Materials for Public Consultation

Stakeholders Engagement for the registration of the Safe Drinking Water Access, Sanitation and Hygiene carbon programme in rural districts "*Uganda WASH Initiative: Building Healthy Communities*" under the Gold Standard for the Global Goals

Introduction

In Uganda, the availability of safe drinking water remains a critical issue, particularly in rural villages where communities rely on sources like rivers, swamps, and other water sources that fail to meet basic quality standards. 19 % of Uganda's population, over 8 million people, relies on unimproved or surface water for daily needs, exposing them to contaminants from polluted streams, ponds, and unprotected hand-dug wells. An additional 32 % face "limited" access, with safe water available but inconveniently located. This means that 21 million people lack basic access to safe drinking water. The consequences are dire, leading to widespread diseases, increased travel time to water sources, security threats, compromised education, and environmental impacts from boiling water. Addressing this issue is not only essential for health but also aligns with the United Nations Sustainable Development Goals (UN SDGs) and greenhouse gases (GHG) emissions reduction efforts.

The impacts of safe water scarcity extend beyond health, affecting aspects like security, education, and employment. Illnesses resulting from contaminated water are rampant, and the time spent traveling to water sources increases vulnerability to security threats and hampers education and work, specially for girls and women. Moreover, the practice of boiling water contributes to environmental degradation due to unsustainable collection of firewood and GHG emissions from its burning. To combat these challenges, the deployment of safe drinking water solutions, like boreholes and water treatment technologies, emerges as a crucial intervention. Such activity does not only reduce health risks providing safe drinking water but also ease access, positively impacting SDGs related to clean water access, good health and well-being, gender equality, and protection of the environment, among others.

Recognizing the pressing need, communities are eager to expand water access. However, sustaining these activities proves challenging due to limited financial resources. The inability to afford water treatment technologies and to build, maintain or repair boreholes poses a threat to the longevity of existing water access systems. Expanding the deployment to provide more water boreholes and treatment systems is not just about increasing safe drinking water access; it's about ensuring the ongoing maintenance and functionality of these vital assets. This expansion will bring about positive changes in sanitation, work opportunities, women's empowerment, and contribute significantly to climate change mitigation efforts.

The Voluntary Carbon Market (VCM) poses a great opportunity to channel environmental financing to fund the deployment of these water access solutions in Uganda. By registering the activities to be carried out by EK and STX as a voluntary carbon programme under the carbon standard Gold Standard for the Global Goals (Gold Standard), it will be possible to issue carbon credits, carbon certificates, carbon offsets, or verified emission reductions and removals (VERs). The VERs represent the right of the holder to claim the achievement of GHG reduction or removal that equals to one metric tone of CO_2 equivalent and are used by corporations, institutions and even individuals for their climate change mitigation claims.

By providing access to safe drinking water sources that don't require the burning of any fuel, the carbon programme *Uganda WASH Initiative: Building Healthy Communities* will reduce the GHG emissions from unsustainable fuel burning. These GHG emission reductions will issue by the Gold Standard as VERs that, once marketed in the VCM, will finance the programme itself.

This expansion will bring about positive changes in sanitation, work opportunities, women's empowerment, and contribute significantly to climate change mitigation efforts.

The present material outlines the proposed plan to provide improved safe drinking water access in a comprehensive way. The goal is to create a sustainable solution that, through the use of carbon finance, not only fulfils immediate water needs but also contributes to broader community development and environmental protection.

A. Objectives of the Programme and Locations

The proposed programme for providing safe drinking water, hygiene and sanitation (WASH) focuses on collaborating with local communities in Uganda to i) build new water boreholes, as well as identify and rehabilitate non-functional existing ones, ii) distribute individual water treatment technologies, in the form of water filtration system, iii) raise awareness and improve hygiene practices, iv) and develop sanitation facilities, such as latrines. This initiative aims to provide safer and more local water resources to communities and households, addressing the critical need for safe drinking water, while improving hygiene and sanitation conditions.

1. *Stakeholder Consultation:*
    - Engage with relevant stakeholders through consultations to present and discuss the *Uganda WASH Initiative*.
    - Seek input, opinions, and insights from community members, local authorities, and other key stakeholders to ensure their active involvement in the programme.
2. *Programme Development:*
    - Gather valuable input and feedback from stakeholders to inform the development of the *Uganda WASH Initiative*.

- Utilize the gathered information to design a programme that effectively addresses the specific needs and challenges faced by the community in accessing safe drinking water and improving sanitation and hygiene.

3. *Issue Evaluation and Mitigation:*

    - Conduct a thorough evaluation to identify potential issues or obstacles that may hinder the successful implementation of the programme.
    - Develop strategies to mitigate identified challenges, ensuring a more seamless and effective execution of the *Uganda WASH Initiative*.

Target of Consultation: 8th – 16th April 2024

Target area of consultation:

1. National Level (Kampala) – April 8th day
    a. 09:30 – 14:00 – Conference with National Officials, NGOs and Stakeholders
2. Kamuli District – April 10th
    a. 09:30 – 14:00 – Meeting with Stakeholders in Government
    b. 15:00 – 17:00 – Meeting with Stakeholders and End users
3. Jinja District – April 11th
    a. 09:30 – 14:00 – Meeting with Stakeholders in Government
    b. 15:00 – 17:00 – Meeting with Stakeholders and End users
4. Luuka District – April 12th
    a. 09:30 – 14:00 – Meeting with Stakeholders in Government
    b. 15:00 – 17:00 – Meeting with Stakeholders and End users
5. Buyende District – April 15th & 16th
    a. 09:30 – 14:00 – Meeting with Stakeholders in Government
    b. 15:00 – 17:00 – Meeting with Stakeholders and End users

B. Description of Solution and Technologies

The provision of safe drinking water will be achieved through two different approaches: water boreholes and water filtration systems.

Water boreholes

The initiative comprises two distinct categories: Strategic Building (new boreholes) and Strategic Rehabilitation (existing boreholes). An effective approach to reach optimal results involve a combination of both strategies to maximize clean water access impact.

A dedicated team of data analysts assesses the entire landscape, mapping out access to water sources and evaluating the condition of existing boreholes. By closely examining data, they identify areas with limited access to clean water, pinpoint non-functional boreholes, and calculate the water needs of various regions. The process involves:

1. Needs assessment: in-depth research identifies areas with water scarcity, where people depend on unsafe water sources.
2. Site selection: strategic areas are chosen to maximize community impact.
3. Community engagement: the local community actively participates in decision-making, guiding the construction/rehabilitation process.
4. Construction/Repair and upgrades: New boreholes are built by the engineering team to meet high standards, ensuring reliability and efficiency. Existing infrastructure issues are addressed, water quality improved, and sustainability ensured.
5. Borehole dedication: following construction/rehabilitation, the borehole is (re)dedicated to the community, with local management councils overseeing its operations and maintenance, emphasizing ownership and responsibility.

Both building new boreholes and repairing existing ones have their advantages, and the choice depends on various factors, including the specific needs of the community, available resources, and environmental considerations.

Strategic Building:

The Strategic Building aims to establish fresh boreholes in regions where clean water access is currently non-existent. Building new boreholes is chosen in the following cases:

1. No existing or severely damaged infrastructure: when there are no existing boreholes in the area or existing boreholes are damaged beyond repair, building a new borehole is the primary option to provide access to clean water.

2. High water demand and community expansion: Iin regions with rapidly growing populations or high-water demand, constructing new boreholes can help meet the increased need for safe water.
3. Strategic locations: when specific locations are identified as critical for water access due to their proximity to communities or other factors, building new boreholes in these areas is preferred.
4. Water quality issues: If existing boreholes suffer from chronic water quality problems that cannot be adequately addressed through rehabilitation, new boreholes with advanced purification systems may be needed.

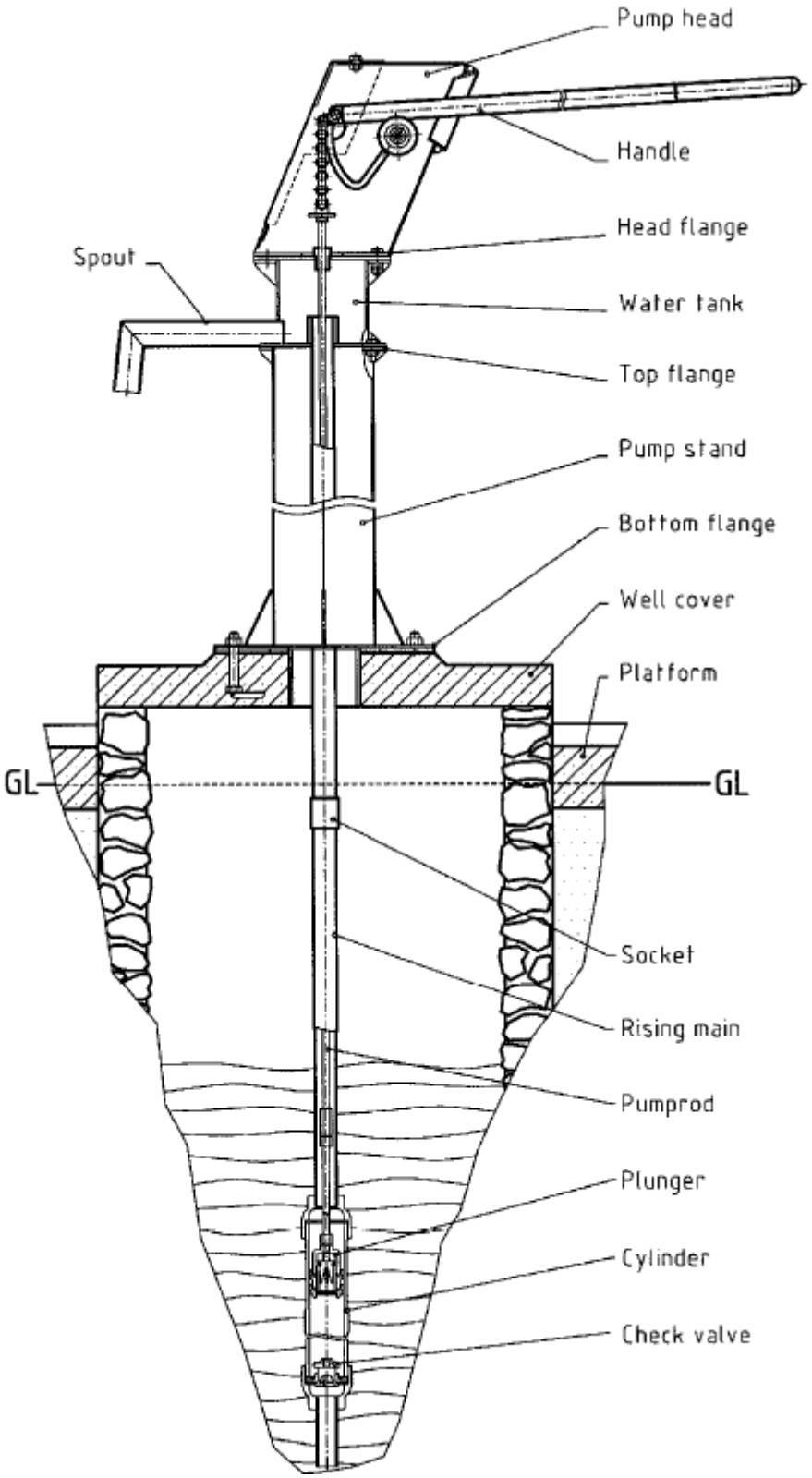
Strategic Rehabilitation:

Strategic Rehabilitation focus on revitalizing existing boreholes in areas where safe water access has waned. This initiative is geared towards restoring and optimizing boreholes to ensure they once again provide a reliable source of clean and safe drinking water to communities in need. A holistic approach to borehole rehabilitation is employed: the borehole rehabilitation process entails a complete system overhaul, go beyond merely changing pipes or addressing immediate issues. Every aspect of the borehole infrastructure is assessed and refurbished, if needed. This includes the borehole casing, pumps, filtration systems, and more. By thoroughly revitalizing the entire system, its lifespan is extended, and its efficiency improved.

Quality control measures are implemented during construction/rehabilitation to guarantee that the water meets or exceeds established safety standards. Upon competition and on a regular basis, the water from the boreholes is sampled and tested in laboratory to make sure it complies with the World Health Organization (WHO) guidelines for drinking water quality and the Uganda Standard for potable water. This approach safeguards the health and well-being of the community for years to come.

Beyond the immediate repair, preventive maintenance plans are tailored to each borehole. These plans include regular check-ups, routine servicing, and timely repairs to address minor issues before they escalate. This proactive approach not only prevents future problems but also extends the borehole's lifespan.

In terms of technology of the solution, the boreholes are dug by hand, encased with a brick wall, and covered by a reinforced concrete slab. Stainless steel pipes and rods are used, and AOV INDIA MARK II hand pumps are installed.


Pump head
Handle
Head flange
Spout
Water tank
Top flange
Pump stand
Bottom flange
Well cover
Platform
GL
GL
Socket
Rising main
Pumprod
Plunger
Cylinder
Check valve

Water filtration systems

Individual water filtration systems will be distributed strategically to further improve safe drinking water access. The distribution of these devices will be prioritized in areas in which episodes of underground water scarcity from boreholes are frequent or among communities for which the use of surface water is strongly rooted, like riverside communities.

The water filtration systems to be distributed will be YB-UF-ZL01A Portable Outdoor Water Filters (or similar). These ultrafiltration (UF) systems have a 0.01-0.1 µm filtration precision, providing a 99.99 % removal rate for all bacteria (*Escherichia coli*, *Salmonella sp*., etc.) and water pollutants. The system does not require electricity and works nearly without water pressure. It is easy to carry, works in many configurations (buckets, bags, faucets), and is able to purify up to 38,000 litres during its lifetime, with a purification rate of 48 litres per hour.

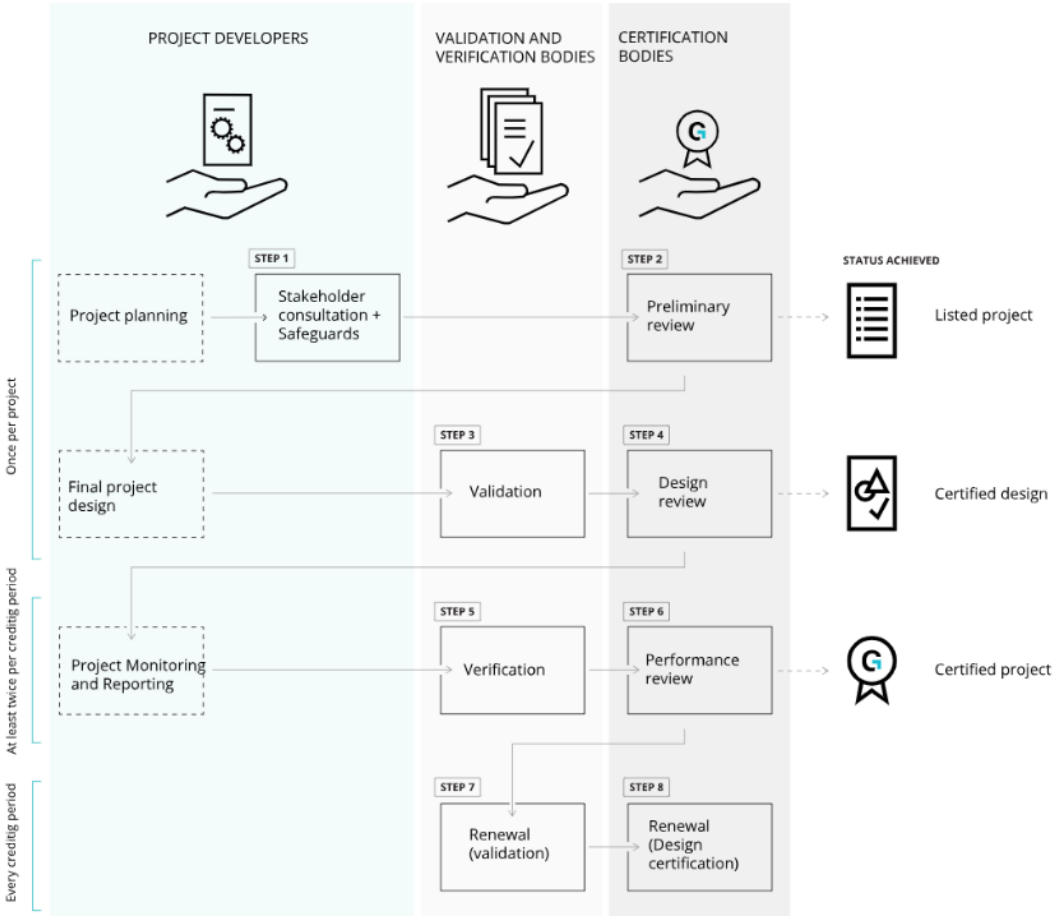
The *Uganda WASH Initiative* will distribute the filtration systems among households and other consumption centres, like schools, and will provide capacitation on their use and replacement once their lifetime is reached.

C. Role of the Gold Standard

The voluntary carbon market (VCM) poses a great opportunity to channel environmental financing to fund the *Uganda WASH Initiative*. EK and STX plan to register and certified the initiative as a Programme of Activities under the Gold Standard. This process will make possible to issue verified emission reductions/removals (VERs). The VERs represent the right of the holder to claim the achievement of GHG reduction or removal that equals to one metric tone of CO_2 equivalent and are used by corporations, institutions and even individuals for their climate change mitigation claims. Specifically, the PoA will focus on the generation of emission reductions from the consumption reduction of unsustainable fuels. Thanks to zero emitting solutions like boreholes and water filtration systems, boiling will no longer be needed to access safe drinking water. Thus, polluting emissions will be prevented.

The Gold Standard for the Global Goals is comprised of numerous methodologies, guidelines, requirements and rules, used to measure and report on the positive impact of climate and development initiatives, to ultimately receive Gold Standard Certification, with the fundamental goal of directing sustainable finance to where it is most needed.

The Gold Standard certification cycle is a s follows:



In terms of public consultation, The Gold Standard relies on public stakeholder consultations to ensure its rule-making is transparent, informed, and conservative. A stakeholder is classed as any individual or group that has an interest in any decision or rule made by Gold Standard. Comments from interested stakeholders allow Gold Standard to make decisions that are based on evidence, experience, and the views of those local communities who will be most affected by the rules or decisions. Matters that require public stakeholder consultations include, but are not limited to, scope expansion, major revision to the Standard, and the inclusion of other environmental assets for certification.

D. Implementation Plan

The following timeline shows the expected implementation plan for the registration of the *Uganda WASH Initiative* as carbon PoA and its first real VPA focused on the construction and the rehabilitation of water boreholes.

- On site Public Consultation (Stakeholders engagement): April 8th to 16th, 2024
- Online feedback and input: April – May 2024
- Preliminary review request to Gold Standard: Beginning July 2024
- PoA and VPA listing: End July 2024
- PoA and VPA Design Validation & Verification: August – October 2024
- PoA and VPA Design and Performance Certification: December 2024

Simultaneously to these actions, field activities will be carried out, including socialization of the PoA and VPA, surveying and data collection, rehabilitation and construction of boreholes, etc.

E. Benefits and Safeguards

Benefits:

1. **Reduced GHG Emissions:**
    - Provision of safe drinking water reduces the need of consumers to boil water for purification, resulting in decreased GHG emissions from burning fuels.
2. **Improved Livelihoods:**
    - Particularly benefiting women and children who face disadvantages due to a lack of safe drinking water access. In households without water access on premises, women and children are responsible for water collection in 80% of cases.
    - By minimizing the necessity to boil water using biomass and other fuel sources, air quality in households with traditional cooking systems is enhanced, leading to direct improvements in respiratory health conditions and a decreased risk of burns.

3. **Time Saved:**
    - Up to 6 hours per day are saved, allowing individuals to allocate time to education, agriculture, and other essential tasks.
    - This equates up to approximately 275 working days per year, or 55 working weeks of saved time annually.
4. **Reduced Resource Consumption:**
    - Diminished reliance on firewood or cooking fuel for boiling and purification.
5. **Reduced Environmental Impact:**
    - Reduced deforestation resulting from decreased firewood consumption.
    - Improved livelihoods of the community and surrounding environment.

Safeguards:

In order to support the implementation of programme and project activities, safeguards need to be created to identify, prevent and mitigate negative, unintended consequences that may arise from any given intervention. They function to ensure that the developmental outcomes are not undermined as well as gaining public support for climate actions.

Some outline of safeguards principles that might be relevant to meet the entire project cycle are as follows:

Social Aspects	Principle 1	Human Rights
	Principle 2	Gender Equality and Women's Empowerment
	Principle 3	Community Health & Safety
	Principle 4	Cultural Heritage, Indigenous Peoples, Displacement and Resettlement
	Principle 5	Corruption
Economic	Principle 6	Economic Impacts
	Principle 7	Climate and Energy
Environmental and Ecological	Principle 8	Water
	Principle 9	Environment

Further details and mechanism of these principle will be further explained under section **H** of this document.

F. Transfer of Carbon Rights

Any rights on the VERs generated by the beneficiaries of the safe drinking water solutions provided by the *Uganda WASH Initiative* PoA will be transferred from them to STX and EK. Beneficiaries will be granted with the use of the safe drinking water solutions free of any charge in exchange for the rights over the VERs. The transfer will be formalized through the signature of agreements between the beneficiaries or their respective representatives (LCs) and STX & EK. Proceeds from the sale of VERs in the VCM will be used to fund the programme, both for the upkeep of existing activities and for the expansion of safe drinking water access to more beneficiaries.

G. Alignment with UN Sustainable Development Goals

The *Uganda WASH Initiative* PoA aligns and contributes to the achievement of several UN SDGs:

- **SDG 3** – Good Health and Well-being: Through the provision of clean and safe drinking water resources, waterborne diseases, respiratory conditions, and burns are reduced.
- **SDG 5** – Gender Equality: Reduce gender disparities by minimizing the burden of water fetching and preventing the risk of sexual harassment for unaccompanied girls and women. The programme provides equal opportunities for employment and wage.
- **SDG 6** – Clean Water and Sanitation: Addressing the core issue of safe drinking water access and raising awareness on sanitation and hygiene.
- **SDG 7** – Affordable and Clean Energy: The direct provision of safe drinking water eliminates the need to boil it, with the consequent saving on fuel and energy.
- **SDG 8** – Decent Work and Economic Growth: The programme creates employment opportunities for local community members and provides decent living wages.
- **SDG 13** – Climate Action: Contributing to emission reduction and combating climate change.
- **SDG 15** – Life on Land: Reducing biomass consumption as fuel alleviates pressure on forest ecosystems, thereby contributing to safeguard terrestrial wildlife habitats.

Through borehole construction, rehabilitation and provision efforts and the distribution of water treatment systems, the programme does not only address the immediate need for safe drinking water but also actively contributes to broader community development, environmental sustainability, and the achievement of key global development goals.

H. Safeguarding Principles Assessment and Mitigation Plan

Prior to the implementation plan, it is important to undertake some principles that will be used to develop the programme and activities. Below are some considerations relevant for Uganda WASH Initiative: Building Healthy Communities

a. Undertakes upfront assessment against the Safeguarding Principles & Requirements (Social, Economic and Environmental Aspects)
   In order to undertake this process, the stakeholders are required to identify what are the potential impacts in the design of the projects, both positive and negative impacts. Some conditions such any impacts to social conditions, economic influence and environmental change are potential to be identified and raised.
b. Implements the activity in accordance with the Safeguarding Principles and relevant requirements. The safeguarding principles
c. Includes measures, corresponding to the identified risks and adverse outcomes, to minimize and address negative impacts, in validated design documents prior to design certification, and
d. Provides information on measures implemented to address the identified risks and status of risk in the monitoring report at each verification.
e. Report any grievances related to compliance and safeguarding principles that are registered at any point during the project cycle.

I. Continuous Input / Grievance Mechanisms

(the survey will be held of minimum 30 days, starting from 9th of April – 9th of May 2024)

	Method Chosen (include all known details e.g. location of the book, phone, number, identity of mediator)	**Justification of Choice (best practice)**
Continuous Input / Grievance Expression Process Book (mandatory)	Kamuli Town, Kamuli (from 9:00 to 17:00) Buwenge, Jinja (from 9:00 to 17:00) Buyende town, Buyende (from 9:00 to 17:00)	
GS Contact (mandatory)	help@goldstandard.org	
Telephone access (optional)	+256 755 969 428	
Internet/email access (optional)	https://ek.eco/grievance-ug Uganda@ek.eco	

About EK

EK is a results-driven project manager specializing in initiatives that create positive social impacts while concurrently delivering environmental benefits. With a keen focus on identifying and leveraging opportunities, EK adeptly navigates projects that align with both social goals and the promotion of environmentally sustainable practices.

Contact information

Below are the contact details if you have any questions and would like a further information about the details of agenda or related issues to:

- EK: Info@ek.eco