Gold Standard
for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (PDD)

PUBLICATION DATE **04.05.2022**

VERSION **v. 2.0**

RELATED SUPPORT - Programme of Activity requirements

This document contains the following Sections

KEY PROJECT INFORMATION

Type of VPA	☐ Real case VPA ☒ Regular VPA
Scale of VPA Note that a VPA can be of one scale. Please select applicable scale accordingly.	☐Microscale ☒Small scale ☐Large scale
Title of corresponding real case VPA (if applicable)	SPOUTS Water Purifier Programme in Africa-WPS in Uganda by TASC-VPA 2
GS ID of real case VPA (if applicable)	GS11640
GS ID of VPA	GS11861
Title of VPA	SPOUTS Water Purifier Programme in Africa-WPS in Uganda by TASC-VPA 3
Time of First Submission Date	14/10/2022
Date of Design Certification	01/06/2023
Version number of the VPA-DD	2.1
Completion date of version	05/06/2023
Coordinating/managing entity	AGS Carbon Advisory
VPA Implementer (s)	Spouts International (SPOUTS)
Project Participants and any communities involved	Spouts International (SPOUTS)
Host Country (ies)	Republic of Uganda
GS ID and Title of applicable Design Certified VPA	N/A
GS ID and Title of applicable Performance Certified VPA	N/A
Activity Requirements applied	☒ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A

Other Requirements applied	NA
Methodology (ies) applied and version number	Emission reduction from safe drinking water supply-version 1.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
VPA Cycle:	☐ Regular ☒ Retroactive

Table 1 – Estimated Sustainable Development Contributions

Sustainable Development Goals Targeted	SDG Impact	Estimated Annual Average	Units or Products
13 Climate Action (mandatory)	Emission Reductions	57,044	tCO_2e
3 Good Health and Wellbeing	Reduce Illnesses and Death from Hazardous Chemicals and Pollution. Health quality improvement (qualitative assessment)	80%	Proportion of population reporting health improvement (qualitative assessment)
5 Gender Equality	Average time saving associated with boiling water and fuel collection	1.3	hours/week
6 Clean Water and Sanitation	Proportion of population served with safely managed water services	16,275	-
7 Affordable and Clean Energy Target	No. of WPS operational at any time in the VPA	17,500	WPS
8 Decent Work and Economic Growth	Total no of jobs created (during Distribution and monitoring & Evaluation)	16	jobs

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

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The purpose of the VPA is to disseminate Safe Water Supply (SWS) devices such as Household Water Treatment (HWT) technologies in domestic households and communities of western regions of Uganda, Africa. They are distributed to households which were earlier using wood on rudimentary stoves for boiling water or were consuming untreated water. The project makes the end-users energy efficient and reduce greenhouse gas (GHG) emissions otherwise resulting from the burning of non-renewable woody biomass for boiling unsafe water to make it safe for consumption.

The project boundary is the geographical boundary of western Uganda where the water filters are proposed to be distributed.

The VPA is implemented by SPOUTS International (SPOUTS) who are Project Owners whereas AGS Carbon Advisory is the Coordinating/Managing Entity (CME) of the PoA. SPOUTS will implement the project with support from TASC SA (Pty) Ltd. ("TASC") and in partnership with local partners and would ensure the last-mile distribution/installation of the water purification systems (WPS) to the beneficiaries.

The World Health Organization (WHO) estimates that over 40% of Africa's Sub-Saharan population still lacks access to safe water. Over 300 million Africans lack access to clean and safe water for drinking and 700 million are living in poor conditions without adequate sanitation. Lack of access to clean and safe water has frustrated poverty reduction efforts and hindered economic prosperity.

In Uganda, WASH (water access, sanitation, and hygiene) sensitive indicators such as diarrhoea and stunting are high. Poor access to WASH has an unaffordably high cost, wasting resources that could be used for furthering the country's development agenda. In Uganda, poor sanitation and hygiene, as well as unequal access to safe drinking

water, make thousands of children very sick and at risk of death. Diarrhoea alone, one of three major childhood killers in Uganda, kills 33 children every day.[1]

According to the Joint Monitoring Programme (JMP)[2], the United Nations and World Health Organization's (WHO) mechanism tasked with monitoring drinking water, sanitation, and hygiene progress shows in 2020, only 17% of the Ugandan population has access to safely managed water sources comprising of improved water sources available within 30 minutes distance.

In rural areas of western Uganda, the situation is worse where majority of population relies on unsafe water for drinking which is either boiled to make it safe for drinking or consumed without boiling.

The above photograph shows plight of the residents of kyenjojo district (western Uganda) where only 69% of the residents have access to water which mostly comprises of shallow wells that are highly prone to contamination[3].

Thus, the baseline scenario is use of traditional cookstoves using non-renewable biomass as fuel for boiling water or drinking untreated water. The baseline scenario has been discussed in detail in section B.4.

[1] https://www.unicef.org/uganda/what-we-do/wash
[2] https://washdata.org/data/household#!/dashboard/new
[3] https://www.independent.co.ug/kyenjojo-residents-struggling-to-access-clean-water/

The project will result in 57,044 tCO_2e annual average emission reductions and a total of 285,220 tCO2e emission reductions over the crediting period of 5 years.

DISTRIBUTION OF WATER FILTERS BY SPOUTS

SPOUTS International (SPOUTS) is the implementer of voluntary project activities (VPAs) included in the PoA. Whereas AGS Carbon Advisory is the Coordinating/managing Entity (CME) of the programme. SPOUTS will encourage the uptake of SWS in western region of Uganda by making it as simple as possible for end users to benefit from finance and incentives available via carbon markets. SPOUTS will source the best available technologies for dissemination under the PoA. The project shall also conduct annual water hygiene education campaigns for the end-users.

SPOUTS will work together with its partners to ensure a smooth distribution of the water filter to the households. In order to make the process of water filter distribution systematic, the SPOUTS will carry out the distribution process in teams. Each team will start the distribution process in a Village at a time until an entire Parish is covered, then the team will start the process in next Parish.

To ensure efficiency, the team will be equipped with an Android Device to be able to capture this data faster. Further, SPOUTS will leverage the presence of VHTs/Village leaders to make sure no household is receiving more than one filter.
Under this VPA the households will be distributed the water filters for free.

A.1.1. Eligibility of the VPA under approved PoA

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Table 2 Eligibility for VPA inclusion as per PoA requirements

No.	Eligibility Criterion	Description/ Required condition	Means of Verification/Supporting evidence for inclusion
1	Geographical boundary of the VPA	The VPA is located within the geographical boundary of one of the African	Household Water Treatment (HWT) technologies will be

		countries included in the PoA.	distributed to residential users within the geographic boundary of Western Uganda which is within the boundary of PoA. CME has issued a statement confirming the geographical boundary of the VPA.
2	Project technology	VPAs involves use of only one technology i.e. distribution of safe drinking water systems (HWT technology) to residents.	The target end-user group is residential user using HWT technology i.e. water purifiers as described in section A.3 of this document. Supporting evidence: Manufacturer specifications and Sales database
3	No Double counting of CEPs impacts within this PoA and across other registered or deregistered PoAs	A unique numbering or identification system for the CEP installed is applied. This shall ensure no double counting of water purifiers within the PoA and ensure that water purifiers can be identified as belonging to this PoA and not to a PoA managed by any other CME.	The unique identification (numbering and programme logo) of each CEP along with the customer details (name, address) is stored in the sales database of devices included in the VPA-DD. Supporting Evidence: All CEPs Sales invoices/sales database including VPA assignment and end user details (i.e. name, address, GPS coordinates) can be verified by the GS-VVB during Verification. Relevant agreements with manufacturers/distributors or a master database will be provided at the time of verification. For this VPA following process is followed to generate the UID- "The

			Unique Identifier is generated using a 3rd Party system - TEC-IT Barcode Studio 16.2 and takes the below format: RTU2022 ######, where RT - Regular Technology (Product Type), U - Uganda (Country of Project), 2022 - Year of Distribution (Changes), ###### - Unique Product Number (Different for every Product). The generated numbers (Serial Codes) are printed and attached to the product and are verifiable on each beneficiary's visit using a Barcode Scanner. On product distribution, the code is matched with the Beneficiaries details which can be accessed once you select the UID in the System."
4	No Double counting of VPA	The VPA is exclusively included in the PoA. The VPA shall not be proposed as part of another offset program i.e. as an individual Gold Standard or CDM project and/or as part of any other CDM PoA and/or any other mechanism to avail climate change mitigation benefits. CME shall issue a statement included in the VPA-DD that the specific VPA will not be part of another Gold Standard or CDM project activity or VPA under another PoA.	A statement by the CME is included in the VPA-DD and a declaration has also been provided by the CME to VVB that the specific VPA will not be part of other ETS, has not participated in any other GHG program and has not been rejected by other GHG program. Supporting Evidence: This has been cross-checked and verified by the CME with other offset mechanisms like UNFCCC-CDM, Gold Standard, VERRA and/or any other

			mechanism to avail climate change mitigation benefits. Declaration by CME for the VPA
5	Specification of the technology such as the level and type of service, as well as performance specification;	The VPA includes ceramic water filter technology which provides safe drinking water, confirming to WHO International standards and host country norms for safe water for human consumption.	• Test reports from National accredited labs confirming the compliance of treated water with WHO and host country norms has been submitted to GS VVB. • Performance assessment of the ceramic water filter by National Water Quality Reference Lab to show its effectiveness and efficiency to produce water that meets the recommended standards for human consumption has also been submitted.
6	Start date of the VPAs	The start dates of the VPA shall be mentioned in each VPA and should be on or after the start date of the registered PoA	The start date of the VPA is 19/07/2022 which is the distribution of first filter under the project. The database screenshot and end user agreement for the first distribution under this VPA is submitted to GS.
7	Non-diversion of ODA in case of public funding	The CME confirms that there is no public funding and no diversion of Official Development Assistance involved in the project activity.	It is confirmed that there is no diversion of ODA. A declaration by Project Owner has been submitted to GS.

8	VPA Crediting Period	VPA crediting period not to exceed the PoA end date and the starting date of the crediting period of a VPA shall be on or after: (i) The date of registration of the PoA, if the corresponding VPA-DD is submitted together with the request for registration; (ii) The date when the VPA was included in the PoA.	A statement is included in the VPA-DD specifying the crediting period start date and that the crediting period will not exceed the PoA end date (this is 20 years after the date of registration of the PoA).
9	Approval of VPA by CME	CME approves each VPA to be included into its registered PoA.	A Statement of CME giving approval for inclusion of the VPA into its registered PoA has been submitted to GS.
10	Methodology Requirement	Each VPA will comply with the applicability criteria of methodology Emission Reduction from safe drinking water supply-version 1.0	The VPA-DD includes information on how it complies with all the applicability criteria of the methodology "Emission Reduction from safe drinking water supply", version 1.0. A detailed justification is provided in section B.2 below.
11	Target groups of the programme	The VPA included in the POA will involve distribution of safe water supply devices (ceramic water filters) directly to the end users.	Sale database and agreement with the end user and SPOUTS submitted to GS
12	Additionality	All VPAs to be included under the PoA will be in compliance with item 1.1.3 of Annex B – positive list mentioned in the 'Community Services Activity Requirements', Version 1.2. All VPAs will be solely composed of isolated units (CEPs)	The VPA-DD confirms that the emission reductions per year at a unit level (i.e. per WPS) are clearly below 600 tCO_2 per year as shown in section B.5 of this document. The same can be verified from ER Calculation sheet

		where the users of the technology/ measure are households or communities or institutions and where each unit results in <= a. 600 MWh of thermal energy savings per year for ICS. b. 600 tCO_2 per year for HWT technologies Hence, according to paragraph 4.1.9 of the 'Community Services Activity Requirements', each of the VPAs, regardless of the host country in which the project activity is being implemented, is deemed additional and therefore is not required to prove additionality at the time of Design Certification.	submitted with the VPA-DD. Hence the VPA is deemed additional
13	Sampling requirements for the PoA	The VPAs will follow the usage survey guidelines of the methodology and UNFCCC guidelines on sampling and survey for Programme of Activities version 4.0	VPA-DD incorporates the sampling procedure in section B.7.2 and sampled survey forms can be provided to GS
14	meet the small-scale or microscale thresholds and remain within those thresholds throughout the crediting period	The CME will ensure that the emission reductions of each VPA are within <60k tCER/year limit. If in case the threshold is breached the CME would let go the ERs above the threshold limit.	An undertaking by the CME confirming scale of the VPA and confirmation that it will remain within the threshold limits of 60K and foregoing the ERs if it crosses the threshold has been submitted to GS VVB with PoA-DD.
15	Conditions to be met by each VPA regarding SDG outcomes assessment	The CME shall conduct the Sustainable Development Goals (SDGs) impact	SDG outcome assessment report has been done at VPA level and is included

		assessment at the VPA level as per Principles & Requirements	in section B.6 of the VPA-DD.
16	Conditions to be met by each VPA regarding safeguarding principles	Projects shall conduct a Safeguarding Principles Assessment and conform to Gold Standard Safeguarding Principles and Requirements.	Safeguarding principles assessment report has been done at VPA level and is included in section D of the VPA-DD.

The table below lists "Global Goals Community Services Activity Requirements", version 1.2 and how the VPA complies with the criteria:

S. No	Community Services Activity Requirements	Justification for VPA inclusion
1	Para 2.1.2: All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	This VPA includes distribution of water purification systems (WPS) reducing greenhouse gas (GHG) emissions otherwise resulting from burning of non-renewable woody biomass for boiling water in Uganda for residential users. The targeted end-users would use biomass to boil water as a form of purification and/or are lacking the access to safe drinking water in the absence of this VPA. Therefore, the project falls under Type b (End-use energy efficiency) of Pre-identified CSA project types.
2	Para 3.1.1. Type of project Water, sanitation and hygiene (WASH): WASH activities contributing to climate change mitigation and/or adaptation benefits.	The VPA will involve distribution of Water Purification Systems (WPS).
3	Para 3.1.2: Project Area and Boundary shall be defined in line with the	The geographical project boundary of this VPA is defined as the western

	applicable Impact Quantification Methodologies and Product Requirements	region of the country of Republic of Uganda (also detailed in Section A.2 of this document).
4	Para 3.1.3: Certain Impact Quantification methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Suppressed Demand baseline is limited to Small Scale and Microscale Projects.	The scale of this VPA is small scale and therefore is eligible under the CSA requirements if applying suppressed demand scenario.
5	Para 3.1.4: Projects involving the distribution of a large number of devices for services such as heating, cooking, lighting, electricity generation, water treatment technology such as water filter, etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with the FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.	The water filters distributed under the VPAs shall be owned by the end user. The SPOUTS will encourage the uptake of SWS by making it as simple as possible for end users to benefit from finance and incentives available via carbon markets. SPOUTS will ensure that the end users are aware of the fact that SPOUTS is claiming ownership rights of and selling the emission reductions resulting from the project activity. It will be communicated to end users at the time of installation/ distribution and during local stakeholder consultations for projects. The carbon title for the product will be signed off by end user to SPOUTS waiving any claim or rights on carbon credits generated under the VPA. The sample of end user SPOUTS Agreement shall be shared with the GS.

The VPA meets all the general eligibility criteria of "Principles and Requirements" as follows:

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
1. Types of Projects	Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	The VPA involves distribution of Water Purification Systems (WPS). Approx. 15,000 WPS have already been distributed under the project activity.
2. Location of the project	Projects may be located in any part of the world.	The VPA is located in western region of Uganda.
3. Project Area, Boundary and scale	The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at	The project area is a point location of CEP beneficiaries in the host country of the VPA. The project boundary will be limited to the geographical boundary of the host country of Uganda. The water filters distributed under this VPA are estimated to achieve less than 60,000 Emission Reduction every year. Hence the VPA qualifies as small Scale VPA. The scale limits for the VPA are shown in section B.5 of this document and the ER calculation sheet. A statement by the CME is included in the VPA-DD and a declaration has also been provided by the CME that the specific VPA will not be part of other ETS, has not

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
	design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst the projects).	participated in any other GHG program and has not been rejected by other GHG program.
4. Host Country Requirements	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The VPA is in compliance with all the legal, environmental, ecological and social regulations prevalent in the host country of Uganda.
5. Contact Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	The contact details of the VPA implementer 'SPOUTS' has been provided in Appendix 2 of the VPA.
5. Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for	SPOUTS has the legal ownership of the Verified Emission Reductions (VERs) that are generated through

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
	example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	the Gold Standard Certification. The carbon title for the product is signed off by end user directly to SPOUTS waiving any claim or rights on carbon credits generated under the VPA.
6. Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (f*or example, access rights, water rights etc.)*. Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	The VPA does not involve the transfer of any other rights except the carbon title transfer.
7. **Official Development Assistance**	All Project Developers applying for project activities located in a country named by the OECD Development Assistance	The ODA declaration form has been submitted by the CME.

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
	Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	

A.1.2. Legal ownership of products generated by the VPA and legal rights to alter use of resources required to service the project

>> SPOUTS has the legal ownership of the Verified Emission Reductions (VERs) that are generated through the Gold Standard Certification. The carbon title for the product is signed off by end user directly to SPOUTS waiving any claim or rights on carbon credits generated under the VPA. As per the End User Agreement "Beneficiaries agree that the water filter be formally registered, and thereafter they agree to voluntarily participate in activities that enable the performance of the water filter to be monitored over its lifetime. Beneficiaries agree SPOUTS will claim the CO_2 emissions reductions from the water filter and sell these as carbon credits to finance the project (including the cost of the water filter, distribution, and monitoring activities)."

Further, as per Annex A of GHG Emissions Reduction and Sequestration Product Requirements version 2.1, as of now there are no mandatory caps enforced in the host country, Uganda for use of issued GS VERs.

In case any such scenario of double counting arises, the CME is committed to retiring an equivalent amount of GS VERs in order to compensate for double counting.

A.2. Location of VPA

>>

Host Party: Republic of Uganda or Uganda

Region/State/Province: Western Uganda

City/Town/Community: Western Uganda

The geographical location of Western Uganda is depicted by the map below. Uganda is a landlocked country in East Africa.

Latitude: 1°22'24'' N

Longitude: 32°17.417' E

Figure 1: The physical/geographical boundary of the SSC-VPA: Western region in Republic of Uganda

A.3. Technologies and/or measures

>> The VPA will include different models of Water Purification Systems (WPS) to provide Safe Water to households.

I. Water purification systems: - Residential

The VPA initially intends to include distribution of Household Water Treatment (HWT) technologies to residential users only. The VPA will implement SWS technologies which are based on replacing inefficient devices using traditional biomass for boiling unsafe

water or consuming untreated unsafe water in the baseline scenario. The water purification treatment options will be selected to ensure that they provide safe and hygienic potable water. The chosen technologies will be in compliance with the WHO and host country norms.

Examples of SWS that shall be included in this project is provided below[4]:

The SWS planned to be implemented in initial VPAs is a ceramic water filter. It is an effective solution for getting clean drinking water. It works by filtering water through microscopic holes in the ceramic pot, allowing only clean water through with the germs and impurities staying behind. The average lifespan of the Water Purifier Purifaaya kit is 8 years[5].

1. **Purifaaya Regular**

Total Capacity: 20 litres container
Storage Capacity: ~10 litres
Number of People: Serves up to 6 people
Filtration Rate: 4.5 – 5.5(The total quantity of water that can be filtered before the replacement of any part is 1,75,200 litres)[6]litres per hour
Effectiveness: 99.99% against germs and bacteria
Recommended water type: Any kind of water
Power Consumption: No need for any power/electricity

As per manufacturers specification the average lifespan of the entire Kit is 8 years[7]

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[4] This is an indicative list of products; other models may be added during the implementation of VPA.
[5] The lifetime of the product depends on usage rates and maintenance and may go beyond 8 years (if maintained properly). The life of the filter pot is average 4 years which will be replaced every 4 years.

[6] The total quantity of water filtered before replacement of any part:
=Total number of years for which water filter operates without replacement*365 days*24 hours* average capacity of water filter
= 4 years*365 days*24 hours* 5 litres/hour

= 1,75,200 litres.
[7] The life of a product depends on the usage and maintenance of filter parts as per manufacturers specifications

The following table provides information on how the project helps in reducing GHG emissions and contributes to SDGs.

Sustainable Development Goals Targeted	How the project contributes to the identified SDG
13 Climate Action (mandatory)	The emissions from the water purifier are negligible or less than the water boiled in baseline stove. Therefore, GHG emissions are reduced.
3 Good Health and Wellbeing	Water Purification systems results in zero emissions otherwise resulting from use of traditional cookstoves used for boiling water therefore improving the health of the end-users by reducing illness from drinking unsafe water and indoor are pollution caused by use of traditional cookstoves for boiling unsafe water
5 Gender Equality	The project results in reduced time of wood collection for women otherwise using in boiling water in baseline stoves and freeing up time for them to utilize.
6 Clean Water and Sanitation	The project results in providing clean drinking water to households improving the level of service and accessibility to safe water
7 Affordable and Clean Energy Target	The project will ensure access to affordable, reliable and modern energy services i.e. WPS distribution to a proportion of population.
8 Decent Work and Economic Growth	Employment is generated in dissemination and maintenance of CEPs, Monitoring & Evaluation of the project

A.4. Scale of the VPA

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The VPA is a small-scale project activity.

As per GHG Emissions reductions & Sequestration Product Requirements project falls under Type 3: Other project activities: project involves technologies such Safe Water Supply, Waste management, etc. that result in GHG emission reductions not exceeding 60,000 tCO_2e per year in any year of the crediting period.

The Emission reduction per stove calculation in section B.5 provides estimation of emission reductions resulting from each water filter for an year which are less than small scale limit for Type 3.

A.5. Funding sources of VPA

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There is no public funding for the PoA or the VPA. No ODA funding will be used, as confirmed by signed ODA Declarations submitted to GS.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

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Emission Reduction from safe drinking water supply version 1.0

B.2. Applicability of methodology (ies)

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The table below lists each of the methodology applicability requirements and how the VPA complies with each of the criteria:

S. No	Methodology applicability requirement	Justification
1	This methodology is applicable to project activities that introduce a new, or rehabilitate an existing, zero-emission or low-emission technology to supply safe drinking water.	The project involves introduction of new zero emission technology to supply safe drinking water. The specifications of the water purifiers are detailed out in section A.3 of the VPA-DD. Document: Project sheet/manufacturers specification
2	As per para 2.2.1a of the methodology, eligible household water treatment technologies (HWT), institutional water treatment technologies (IWT), and community level water treatment	This VPA includes distribution of HWT to reduce or avoid GHG emission from boiling unsafe drinking water in the baseline and lacking access to safe drinking water (suppressed demand)

	technologies (CWT) include bleach/chlorine, water filter (ceramic, sand, composite, membrane, etc.), UV disinfection, etc.	to households who are the target end users. In the absence of this VPA, the above two are the baseline methods for drinking water in households. Document: Project sheet/manufacturers specification
3.	Eligible community water supply technologies (CWS) include new installation of new borehole hand-pumps, borehole hand-pumps rehabilitation, solar powered drinking water pumps, etc. Water pumps powered by fossil-fuel engines are not eligible, with the exception of backup fossil–fuel engines that are used for no more than 10% of operating hours	Not Applicable to the VPA as community water supply technology (CWS) is not included.
4.	The project involves the rehabilitation of an existing technology, the project developer shall provide evidence that the existing technology is non-operational and that there is no planned maintenance or repair for at least 3 months after the date it became non-operational	Not Applicable. The project involves distribution of new HWT.
5.	The methodology allows for project activities to include safe water treatment and/or supply technologies implemented for end-users in households, and/or commercial premises such as shops or institutional premises including half or full day/boarding schools, prisons, army camps & refugee camps.	This VPA includes distribution of HWT to reduce or avoid GHG emission from boiling unsafe drinking water in the baseline and lacking access to safe drinking water (suppressed demand) to households who are the target end users. Document: Sales database

6.	Demonstration of safe water is retrieved at the CWT or CWS location, the water in its improved form shall be available within a distance of 1 km or less from the end-users by satellite imaging or GPS coordinates of each CWT or CWS location. Alternatively, to demonstrate, as a proxy, a total collection time of 30 minutes or less for a round trip, including queuing, using the travel modes of walking or pedaling.	Not Applicable as this is applicable to CWS and CWT technologies.
7.	Demonstration of Project technology performance level of HWT and IWT: It shall be demonstrated based on report of laboratory testing or official notification that the project technology or equipment achieves either (i) the performance target classification 3-star or 2-star level, meaning "Comprehensive Protection," as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011) or (ii) compliance with the national standard or guideline for household drinking water treatment technology; if no national guideline or standard is available, then the project technology shall comply with the WHO	The technology meets the host country norms[8]. The ceramic filters have been approved by Water Institute, Ministry of Water. Performance assessment of the ceramic water filter by National Water Quality Reference Lab to show its effectiveness and efficiency to produce water that meets the recommended standards for human consumption has also been done. The products have also been tested at WHO designated testing laboratory confirming the compliance of treated water with WHO International scheme. Test reports have been submitted to GS.

[8] https://ia801901.us.archive.org/10/items/us.201.2008/us.201.2008.pdf

	International Scheme requirements as per (i)	
8.	Demonstration of Project technology performance level of CWT and CWS: For each individual CWT or CWS, it shall be demonstrated at the start of each crediting period with water quality testing reports that the water directly supplied by the project water technology/source achieves both: a. microbial quality in line with either (i) national standards or guidelines for microbial quality of drinking water, or in the absence of such requirements, (ii) the guideline values for verification of microbial quality from the Guidelines for drinking-water quality b. compliance with (i) national standards or guidelines on priority chemical contamination and physical and aesthetic aspects, or in the absence of such requirements, (ii) international standards or guidelines on priority chemical contamination11 and physical and aesthetic aspects.	Not Applicable as this is applicable to CWS and CWT technologies which is not part of this VPA.
9.	To conduct annual water hygiene education campaigns for the end-users in this project.	Annual water hygiene education campaigns will be conducted. During monitoring of households, SPOUTS shall conduct a representative sample survey annually and will be reported as "report of annual hygiene campaign results" and summarized in the monitoring report. Any major change will be reported and strategy

		will be addressed through subsequent health campaign. The comprehensive steps or methods to access hygiene handling of clean water will be provided in Monitoring Report.
10	A project applying this methodology may make SDG claims if relevant monitoring parameter(s) is included in the monitoring plan to demonstrate and confirm the project's contributions to SDGs 12. See parameter SDWS 19.	The project developer /SPOUTS will capture all the SDG indicators which is relevant to this project through monitoring in HH. The monitoring will be done using a detailed questionnaire which includes all the SDG indicators. For example, capturing water quality.
11	Project shall document the national, regional and local regulatory framework for provision of safe drinking water in the project boundary. The project shall not undermine or conflict with any national, sub-national and local regulations or guidance for safe drinking water supply, operation and maintenance, including any tariff requirements.	The national, regional and local regulatory framework for the safe water has been defined under National Water and Sewerage Corporation which refers to World Health Organization (WHO) guidelines. The project activity devices confirm the compliance of water from water purifiers with above norms.
12.	If the expected technical life of project technology (parameter SDWS 7) is shorter than the crediting period, describe measures to ensure that end users are provided replacement systems of comparable quality at the end of the expected technical life (for example, replace with comparable or better technology, retrofit with performance guarantee, etc.). This	The end users in the VPA shall be provided with replacement parts including new filter, and/or access to a new model technology of comparable quality. These filters will be available through the MFI offices or their retailers. Specifically, the PO field staff typically meets with the users of the improved water filters on a weekly or monthly basis, either in group meetings, or

	applies both for new technology and rehabilitated.	when they come to a bank branch. At group meetings the PO will make regular announcements about the availability of replacement filters, including where to buy them, and discounts available due to the carbon funds. The project implementer would ensure that maintenance of the project appliances is implemented in accordance with manufacturer's specifications/ recommendations, including provisions in regards to replacement or cleansing of the involved filters.

S. No	**CDM Tool 30 "Calculation of the fraction of non-renewable biomass, version 3.0" applicability requirement**	**Justification**
1	This tool may be used by: (a) DNAs to submit region- or country-specific default fNRB values, following the procedures for development, revision, clarification and update of standardized baselines (SB procedures); or (b) project participants to calculate project- or PoA-specific fNRB values	The tool has been used by the project participant to calculate fNRB values for Uganda.

B.3. VPA boundary

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The project boundary as specified in section 3.1 of the applied GS methodology includes:

a. the physical, geographical sites of the low- or zero-greenhouse gas emitting technologies to treat/supply safe drinking water installed by the project activity,

b. any back-up engines or other equipment using fossil-fuel related to the low greenhouse gas emitting technologies,

c. the electricity grid, in the case electricity is used by the project, and

d. the households where the end users of safe water provided by the project are located.

The project will introduce zero-energy water filtration technology which will displace the use of woody fuels traditionally used to treat drinking water. The water filtration system requires no energy input or consumables.

Therefore, for this VPA, the project boundary is the physical, geographical sites of the zero-greenhouse gas emitting technologies, which is the geographical location of the households where the end users of safe water provided by project are located.

The sources and gases included in the project boundary are described in the below table.

Source		GHGs	Included?	Justification/ Explanation
Baseline scenario	Emissions from wood fuels/fossil fuels utilized for obtaining safe drinking water displaced due to project activity.	CO_2	Yes	Major source of emissions
		CH_4	Yes	Minor source of emission
		N_2O	Yes	Minor source of emission
Project scenario	Emissions from electricity/fossil fuels for operating project water supply/treatment technology	CO_2	No	Project activity does not involve consumption of fossil fuels or electricity therefore no CO_2 emissions are generated
		CH_4	No	Excluded for simplification

		N_2O	No	Excluded for simplification

B.4. Establishment and description of baseline scenario

>>

Under the applied methodology for emission reduction from safe drinking water supply-version 1.0, the project's objective is to reduce or avoid GHG emissions from boiling unsafe drinking water in the baseline and to supply drinking water that is safe for consumption when it enters the project households.

As per para 3.4.1 of the methodology, for users that boil unsafe water for drinking in the pre-project scenario, the general baseline scenario is that users would have boiled water for drinking in the absence of the project activity. The target population for this VPA are all users of either three stone fired wood stove or traditional biomass cookstove with less than 10% efficiency. The biomass used as fuel for cooking shall be ascertained for calculating baseline emissions.

As per para 3.4.3 of the methodology, for household end-users currently drinking unsafe water, the principles of suppressed demand are applied, such that the general baseline scenario is assumed to be that users would have boiled water for drinking in the absence of the project activity. In line with the paragraph 3.4.2 of the applied methodology, for the case of end-users currently drinking unsafe water because e.g. energy poverty barriers result in less than the minimum required amount of safe drinking water, the principles of suppressed demand are applied and the baseline is set as a proxy technology (water boiling of an adequate quantity of drinking water) based on the standard of living achieved by peers (adequate supply of safe drinking water). Projects applying the suppressed demand baseline shall take into account any general rules or guidelines for suppressed demand published by the Gold Standard at the time of registration and crediting period renewal, as applicable.

Selection and justification of baseline scenario:

A baseline survey has been carried out to document the drinking water sources and/or treatment technologies available and used in the project boundary, the baseline stove or water boiling technologies and technologies' thermal efficiency used in the project

boundary and the baseline cooking fuels used for water boiling in the project boundary [9]. As per the survey,

- The main source of water is Surface water (river, stream, canal, lake, pond etc.)
- Majority of the population does not use any method to treat water
- The only treatment method used is boiling unsafe water
- Baseline stove is traditional three stone cookstove using non-renewable biomass

Baseline Survey Procedure

- In line with the applied methodology "Emission reductions from Safe Drinking Water Supply v.1.0" the section 4.2.3 prescribes that "When a baseline and project survey is used the following sample size guidelines should be applied, unless otherwise stated for specific parameters:

Group size	Minimum sample size
<300	30 or population size, whichever is smaller
300 to 1000	10% of group size
>1000	100

- Total number of samples considered under the baseline study is 114, which fulfills this minimum required sample size of 100 as per the table above. Thus, a total of 114 households located within western region of Uganda (project boundary) were selected for Baseline survey. Literature review was done to understand the demographics of the country for which recognized journals/articles and Census data was used. Accessibility and local authorities' permission were the basis for selecting a parish/zone. Local authorities and chiefs were consulted throughout the process to obtain their consent and support the sampling methods. The survey employed simple random sampling approach to randomly choose areas/villages

[9] Detailed baseline sample survey result and forms have been submitted to the GS VVB

within the districts. Random sampling also ensured that the results captured the diversity of the communities which represent commonly observed fuel choices. The Baseline survey was conducted on 31st January 2022 at the respondents' households to ensure where the respondent lives and maintain the integrity of the random selection of interviewees. The survey was done in Swahili language which is the national language in the host country.

Baseline survey results

The baseline surveys results showed that 93% (106HH/114HH) of the Households surveyed in the western region have been drinking unsafe water i.e. collecting water from unimproved sources after covering an average distance of more than 30 mins by either boiling it using traditional cookstoves or drinking the collected water without any treatment. While 7% (8HH/114HH) were collecting water from improved water sources like piped supply.

Sources of water	**Households**	**Percentage**
Piped into dwelling	8	7%
Surface water (river, streams, canal)	91	79.8%
Unprotected well	15	13.2%
Total	**114**	**100%**

Sources of water	**Households**	**Percentage**
Improved sources	8	7%
Unimproved sources	106	93%
Total	114	100%

Practices of boiling water or drinking unsafe water

The percentage of households who are available of safe drinking water from improved sources before project activity is 7% (8HH/114HH). However, 62.5% (5HH/8HH) of the households still boiled water before drinking. These households upon asking the reason for treatment didn't believe the source water was safe for direct consumption.

Further, 34% (36HH/106HH) of the households boil unsafe water from unimproved sources before drinking and 66% (70HH/106HH) drink unsafe water directly without any treatment. As per section 3.4.2 and 3.4.3 of the safe water methodology, these households would have boiled water in absence of project activity or as they move up the energy ladder (or improvement of standard of living).

Baseline Stove and fuel

Considering 106 HH who were supplied with unsafe water, 100% (106HH/106HH) boiled water before consumption (including suppressed demand users). 100% (36HH/36HH) of the households used three stone fired stove or mud stove using firewood for boiling.

Stove type	Fuel type	Households	Percentage
Three stone fired stove	Firewood	34	95%
Mud stove	Firewood	2	5%
Improved cookstove	Firewood	0	0%
Weighted Average		**36**	**100%**

Therefore, the baseline study shows users using traditional three-stone cookstoves using firewood to boil water in baseline scenario with majority relying on unimproved source of water.

Further as a cross check measure other sources as mentioned in the methodology for the parameter x_f and C_b were used.

x_f (Percentage of fuel f use in target population)

The Uganda National Household Survey, UNHS 2019/20[10] by Uganda Bureau of Statistics was referred which tabulates the percentage of woody biomass used in rural households of Uganda. The survey report shows the majority of households (87.6%) in rural regions of Uganda use firewood as cooking fuel while 9.2% use charcoal as cooking

[10] The Uganda National Household Survey Report 2019/2020 has been submitted to VVB

fuel and rest 3% comprises of other sources of energy (kerosene, electricity etc.). The baseline survey reported 100% firewood use in target area which is a conservative selection.

C_b (Proportion of project end-users who in the baseline were already using safe water, either from an improved water source, or from a water treatment method other than boiling)

The WHO/UNICEF Joint Monitoring Programme for water supply, sanitation and hygiene has published Progress on household Drinking water, sanitation and hygiene 2000-2020[11] according to which approximately 17% of Uganda population was reportedly using safely managed drinking water services in 2020. Since no source directly related to the target region of VPA was found, the above-mentioned source giving an average of both Urban and Rural regions of Uganda has been used as cross-check. Thus, the value from cross-check source is in line with the baseline survey results.

This VPA will supply/distribute Household water treatment (HWT) technologies to households in the project boundary to users boiling unsafe water for drinking and with no or limited access to safe drinking water, by leveraging resources provided by the PoA. Therefore, it is assumed that in the absence of the project activity, the baseline scenario would be the use of biomass cookstove for boiling unsafe water for drinking purposes as safe drinking water is not available to the end users.

It has been envisaged that VPA will adequately support the national as well as sectoral policies and circumstances of the host country by means of reducing deforestation rate with the help of Safe Water Supply (SWS) devices.

B.5. Demonstration of additionality

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[11] https://data.unicef.org/resources/progress-on-household-drinking-water-sanitation-and-hygiene-2000-2020/

Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	Community Services Activity Requirements (Version 1.2), paragraph 4.1.9: "Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of Design Certification: (a) Positive list (Annex B) i.e. All VPAs will be solely composed of isolated units (CEPs) where the users of the technology/ measure are households or communities or institutions and where each unit results in <= a. 600 MWh of thermal energy savings per year for ICS. b. 600 tCO_2 per year for HWT technologies (b) Projects located in LDC, SIDS, LLDC (c) Micro-scale projects"
Describe how the proposed VPA meets the criteria for deemed additionality.	Project activities under the VPA are solely composed of isolated units where the users of the HWT are households and where each unit results in GHG emission not exceeding 600 ton of CO_2e in any year of the crediting period and are located in a LDC[12].

[12] https://www.un.org/development/desa/dpad/least-developed-country-category/ldcs-at-a-glance.html

	Thus, the project activity meets the criteria (a) and (b) and is therefore deemed additional.

The below table shows the calculation for the water purifiers that will result in 3.26 tCO_2e emission reductions per year per water purifier which is less than 600 tCO_2e limit to prove the project is deemed additional.

Parameter	Description	Units	Value	Equations used
$SE_{w,b,y}$	Specific energy required to boil water	KJ/L	3608.3	SEw,b,y = 360.83/ηw
n_w	Efficiency of the stoves for baseline water boiling	%	10	Meth default for firewood traditional stoves
xf	Proportion of fuel f used in the baseline (fraction determined based on an energy basis)	%	100%	Baseline survey/Literature
$f_{NRB,b,i,y}$	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass	percentage	90	Calculated as per CDM Tool 30 ver 3.0
$EF_{p,i,CO2}$	CO2 emission factor of the fuel that is substituted or reduced	tCO2/TJ	112	Meth default IPCC value
$EF_{p,i,non\text{-}CO2}$	Non-CO2 emission factor of the fuel that is reduced	tCO2/TJ	9.46	Meth default IPCC value+F8
EF_b	Emission factor for the use of fuel to obtain safe water in the baseline	tCO2e/L	0.000398	$EFb = SEw,b,y * \Sigma(xf * (EFb,f,CO2 * fNRB,f,y + EFb,f,nonCO2)) f \div 10\text{^}9$
$U_{p,y}$	Cumulative usage rate for technologies in project scenario p in year y	%	100	Monitored
$N_{p,y}$	Number of premises type p with at least one	-	17,500	Monitored

	project technology in year y			
$DP_{p,y}$	Days the project technology is present for end-users in the premises p in year y		365	Monitored
$QPW_{hh,p,y}$	Volume of drinking water per premises p per day in year y (L)	L/HH/day	25.41	Calculated
QPW_p	Volume of drinking water per person per day for premises type p (L)	L	4.5	Pilot study
$HN_{p,y}$	Number of individuals per premises type p in year y		5.65	Literature
q_i	Capacity of the HWT individual project technology	L/h	5	Manufacture specifications
$t_{p,y}$	Usage time of the project technology by premises type p in year y	h/day	13.6	Pilot study
Q_y	Quantity of safe drinking water provided by the project in year y	L	162,287,213	$Qy = \sum Np,y \times Up,y \times QPWhh,p,y \times DPp,y$
C_b	Proportion of project end-users who in the baseline were already using a safe water supply that did not require boiling	%	7	Baseline survey
$X_{cleanboil,y}$	Proportion of project end-users that boil safe water in the project year y	%	0	Monitored
$M_{q,y}$	Modifier for the water quality in year y	Fraction	1	Monitored
Leakage emissions	Leakage for project scenario p in year	%	5%	Default
ER	Emission reductions	tCO2/year	57,044	$BE_y = EF_b \times (1 - C_b - X_{cleanboil,y}) \times Q_y \times M_{q,y}$ Calculated

ER per WPS	Emission reductions per filter	tCO2/year	**3.26**	

B.5.1. Prior Consideration

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As per 'Prior Consideration' required by GS Principles & Requirements para 4.1.50, "Regular projects are exempt from any kind of prior consideration of revenues from Gold Standard certification checks. Whereas, Retroactive VPAs with a project start date before or after the time of first submission of the PoA must submit the required documents for preliminary review within one year of its start date".

For this VPA the Local Stakeholder Consultation was done before the start date of the VPA therefore this being a regular project it is exempted from prior consideration timelines.

B.5.2. Ongoing Financial Need

>> Not applicable as this is not required at the time of design Certification.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact Indicator (Proposed or SDG Indicator)
13 Climate Action (mandatory)	13.2 Integrate climate change measures into national policies, planning and strategies	Emission Reductions

3 Good Health and Well-being	3.9 Reduce Illnesses and Death from Hazardous Chemicals and Pollution	Proportion of population reporting decrease in instances of illnesses and deaths from water pollution and indoor air pollution . Health quality improvement (qualitative assessment)
5: Gender Equality	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	Average time saving associated with cooking and fuel collection
6: Clean Water and Sanitation	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Number of households served with safely managed water services
7 Affordable and Clean Energy Target	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	No. of WPS operational at any time in the VPA
8: Decent Work and Economic Growth	8.5 Full Employment and Decent work with Equal Pay	Total no of jobs created (in distribution, Monitoring & Evaluation).

B.6.1. Explanation of methodological choices/approaches for estimating the SDG Impact

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The VPA includes distribution of water purification systems (WPS) with the aim to reduce greenhouse gas (GHG) emissions from the burning of non-renewable woody biomass for boiling water in Uganda.

Proposed approach to estimate SDG 13

The outcome of the SDG 13 (Climate Action) will be measured as reduced greenhouse gas emissions as tonnes of CO_2e applying the GS methodology Emission reductions from Safe Drinking water supply v 1.0. The SDG 13 outcome will be certified as "Certified SDG 13 Impacts" allowing the generation of carbon credits (GS VERs). The overall GHG reductions achieved by the project activity in year y are calculated as follows:

Each VPA shall determine the applicable baseline scenario for fuel, technology and end-user group as applicable.

Baseline Scenario Fuel Consumption Calculation

The total safe water consumed in the project scenario is the amount of safe water supplied by the project technology and consumed in the project scenario. This total is assumed to be equivalent to the unsafe water boiled in the baseline.

Baseline emission calculation

The baseline emission shall be calculated as

$$BE_y = EF_b \times (1 - C_b - X_{cleanboil,y}) \times Q_y \times M_{q,y}$$

Where:

BE_y	=	Baseline emissions from the use of fuel to obtain safe water in the baseline (tCO_2e)
C_b	=	Proportion of project end-users who in the baseline were already using a safe water supply that did not require boiling (%)
$X_{cleanboil,y}$	=	Proportion of project end-users that boil safe water in the project year y (%)
Q_y	=	Quantity of safe drinking water provided by the project in year y (L)
$M_{q,y}$	=	Modifier for the water quality in year y

The baseline emission factor shall be calculated as

$$EF_b = SE_{w,b,y} * \sum(xf * (EF_{b,f,CO2} * f_{NRB,f,y} + EF_{b,f,nonCO2})) \; f \div 10^9$$

Where:

EF_b	=	Emission factor for the use of fuel to obtain safe water in the baseline (tCO2e/L)
$SE_{w,b,y}$	=	Specific energy required to boil water (kJ/L), to be calculated as per the paragraph below
x_f	=	Proportion of fuel f used in the baseline (fraction determined based on an energy basis)

$EF_{b,f,CO2}$	=	CO2 emission factor from use of fuel f (tCO2/TJ)
$EF_{b,f,nonCO2}$	=	Non-CO2 emission factor arising from use of fuel f, when the baseline fuel f is biomass or charcoal (tCO2e/TJ). This parameter is omitted when f is a fossil fuel.
$f_{NRB,f,y}$	=	Fractional non-renewability status of woody biomass fuel during year y (fraction). For biomass, it is the fraction of woody biomass that can be established as non-renewable. This parameter is omitted when f is a fossil fuel.
f	=	Index for baseline fuel types

The specific energy required to boil water using the baseline technology (SEw,b,y) is determined as follows, by calculating the energy input required to obtain 1 L of boiling water, including boiling and vaporization losses, taking into account default or measured stove efficiency.

$SE_{w,b,y}$ = 360.83/ηwb

Where:

360.83 = Default amount of energy required to obtain 1 L of water after 5 minutes of boiling from a first principles approach kJ/l

ηwb = Efficiency of the stoves for baseline water boiling (%). Weighted average of baseline stove types.

The quantity of safe drinking water provided by the project Qy is calculated using following method (for HWT)

$$Q_y = \sum N_{p,y} \times U_{p,y} \times QPW_{hh,p,y} \times DP_{p,y\ p}$$

Where:

Np,y	=	Number of premises type p with at least one project technology in year y
Up,y	=	Usage rate of the project technology by premises type p during year y (%)
$QPW_{hh,p,y}$	=	Volume of drinking water per premises p per day in year y (L)
$DP_{p,y}$	=	Days the project technology is present for end-users in the premises p in year y

The volume of drinking water per premises per day is determined by considering whether the capacity of the project device is sufficient to provide at least the default amount of drinking water, as follows:

$QPWhh,p,y$ = min (($qi \times tp,y \times DNp,y$), ($QPWp \times HNp,y$))

Where:

qi	=	Capacity of the HWT individual project technology (L/h)
tp,y	=	Usage time of the project technology by premises type p in year y (h/day)
DNp,y	=	Average number of individual project technologies in each project premises type p in year y
HNp,y	=	Number of individuals per premises type p (e.g. household, school) in year y
$QPWp$	=	Volume of drinking water per person per day for premises type p (L). Apply the default value or monitored value through water consumption field tests in the project scenario, capped at 5.5 L per person per day.

Project Scenario Fuel Consumption Calculation

Since the water purifiers do not use fossil fuel or electricity for filtration the project emissions would be zero.

PEy = Project emissions in year y (t CO_2e/yr) = 0

Leakage Emissions

Where relevant, leakage relating to the non-renewable woody biomass shall be assessed as follows. Other types of leakage are excluded for simplification. Leakage emissions, LE_y, shall be calculated as follows:

The project developer has evaluated, ex-ante, the following potential sources of leakage and provide an evidence-based description and preliminary quantification of each potential source and its relevance for the project:

a. Since the non-renewable biomass is available in abundance in the project geographical area (as evident from fNRB), it is highly unlikely that the use of non-renewable biomass increases among the members of the population who do not participate in the project, and were previously using lower emitting energy sources.

b. The purpose of the project is reducing the use of NRB otherwise used in cookstoves for boiling water and instead use water purifier which does not require any NRB or any other fuel for its operations. So, the project would actually help in relatively increasing the NRB fraction in that area. Therefore, the condition that the project involves reducing the NRB fraction within an area where other GHG mitigation project activities account for NRB fraction in their baseline scenario is not applicable, hence no leakage emissions.

c. The project population is in the area where the annual average temperature is above 20°C. Hence there is no requirement to compensate for loss of the space heating effect

of water boiling by adopting some other form of space heating or by retaining some baseline wood fuel-burning practices.

Thus, the leakage emissions can be considered as nil and can be ignored for the project activity.

Further as per section 3.8.3 of the methodology, "If the ex-ante evaluation shows that leakage emissions are less than 5% of total emission reductions, then no monitoring is needed, and emission reductions simply shall be adjusted 5% down." Therefore, the Emission reductions have been adjusted by 5% to account for leakage emissions.

Emission Reductions

The Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (t CO_2e/yr)

BE_y = Baseline emissions in year y (t CO_2e/yr)

PE_y = Project emissions in year y (t CO_2e/yr)

LE_y = Leakage emissions in year y (t CO_2e/yr)

The other SDGs impacts of this VPA (SDG 3, SDG 5, SDG 6, SDG 7, SDG 8) will be estimated qualitatively.

Approach to estimate SDG 3

The contribution of the VPA to SDG 3 will be confirmed through a random sample survey (in conjunction with the annual monitoring survey for the project) with a representative number of households. Households will be asked to confirm if there has been reduction in number of family members visiting the medical facilities for pollution-related inconveniences like itchy eyes and breathing problems and water borne diseases in the project scenario as compared to the baseline scenario. In case that households confirm, the same can be used to confirm that the project contributes positively to SDG 3.

Baseline scenario: In baseline situation, there is risk of waterborne disease; also smoke level from the combustion of fuelwood mostly in open fire practice. Therefore, baseline outcome benefit is zero.

Project situation: In project situation, the number of people accessing SPOUTS WPS that causes zero emission compared to baseline fuelwood combustion. The Purifaaya also helps reducing waterborne diseases such as cholera, diarrhoea, typhoid etc. Also, due to avoidance of fuelwood burning for water boiling, there will be reduction in kitchen

smoke, as a result improved indoor air quality directly benefits the health of the women and children at house.

Approach to estimate SDG 5

The contribution of the VPA to SDG 5 will be confirmed through a random sample survey (in conjunction with the annual monitoring survey for the project) with a representative number of households. Households will be asked to confirm if there has been reduction in time spent on domestic work by women including any travel required to collect water or fuel in the project scenario as compared to the baseline scenario. In case that households confirm, the same can be used to confirm that the project contributes positively to SDG 5.

Baseline scenario: In baseline situation, there is more involvement of time and efforts in the process of collecting fuelwood, boiling water under inefficient cooking methods; hence no residual time for any other activities. Also, water boiling is mostly a part of kitchen practice, hence no shared responsibility within the household. Therefore, baseline outcome benefit is zero.

Project situation: In project situation, the number of people accessing Purifaaya will realize increasing time availability for female members of households to empower themselves. Thus, the project activity under the VPAs will allow saving in time, especially for women since there is no need for boiling of water and in some cases collection of firewood anymore which can be used for income-generating activities.

SDG5 contribution = Average saving in time per week

Approach to estimate SDG 6

This VPA will help in providing equitable access to safe and affordable drinking water for the communities. The benefit will be estimated from Number of households served with safely managed water services.

Baseline scenario: In baseline situation, there is risk of waterborne disease, poor sanitation and hygiene conditions due to consumption of existing unsafe water. Therefore, baseline outcome benefit is zero.

Project situation: Number of households served with satisfactory level of safe water can be calculated as follows:

SDG6 contribution =Np,y*(1-Cb)*Up,y*Mq,y

The net benefit of SDG6 = Project outcome of SDG6 – Baseline outcome of SDG6

Approach to estimate SDG 7

The contribution of the VPA to SDG 7 will be confirmed through the number of WPS distributed and in operation.

Approach to estimate SDG 8

The contribution of the VPA to SDG 8 will be confirmed by the number of jobs or new entrepreneurship activities created due to the project.

B.6.2. Data and parameters fixed ex ante

SDG13

Data/parameter	Project Technology Description
Unit	N/A
Description	The following is the detailed description of the project technology: HWT: Manufacturer- SPOUTS International, Technology type- Ceramic water filter Product name- Purifaaya, Model-Purifaaya Regular The Purifaaya models complies with US 201: 2008 Drinking water Standard class 1 and its performance level as per International scheme to evaluate household water treatment technologies by WHO is 1 star[13].
Source of data	Manufacturer's specifications Performance assessment of the ceramic water filter by National Water Quality Reference Laboratory
Value(s) applied	Please refer to Section A.3

[13] https://www.who.int/tools/international-scheme-to-evaluate-household-water-treatment-technologies/products-evaluated

Choice of data or Measurement methods and procedures	-
Purpose of data	-
Additional comment	This parameter is fixed ex-ante & shall be updated at CP renewal.

Data/parameter	Regulatory Framework for safe water supply
Unit	N/A
Description	The Uganda standard, US EAS 12:2014, potable water – Specification specifies the Microbiological requirements, Chemical and physical limits for quality of drinking water supplies.
Source of data	The Uganda standard, US EAS 12:2014, potable water - Specification https://ia601901.us.archive.org/10/items/us.201.2008/us.201.2008.html
Value(s) applied	Following gives the maximum Microbiological requirements for drinking water The project doesn't conflict with host country law. Please refer to Section B.4

	Allowable compliance limits and contribution of samples (%)		
	Minimum 95%	Maximum of 4% of samples	Maximum of 1% of samples
Coliform count per 100 ml	0	10	100
E. Coli (faecal coliform) count per 100 ml	0	0	1
Note: For each individual sample coliform should be estimated in terms of the "Most Probable Number" in 100 ml of drinking water, which is often designated as MPN index or Coli index. Occurrence of E. coli (faecal coli) in consecutive samples, in less than 100 ml of drinking water is an indication of faecal pollution and hence a dangerous situation needing urgent, rectification.			

Choice of data or Measurement methods and procedures	SPOUTS shall carry out annual tests of the filtered water from the purifiers which confirms to the The Uganda Standard for potable water.
Purpose of data	-
Additional comment	This parameter is fixed Ex-ante & shall be updated at CP renewal.

Data/parameter	Water sources in the project boundary
Unit	N/A
Description	The water sources in the project boundary are identified and if classified to be used for drinking water, then further classified as improved and unimproved water source.
Source of data	Baseline study
Value(s) applied	As per the baseline survey the water sources in project boundary are: • Surface water • Unprotected dug wells • Piped water
Choice of data or Measurement methods and procedures	A baseline survey is carried out as detailed in section B.4
Purpose of data	For parameter C_b calculation
Additional comment	This parameter is fixed ex-ante & shall be updated at CP renewal.

Data/parameter	Stove technologies used in the project boundary
Unit	-
Description	The stove type/technology used in premises in the geographical area of the project is mainly, Three-stone fire

	or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system
Source of data	Baseline survey
Value(s) applied	Three stone fire cookstove using woody biomass-100%
Choice of data or Measurement methods and procedures	Baseline survey was conducted as detailed in section B.4. which showed that majority of the population is using traditional three stone cookstoves using woody biomass. The details of the sampling plan followed are given in section B 7.2
Purpose of data	Calculation of baseline scenario
Additional comment	This parameter is fixed ex-ante & shall be updated at CP renewal.

Data/parameter	Expected technical life of project technology
Unit	Years
Description	The expected technical life of an individual project technology is defined in section A.3 of the VPA-DD. The details include the life of different product types used.
Source of data	Manufacturer specifications
Value(s) applied	8 years[14]
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of project life

[14] As specified by the manufacturer, the product's life may exceed 8 years if maintained properly.

Additional comment	In cases where the life span of the water purifier technologies is shorter than the crediting period of the PoA, the project proponent shall ensure that the units are replaced in order to continue claiming emission reductions. SPOUTS has systems in place to ensure that end users have access to replacement filter parts of comparable quality. The technology/equipment will be replaced prior to the life span so that end users can access the same level of water purification. If no replacement or retrofitting is provided, emission reduction claims are limited to the expected technical life.

Data/parameter	x_f
Unit	Percentage of fuel f use in target population
Description	The proportion of each different cooking fuel f used in the project boundary by end-users: - % among the target population if single fuel is used for water boiling. If the project covers different types of end-user premises (e.g. households, schools), then the fuels used in the geographical area of the project by the same types of end-users are to be determined for each end-user premises type.
Source of data	Baseline survey
Value(s) applied	Wood- 100%
Choice of data or Measurement methods and procedures	A baseline survey as detailed in section B.4 and the sampling plan using steps under section B 7.2 are followed.
Purpose of data	Calculation of baseline scenario
Additional comment	The percentages applied shall be cross-checked against at least one other source on the list. For cross-check purposes, sources applied may be up to 5 years old. Further, cross-check with older sources may be used provided they provide conservative results. In this project the cross-check document is The Uganda National Household Survey Report 2019/2020. This document shows that approx. 88% residences in rural areas use

	firewood for cooking purposes[15], 9% households use charcoal while rest use kerosene, LPG fuels etc. The use of 100% firewood in project baseline is in line with the cross-check source. This parameter is fixed Ex-ante & shall be updated at CP renewal.

Data/parameter	$EF_{b,f,CO2}$
Unit	tCO_2/TJ
Description	CO_2 emission factor arising from use of fuels in baseline Scenario
Source of data	IPCC defaults for wood and charcoal, the following defaults derived from the IPCC shall be applied: Wood: 112 tCO2/TJ Charcoal: 165.22 tCO2/TJ (includes charcoal production emissions)
Value(s) applied	Wood: 112
Choice of data or Measurement methods and procedures	Default methodology value for fuelwood is applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter	$EF_{b,f,non-CO2}$
Unit	tCO_{2e}/TJ
Description	Non-CO_2 emission factor from use of fuels, in case the baseline fuel is biomass or charcoal

[15] https://opendata-analytics.org/2021/08/ubos-national-house-survey-2020/

Source of data	IPCC defaults for woody biomass, the following defaults derived from the IPCC shall be applied: AR5 GWP - Wood: 9.46 tCO2e/TJ - Charcoal: 44.83 tCO2e/TJ (includes production emissions of CH4 and N2O)
Value(s) applied	Wood: 9.46
Choice of data or Measurement methods and procedures	Default methodology value for biomass or charcoal is applied
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter	ηwb
Unit	%
Description	Weighted average efficiency of the baseline water boiling devices. Calculate the weighted average of the water boiling efficiency in the project boundary using the proportion of different stove types used and the stove efficiencies.
Source of data	As per methodology Emission Reductions from Safe drinking water supply version 1.0, the following default values may be applied to calculate the weighted average of the water boiling efficiency in the project boundary: - Three-stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system, that is without either a grate or a chimney: default efficiency 10%. – Other conventional systems using woody biomass: default efficiency 20%. - Improved cookstoves: manufacturer specification, or if not available, default efficiency 30%.
Value(s) applied	10%

Choice of data or Measurement methods and procedures	Baseline survey showed that the cookstove used in the baseline scenario is three stone fired cookstove.
Purpose of data	Calculation of Baseline scenario
Additional comment	This parameter is fixed Ex-ante & shall be updated at CP renewal.

Data/parameter	C_b
Unit	Percentage
Description	Proportion of project end-users who in the baseline were already using safe water, either from an improved water source, or from a water treatment method other than boiling
Source of data	Baseline survey
Value(s) applied	7%
Choice of data or Measurement methods and procedures	The percentage of households who avail safe drinking water before project activity is 7% (8HH/114HH) which includes 62.5% (5HH/8HH) HHs boiling water whereas 37.5% (3HH/8HH) drink unsafe water directly without any treatment.
Purpose of data	Calculation of baseline scenario
Additional comment	The safe water sources and percentages shall be consistent with the information reported for parameter Water sources in the project boundary (SWDS 5). According to the applied methodology, the percentages applied shall be cross-checked against at least one other source on the list. For cross-check purposes, sources applied may be up to 5 years old. In this project the cross-check document is WHO/UNICEF Joint Monitoring Programme for Progress on Household Drinking Water, Sanitation and Hygiene, 2000-2020. The report shows only 17% of the population in Uganda has access to safely managed drinking water services. The literature available is for entire Uganda which includes both rural and urban

	populations. Therefore, use of 7% for rural population in western Uganda based on baseline survey is appropriate. This parameter is fixed Ex-ante & shall be updated at CP renewal.

Data/parameter	q_i
Unit	Litres per hour
Description	Capacity of the household or institutional water treatment technology
Source of data	Manufacturer specifications/ Design specifications
Value(s) applied	Purifaaya Regular- 5 (average of 4.5-5.5)
Choice of data or Measurement methods and procedures	-
Purpose of data	Calculation of baseline scenario
Additional comment	This depends on water filtration device model and fixed for each model introduced. The capacity of the water treatment technology will help in calculating the amount of water treated. This parameter is fixed Ex-ante & shall be updated at CP renewal.

Data/parameter	$f_{NRB,f,y}$
Unit	Percentage
Description	Fractional non-renewability status of woody biomass fuel during year y, in case the baseline fuel is biomass
Source of data	Assessment based on CDM Methodological tool 30: Calculation of the fraction of non-renewable biomass, Version 03.0
Value(s) applied	90%

Choice of data or Measurement methods and procedures	Assessment based on CDM Methodological tool 30: Calculation of the fraction of non-renewable biomass, Version 03.0 Other reference documents: 2019 Refinement to IPCC 2006 Global Forest Resources Assessment 2020 Uganda Global Forest Resources Assessment 2015 Forest Product Conversion Factors 2020 FAOSTAT on Forest Production and Trade (http://www.fao.org/faostat/en/#data/FO)
Purpose of data	Calculation of baseline scenario
Additional comment	The f_{NRB} value will remain fixed during the crediting period.

B.6.3. Ex ante estimation of SDG Impact

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The detailed ex-ante calculations of estimated SDG Impacts are provided in a separate excel calculation sheet.

Calculation of SDG 13

Baseline emission calculation

The baseline emission shall be calculated as

$BE_y = EF_b \times (1 - C_b - X_{cleanboil,y}) \times Q_y \times M_{q,y}$

= 0.000398 * (1-0.07-0) * 162,287,213 * 1

= 60,047 tCO_2e/yr

$EF_b = SE_{w,b,y} * \sum(xf * (EF_{b,f,CO2} * f_{NRB,f,y} + EF_{b,f,nonCO2})) f \div 10^9$

= 3608.3*100%*(112*0.90+9.46) /10^9

= 0.000398

$SE_{w,b,y}$ = 360.83/η_{wb}

=360.83/0.1

$Q_y = \sum N_{p,y} \times U_{p,y} \times QPW_{hh,p,y} \times DP_{p,y}$

= 17500*1 * 25.41 * 365 = 162,287,213

$QPW_{hh,p,y}$ = min $((qi \times tp,y \times DNp,y), (QPWp \times HNp,y))$

= min (5* 13.57 *1), (4.5 * 5.65) = 25.41 L/HH

There are no Project emissions but 5% default leakage emissions shall be accounted for this VPA.

The summary of SDG 13 calculation has been provided in below table and the detailed ex-ante calculations of estimated ex-ante emission reductions related to outcomes of SDG 13 are provided in a separate excel calculation sheet.

Parameter	Description	Units	Value	Equations used
$SE_{w,b,y}$	Specific energy required to boil water	KJ/L	3608.3	SEw,b,y = 360.83/ηw
nw	Efficiency of the stoves for baseline water boiling	%	10	Meth default for firewood traditional stoves
xf	Proportion of fuel f used in the baseline (fraction determined based on an energy basis)	%	100%	Baseline survey/Literature
fNRB,b,i,y	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass	percentage	90	Calculated as per CDM Tool 30 ver 3.0
$EF_{p,i,CO2}$	CO2 emission factor of the fuel that is substituted or reduced	tCO2/TJ	112	Meth default IPCC value
$EF_{p,i,non-CO2}$	Non-CO2 emission factor of the fuel that is reduced	tCO2/TJ	9.46	Meth default IPCC value
EFb	Emission factor for the use of fuel to obtain safe water in the baseline	(tCO2e/L	0.000398	$EFb = SEw,b,y * \Sigma(xf * (EFb,f,CO2 * fNRB,f,y + EFb,f,nonCO2)) f \div 10^9$
Up,y	Cumulative usage rate for technologies in project scenario p in year y	%	100	Monitored
$N_{p,y}$	Number of premises type p with at least one project technology in year y	-	17,500	Monitored
DPp,y	Days the project technology is present for end-users in the premises p in year y		365	Monitored

QPWhh,p,y	Volume of drinking water per premises p per day in year y (L)	L/HH/day	25.41	Calculated
QPWp	Volume of drinking water per person per day for premises type p (L)	L	4.5	Based on pilot study/Monitored ex-post
HNp,y	Number of individuals per premises type p in year y		5.65	Literature
qi	Capacity of the HWT individual project technology	L/h	5	Manufacture specifications
tp,y	Usage time of the project technology by premises type p in year y	h/day	13.57	Based on pilot study
Qy	Quantity of safe drinking water provided by the project in year y	L	162, 287,213	$Qy = \sum Np,y \times Up,y \times QPWhh,p,y \times DPp,y$
Cb	Proportion of project end-users who in the baseline were already using a safe water supply that did not require boiling	%	7	Baseline survey
Xcleanboil,y	Proportion of project end-users that boil safe water in the project year y	%	0%	Monitored
Mq,y	Modifier for the water quality in year y	Fraction	1	Monitored
Leakage emissions	Leakage for project scenario p in year	tCO2/year	5%	Methodology Default
ER	Emission reductions	tCO2/yr	**57,044**	$BE_y = EF_b \times (1 - C_b - X_{cleanboil,y}) \times Q_y \times M_{q,y}$
ER	Emissions reductions per filter	tCO2/yr	**3.26**	

B.6.4. Summary of ex ante estimates of each SDG outcome

SDG 13

Year	Baseline estimate	Project estimate	Net benefit
19/07/2022- 18/07/2023	57,044	0	57,044
19/07/2023- 18/07/2024	57,044	0	57,044
19/07/2024- 18/07/2025	57,044	0	57,044
19/07/2025- 18/07/2026	57,044	0	57,044
19/07/2026- 18/07/2027	57,044	0	57,044
Total	**285,220**	**0**	**285,220**

Total number of crediting years	5		
Annual average over the crediting period	57,044	0	57,044

SDG 3

Number of people accessing the water purification systems in project activity who report reduction in number of family members visiting the medical facilities for pollution-related inconveniences like itchy eyes and breathing problems and water borne diseases = 80%

SDG 5

Average time saving associated with cooking and fuel collection: 1.3 hours/week.

SDG 6

For SDG6, the monitoring indicator is Number of households served with satisfactory level of safe water and the calculation formula is as follows:

The Project outcome of SDG 6 = Np,y*(1-Cb)*Up,y*Mq,y

Where,

$N_{p,y}$= 17,500

Cb = 7%

$U_{p,y}$ = 100%

$M_{q,y}$ = 1

The Number of households served with satisfactory level of safe water of outcomes for SDG 6 are as shown in the following table.

Year	Project outcome of SDG 6
19/07/2022- 18/07/2023	16,275
19/07/2023- 18/07/2024	16,275
19/07/2024- 18/07/2025	16,275
19/07/2025- 18/07/2026	16,275
19/07/2026- 18/07/2027	16,275

Total	**81,375**
Annual Average	16,275

SDG 7

Estimated no. of operational WPS in the VPA: 17,500

SDG 8

Estimated Annual number of jobs created: 16

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 13

Data/parameter	$X_{cleanboil,y}$
Unit	Percentage
Description	Proportion of project end-users that boil safe (treated, or from safe supply) water after installation of project technology in year y.
Source of data	Project survey
Value(s) applied	0 (ex-ante estimation)
Measurement methods and procedures	A project Survey shall be carried out to determine the value using sampling plan as detailed in section B.7.2
Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Calculation of baseline emissions
Additional comment	For sampling, follow section B 7.2

Data/parameter	$M_{q,y}$
Unit	Fraction

Description	Ongoing water quality indicated as the fraction of the samples that pass microbial quality standard requirements specified in relevant microbial quality standard for drinking water of the host country. In case a national standard is not available, the water quality shall comply with WHO Guideline values for verification of microbial quality i.e., all water directly intended for drinking must not have detectable E.Coli in any 100 ml sample i.e., less than 1 Colony Forming Unit (CFU) of E.Coli /100 ml
Source of data	Testing of water at the exits of the treatment technology for a representative sample of end-users
Value(s) applied	1
Measurement methods and procedures	-
Monitoring Frequency	Annual sampling, and the first round of testing shall be conducted at least after six months from the start date.
QA/QC Procedures	1. Laboratories used for water quality testing must be approved by local health authorities and/or have quality accreditation; and 2. The laboratory used must demonstrate that it has an adequate quality management plan in place which addresses both quality assurance and quality control test procedures. 3. Field testing kits also are eligible, e.g. based on Colony Forming Unit method or Most Probable Number method. To use the field testing kits the project shall meet the following requirements: a. Testing kits must be approved by national agency or meet standards set by relevant international organization e.g. US-EPA, and b. Testing kits shall be tested for its accuracy and robustness prior to application for project level monitoring, whereby local or accredited laboratory shall conduct water quality tests using testing kits and a relevant ISO standard or an equivalent standard, in parallel with field testing kits. 4. Follow 4.2 |General requirements for sampling of the methodology. The sampling results shall satisfy at minimum the 90/10 rule.
Purpose of data	To meet claims under SDG 6.1.1. Level of Service and Project contributions: Water quality

Additional comment	If the proportion of samples not meeting Safe Drinking Water Quality Standards exceeds a threshold, no emission reductions will be claimed for the corresponding monitoring period. Thresholds: - Project or VPA year 1: 20% - Project or VPA year 2: 15% - Project or VPA year 3 or above: 10% When the crediting period is renewed, the year number count continues, i.e. the second crediting period would encompass year 6, year 7, year 8, etc. Additionally, when the threshold is exceeded, the project shall provide an explanation for why this occurred and provide a remediation plan.

Data/parameter	QPW_P
Unit	Liters/person/day
Description	Volume of drinking water per person per day for premises type p
Source of data	Option 1. Water Consumption Field Tests. As per methodological tool: Emission reductions from Safe Drinking Water Supply version 1.0
Value(s) applied	4.5
Measurement methods and procedures	For ex-ante estimations a value of 4.5L/person/day has been taken based on pilot study data. For ex-post ER estimation Water Consumption Field Tests will be done. In all cases, the value is capped at 5.5 L/person/day. The water consumption field test (WCFT) measures project-supplied clean water consumption volumes. The WCFT is conducted with end users representative of the project scenario target population and currently using the project technology. The WCFT must be designed to ensure that monitoring is representative of typical technology use practices and that: - it is transparent and can easily be replicated, - it is evidently conservative, - the sample is randomly selected so as to not introduce a material bias, and - the impact of daily and seasonal variations on the expected average water consumption is accounted for The WCFT must be conducted over 3 days, not including weekends, and averaged value (l/person/day) value should be determined after excluding outliers.

	It must be made explicit to the households that they must behave and consume water normally, reflecting typical daily water consumption pattern. Any sampling methods can be used, provided that the sample is selected randomly. Minimum sample size for HWT is 30. For minimum sample size requirements for different sampling approach Guidelines for sampling and surveys for CDM project activities and programme of activities.
Monitoring Frequency	Every two years
QA/QC Procedures	-
Purpose of data	Calculation of baseline scenario
Additional comment	-

Data/parameter	Replacement of filter pot
Unit	-
Description	Filter pot replacement of the Purifaaya regular water filter
Source of data	SPOUTS database
Value(s) applied	-
Measurement methods and procedures	The project implementer (SPOUTS) has maintained a database regarding the date of distribution of water filters to different households of western Uganda. SPOUTS shall replace the water filter every 4 years in order to ensure that the end-users are supplied with clean drinking water beyond 4 years without disruption.
Monitoring Frequency	Every 4 years
QA/QC Procedures	-
Purpose of data	Ensure that end-users are provided with clean drinking water
Additional comment	-

Data/parameter	$N_{p,y}$

Unit	Number
Description	Accumulated number of premises type p with at least one individual project technology in year y
Source of data	Sales or distribution records
Value(s) applied	17,500
Measurement methods and procedures	The no. of units distributed shall be recorded under HWT. Ex-ante it is assumed that each household shall receive 1 project device
Monitoring Frequency	Annual
QA/QC Procedures	Sales or distribution records to include i. Date of sale/distribution ii. Geographic area of sale iii. Model/type of project technology sold iv. Quantity of project technologies sold Name and telephone number, and address (if available) or other traceable indicator of premises identity and location for all end users.
Purpose of data	Calculation of baseline emissions
Additional comment	Units shall not be counted in $N_{p,y}$ after the end of their technical life, unless this is addressed by the measures to manage the cases where the expected technical life of the project technology is shorter than the crediting period, namely replacement or retrofit as described in the parameter SDWS 7.

Data/parameter	$U_{p,y}$
Unit	Percentage
Description	Usage rate of the project technology by premises type p during year y
Source of data	Project Survey of the premises using a project technology to determine the usage rate of the project technology during the year.
Value(s) applied	100% (Assumed for ex-ante calculation)

Measurement methods and procedures	Option 1: In-person survey of project premises. Households that show at least once-in-two-days use may be counted as users. The resulting fraction is multiplied by 100% to get Up,y. Where project technologies of different ages are being credited, the sample shall be representative of the distribution of project technology ages. The minimum sample size for HWT - for individual technology age group shall be minimum 30 household. .
Monitoring Frequency	Annual
QA/QC Procedures	Where a WCFT is undertaken to determine QPW_p, this may be used to cross check the usage percentage.
Purpose of data	Calculation of baseline emissions
Additional comment	The usage survey provides a single usage parameter that is representative for project technologies in the total sales record.

Data/parameter	$DP_{p,y}$
Unit	Days
Description	Average days the project technology is present for end-users in the premises p in year y
Source of data	Sales or distribution records.
Value(s) applied	365
Measurement methods and procedures	Ex-ante it is assumed to be present 365 days. However ex-post, based on the sales or distribution records of "Date of sale/distribution" and ex-ante parameter "Expected technical life of project technology," it shall be determined for each project device how many days of the 365 days of the year it was in the premises and within its technical life. The average for all the project technology by premises type p shall be calculated to obtain this parameter.
Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Calculation of baseline emissions

Additional comment	-

Data/parameter	$t_{p,y}$
Unit	Hours per day
Description	Usage time of the project technology by premises type p in year y
Source of data	Project survey
Value(s) applied	13.6 (ex-ante estimation)
Measurement methods and procedures	Determined via project survey using Option 2. Interview survey performed by telephone or messaging (e.g. text, app) following general requirement of sampling as per section 7.2 Ex-ante, a pilot study value has been considered
Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Calculation of baseline emissions
Additional comment	-

Data/parameter	$DN_{p,y}$
Unit	Number
Description	Average number of individual project technologies in each project premises type p in year y
Source of data	Sales or distribution records.
Value(s) applied	HH-1
Measurement methods and procedures	Based on the sales or distribution records of "Quantity of project technologies sold" and identifying information of buyer/recipient, the average number of project devices per premises are calculated. Ex-ante it is assumed that only 1 device will be sold per household. If the project covers different types of end-users (e.g. households), the average number must be determined per premises type p.

Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Estimation of CO_2e emission reductions
Additional comment	Applies to HWT project

Data/parameter	$HN_{p,y}$
Unit	-
Description	Number of individuals per premises type p in the project boundary in year y
Source of data	Published Literature[16]
Value(s) applied	5.65
Measurement methods and procedures	Sampling for project survey should be carried out following the General requirements for sampling as per section 4.2 of the methodology.
Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Calculation of baseline emissions
Additional comment	The value applied shall be cross-checked against at least one other source on the list. For cross-check purposes, sources applied may be up to 5 years old. For this project, the value shall be cross checked with the project survey results carried out during first monitoring and a conservative value shall be applied during Performance review. For ex-ante purpose a pilot study was also carried out, which showed the household size at 6.3. Therefore, the value considered is conservative.

[16] Report by Ignosi Research, 2019-2020

Data/parameter	Water hygiene education campaigns
Unit	-
Description	Hygiene campaigns carried out among project safe water end-users.
Source of data	Report of annual hygiene campaigns results
Value(s) applied	-
Measurement methods and procedures	The following guidelines apply for conducting these campaigns -The project developer shall report the activities conducted each year in a detailed "Report of annual hygiene campaigns results" and summarize the results in the project monitoring reports. - Any major changes in the health status of the water users as a result of contaminated water (e.g. an outbreak of water related disease) must be reported and, if relevant, a strategy put in place to address it through the subsequent hygiene campaign. - The detailed method used to assess hygienic handling of clean water must be provided with the PDD and verified by the VVB. - The details of the method should be adjusted to suit the circumstances of each project and also to suit learning year on year. The impacts of the hygiene campaign shall be assessed using the WHO/UNICEF Joint Monitoring Programme Core questions for drinking water and hygiene to determine the fraction of the households where Safe water and Hygiene practices are found to fulfill "safely managed" or "basic" requirements. In-person or telephone or by messaging (e.g. text, app) based survey shall be conducted covering all the JMP core questions for drinking water and core questions for hygiene. For sampling requirements, follow section 4.2 |General requirements for sampling of the methodology. The JMP core questions for households, schools and health care facilities are available at https://washdata.org/monitoring/methods/core-questions
Monitoring Frequency	Annual

QA/QC Procedures	The fraction of the households where Safe water and Hygiene practices are found to fulfill "safely managed" or "basic" requirements is expected to increase over time as a result of the hygiene campaigns.
Purpose of data	Monitoring of SDG 6
Additional comment	-

SDG 3: Good Health and Well-being

Data/parameter	SDG 3.9
Unit	-
Description	Decrease in number of family members visiting the medical facilities for pollution-related inconveniences like itchy eyes and breathing problems and water borne diseases
Source of data	The benefit will be estimated from project survey with a randomly selected number of beneficiaries
Value(s) applied	80% (ex-ante estimation)
Measurement methods and procedures	The value shall be established based on Sampling Survey across a randomly selected number of beneficiaries. The result will be applied to all the beneficiaries of the project activity
Monitoring Frequency	Annual
QA/QC Procedures	-
Purpose of data	Monitoring of SDG 3
Additional comment	-

SDG 5: Gender Equality

Data/parameter	SDG 5.4

Unit	Hours/week
Description	Average time saving associated with cooking and fuel collection
Source of data	Monitoring Survey
Value(s) applied	1.3
Measurement methods and procedures	This parameter will be monitored as part of the monitoring survey. Users will be asked as part of monitoring survey if they have been able to save time due to use of clean energy products. This can be calculated from reduction in weekly rounds for collection of firewood and approx. time taken for one round of visit.
Monitoring Frequency	Annual
QA/QC Procedures	Sampling for the survey should be carried out for randomly selected beneficiaries
Purpose of data	Monitoring of SDG 5
Additional comment	The parameter will be measured qualitatively. The ex-ante value has been taken from the pilot study carried out for the project activity

SDG 6: Clean Water and Sanitation

Data / Parameter	SDG 6.1
Unit	-
Description	Number of households served with safely managed water services
Source of data	Calculated
Value(s) applied	16,275
Measurement methods and procedures	Using formula, Np,y*(1-Cb)*Up,y*Mq,y
Monitoring frequency	Annual
QA/QC procedures	-

Purpose of data	Monitoring of SDG 6.1
Additional comment	-

SDG 7: **Affordable and Clean Energy**

Data / Parameter	SDG 7
Unit	-
Description	No. of operational WPS
Source of data	SPOUTS Database
Value(s) applied	17,500 (ex-ante estimation)
Measurement methods and procedures	The number of WPS operational ($U_{p,y}$) shall be monitored annually through project survey and results shall be applied to the total WPS distributed under the project activity
Monitoring frequency	Annual
QA/QC procedures	-
Purpose of data	Monitoring of SDG 7
Additional comment	-

SDG 8: Decent Work and Economic Growth

Data / Parameter	SDG 8.5
Unit	-
Description	Total no of jobs created
Source of data	SPOUTS Database
Value(s) applied	16
Measurement methods and procedures	SPOUTS will maintain a record of jobs created during different phases of the project activity (Distribution: 10 jobs, Monitoring & evaluation: 6 jobs) as a result of

	implementation of this programme in form employee/consultant list/ payroll system/ contracts/ pay slips
Monitoring frequency	Annual
QA/QC procedures	Employment created under different categories eg. Full time, part time, consultant etc. will be recorded
Purpose of data	Monitoring of SDG 8
Additional comment	-

B.7.2. Sampling plan

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The sampling approach to be used for surveys is summarized below:

A statistically valid sample can be used to determine parameter values, as per the relevant requirements for sampling in the "Guidelines for Sampling and surveys for CDM project activities and programme of activities, version 4.0" Minimum 90% confidence interval and a 10% margin of error requirement shall be achieved for the sampled parameters. In any case, for proportion parameter values, a minimum sample size of 30, or the whole group size if this is lower than 30, must always be applied. Further, cross-VPA sampling is not accepted across groups larger than 10 VPAs

1. **Sampling Design**

Sampling objective

The sampling objective for each parameter is to determine a statistically significant parameter value for the emission reduction calculations through a sampling survey and/or test. The parameters to be sampled are classified into monitored parameters and monitoring parameters where sampling is done ex-ante and annually respectively, as follows:

Monitored Parameter	**Description of Parameter**	**Type of survey**
Water sources in Project boundary	Water sources in Project boundary	Baseline
Stove technologies used in project boundaries	Stove technologies used in project boundaries	Baseline
Percentage of fuel f used in the target population	Percentage of fuel f used in the target population	Baseline
Average time saving associated with cooking and fuel collection	Average time saving associated with cooking and fuel collection	Baseline
$N_{w,b}$	Weighted average efficiency of the baseline water boiling devices.	Baseline

C_b	Proportion of project end-users who in the baseline were already using safe water, either from an improved water source, or from a water treatment method other than boiling	Baseline

Monitoring Parameter	**Description of Parameter**	**Monitoring frequency**	**Type of survey**
$X_{clean,boil,y}$	Proportion of project end-users that boil safe (treated, or from safe supply) water after installation of project technology in year y.	Annual	Project
$M_{q,y}$	Ongoing water quality indicated as the fraction of the samples that pass microbial quality standard requirements specified in relevant microbial quality standard for drinking water of the host country. In case a national standard is not available, the water quality shall comply with WHO Guideline values for verification of microbial quality i.e., all water directly intended for drinking must not have detectable E.Coli in any 100 ml sample i.e., less than 1 Colony Forming Unit (CFU) of E.Coli /100 ml	Annual	Project

Up,y	Usage rate of the project technology by premises type p during year y	Annual	Project
tp,y	Usage time of the project technology by premises type p in year y	Annual	Project
HNp,y	Number of individuals per premises type p in the project boundary in year y	Annual	Project
SDG 3	Decrease in number of family members visiting the medical facilities for pollution-related inconveniences like itchy eyes and breathing problems and water borne diseases	Annual	Project
SDG 5	Average time saving associated with boiling and fuel collection	Annual	Project
SDG 6	Results from $M_{q,y}$ shall be used	Annual	Project

Sampling Methodology

West Uganda has a homogenous distribution of its population over the country with majority belonging to lower middle class. Due to the homogeneity feature of this program, simple random sampling method will be applied through all VPAs. A simple random sample is a subset of a population (e.g. villages, individuals, buildings, pieces of equipment) chosen randomly, such that each element (or unit) of the population has the same probability of being selected. The sample-based estimate (mean or proportion) is an unbiased estimate of the population parameter. Simple random sampling is conceptually straightforward and easy to implement – provided that a sampling frame of all elements of the population exists. Its simplicity makes it relatively easy to analyse the collected data. It is also appropriate when only minimum information of the population is known in advance of the data collection. The costs of data collection under simple random sampling could be higher than other sampling approaches when the population is large and geographically dispersed.

Sampling Size

Suppose that the population is homogeneous with respect to the continued use of the water purifiers. Then simple random sampling would be an appropriate method to estimate the proportion of water purifiers still in operation. A statistically valid sample can be used to determine parameter values, as per the relevant requirements for sampling in the "Guidelines for Sampling and surveys for CDM project activities and programme of activities." Minimum 90% confidence interval and a 10% margin of error requirement shall be achieved for the sampled parameters. In any case, for proportion parameter values, a minimum sample size of 30, or the whole group size if this is lower than 30, must always be applied. Further, cross-VPA sampling is not accepted across groups larger than 10 VPAs.

When a baseline and project survey is used the following sample size guidelines should be applied, unless otherwise stated for specific parameters:

Group size	**Minimum sample size**
<300	30 or population size, whichever is smaller
300 to 1000	10% of group size
>1000	100

Sampling frame

Sample sizes will be sufficient to ensure that the precision of the sample means/proportions are in accordance to the Sampling Frame established for the VPA within the PoA to estimate emissions reductions. In cases where survey results indicate that the desired precision is not achieved, more samples will be surveyed to achieve the desired results. Alternatively, the survey may be expanded to reach the required confidence/precision. To ensure a simple random sample selection, random number generators shall be applied. Each water purifier in the target population is uniquely identifiable by its Serial ID number. Each water purifier can thus be allocated a Sample Selection Number in each monitoring period, starting at 1 and increasing up to the total number of water purifiers in the Database for that pre-defined simple random sampling frame. Applying the random number generators, the water purifier can then be

randomly chosen from the defined population up to the required sample size as calculated by the CME.

2. Data to be collected

i) Field measurements

The sampling objective for each parameter is to determine a statistically significant parameter value for the emission reduction calculations through a sampling survey and/or test.

To monitor the required parameters, data will be collected from a statistically valid sample of water purifiers in the database as per this sampling plan during the monitoring period. The monitoring frequency for each parameter will be followed as per the methodology applied. After that, the relevant data will be archived in the electronic database tool and be used to determine sample size for each parameter. The surveys for parameters $n_{w,b}$ and $M_{q,y}$ will be done by well-trained personnel from the SPOUTS. Low cost testing kits may be used for monitoring, if local laboratories are limited to test a large number of samples for quality of water. As per the methodology the relevant requirements for sampling in the Methodology "Sampling and surveys for CDM project activities and programme of activities" shall be followed. A 90% confidence interval and a 10% margin of error requirement shall be achieved for the sampled parameters.

ii) Quality Assurance/Quality Control

To increase the precision of the estimates during the survey, it is necessary to establish sampling mechanisms for avoiding non-sampling errors (bias) include good questionnaire design, well-tested questionnaires, possibly pilot testing the data collection. To remedy the incomplete questionnaires, additional households or schools will be drawn randomly until the required number is met at per the sample size determined. Then, well-trained personnel will scrutinize all the questionnaires. This will be a procedure to find outliers, and then outliers may be excluded and/or replaced. If the outliers are found according to the above analysis it will be examined further to correct for possible transcription and data entry errors, but it will be omitted from the analysis if no such administrative errors exist. All monitored data such as name, date and contact information of the end-user will be archived in the electronic database tool. Hard copies of all documents will be kept at the office of SPOUTS or an alternative place nominated by SPOUTS. All the data will be used to calculate the sample size for

parameters and emission reductions. All data stored to be kept for at least two years after the crediting period or the last issuance of CERs for the project activity.

iii) Analysis

The data from the survey will be analyzed to calculate the value of the parameters:

- Stove technologies used in project boundaries
- Percentage of fuel f used in the target population
- Average time saving associated with cooking and fuel collection
- Water sources in Project boundary
- $n_{w,b}$
- C_b
- $X_{clean,boil,y}$
- $M_{q,y}$
- $U_{p,y}$
- $t_{n,y}$
- $HN_{p,y}$

Data will be used for the preparation of monitoring reports for each VPA or a group of similar VPAs. The results of all monitoring will be included in the SPOUTS's management database. Where it is found that an installed water purification system is no longer in use, the installation will be removed from inclusion in the VPA.

3. Implementation plan

i) Survey Implementation Schedule: The survey for collecting the details of monitoring parameters will be conducted at least annually at the end of the calendar year. The overall monitoring and the implementation of the sampling will be coordinated by the SPOUTS and the management staff. They will ensure successful monitoring of the emission reductions of the proposed project during its crediting period. Furthermore, the survey of the representative sample for the parameters will be carried out by the distributor together with the SPOUTS. The survey method that will be used by SPOUTS include: (a) Hard-copy questionnaires (b) Face to face interview (c) Telephone Interview

All efforts of sampling will be conducted by qualified personnel who have undergone training as part of the programme. All the persons who carry out sampling plan will be required to speak the native language(s) allowing for a full understanding of any responses given by users and any questions therein. All efforts of sampling will be conducted by qualified personnel who have undergone training as part of the programme. The date of all monitoring shall be recorded in the VPA database.

When a baseline and project survey is used the following sample size guidelines should be applied, unless otherwise stated for specific parameters:

Water quality testing

- The sample for water quality testing will be made following the 90/10 precision rule indicated by the applied methodology.

Usage Survey

- The minimum total sample size for Usage Survey is 100 with at least 30 samples for project technologies of each age being credited. The majority of interviews in a usage survey must be conducted in person. Thus, if technologies of age 1-5 are credited, the usage survey must include 30 representative samples from each age for total of 150 samples. The resulting usage parameter should be weighted based on the proportion of technologies in the total sales record of each age.

Group size	**Minimum sample size**
<300	30 or population size, whichever is smaller
300 to 1000	10% of group size
>1000	100

- In case of cross VPA sampling, 95/10 confidence/precision will be applied
- In line with the applied methodology, any sampling methods can be used, provided that the sample is selected randomly. If sampling approach other than simple

random sampling is applied, 'Guidelines for sampling and survey for CDM project activities and program of activities'[17] must be followed.

When applicable the Usage Survey and the Project Survey will be implemented together using the same sample.

B.7.3. Other elements of monitoring plan

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Monitored Systems

1. Total Distribution Record: The total distribution record documents the information listed below for the technologies implemented. A carbon waiver including a warranty card will be distributed with each technology (HWT) distributed. The SPOUTS makes every effort to retrieve this information (paper form or electronically i.e. SMS) but cannot guarantee the collection of information for waivers and warranties with every technology due to challenges such as high rates of illiteracy and logistical challenges. The total distribution record will be kept electronically and with supporting evidence from paper records and/or SMS tracking records and will be provided to the GS-VVB at verification. The Total Distribution Record contains:

    a) VPA-ID (VPA to which the system belongs)
    b) Unique identification of WPS using WPS serial number
    c) Partner organization name, address and telephone (as available)
    d) Date of distribution and model/type of project technology distributed
    e) Quantity of project technology distributed as evidenced by database/invoices

    Frequency: Ongoing

    Project Database: Each VPA will have a specific Project Database that records each WPS crediting in that VPA. Every WPS listed in the Total Distribution Record will be transferred into the Project Database of this VPA as needed to expand the

[17] https://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20151023152925068/Meth_GC48_%28ver04.0%29.pdf

number of WPS deployed, until the maximum threshold for this VPA is reached. In addition to the information provided in the Total Distribution Record, the VPA-specific Project Database will record user details (enough for end-user identification and follow-up) for all, or a subset of all, appliances deployed. End-user details recorded are:

a) Name
b) Telephone, or address (as available)
c) Baseline technology: whether boiling or no boiling
d) Type of WPS (WPS model) and fuel the WPS is replacing: Example – traditional or improved baseline stoves, or wood fuel.

HWT with end-user details recorded here will be used to determine other information needed using as many samples as commensurate with representative sampling to calculate the emission reductions of the project.
Frequency: Ongoing

During the project survey conducted by SPOUTS (project implementer), the survey questionnaire shall include questions on end-user being a part of any other programme/registered project. If the end-user indicates sourcing water from a borehole-registered project only then the CME shall not account for ERs generated from such households (to avoid double counting), however, if the end-source indicates sourcing water from multiple sources (which includes a registered borehole project in Uganda) then WCFT (water consumption field test) shall be conducted by the project implementer to discount ERs generated from registered borehole project and thereby avoiding double counting of ERs.

Continued use of displaced baseline technology

The replaced stoves used for boiling are disposed of and not used within the boundary or within the region. Monitoring surveys conducted on households (HH) using HWT will also investigate the extent to which baseline stoves are still in use. If it is found that a baseline stove is still used for boiling water, the HH will not be eligible for claiming credits.

Organizational structure of monitoring and inclusions:

Person	Role
AGS Carbon Programme in-charge	The programme-incharge will be responsible for overall management of PoA with all the VPAs. The monitored data will be assessed and reviewed in line with GS guidelines for preparing final Monitoring Reports.
SPOUTS database administrator	The database administrator is responsible for updating and maintaining all electronic databases. Required competencies include experience with data management systems (e.g. Excel, STATA, or SPSS), minimum 2 years working experience in a similar field, and at minimum a Bachelor's degree from an institution of higher education.
Monitoring team	The monitoring team will be assigned by the SPOUTS to conduct the user interviews and appliance tests during the periodic sampling and reports the results to the database administrator. The skills and experience required for the data collection activities include: • Experience conducting surveys/tests • Experience conducting door-to-door surveys of biomass consumption • Local language skills (especially important for input to questionnaire design and interviewing of end users) • English language skills • Cultural awareness • Numerical proficiency • Data entry skills

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

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19/07/2022 (start date of distribution of first WPS of this VPA)

C.1.2. Expected operational lifetime of VPA

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15 years (3 x 5 years)

C.2. Crediting period of project

C.2.1. Start date of crediting period

>>

19/07/2022

C.2.2. Total length of crediting period

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5 years for CP-1 (19/07/2022- 18/07/2027). The crediting period may be renewed twice in line with the Community Services Activity Requirements.

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1. Safeguarding Principles that will be monitored

Principles	Mitigation Measures added to the Monitoring Plan
NA	

A completed Safeguarding Principles Assessment is in Appendix 1, no ongoing monitoring is applicable to this VPA.

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The local stakeholder consultation meeting has been carried out following a gender sensitive approach. The stakeholder meeting had a 30-40% women representation. Women working groups were involved in the stakeholder consultation process and separate meetings were held so that women could freely voice their opinion. The project will incorporate measures to ensure that there is no discrimination based on gender. Water Purification Systems (WPS) will be distributed to all willing customers within the project boundary. The project will have a positive impact on women considering that they will spend less time on boiling water for treatment or walking for miles to collect

	water and fuel thereby saving their time for more productive activities. The project will also have a positive impact on the health of women as they won't be drinking water from unimproved sources thereby reducing the instances of waterborne illnesses.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	Uganda has National Gender Policy 2007 with the goal to achieve gender equality and women's empowerment as an integral part of Uganda's socio-economic development. The project will contribute towards the goal of policy by providing women opportunity to save time used in either collecting fuelwood for boiling water to make it fit for drinking or travelling long distance to collect drinking water. Therefore, the project very well aligns with the existing policies, strategies and best practices of host country Uganda.
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	Yes. The project has sought expert opinion on gender safeguarding principles and requirement.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	Yes. The project has sought expert opinion to assist with gender issues at stakeholder consultation.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

E.1. Summary of stakeholder mitigation measures

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The Stakeholder consultation meeting for the project was conducted in December, 2021 however SPOUTS conducted an additional stakeholder consultation meeting on 11th May,2023 to comply with all the guidelines of GS4GG for conducting stakeholder consultation meeting.

Over 60 stakeholders had attended the additional physical stakeholder consultation meeting. All the relevant categories of stakeholders (including local communities, marginalized groups, local policy makers, national government officials, local NGOs, gold standard representatives, relevant international NGOs) were invited for the stakeholder consultation meeting. The additional stakeholder consultation meeting involved discussion on the positive impact of the project such as the time saved by women (who are primarily involved in collecting firewood for boiling water), reduced levels of IAP (indoor air pollution), reduced instances of water borne diseases. The contribution of the project towards SDG 3, SDG 5, SDG 6, SDG 7, SDG 8 and SDG 13 was also discussed with stakeholders during the physical stakeholder consultation meeting.

The process of carbon title transfer was also discussed transparently with the stakeholders. SPOUTS team informed the stakeholders that the credits generated due to the WPS project will be transferred to SPOUTS which will in-turn sell these credits to generate revenue that will be used to sustain the project.

Mitigation measures

The project overall received positive feedback about its intention to improve the living conditions of rural people. And following measures will be undertaken for the comments received:

1. The statistics on Sustainable Development Goals shall be provided once the project is implemented and the various parameters will be monitored as per SDG Tool and detailed report provided to GS VVB. Further, in case stakeholders are interested in the statistics the same will be shared with them on request.
2. The product shall be distributed even in remote areas of Uganda and workshops will be conducted to impart importance of safe drinking water and best practices to be followed to maintain hygiene. The communities will be sensitized about the health benefits of using water purifier rather than boiling using biomass based traditional cookstoves leading to GHG emissions.

Stakeholder Feedback Round

The initial stakeholder feedback round was conducted for 30 days between 21/01/2022 to 21/02/2022.For the additional LSC conducted on 11 May 2023, a combined Stakeholder Feedback Round was held on 11th May,2023 itself.

Feedback Received

There were no comments received during the feedback round which could have an impact on the implementation or Design of the project.

E.2. Final continuous input / grievance mechanism

Method	Include all details of Chosen Method (s) so that they may be understood and, where relevant, used by readers.
Continuous Input / Grievance Expression Process Book (mandatory)	SPOUTS, the in-country project owner, will be managing the concerns/inputs/support needs as part of the Grievance/Continuous Input Mechanism. The Stakeholders can reach SPOUTS through the contacts regional offices with designated persons at these offices and, also have a Grievance book which will be used to take note of concerns/inputs/support needs.

GS Contact (mandatory)	help@goldstandard.org Gold Standard's telephone number is: +41 (0) 22 788 7080
Other	To facilitate the flow of information stakeholders can use the following local phone number; Ronald Ampaire, Business Intelligence Specialist (SPOUTS International): +256 (0) 75 775 9533 – Mobile & WhatsApp +256 (0)78 739 2327 – Mobile Email addresses: Ronald Ampaire ronaldampaire@spouts.org Daniel Yin danyin@spouts.org

SECTION F. Eligibility and inclusion criteria for VPAs inclusion

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The below table shall be completed for all VPAs.

No.	Eligibility Criterion	Description/ Required condition	Description of the VPA in relation to the criteria, Means of Verification/Supporting evidence for inclusion
1	Geographical boundary of the VPA	The VPA is located within the geographical boundary of one of the African countries included in the PoA.	Household Water Treatment (HWT) technologies will be distributed to residential users within the geographic boundary of Uganda for this VPA which is within the boundary of PoA. CME has issued a statement confirming the geographical boundary of the VPA.

2	Project technology	VPAs involves use of only one technology i.e. distribution of safe drinking water systems (HWT technologies) to residents/.	The target end-user group is residential user where HWT shall be distributed. The details of the technology to be distributed under this project is provided in section A.3 of this document. Supporting evidence: Distribution database
3	No Double counting of CEPs impacts within this PoA and across other registered or deregistered PoAs	A unique numbering or identification system for the CEP installed is applied. This shall ensure no double counting of water purifiers within the PoA and ensure that water purifiers can be identified as belonging to this PoA and not to a PoA managed by any other CME.	The unique identification (Programme numbering and serial no.) of each CEP along with the customer details (name, address) is stored in the distribution database of devices included in the VPA-DD. Supporting Evidence: All CEPs Distribution database/invoices including VPA assignment and end user details (i.e. name, address, GPS coordinates) can be verified by the GS-VVB during Verification. Relevant agreements with manufacturers/distributors or a master database will be provided at the time of verification. For this VPA following process is followed to generate the UID- "The Unique Identifier is generated using a 3rd Party system - TEC-IT Barcode Studio 16.2 and takes the below format: RTU2022 ######, where RT - Regular Technology (Product Type), U - Uganda

			(Country of Project), 2022 - Year of Distribution (Changes), ###### - Unique Product Number (Different for every Product). The generated numbers (Serial Codes) are printed and attached to the product and are verifiable on each beneficiary's visit using a Barcode Scanner. On product distribution, the code is matched with the Beneficiaries details which can be accessed once you select the UID in the System."
4	No Double counting of VPA	The VPA is exclusively included in the PoA. The VPA shall not be proposed as part of another offset program i.e. as an individual Gold Standard or CDM project and/or as part of any other CDM PoA and/or any other mechanism to avail climate change mitigation benefits. CME shall issue a statement included in the VPA-DD that the specific VPA will not be part of another Gold Standard or CDM project activity or VPA under another PoA.	A statement by the CME is included in the VPA-DD and a declaration has also been provided by the CME to GS that the specific VPA will not be part of other ETS, has not participated in any other GHG program and has not been rejected by other GHG program Supporting Evidence: This has been cross-checked and verified by the CME with offset mechanisms like UNFCCC-CDM, Gold Standard, VERRA and/or any other mechanism to avail climate change mitigation benefits. Declaration by CME for the VPA
5	Specification of the technology such as the level and type of service, as well as performance specification;	The VPA includes ceramic water filter technology which provides safe drinking water, confirming to WHO International	• Test reports from National accredited labs confirming the compliance of treated water with

		standards and host country norms for safe water for human consumption.	WHO and host country norms shall be submitted to GS and VVB during Verification. • Performance assessment of the ceramic water filter by National Water Quality Reference Lab to show its effectiveness and efficiency to produce water that meets the recommended standards for human consumption shall also be submitted.
6	Start date of the VPAs	The start dates of the VPA shall be mentioned in each VPA and should be on or after the start date of the registered PoA	Screenshot of database and end user agreement for first sale of the water filter under the VPA has been submitted to GS.
7	Non-diversion of ODA in case of public funding	SPOUTS confirms that there is no public funding and no diversion of Official Development Assistance involved in the project activity.	It is confirmed that there is no diversion of ODA. A declaration by SPOUTS has been submitted to GS.
8	VPA Crediting Period	VPA crediting period not to exceed the PoA end date and the starting date of the crediting period of a VPA shall be on or after: (i) The date of registration of the PoA, if the corresponding VPA-DD is submitted together with the request for registration; (ii) The date when the VPA was included in the PoA.	A statement is included in the VPA-DD specifying the crediting period start date and that the crediting period will not exceed the PoA end date (this is 20 years after the date of registration of the PoA).
9	Approval of VPA by CME	CME approves each VPA to be included into its registered PoA.	A Statement of CME giving approval for inclusion of the VPA into its registered PoA has been submitted to GS.

10	Methodology Requirement	Each VPA will comply with the applicability criteria of methodology Emission Reduction from safe drinking water supply- version 1.0	The VPA-DD includes information on how it complies with all the applicability criteria of the methodology "Emission Reduction from safe drinking water supply", version 1.0. A detailed justification is provided in Section B.2 of VPA-DD.
11	Target groups of the programme	The VPA included in the POA will involve distribution of safe water supply devices (ceramic water filters) directly to the end users.	The distribution database and agreement with the end user of SPOUTS submitted to GS
12	Additionality	All VPAs to be included under the PoA will be in compliance with item 1.1.3 of Annex B – positive list mentioned in the 'Community Services Activity Requirements', Version 1.2. All VPAs will be solely composed of isolated units (CEPs) where the users of the technology/ measure are households or communities or institutions and where each unit results in <= c. 600 MWh of thermal energy savings per year for ICS. d. 600 tCO_2 per year for HWT technologies Hence, according to paragraph 4.1.9 of the Community Services Activity Requirements', each of the VPAs, regardless of the host country in which the project activity is being	The VPA-DD confirms that the emission reductions per year at a unit level (i.e. per WPS) are clearly below 600 tCO_2 per year. The same can be verified from ER Calculation sheet submitted with the VPA-DD.

		implemented, is deemed additional and therefore is not required to prove additionality at the time of Design Certification.	
13	Sampling requirements for the PoA	The VPAs will follow the usage survey guidelines of the methodology and UNFCCC guidelines on sampling and survey for Programme of Activities version 4.0	VPA-DD incorporates the sampling procedure in section B.7.2 and sampled survey form/excel sheets can be provided to GS
14	Meet the small-scale or microscale thresholds and remain within those thresholds throughout the crediting period	The CME will ensure that the emission reductions of each VPA are within <60k tCER/year limit. If in case the threshold is breached the CME would let go the ERs above the threshold limit.	An undertaking by the CME confirming scale of the VPA and confirmation that it will remain within the threshold limits and foregoing the ERs if it crosses the threshold has been submitted to GS VVB with PoA-DD.
15	Conditions to be met by each VPA regarding SDG outcomes assessment	The CME shall conduct the Sustainable Development Goals (SDGs) impact assessment at the VPA level as per Principles & Requirements	SDG outcome assessment has been done at VPA level and the results included in section B.6 of the VPA-DD.
16	Conditions to be met by each VPA regarding safeguarding principles	Projects shall conduct a Safeguarding Principles Assessment and conform to Gold Standard Safeguarding Principles and Requirements.	Safeguarding principles assessment has been done in Appendix 1 of this document.

The table below lists "Global Goals Community Services Activity Requirements", version 1.2 and how the VPA complies with the criteria:

S. No	**Community Services Activity Requirements**	**Justification for VPA inclusion**
1	Para 2.1.2: All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving	This VPA includes distribution of water purification systems (WPS) reducing greenhouse gas (GHG) emissions

	access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	otherwise resulting from burning of non-renewable woody biomass for boiling water in Uganda for residential users. The targeted end-users use biomass to boil water as a form of purification and/or are lacking the access to safe drinking water in the absence of this VPA. Therefore, the project falls under Type b (End-use energy efficiency) of Pre-identified CSA project types.
2	All Projects shall conform to the Principles & Requirements (and associated documents)	The VPA confirms to the Principles & requirements, Stakeholder Consultation and Engagement Requirements, Safeguarding Principles & requirements
3	Para 3.1.1. Type of project Water, sanitation and hygiene (WASH): WASH activities contributing to climate change mitigation and/or adaptation benefits.	The VPA involves distribution of Water Purification Systems (WPS).
4	Para 3.1.2: Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements	The geographical project boundary of this VPA is defined as the western region of the country of Republic of Uganda (also detailed in Section A.2 of this document).
5	Para 3.1.3: Certain Impact Quantification methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Suppressed Demand baseline is limited to Small Scale and Microscale Projects.	The scale of this VPA is small scale and therefore is eligible under the CSA requirements if applying suppressed demand scenario.

6	Para 3.1.4: Projects involving the distribution of a large number of devices for services such as heating, cooking, lighting, electricity generation, water treatment technology such as water filter, etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with the FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.	The water filters distributed under the VPAs are owned by the end user. The SPOUTS will encourage the uptake of SWS by making it as simple as possible for end users to benefit from finance and incentives available via carbon markets. SPOUTS will ensure that the end users are aware of the fact that SPOUTS is claiming ownership rights of and selling the emission reductions resulting from the project activity. It will be communicated to end users at the time of installation/ distribution and during local stakeholder consultations for projects. The carbon title for the product is signed off by end user to SPOUTS waiving any claim or rights on carbon credits generated under the VPA. The sample of end user SPOUTS Agreement has been shared with the GS.

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into SECTION D above. Please refer to the instructions in the Guide to Completing this Form below.

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)
Principle 1. Human Rights			
1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights 2. The Project shall not discriminate with regards to participation and inclusion	Yes	The project will be implemented in collaboration with local partners and SPOUTS will respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Right. The project will not discriminate with regards to participation and inclusion. The end-users have formally agreed that they are	Not required

		voluntarily: participating in the water filter distribution activity, agreeing to transfer the credits generated due to the water filters, providing personal details such as GPS location, photographs and contact details. Therefore, the beneficiaries are willingly receiving products (ceramic water filters from the project implementer) after the information about the benefits of the water filter has been disseminated by the project implementer – SPOUTS. SPOUTS shall follow a systematic approach of identifying beneficiaries based on the baseline survey carried out in the region and it shall be ensured that there is no discrimination in the process of water filter distribution to the beneficiaries	

		Further, as the safeguarding principle 1 is relevant in the context of the project, the CME has sought expert opinion for the same.	
Principle 2. Gender Equality			
1. The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of nondiscrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)	Yes	The project activity doesn't endorse any form of discrimination based on gender. Water Purification Systems (WPS) will be distributed to all willing customers within the project boundary. The project will have a positive impact on women considering that they will spend less time on boiling water for treatment or walking for miles to collect water and fuel. The projects shall apply the principles of non-discrimination and would pay equally to people employed. The Government of Uganda prioritizes gender equality as a cross cutting enabler for socio-economic	Not required

		transformation as mentioned in Uganda Gender Policy (2007) [18] Therefore, the water filter distribution project has a positive impact on the principle of gender equality and it ensures that no form of gender-based discrimination is reinforced. Further, as safeguarding principle 2 is relevant in the context of the project the CME has sought expert opinion for the same.	
Principle 3. Community Health, Safety and Working Conditions			
1. The Project shall avoid community exposure to increased health risks and shall not adversely	No	The project doesn't expose the community to increased health risks and is not adversely affecting the health of workers	Not required

[18] http://extwprlegs1.fao.org/docs/pdf/uga163564.pdf#:~:text=The%20Uganda%20Gender%20Policy%20%282007%29%20socio-cultural%2C%20economic%20and,agency%20which%20is%20the%20ability%20to%20influence%20outcomes.

affect the health of the workers and the community		and the community. Use of WPS will contribute in improving the health of users as compared to baseline by reducing the smoke from baseline stoves used to boil water and decrease in chances of water-borne diseases through an efficient and zero GHG emission device. The workers participating in the project activity are not exposed to unsafe or unhealthy work environments as the sale/distribution of WPS or the monitoring activities of the project will not include any hazardous chemicals or other hazardous material. The water filter distribution project has a positive impact on the health of the community as the end-users are getting safe drinking water due to water filter installation and are no more drinking water directly from	

		unimproved sources. Further, the project implementer is also providing repair and maintenance services to the beneficiaries thereby providing the community with uninterrupted supply of safe drinking water. Further as the safeguarding principle 3 is relevant in the context of the project, the CME has sought expert opinion for the same	
Principle 4.1 Sites of Cultural and Historical Heritage			
Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	No	Since this is a WPS project distributed to households, there is no risk to cultural, historical, traditional or religious values.	N/A
>>			
Principle 4.2 Forced Eviction and Displacement			
Does the Project require or cause the physical or economic	No	Since this is a WPS project at household level, there is no	N/A

relocation of peoples (temporary or permanent, full or partial)?		risk of forced eviction and displacement.	
>>			
Principle 4.3 Land Tenure and Other Rights			
a. Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership? b. For Projects involving land use tenure, are there any uncertainties with regards to land tenure, access rights, usage rights or land ownership?	No	Since this is a WPS distribution project, there is no risk of uncertainty due to land rights/ownership.	N/A
>>			
Principle 4.4 - Indigenous people			
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No	Since this is a safe water supply project at household level, there is no risk to land/territory claimed by indigenous people. Safe water devices will be distributed to all willing customers within the project boundary.	N/A
>>			

Principle 5. Corruption			
1. The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	Yes	SPOUTS will ensure that the project doesn't involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects. Further, the CME has sought expert opinion for principle 5	Not required
Principle 6.1 Labour Rights			
1. The Project Developer shall ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions 2. Workers shall be able to establish and join labour organisations 3. Working agreements with all individual workers shall be documented and	Yes	1. The project is implemented by SPOUTS an Africa based organization in collaboration with other project partners. The project employment will be in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions. 2. The workers employed by SPOUTS for the project	Not required

implemented and include: a) Working hours (must not exceed 48 hours per week on a regular basis), AND b) Duties and tasks, AND c) Remuneration (must include provision for payment of overtime), AND d) Modalities on health insurance, AND e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave. 4. No child labour is allowed (Exceptions for children working on their families' property		are able to establish and join labour organizations. 3. The working agreements with the individual workers will be documented and implemented and the minimum requirements stated will be respected as applicable. 4. No child labour allowed in the project and the minimum age for employed or wages staff is above 18 years. All the workers will be provided with appropriate equipment, training documentation and reporting of accidents and incidents, and emergency preparedness and response measures. All the labour hiring will be done on a contractual basis and remuneration will be provided in compliance with the host country's (Uganda) guidelines on labour wages.	

requires an Expert Stakeholder opinion) 5. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures		The water filter distribution project will ensure that there is no forced labour and all employment is in compliance with ILO (International Labour Organization) guidelines. Further the safeguarding principle 6.1 is relevant in the context of the project hence the CME has sought expert opinion for the same.	
Principle 6.2 Negative Economic Consequences			
1. Does the project cause negative economic consequences during and after project implementation?	No	The project involves sale of WPS to willing customers within the project boundary. Carbon revenues are important for creating awareness among the end users and strengthening the local sales and distribution services.	N/A
>>			
Principle 7.1 Emissions			

Will the Project increase greenhouse gas emissions over the Baseline Scenario? >>	No	The project will reduce the GHG emissions which will be monitored and verified in line with the GS4GG.	N/A
Principle 7.2 Energy Supply			
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users? >>	No	The project does not use energy from a local grid or power supply. Use fuelwood for boiling water in baseline using traditional stoves will be significantly reduced by introducing WPS.	N/A
Principle 8.1 Impact on Natural Water Patterns/Flows			
Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? >>	No	The project is a WPS distribution programme and will not affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity.	N/A
Principle 8.2 Erosion and/or Water Body Instability			

a. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? b. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No	The project is a WPS distribution programme and will not directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion.	N/A
>>			
Principle 9.1 Landscape Modification and Soil			
Does the Project involve the use of land and soil for production of crops or other products?	No	The project is a WPS distribution programme and does not involve the use of land and soil for production of crops or other products.	N/A
>>			
Principle 9.2 Vulnerability to Natural Disaster			
Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	No	The project is a WPS distribution programme and will not be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or	N/A
>>			

		other extreme climatic conditions.	
Principle 9.3 Genetic Resources			
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	No	The Project is not negatively impacted by the use of genetically modified organisms or GMOs.	N/A
>>			
Principle 9.4 Release of pollutants			
Could the Project potentially result in the release of pollutants to the environment?	No	The Project is a WPS distribution programme which result in zero GHG emission products and does not result in the release of pollutants to the environment	N/A
>>			
Principle 9.5 Hazardous and Non-hazardous Waste			
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	The Project does not involve the manufacture, trade, release, and/or use of hazardous chemicals and or materials.	N/A

>>			
Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No	The project does not involve the application of pesticides and/or fertilisers.	N/A
>>			
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No	The project does not involve the harvesting of forests.	N/A
>>			
Principle 9.8 Food			
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No	The project does not modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives.	N/A
>>			
Principle 9.9 Animal husbandry			
Will the Project involve animal husbandry?	No	The project does not involve animal husbandry.	N/A
>>			
Principle 9.10 High Conservation Value Areas and Critical Habitats			

Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified? >>	No	The project is a WPS distribution programme and does not physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified.	N/A
Principle 9.11 Endangered Species			
a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects? >>	No	The project boundary is geographical sites of WPS distributed and there are no endangered species identified as potentially being present within the Project boundary.	N/A

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organization name	SPOUTS International
Registration number with relevant authority	192221GBC
Street/P.O. Box	Nsambya Block 15, John Kiyingi Rd
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State/Region	Uganda
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Website	https://spoutsofwater.com
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APPENDIX 3- LUF ADDITIONAL INFORMATION

NA

APPENDIX 4-SUMMARY OF APPROVED DESIGN CHANGES

NA

Revision History

Version	Date	Remarks
2.0	4 May 2022	
1.1	7 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption