

TEMPLATE

VERIFICATION APPRAISAL REPORT

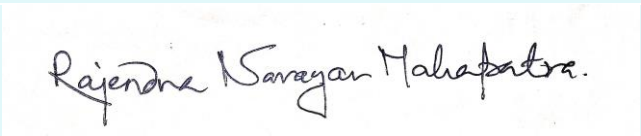
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VERSION **v. 1.2**

KEY PROJECT INFORMATION

GS ID (s)	GS3964
Title of Project	Native Energy Hydrad BioSand Water FilterProgramme South East Asia
Version number of the VAR	01
Completion Date of version	28/02/2023
Microscale Project Type	☐ Standalone ☒ Microprogramme
Title of MicroProgramme (mark N/A if project type is Standalone)	Native Energy Clean Water Programme South East Asia: NE_VPA 01_IND
SDG Impacts (as per MR):	1-SDG 13: Climate action. 2-SDG 3: Ensure healthy lives and promote well-being for all at all ages. 3-SDG 6: Ensure availability and sustainable management of water and sanitation for all. 4-SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
List document titles and versions supplied for Objective Observer review	1) GS 3964 T-PerfCert_V1.1-Monitoring-Report(1) 2) Er Calculations and Monitoring Survey summary_27.06.2022

	3) Log book_2021_BSF_NYDHEE _JHARKHAND_Confidential
	4) Log book_2021- 2022_BSF_NYDHEE_WB_Confidential

Objective Observer	Rajendra Narayan Mahapatra
Date of Site Visit (dd/mm/yyyy)	29 and 30 th of April 2023
Signature (final version only)	

SECTION A. BRIEF PROJECT DESCRIPTION

NE – VPA 01 – IND herein after referred to as the project activity, is centered on the introduction of zero energy water filters for point of use application to replace the use of wood fuels for water treatment and in the alternative alleviate situations of suppressed demand where raw water is consumed but would have been boiled in the absence of both the project activity and prevailing energy poverty barriers. In so doing the project activity is designed so as to abate greenhouse gas emissions, Indoor air pollution as well as to reduce the pressure on non-renewable biomass resources within the project boundary.

The project activity seeks to distribute approximately 1,629 filters in the specific districts in Jharkhand and West Bengal states in the Republic of India. These districts are East of Medinipur, North 24 Parganas, South 24 Parganas in West Bengal state and Ranchi, Ghumla and Khunti districts in Jharkhand state. The project qualifies as sectoral Scope 03, Type III project activity. As a gold standard micro scale project activity, the VPA shall generate greenhouse gas emissions 9,784 tCO₂e per annum.

(a) Implementation Status of the Project:

1. Start date of the project is 13/01/2018, which is the date when the first filter sale was made.
2. The 1st LSC meeting was conducted on 05/12/2014 and the additional LSC meeting was held on 08/12/2014 during the design change process.
3. Registration Date –03/06/2019

4. This is the 2nd and 3rd periodic monitoring period, and which is from the 01/05/2020 to 30/04/2021 and 01/05/2021 to 30/04/2022.

6. Monitoring survey was conducted between 01/02/2022- 30/03/2022.

(b) Total GHG emission Reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period

Location of project

The VPA will be implemented in the states of West Bengal and Jharkhand, Districts of Ranchi, Khunti, Gumla, Tamluk, North 24 Parganas and South 24 Parganas regions of the Republic of India as shown in the co-ordinates below.

State	District	Coordinates
Jharkhand	Ranchi	23.3500° N, 85.3300° E
	Khunti	23.0140° N, 85.2724° E
	Gumla	23.0000° N, 84.5000° E
West Bengal	Tamluk	22.3000° N, 87.9200° E
	North 24 Parganas	22.1300° N, 88.5000° E
	South 24 Parganas	22.5300° N, 88.3300° E

SECTION B. OBJECTIVE OBSERVER'S OPINION

Durning the observation Days of my travel I could cover 3 districts and few villages of District Ranchi and Khunti of Jharkhand state and North 24 Praganas district of West Bengal district.

The project's main aim is to reduce the greenhouse gas emissions within the operational Households. This objective has clearly been met after discussion with 14 number of Households and their pattern of energy use, specially firewood consumption for purifying water. I am convinced after interaction with villagers and filter owners that the filter machine has brought a significant impact on their lives apart from reducing carbon emissions, the some of the benefits they elaborated are:

1. The availability of clean water at their respective houses with lot of convenience
2. The cost of a similar water filter comes with higher cost (Rs 10,000 to 15,000), consumes electricity and also need annual maintenance cost etc.

3. No incidence of diarrhea/dysentery/ skin diseases or any kidney related ailments post installation. All the Families interacted reported that expenses related to these waterborne diseases has also been reduced to almost nil.
4. Drudgery of Women folks, who used to spend significant time earlier in filtering water with clothes, spend time in boiling, waiting for cooling has also been reduced to nil.
5. Less drudgery means more time for other household and other family time for these women members.

Hence in my opinion, the project truly goes beyond the main project objective of reducing carbon emissions and has contributed to many other aspects of sustainable development goals to the families of these filter owners.

Use the table to summarise risks you observed in key sections in this report aligned to Gold Standard Principles 2, 3 and 4. If deemed significant, these risks will be assessed in more detail in the parallel certification process.

Gold Standard Principles	Summary of any observed risks for further review
2: Safeguarding Principles (section D)	The filters were distributed to a limited number of households within villages who can afford to pay an entry amount. These villages which also constitute people from similar backgrounds never get any chance to receive a similar item till date. During interaction with beneficiaries in each village the non-beneficiaries gather and put forward their request for similar item as it is effective, no cost and a durable item without any major issues of maintenance. If adequate process would have been undertaken while selecting the beneficiaries such as families who cannot afford water filters, landless families, women headed families and widows such disparities could have been avoided.

3: Stakeholder Inclusivity (section F)

Stakeholder inclusivity within the project could have been improved by implementing a distribution strategy that takes into account the social and economic backgrounds of individuals within a limited geographical area. While recognizing the universal need and right to clean water, it is important to ensure that the project delivers equitable solutions to the wider community as well. By considering the diverse needs and circumstances of stakeholders, the project can foster more inclusivity and address the unique challenges faced by different groups.

4: Demonstration of real outcomes (section E)

Families who have received the filters are extremely satisfied with the product's quality in terms of purity and taste. To further enhance their experience and address any concerns, the following minor adjustments can be made:

1. Periodic interactions with the beneficiaries can be conducted even through telephone calls. This allows for ongoing communication and feedback, ensuring that any issues or queries are promptly addressed.
2. Sharing the results of the sample water testing can be done by providing a card or attaching the testing result as a colour coded stickers directly onto the filter itself. This transparent approach enables beneficiaries to have easy access to the water quality data and reinforces their trust in the project and it's process.
3. Maintaining a village-wise log sheet in a register form is highly recommended at the village level, which can significantly contribute to evaluating the time duration for addressing any issues. This systematic record-keeping will allow for better tracking of progress and provide valuable insights to measure the project's effectiveness in achieving its objectives.

SECTION C. DETAILS ABOUT THE SITE-VISIT

C.1. Individual or team on site

I visited the villages along with the ED of Nydhee and their field teams who are responsible for field operations. I am, a rural development practitioner with 25 years of expertise in designing technical and operational guidance through program conceptualization, management and policy advocacy for interventions in Reproductive Maternal and Child Health and Nutrition programs especially for rural communities and indigenous communities across 20 districts of Odisha and Jharkhand of India.

I am an Erasmus Mundus Scholar, Master's in international health from Institute of Tropical Medicine, Charity University, Berlin and done my Post graduate Diploma in Rural Management from Xavier's Institute of Management, Bhubaneswar and done my MBA (HR) from Regional Collage of Management Bhubaneswar, Odisha, India. I have worked across Odisha and Jharkhand states of Eastern, India on various implementation projects with DFID, UNICEF, Governments and consulting assignments on evaluations and impact assessments.

I also hereby declare that I don't have any potential conflict of interest in this project.

C.2. People interviewed.

Name	Role	Organisation	Topics Covered
Prashant ku Muduli	Executive Director	Nydhee	1. History of the project 2. Role of Nydhee 3. Organisational structure 4. Project Monitoring
Umesh Kumar Verma	Staff - Nydhee	Nydhee	1. Feedbacks from beneficiaries 2. Operational modalities 3. reports and formats

Samya Lakra	Staff- Nydhee	Nydhee	1. Feedbacks from beneficiaries 2. Operational modalities 3. reports and formats
1. Bandhra Tigga (1000139)	Beneficiary	-	1. Current Use of filters 2. Problems faced. 3. Episode of water-borne diseases 4. Response time solve to complaints by the NGO.
2. Poonam Lakra (10002183)	Beneficiary	-	-Do-
3. Emmilton Lakra(10001550)	Beneficiary	-	-Do-
4. Salomi Kujur (10001318)	Beneficiary	-	-Do-
5. N.Horo (10002255)	Beneficiary	-	-Do-
6. Seteng Topno (10002258)	Beneficiary	-	-Do-
7. Premika Purty (10002794)	Beneficiary	-	-Do-
8. Sukumar Maity (10001871)	Beneficiary	-	-Do-
9. Basudev Giri (10001871)	Beneficiary	-	-Do-
10. Hrishikes Das (10009960)	Beneficiary	-	-Do-
11. Byomkesh Das (10009972)	Beneficiary	-	-Do-
12. Uttam Jana (10009891)	Beneficiary	-	-Do-
13. Kanhailal Das (10002538)	Beneficiary	-	-Do-
14. Sk Habibul (10002860)	Beneficiary	-	-Do-

C.3. Means for interviews.

On the first day, April 29th, we conducted a small Focus Group Discussion (FGD) with the villagers of Kantai Toli in the Namkum block of Ranchi district, Jharkhand. In the following days, I visited 14 individual households to gather feedback on their usage of the filters, the benefits they have experienced, instances of waterborne diseases, and their satisfaction with the response time of the field team from Nydhee (the implementing NGO) in addressing any complaints or issues. This direct interaction with

the beneficiaries allowed for a more comprehensive understanding of their experiences and enabled me to collect valuable insights for further improvement.

Day 1: 29.04.2023

- Kantai Toli and Jamchuan Village of Namkum Block, Ranchi District beneficiary Sl number 1-4
- Binda Village and Sandigaon villages of Murhu Block, Ranchi District beneficiary Sl. number 5- 8

Day 2: 30.04.2023

- Jogudasba Village of Contai Block, 24 Pragana District beneficiary Sl. number 9
- Deulbad and Deulbagh Village and Sandigaon villages of Murhu Block, Ranchi District beneficiary Sl. number 1-4

In all of my interactions, I had the opportunity to engage with the women members of the households in the presence of their male counterparts. It was notable that the women were actively vocal about the benefits they were experiencing from the water filter and expressed their satisfaction with the product. Their input provided valuable insights into the positive impact the filters have had on their daily lives and their overall well-being. By involving both women and men in the discussions, we ensured a more inclusive and comprehensive understanding of the household's perspective, allowing us to address their needs and preferences effectively.

SECTION D. EVALUATION OF THE RISKS ASSOCIATED WITH THE PROJECT

Safeguarding Principle	Relevant to the project	Implementation status
Gender equality and women rights	Yes	Both men and women employed by the project i.e., 5 men and 2 women.

As I have visited 2 states, I could interact with 2 male and 2 female staff of the organization.

The project has created a demand for similar filters from potential beneficiaries in each of the villages it has been distributed and has increased the expectations of the families who are poor and can't afford to buy a filter, does not have electricity, and cannot afford improved health care in case of waterborne disease. Over the past 5 years, there have been numerous requests from individuals who expressed the need for these filters. As a result, a disparity has emerged between those who have access to the filters and those who do not. It is essential to establish a system where everyone in the village can benefit from the advantages provided by these filters.

After field interactions it was felt that the need of easy access to clean water is a topmost priority of the villagers and for them 'saving fuel for carbon credit' is a secondary output of the project. Hence, collaborative efforts with local and international stakeholders and exploring alternative funding sources could help overcome the existing limitations and extend the benefits of clean water to a broader population and in return can enhance the volume of 'carbon credit' through these communities.

SECTION E. STATUS OF SUSTAINABLE DEVELOPMENT GOALS OUTCOMES

Data and parameters monitored.

Relevant SDG Indicator	SDG 3: Good health and well-being. Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
Data / Parameter:	Up, y
Unit:	Percentage
Description:	Usage rate in project scenario p during year y
Measured/Calculated / Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022
Value(s) of monitored parameter:	100%

Monitoring equipment:	None
Measuring/Reading/Recording frequency:	Annually
Calculation method (if applicable):	The PP has provided excel based calculations that demonstrate the calculation of a single usage parameter. The PP determined the usage parameter by eliminating the non-users of the project technology from the sample frame and extrapolating to the entire Total sales record population.
QA/QC procedures:	The guidance questions in the usage survey section in the monitoring survey template clearly determined the operational and non-operational filters in the project scenario.
Purpose of data:	Calculations of total Emission reductions
Additional comment:	105 filters from the sampled households were found to be users of the project technology.

• **My Observation:**

1. Usage rate in each of the Household are 100%
2. Water borne diseases are totally absent from the villages and households post installation, and it seems the project *have achieved its objective in this regard*.
3. *Social mobilization by the NGO has also impacted reduction in waterborne diseases beyond the users of water filters.*
4. Supply of filters to households selected randomly, distributed scattered manner in a large area.
5. Scope of promoting use of toilets in all villages where water filters were distributed by the local implementing agency.
6. Scope of HH waste management practices across the villages.

Relevant SDG Indicator	SDG 6: Clean water and sanitation Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
Data / Parameter:	Q, p,y
Unit:	Litres per person per day
Description:	Quantity of safe water in litres consumed in the project scenario p and supplied by project technology per person per day
Measured/Calculated Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022

Value(s) of monitored parameter:	7.0 litres per person per day (8.41)
Monitoring equipment:	Calibrated measuring containers
Measuring/Reading/Recording frequency:	Biennially
Calculation method (if applicable):	This was done in accordance to the methodological guidance of the Water consumption field test. The PP conducted a 3-day assessment of water consumed from the filter. The PP only measured water that was to be used for cooking, drinking and personal hygiene as stipulated in the Gold Standard guidelines. The PP used calibrated containers to measure the volume of water. The water is measured before pouring into the buckets that the households use on their daily routine. Water from the bucket is poured into the filter to determine how much water the household would consume per day. The average volume over the 3-day period was used as the conservative estimate of water consumed from the filter per household per day
QA/QC procedures:	Enumerators went through training to ensure they conducted the WCFT in the most accurate way. They were also using calibrated measuring containers to determine how much water a household would use in a day from the Hydrad filter.
Purpose of data:	Calculation of baseline emissions
Additional comment:	This parameter is monitored biennially therefore the results used in this period are the same as the ones used in the last monitoring period. The $Q_{p,y}$ was calculated at 8.51 but the PP capped this at 7.0 as recommended by WHO.

My Observation: Quantity of safe water in liters consumed in the project is satisfactory and the filters are able to meet the demand of water for drinking water and cooking. The claim of 7 liters per person day seems logical from my field observations. Many HHs where family size is high, they fill the filter twice a day to fulfill their families' daily need of water.

Relevant SDG Indicator	SDG 6: Clean water and sanitation Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
Data / Parameter:	Quality of Treated Water
Unit:	MPN/100ml

Description:	Quality of filtered water
Measured/Calculated / Default:	Measured
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022
Value(s) of monitored parameter:	Presence of E.coli = 0% Absence of E.Coli = 100%
Monitoring equipment:	Aquagenx Field test kits
Measuring/ Reading/Recording frequency:	Annually
Calculation method (if applicable):	Using Aquagenx toolkit instructional manual for using the CBT. Of the samples collected, 105 (100%) had 0 Ecoli Therefore, the only water which was considered safe was water with less than 0cfu/100ml.
QA/QC procedures:	The monitoring team undergoes extensive training of how to use the Aquagenx CBT.
Purpose of data:	Gold Standards Sustainable Development monitoring.
Additional comment:	The Aquagenx field test kits have been used to determine quality of safe water. The PP has eliminated the 1 households with >0mpn/100ml.

My Observation: From the evidence of zero waterborne diseases, supply of water across all the households is a clear testimony of consumption and supply of pure water. In some Households borewells and water taps supplied by govt are established, yet all the households prefer water treated through the filter, as it tastes better and looks clean. Hence it can be assumed that the quality of water is satisfactory. Water testing done by field team annually.

Suggestion: It will be good to issue the result of the water testing at the HH level for their reference (maybe a colour coded stickers). Currently the test reports are only available with the field staff and could not be produced by the field team during my field visits. Some HHs remember testing procedure but could not recall the month / year when it was last conducted. They have complete faith upon the filter, that the water is safe to consume and have never demanded any testing report cards from their end yet.

Relevant SDG Indicator	SDG 6: Clean water and sanitation Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
Data / Parameter:	Q _{p,rawboil,y}

Unit:	Litres per person per day
Description:	The raw or unsafe water that is still boiled after installation of the water treatment technology.
Measured/Calculated / Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022
Value(s) of monitored parameter:	0
Monitoring equipment:	3-day measurement using calibrated measuring containers.
Measuring/Reading/Recording frequency:	Biennially
Calculation method (if applicable):	This was done in accordance to the methodological guidance of the Water consumption field test. The PP has provided the protocol followed in this monitoring report. The PP conducted a 3-day assessment of any raw water boiled. None of the households reported that they boil any raw water.
QA/QC procedures:	Measurements of water were based on calibrated containers
Purpose of data:	Calculation of baseline and project emissions.
Additional comment:	This is a biennially monitored parameter therefore the results used in this period are the same as the ones used in the last monitoring period

My observation: The raw or unsafe water boiling practice has been completely abolished in the households with these filters. Each household remembered doing it 5 years back but not anymore. Whereas the same practice must be in practice in other HHs who could not avail these filters. For the same reason demand for new filters is ever increasing.

1. In one case it was observed that one family has collected one filter (ID10002183) from another villager (BHAUTA LAKRA) who has moved out of the village and state for some jobs.
2. HH 4. Salomi Kujur (ID 10001318) wanted another filter for her daughter who had got married in another village, but her in-laws house does not have a safe source of water, she also needs one more filter for her newly married daughter.
3. Another HH 12 (Uttam Jana (ID 10009891) had two sons and are now married off, each of the daughter in law wanted new filters in their respective new homes. And the Uttam Jana (owner and father-in-law) not ready to donate any one,

neither to favor nor to discriminate any daughter-in-law and he also wants to keep it with him along with his wife.

Relevant SDG Indicator	SDG 6: Clean water and sanitation Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all
Data / Parameter:	Qp,cleanboil,y
Unit:	Litres per person per day
Description:	Quantity of safe (treated, or from safe supply) water boiled in the project scenario p, after installation of project technology
Measured/Calculated /Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022
Value(s) of monitored parameter:	0
Monitoring equipment:	Monitoring surveys
Measuring/Reading/R ecording frequency:	Biennially
Calculation method (if applicable):	The PP had a question in the WCFT survey form seeking to know if the households boiled any water from the Hydrad filter. No Household interviewed boiled water from the Hydrad filter, and as such, the parameter value is 0.
QA/QC procedures:	Measurements of water would have been based on calibrated containers
Purpose of data:	Calculation of project emissions.
Additional comment:	This is a biennially monitored parameter therefore the results used in this period are the same as the ones used in the last monitoring period.

My observation: I could not find any HHs boiling water for consumption within the households where filter has been supplied.

Relevant SDG Indicator	SDG 3: Good health and well being Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
Data / Parameter:	Np, y
Unit:	Person.days
Description:	Number of persons consuming water supplied by project scenario p through year y
Measured/ Calculated /Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022

Value(s) of monitored parameter:	2,299.50
Monitoring equipment:	Open ended question from the Monitoring surveys
Measuring/Reading/Recording frequency:	Biennially
Calculation method (if applicable):	The date of installation of the filter shall be ascertained from the Total Sales record this shall be used to quantify the number of days in the crediting period within which the filter has been use. The monitoring survey determined the number of persons per household. The two variables shall be multiplied to get the person.days.
QA/QC procedures:	Clear question in the monitoring survey that sought to find out the number of persons per household.
Purpose of data:	Calculation of project emissions.
Additional comment:	This is a biennially monitored parameter therefore the results used in this period are the same as the ones used in the last monitoring period.

My observation: I could see all the family members are consuming filter water irrespective of age and sex. An average family size of each HH should be around 5-7 members and each of the members consumes water only from the filter and each house holds refill the filter minimum once a day, and 2 times if the family size is more than 5-6 adults.

In 2 case it was found that the filters flow has been reduced as it was not cleaned in one HH and another HH was waiting for a replacement of a broken pipe, and the family members were waiting for the field team of the NGO to reach/interact. They have stopped consuming water for some days but not reported boiling the water before consumption.

Relevant SDG Indicator	SDG 13: Climate Action Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
Data / Parameter:	Bby
Unit:	Tons
Description:	Quantity of wood fuel consumed in baseline scenario b during the year y in tons
Measured/Calculated / Default:	Calculated
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022

Value(s) of monitored parameter:	6.319578
Monitoring equipment:	N/A
Measuring/ Reading/ Recording frequency:	Annually
Calculation method (if applicable):	The parameter is a function of the Cj factor, Npy, Wib,y , Qpy an Qp raw boil as shown in the equation below: $Bby = (1 - Cj) * Wib,y * Np,y * (Qpy + Qpraw,boil)$
QA/QC procedures:	The variables were based on accurate monitored data as well as data fixed ex-ante. Additionally, the formula used is derived from the GS approved methodology "Technologies and practices to Displace Decentralized Thermal Energy Consumption"
Purpose of data:	Calculation of Baseline emissions.
Additional comment:	N/A

My observation: could not be observed.

Relevant SDG Indicator	SDG 6: Ensure availability and sustainable management of water and sanitation for all Target 6.b.1: Support and strengthen the participation of local communities in improving water and sanitation management
Data / Parameter:	Number of People trained on water, hygiene and sanitation management
Unit:	Numeric figure
Description:	Describes the total number of people trained by the project on water, hygiene and sanitation improvement during the monitoring period.
Measured/Calculated / Default:	Calculated
Source of data:	GS 3964 Summary Training Records_NYDHEE_Confidential
Value(s) of monitored parameter:	17
Monitoring equipment:	Training records
Measuring/Reading/Recording frequency:	Annually
Calculation method (if applicable):	N/A

QA/QC procedures:	2 trainings on water, hygiene and sanitation improvement were conducted in this monitoring period. A total of 17 participants were trained on relevant topics on water, hygiene and filter use best practices. Participants lists and Training records have been provided as a support document. A refresher training was held through Skype between ClimateCare, Native Energy and the monitoring team. The agenda was to provide support to the team on how to undertake the monitoring survey and water testing.
Purpose of data:	Gold Standard sustainable development monitoring
Additional comment:	The PP has provided the training records and Participants training lists as supporting evidence.

My observation: Apart from the Field team of the organization, I could not see any significant work done by the trained personnel from villages. There is an opportunity to motivate these people and get support in promoting hygiene, toilet use among the villagers and getting support in maintenance and recordkeeping for the project.

Relevant SDG Indicator	Goal 13: Take urgent action to combat climate change and its impacts Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Data / Parameter:	Number of filters sold
Unit:	Numeric figure
Description:	Change in Energy use as monitored by the number of water filters sold.
Measured/Calculated / Default:	Calculated
Source of data:	GS 3964 TSR and Sample Frame
Value(s) of monitored parameter:	726 filters
Monitoring equipment:	N/A
Measuring/Reading/Recording frequency:	Annually
Calculation method (if applicable):	N/A

QA/QC procedures:	A sales record is maintained for all filters distributed under this project to ensure accuracy of the records; at the time of installation an interview was conducted within the household of the installation to collect user characteristics. This information was entered into a database shortly after the sale is made and the filter installed and was maintained by Native Energy.
Purpose of data:	Gold Standard sustainable development monitoring
Additional comment:	A TSR has been provided to the GS as supporting document.

My observations: A reduction in firewood/fuel use is quite evident from my filed observations specially to purify the water before drinking. Could not assess from each household but an average of 20 to 30 minutes of fuel saved in a day per an average family size of 5.

Relevant SDG Indicator	SDG 8: Decent Work and Economic growth Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
Data / Parameter:	Income Generation
Unit:	Income generated
Description:	To assess the Income generated by employees enrolled in the project activity.
Measured/Calculated / Default:	Calculated
Source of data:	GS 3964 Employment records_NYDHEE_Confidential
Value(s) of monitored parameter:	A total of 7 employees worked for the project between year 2020 and 2021. Income earned by each employee has been included.
Monitoring equipment:	Employment Records
Measuring/Reading/ Recording frequency:	Annually
Calculation method (if applicable):	N/A
QA/QC procedures:	Employment Records are kept electronically and updated frequently to ensure they are up to date.
Purpose of data:	Gold Standard sustainable development monitoring
Additional comment:	5men and 2 women were employed by the project during this monitoring periods.

My observation: I could meet 2 staff (Samya and Umesh) in Jharkhand and 2 in West Bengal (Gouri and Bijay), it seems they are regularly paid by the organization. Did not

check with field team about the amount and frequency of salary, but they seem quite motivated to work in the organization.

Relevant SDG Indicator	SDG 8: Decent Work and Economic growth Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.
Data / Parameter:	Number of people employed by the project
Unit:	Number of people
Description:	This parameter will be collected to indicate the project provides decent work for all men and women.
Measured/Calculated / Default:	Calculated
Source of data:	GS 3964 Employment records_NYDHEE_Confidential
Value(s) of monitored parameter:	A total of 7 employees worked for the project between year 2020 and 2022. This constitutes 5 men and 2 women. Out of the 7 employees, 1 woman is considered as a youth (employees under the age of 29 years).
Monitoring equipment:	N/A
Measuring/Reading/Recording frequency:	Annually
Calculation method (if applicable):	N/A
QA/QC procedures:	The employment records shall be up to date and backed up electronically
Purpose of data:	Gold Standards sustainable development monitoring
Additional comment:	In India, a youth is defined as any person between 15 to 29 years. ¹

My observations: One staff can be considered as youth, although I could not check her DOB. If necessary, the document can be collected.

Relevant SDG Indicator	SDG 3: Good health and wellbeing. Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
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¹ <https://www.youthpolicy.org/factsheets/country/india/>

Data / Parameter:	Reduced number of water borne diseases (Skin rash, diarrhea, foot sore and parasites) and Indoor Air Pollution related diseases/infections (itchy eyes, eye problems and incidence of coughing)
Unit:	Percentage
Description:	Measurement of user perceived change in air quality between the baseline and project scenario: smoke levels, incidence of coughing, incidence of respiratory illness, and incidence of itchy eyes and reduced exposure to water Borne diseases
Measured/Calculated / Default:	Measured
Source of data:	Er Calculations and Monitoring Survey summary_27.06.2022
Value(s) of monitored parameter:	<u>Improved Smoke levels in the House:</u> - Improved: 74% - Decline: 12% - No change: 13% - N/A: 0% <u>Improved Incidents of Coughing:</u> - Improved = 68% - Decline = 11% - No Change = 21% - N/A=0% <u>Reduced incidences of Itchy Eyes:</u> - Yes = 37% - No = 15% - No Change = 48% - N/A=0% Occurrences of water borne diseases. - Yes = 0% - No = 100% - No Change = 0% - N/A=0%
Monitoring equipment:	Monitoring Survey questionnaire
Measuring/Reading/Recording frequency:	Annually
Calculation method (if applicable):	The number of end users with the perceived outcome e.g. reduced levels of smoke was divided by the total units in the sample frame and multiplied by 100 to get the percentage.
QA/QC procedures:	The questionnaire is asked in an unbiased manner to ensure the respondents are not coerced into any answer by the interviewer
Purpose of data:	Gold Standard sustainable development monitoring
Additional comment:	N/A

My observations: My observations during my field visits, the values tally with the values that I monitored, are almost similar to the parameters of the monitoring survey

questionnaire at least for the HHs I have visited. Other than the listed diseases I have also inquired about the kidney diseases which can be a result of long-term use of contaminated water, but no such cases could be traced.

SECTION F. STATUS OF IMPLEMENTATION OF CONTINUOUS INPUT / GRIEVANCE MECHANISM & FEEDBACK RECEIVED

Logbook 1

Native Energy Clean Water Programme South East Asia: NE_VPA 01_IND

Location: Jharkhand (India)

Contact Person: Umesh Kumar Verma

Position of the contact person: Cluster Coordinator

Office phone number: NA

Cell phone number: 9122759496

Email address: umeshje2013@gmail.com

Date of comment	Comment	Action required from local implementer	Response from project implementer	Name of the person who handled the issue	Was the issue resolved?	Date issue was resolved
01.07.2021	Flow rate less than 400 ml (filter no: 10002202)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	03.07.2021
06.07.2021	Flow rate less than 400 ml (filter no: 10001323)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	08.07.2021
10.07.2021	Lid broken (filter no: 10001941)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	12.07.2021
14.07.2021	Flow rate less than 400 ml (filter no: 10002127)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	15.07.2021
18.07.2021	Flow rate less than 400 ml (filter no: 10001296)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	20.07.2021

20.07.2021	Filter Outlet pipe broken (filter no: 10001530)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	21.07.2021
24.07.2021	Flow rate less than 400 ml (filter no: 10002224)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	26.07.2021
01.08.2021	Flow rate less than 400 ml (filter no: 10002267)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	04.08.2021
06.08.2021	Flow rate less than 400 ml (filter no: 10002180)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	09.08.2021
10.08.2021	Outlet pipe broken (filter no: 10002181)	Need to visit household to solve the case	New Pipe provided	Samiya Lakra	yes	12.08.2021
13.08.2021	Flow rate less than 400 ml (filter no: 10002192)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	14.08.2021
16.08.2021	Lid broken (filter no: 10002272)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	18.08.2021
21.08.2021	Flow rate less than 400 ml (filter no: 10002186)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	24.08.2021
27.08.2021	Flow rate less than 400 ml (filter no: 10002608)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	30.08.2021
01.09.2021	Flow rate less than 400 ml (filter no: 10001315)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	04.09.2021
06.09.2021	Flow rate less than 400ml (filter no: 10001318)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	08.09.2021
13.09.2021	Outlet pipe broken (filter no: 10001528)	Need to visit household to solve the case	New Pipe provided	Menuel Lakra	yes	15.09.2021
17.09.2021	Flow rate less than 400 ml	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	20.09.2021

	(filter no: 10002154)					
21.09.2021	Flow rate less than 400 ml (filter no: 10002613)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	22.09.2021
27.09.2021	Flow rate less than 400 ml (filter no: 10002103)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	30.09.2021
01.10.2021	Standing water level less than 4 cm (filter no: 10001381)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	05.10.2021
11.10.2021	Standing water level more than 6 cm (filter no: 10002151)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	18.10.2021
19.10.2021	Standing water level more than 6 cm (filter no: 10001736)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	21.10.2021
22.10.2021	Standing water level less than 4 cm (filter no: 10002636)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	25.10.2021
26.10.2021	Crack in filter (filter no: 10002159)	Need to visit household to solve the case	Fixing materials provided	Samiya Lakra	yes	28.10.2021
01.11.2021	Standing water level less than 4 cm (filter no: 10001153)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	03.11.2021
05.11.2021	Flow rate less than 400 ml (filter no: 10000200)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	08.11.2021
09.11.2021	Filter cover broken (filter no: 10001934)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	11.11.2021

12.11.2021	Standing water level less than 4 cm (filter no: 10001337)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	15.11.2021
16.11.2021	Flow rate less than 400 ml (filter no: 10001336)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	18.11.2021
20.11.2021	Standing water level less than 4 cm (filter no: 10002222)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	22.11.2021
24.11.2021	Flow rate less than 400 ml (filter no: 10002265)	Need to visit household to solve the case	Not needed	Umesh Kumar Verma	yes	27.11.2021
28.11.2021	Flow rate less than 400 ml (filter no: 10001696)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	30.11.2021
01.12.2021	Standing water level less than 4 cm (filter no: 10001339)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	03.12.2021
06.12.2021	Flow rate less than 400 ml (filter no: 10002582)	Need to visit household to solve the case	Not needed	Samiya Lakra	yes	08.12.2021
09.12.2021	Outlet pipe broken (filter no: 10001532)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	13.12.2021
14.12.2021	Crack in filter (filter no: 10001879)	Need to visit household to solve the case	Fixing materials provided	Samiya Lakra	yes	17.12.2021
20.12.2021	Standing water level less than 4 cm (filter no: 10001654)	Need to visit household to solve the case	Not needed	Menuel Lakra	yes	22.12.2021

Logbook 2

Native Energy Clean Water Programme South East Asia: NE_VPA 01_IND

Location: West Bengal

Contact Person: BijoyMondal

Position of the contact person: Cluster Coordinator

Office phone number: NA

Cell phone number: 9733988944

Email address: mondalbijoy11@gmail.com

Date of comment	Comment	Action required from local implementer	Response from project implementer	Name of the person who handled the issue	Was the issue resolved?	Date issue was resolved
02.07.2021	Flow rate less than 400 ml (filter no: 10001949)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	06.07.2021
10.07.2021	Flow rate less than 400 ml (filter no: 10002838)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	14.07.2021
18.07.2021	Lid broken (filter no: 10009562)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	22.07.2021
23.07.2021	Flow rate less than 400 ml (filter no: 10001936)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	30.07.2021
01.08.2021	Flow rate less than 400 ml	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	04.08.2021

	(filter no: 10001796)					
05.08.2021	Filter Outlet pipe broken (filter no: 10002833)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	08.08.2021
10.08.2021	Flow rate less than 400 ml (filter no: 10002869)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	14.08.2021
15.08.2021	Flow rate less than 400 ml (filter no: 10002478)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	19.08.2021
20.08.2021	Flow rate less than 400 ml (filter no: 10001798)	Need to visit household to solve the case	Not needed	Bijay Manda	yes	24.08.2021
25..08.2021	Outlet pipe broken (filter no: 10001722)	Need to visit household to solve the case	New Pipe provided	Gouri Rani Giri	yes	28.08.2021
28.08.2021	Flow rate less than 400 ml (filter no: 10002747)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	01.09.2021

30.08.2021	Lid broken (filter no: 10009547)	Need to visit household to solve the case	Not needed	Gouri Rani Halder	yes	03.09.2021
31.08.2021	Flow rate less than 400 ml (filter no: 10002778)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	05.09.2021
01.09.2021	Flow rate less than 400 ml (filter no: 10002482)	Need to visit household to solve the case	Not needed	Gourirani Halder	yes	06.09.2021
05.09.2021	Flow rate less than 400 ml (filter no: 10002889)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	09.09.2021
09.09.2021	Flow rate less than 400 ml (filter no: 10001763)	Need to visit household to solve the case	Not needed	Bhola nath Halder	yes	12.09.2021
13.09.2021	Outlet pipe broken (filter no: 10002570)	Need to visit household to solve the case	New Pipe provided	Bholanath Halder	yes	16.09.2021
17.09.2021	Flow rate less than 400 ml	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	20.09.2021

	(filter no: 10002869)					
21.09.2021	Flow rate less than 400 ml (filter no: 10001741)	Need to visit household to solve the case	Not needed	Gouri Rani. Giri	yes	24.09.2021
24.09.2021	Flow rate less than 400 ml (filter no: 10002139)	Need to visit household to solve the case	Not needed	Gouri Rani Giri	yes	28.09.2021
26.09.2021	Standing water level less than 4 cm (filter no: 10002199)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	30.09.2021
30.09.2021	Standing water level more than 6 cm (filter no: 10001361)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	01.10.2021
04.10.2021	Standing water level more than 6 cm (filter no: 10009543)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	08.10.2021
15.10.2021	Standing water level less than 4 cm (filter	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	19.10.2021

	no: 10001701)					
20.10.2021	Crack in filter (filter no: 10001867)	Need to visit household to solve the case	Fixing materials provided	Gourirani Giri	yes	24.10.2021
22.10.2021	Standing water level less than 4 cm (filter no: 10001683)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	26.10.2021
24.10.2021	Flow rate less than 400 ml (filter no: 10002479)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	28.10.2021
26.10.2021	Filter cover broken (filter no: 10001934)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	30.10.2021
31.10.2021	Standing water level less than 4 cm (filter no: 10001704)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	02.11.2021
01.11.2021	Flow rate less than 400 ml (filter no: 10002473)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	04.11.2021

04.11.2021	Standing water level less than 4 cm (filter no: 10002849)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	08.11.2021
08.11.2021	Flow rate less than 400 ml (filter no: 10002760)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	12.11.2021
12.11.2021	Flow rate less than 400 ml (filter no: 10000175)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	16.11.2021
14.11.2021	Standing water level less than 4 cm (filter no: 10001732)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	18.11.2021
19.11.2021	Flow rate less than 400 ml (filter no: 10002571)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	21.11.2021
21.11.2021	Outlet pipe broken (filter no: 10001817)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	23.11.2021
24.11.2021	Crack in filter (filter no: 10001817)	Need to visit household to solve the case	Fixing materials provided	Bholanath Halder	yes	26.11.2021

	no: 10002886)					
25.11.2021	Standing water level less than 4 cm (filter no: 10001710)	Need to visit household to solve the case	Not needed	Gouri Rani Giri	yes	28.11.2021
27.11.2021	Flow rate less than 400 ml (filter no: 10001712)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	30.11.2021
28.11.2021	Flow rate less than 400 ml (filter no: 10001807)	Need to visit household to solve the case	Not needed	Bholanath Halдар	yes	01.12.2021
29.11.2021	Flow rate less than 400 ml (filer no; 10009586)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	03.12.2021
30.11.2021	Standing water level more than 6 cm (filter no: 10002532)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	05.12.2021
01.12.2021	Standing water level less than 4 cm (filter no: 10002858)	Need to visit household to solve the case	Not needed	Bholanath Halдар	yes	08.12.2021

02.12.2021	Crack in filter (filter no: 10002857)	Need to visit household to solve the case	Fixing materials provided	Gourirani Giri	yes	09.12.2021
03.12.2021	Standing water level more than 6 cm (filter no: 10009929)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	12.12.2021
10.12.2021	Crack in filter (filter no: 10002467)	Need to visit household to solve the case	Not needed	Bholanath Halder	yes	15.12.2021
12.12.2021	Flow rate less than 400 ml (filter no: 10002832)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	18.12.2021
16.12.2021	Diffuser damaged (filter no: 10002477)	Need to visit household to solve the case	Not needed	Bijay Mandal	yes	19.12.2021
18.12.2021	Standing water level more than 6 cm (filter no: 10009891)	Need to visit household to solve the case	Not needed	Gourirani Giri	yes	21.12.2021
19.12.2021	Crack in filter (filter no: 10002853)	Need to visit household to solve the case	Fixing materials provided	Bholanath Halder	yes	22.12.2021

20.12.2021	Diffuser damaged (filter no: 10002512)	Need to visit household to solve the case	Not needed	Bholanath Haldar	yes	23.12.2021
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My Observations:

- Filed team could not show my any register or format that can be crosschecked with the families.
- The above list does not contain a detailed address (village/block/District/ so this list also could not be verified.
- Phone numbers of the field team has not been shared with the beneficiaries, only the field personnel can call from their end to the beneficiaries. During my visit field team encountered 3 filters which were not cleaned/pipe has been broken and cleaned Infront of me.
- In absence of a village level register, I could not cross check with any family who has raised a complaint and got it solved by the field team. It is pretty difficult to cross check with just the filter Id.
- Visited some HHs where field team has not visited for months, and condition of filter certainly needed attention and cleaning.
- From the above table: Diffuser has been damaged in 2 cases,

Suggestion:

As it is a low maintenance filter hence the field team does not require a visit on a regular basis but can circulate their phone numbers, for any maintenance which requires their presence. They can also conduct a training session for villages where the water quality is bad, and number of filters distributed are highest. They can also place a sticker on the filter as well to call in case of an emergency.

As the filters are distributed in a scattered manner reaching each HH is not economical. So, monitoring through the help of mobiles and visits can be done only when necessary. Visits may be pre planned/on fixed days for village meetings and home visits.

Funders and project implementors should be committal to a feasible plan to provide filters to non-recipients of water filters. The other members should have options to buy/create filters using similar products through local vendors and expand the projects achievements to more families and villages as a social responsibility rather than just the committed volume of carbon credit.

Local implementers (NGO) must coordinate with state and district administration to replicate the similar solution / technology in both the states.

APPENDIX – REVIEW PROTOCOL

This section records the clarifications and questions listed by section that were posed to the Objective Observer during the finalization of this report. Any changes in this

report should be done using tracked changes in word for transparency and the final version saved as clean.

Comment/ Request 1 Section X
NA
Response by Objective Observer – 1st round
Response by SustainCERT – 1st round
Response by Objective Observer – 2nd round
Response by SustainCERT – 2nd round

Revision History

Version	Date	Remarks
1.2	13 th October 2020	Improved guidance for developers on what sections to be part completed Improved guidance for Objective observers on feedback required Inclusion of risks summary table Removal of signed, dated COI declaration Inclusion of review protocol showing the review of the report.
1.1	1 st March 2018	Updated to include a section to indicate version numbers of documents reviewed
1.0	10 th July 2017	Initial adoption