

Step 7: Premium Setting and Affordability Analysis

Actuarial support was provided to determine premium levels based on historical data, expected loss ratios, and operational costs. Scenarios were modeled to ensure premiums would remain affordable to Water service providers, with room for donor-backed subsidies during the pilot phase. Payment modalities (e.g., annual, semi-annual) were tailored to reflect local revenue cycles.

Step 8: Policy Implementation and Enrollment of Systems

Following product launch, water systems in pilot districts were enrolled. Orientation sessions were held for water system operators and MMDAs on policy terms, premium payment, incident reporting, and claims processes.

Step 9: Claims Management and Monitoring

An incident-reporting protocol was developed with tools for verification, digital documentation, and resolution tracking. NSIA Insurance Ltd and partner MMDAs established a coordinated framework for timely claims processing. Systems that experienced qualifying events were able to file claims, receive payouts, and restore service efficiently.

Step 10: Feedback Loops and Refinement

The design remains iterative. Feedback from users of insured water systems, MMDAs, and the insurer will be continuously collected to refine the scheme. Adjustments are made to the scope of coverage, claim criteria, and education materials. Lessons from pilot districts will guide scaling to other regions.

Benefits of the Scheme

The scheme benefits all: Water service providers avoid financial shocks and build trust; District Assemblies strengthen service delivery; Communities enjoy reliable water access; Insurers engage a new impact market; Donors reduce repeated funding cycles. Early results show fewer downtimes and better preparedness among insured systems.



INSURANCE SCHEME INTRODUCED

STAKEHOLDER BENEFITS



WATER BOARDS
Avoid financial shocks
& build trust



DISTRICT ASSEMBLIES
Strengthen service
delivery



COMMUNITIES
Enjoy reliable water
access



DONORS
engage a new impact
market

EARLY RESULTS

Fewer downtimes

Better preparedness among insured systems

Join the Movement

Water supply systems are fully insured and providing reliable and continuous services. Join us in expanding the scheme and protecting more communities.

How You Can Join:



Water Systems Operators: Enroll your system for protection



District Assemblies: Promote uptake across your jurisdictions



Donors & NGOs: Help expand coverage and subsidize premiums



Insurers: Partner to create accessible, fit-for-purpose policies



Leadership of Nsia Insurance Company and WASH Management Team from World Vision Ghana



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