

TEMPLATE

KEY PROJECT INFORMATION & VPA DESIGN DOCUMENT (VPA DD)

PUBLICATION DATE 29.06.2023

VERSION v.2.3

RELATED SUPPORT

- Programme of Activity requirements
- TEMPLATE GUIDE VPA Design Document

This document contains the following sections

Section A - Description of project

<u>Section B</u> - Application of approved Gold Standard Methodology (ies) and/or demonstration of SDG Contributions

Section C - Duration and crediting period

Section D - Summary of Safeguarding Principles and Gender Sensitive Assessment

<u>Section E</u> – Summary of Local stakeholder consultation

<u>Section F</u> - Eligibility and inclusion criteria for VPAs inclusion

Appendix 1 – Safeguarding Principles Assessment (mandatory)

Appendix 2- Contact information of VPA Implementer (mandatory)

Appendix 3 – LUF Additional Information (VPA specific)

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KEY PROJECT INFORMATION

	□ Real case VPA
Type of VPA	⊠ Regular VPA
	□Microscale
Scale of VPA	Small scale
Note that a VPA can be of one scale.	
Please select applicable scale	□Large scale
accordingly.	
Title of corresponding real case VPA (if applicable)	NA
	NA
GS ID of real case VPA (if applicable)	
GS ID of VPA	3109
Title of VPA	Nepal Biogas Support Program-CPA 1:
Title of VPA	20,000 Digesters
Time of First Submission Date	
Time of First Submission Date	25/01/2019
Date of Design Certification	23/01/2019
Version number of the VPA-DD	1.0
Version number of the VFA-DD	31/01/2025
Completion date of version	31/01/2023
Coordinating/managing entity	Alternative Energy Promotion Centre
VDA T I	Alternative Energy Promotion Centre
VPA Implementer (s)	atmosfair aCmbU.
Project Participants and any communities involved	atmosfair gGmbH;
Host Country (ies)	Nepal
GS ID and Title of applicable Design	NA
Certified VPA GS ID and Title of applicable	
Performance Certified VPA	NA
Activity Requirements applied	□ Community Services Activities
	☐ Renewable Energy Activities
	☐ Land Use and Forestry Activities/Risks &
	Capacities

	□ N/A
Other Requirements applied	
Methodology (ies) applied and version number	AMS-I-E: Switch from non-renewable
	biomass for thermal applications by the
	user (Version 13.0)
Product Requirements applied	\square 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 (DEFINED IN B.6.)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Reduction in GHGs emissions	65,106	tCO ₂ e
3 Good Health and Well Beings			
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%
3.9.1 Mortality rate attributed to household and ambient air pollution	Reduction incidence of disease caused by air pollutants	100	%

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3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Substantially reduce the number of deaths and illness from hazardous chemicals and air water and soil pollution and contamination	100	%
3.9.3 Mortality rate attributed to unintentional poisoning	Substantially reduce the number of deaths and illness from hazardous chemicals and air water and soil pollution and contamination	100	%
7: Affordable and Clean Energy			
7.1.2 Proportion of population with primary reliance on clean fuels and technology	Ensure universal access to affordable, reliable and modern energy services	100	%
7.1.2 Proportion of population with primary reliance on clean fuels and technology	Ensure universal access to affordable, reliable and modern energy services	100	%

SECTION A. DESCRIPTION OF PROJECT

A.1. Purpose and general description of project

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Main objective of the Nepal Biogas Support Programme-PoA is to further develop and disseminate biogas digesters as a renewable energy solution in Nepal, while better addressing poverty, social inclusion and regional balance issues and at the same time ensuring sustainability of the sector. Under this, AEPC currently supports to implement up to 20,000 digesters for each CPA under this PoA, which assures to remain within the small scale threshold. Besides investment subsidy to user households, AEPC needs funding on program level to maintain its activities. Target group under the PoA/CPA are households with at least one head of cattle (generally cows or buffalos) who currently use non-renewable biomass (firewood) for cooking purpose. The baseline of the PoA considers only non-renewable biomass replaced through household biogas applications. Only households previously using non-renewable biomass are eligible to the PoA.

This CDM Program Activity (CPA) is part of the Nepal Biogas Support Program-Programme of Activity (PoA). Initially, this CPA included 20,000 digesters which were implemented between 22 June 2007 and 18 March 2009. For this crediting period, number of digester included in the CPA is 19,999. Table 1 provides an overview of the digesters according to their size and location.

Table 2: Digesters listed in this CPA.

Region Size	Terai	Hill	Mountain or Remote Hill	Total
4 m³	1584	1,511	16	3,111
6 m ³	7798	7,726	93	15,617
8 m ³	628	628	7	1263
10 m ³	1	7	0	8
Total	10,011	9,872	116	19,999

¹ During the first crediting period, one biogas of 6 cu m capacity in Ilam district was found abandoned during monitoring. So, the biogas is removed from CPA list.

A complete list of all digesters included in this CPA can be found in a table attached separately.

A.1.1. Eligibility of the VPA under approved PoA

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The CPA is eligible for the inclusion and renewal of crediting period in the PoA for Nepal Biogas Support Program-PoA since it meets all the criteria listed in the eligibility criteria for inclusion of a CPA in the PoA as given in registered PoA-DD as under.

DESCRIPTION OF THE

Table 3 Eligibility for VPA inclusion as per PoA requirements

NO.	ELIGIBILITY CRITERION	DESCRIPTION/ REQUIRED CONDITION	VPA IN RELATION TO THE CRITERIA, MEANS OF VERIFICATION AND SUPPORTING EVIDENCE FOR INCLUSION
1	Geographical boundary	are located within the	 Commissioning Report from Biogas Companies (BC). CPA Database indicating digester code, address and GPS coordinate.
2	Double counting	- Double counting is avoided by assuring that no digester is already included to a different CDM project or CPA This will be confirmed by the CME based on a) the digester codes listed in the BSP database and b) if necessary also GPS coordinates (the latter applies if biogas projects emerge under the CDM that are not part of the BSP).	digester code, address and GPS

3	Technology	as part of the BSP All digesters listed in the CPA	documents detailing digester
4	Start Date	- The start date of a CPA is the date of commissioning of the first biogas digester included to that respective CPA The start date of CPA 1 shall be 22 June 2007, which is the date of commissioning of the first digester in CPA 1 The start of each future CPA shall be after the date of commissioning of the last installation included to a previous CPA The date of commissioning is recorded in the Commissioning Report, which is archived and the date recorded in the CPA database.	indicating the commissioning date.
5	Compliance with applied methodology	- The activity shall replace non renewable biomass. This will be confirmed through documenting that participating households use non-renewable biomass as firewood.	- Report confirming use of non- renewable biomass as firewood prior to installation of digesters (e.g. BUS)
6	Diversion of official development assistance	- The CPA shall not result into the diversion of official development assistance.	- Declaration from CPA implementer / AEPC Confirmation of ODA non diversion, as applicable.
7	Target Group and distribution mechanism	- The target group within the CPA are households.	- Installation confirmation from Biogas Companies (BC) indicating that the digesters are installed in a household.

8	Threshold check	- Number of biogas digester included in each CPA shall not exceed 20,000 units, which assures compliance with the small scale limit of 45MWth. ²	- BSP/AEPC database to confirm the number of digesters in a CPA is maximum 20,000.
9	Other Voluntary action	 Each CPA to be included in this PoA should be a voluntary action and not mandated by the Government of Nepal 	- Confirmation that each CPA is a voluntary action not mandated by the Government of Nepal

All other criteria for the eligibility given in PoA-DD susch as safeguarding principles and the SDG outcomes is in-line with the PoA.

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

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The technology used in this PoA is the household level biogas plants and the owner of the technology is the particular household using biogas plants. The owners of a digester signed an agreement with AEPC by transferring all legal rights, interests, credits, entitlements, benefits or allowances arising from or in connection with any greenhouse gas emissions reductions arising from the operation of the digester (Emission Reduction), and agrees to take all necessary action required to ensure the transfer of those Emission Reductions to the Alternative Energy Promotion Centre or its nominee, including executing any relevant documents. So, the ownership of the products that are generated under Gold Standard Certification is under Alternative Energy Promotion Centre.

A.2. Location of VPA

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The digesters in this CPA are located at various locations across Nepal. The geographical coordinates of Nepal are:

Latitude - North 26.20 degree to North 30.45 degree

Longitude - East 80.07 degree to East 88.20 degree

 $^{^2}$ Estimated maximum capacity of 1.86 kWth per stove. Considering that the limit for SSC is 45 MWth, the maximum number of digesters allowed under a CPA (20,000) remains well below the SSC threshold.

The CPA database contains the following information for each digester: owner's name, spouse name, VDC/NP, ward number or cluster, district, region, plant size, name of Installation Company, digester code and the commissioning date.

A.3. Technologies and/or measures

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The technologies used in this CPA are household biogas digesters with a sludge and gas holding capacity range of up to 10 m³. The different sizes of the digesters that would be included in the programme would be of 4, 6, 8 and 10 m³. The programmes uses only one design i.e. GGC 2047 model. The biogas digesters are based on a uniform technical design and are manufactured and installed following established technical standards in Nepal. The digester itself is a closed underground container made of concrete or other materials. The design of the digester is mentioned below:

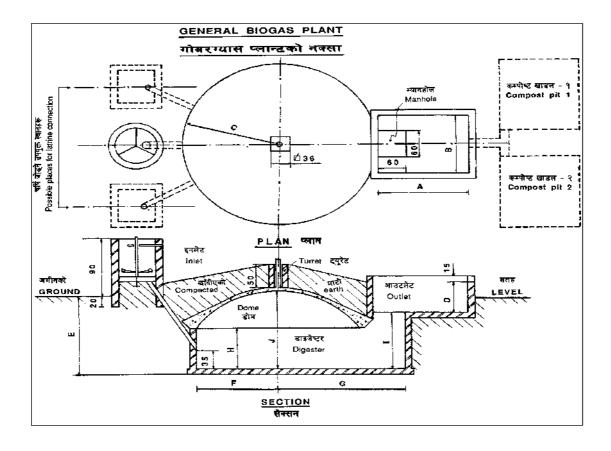


Figure 1: Biogas Model GGC 2047

The GGC 2047 biogas digester consists of five main structures or components. They are the inlet, outlet, digester, dome and the compost pits. The required quantity of dung and water is mixed in the inlet tank and this mix in the form of slurry is allowed to be digested inside the digester. The gas produced in the digester is collected in the dome, called as the gas holder. The digested slurry flows to the outlet tank from

the digester through the manhole. The slurry then flows through the overflow opening to the compost pit where it is collected and composted. The gas is supplied to the point of application through the pipeline.

A.4. Scale of the VPA

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The proposed small scale CPA is not a de-bundled component of a large CDM project. Each of the independent subsystems (bio digesters) included in the CPA is not greater than 1% of the threshold defined for a small scale project³. 1% of the 15 MWel (45MWth) threshold for type I projects is 150 kW_{el} (450kW_{th}). The capacity of a digester is 1.86 kW_{th} and hence remains well below the 1% of 15 MW threshold.

A.5. Funding sources of VPA

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The digesters listed in the CPA received subsidies and technical support under the BSP program. The BSP program is funded by the entities listed below. These include:

- German Development Bank KfW,
- Directorate General for International Cooperation (DGIS) of the government of the Netherlands through the Dutch development organisation SNV,
- Government of Nepal (GoN).

³ Guidelines on Assessment of Debundling for SSC Project Activities – Version 03, (EB 54, Annex 13)

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

Reference of approved methodology (ies) B.1.

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Title: Switch from non-renewable biomass for thermal applications by the user (AMS I.E. version 13)

https://cdm.unfccc.int/UserManagement/FileStorage/KT73R82ES91H0AMD4N5XGVQF **ZPUWLI**

Applicability of methodology (ies) B.2.

The Nepal Biogas Support Programme-CPA-1 meets the applicability criteria of AMS-I.E (version 09) as

Criteria AMS-I.E.	Explanation
Small-Scale project requirement:	The biogas capacity of each stove is 400 litre/hour. With
For biomass, biofuel and biogas project	a methane content of 52%, this gives an annual natural
activities, the maximal limit of 15MW(e) is	gas capacity of not more than 1.86 kW _{th} per stove
equivalent to 45 MW thermal output of the	(validated during registration). This means that around
equipment or the plant (e.g. boilers). For	24,000 stoves would still have an aggregated capacity
thermal applications of biomass, biofuels or	below the 45MW _{th} small scale threshold value, however
biogas (e.g. the cookstoves), the limit of 45	the CPA will be limited to 20000 installations only.
MWth is the installed/rated capacity of the	
thermal application equipment or device/s	
(e.g. biogas stoves).	
This category comprises activities to displace	The digesters are indeed "small thermal appliances that
the use of non-renewable biomass by	displace the use of non-renewable biomass by
introducing renewable energy technologies.	introducing new renewable energy end-user
Examples of these technologies include but	technologies". AMS-I.E. even lists biogas stoves as an
are not limited to biogas stoves, solar	example of eligible end user technologies.
cookers, passive solar homes, renewable	
energy based drinking water treatment	
technologies (e.g. sand filters followed by	

solar water disinfection; water boiling using	
renewable biomass).	
Project participants are able to show that	The BUS conducted in 2018 demonstrated that the time
non-renewable biomass has been used since	needed to gather firewood, the price of firewood and
31 December 1989, using survey methods or	the distance travelled to gather firewood is increasing
referring to published literature, official	at least since December 1989.
reports or statistics.	In that survey the respondents were asked to provide
	averages for the time needed to gather firewood, the
	distance travelled and the price. The average of the
	estimates from all respondents, showed a clear
	increase on all three indicators.

B.3. VPA boundary

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Source		GHGs	Included?	Justification/Explanation
		CO ₂	Included	Major Emission
	Emissions from NRB	CH ₄	Not Included	Conservative
	use for cooking	N ₂ O	Not Included	Conservative
ario				
scenario		CO ₂	Not Included	Conservative
e SC	Emissions from	CH ₄	Not Included	Conservative
Baselin	fossil fuel use for cooking	N ₂ O	Not Included	Conservative
Bas				
_				
		CO ₂	Not Included	Negligible
scenario	Digester and Biogas cooking stove	CH ₄	Not Included	Negligible
cen	Digester and biogas cooking stove			
Project				
۵		CH ₄		

N ₂ O

B.4. Establishment and description of baseline scenario

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The baseline scenario has been determined at the PoA level. The baseline scenario is continued use of NRB i.e. firewood for cooking. Research indicates that use of firewood has a low sensitivity to economic determinants.

For the second crediting period, the Methodological tool "Assessment of validity of the original/current baseline and update of the baseline at the renewal of a crediting period" Version 03.0.1 (EB 66, Annex 47) is used to assess the continued validity of the original baseline. This tool provides a stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period. For detail, please refer section I.5 of the registered CDM PoA-DD.

B.5. Demonstration of additionality

>>

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).

Guidelines on the demonstration of additionality of small scale project on activities" (version 09) EB 68 Annex 27.

Describe how the proposed VPA meets the criteria for deemed additionality.

The paragraph 2 of this guideline states that, "Documentation of barriers, as per paragraph 1 above is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM

thresholds (e.g. installed capacity up to 15 MW)"

The sub-section 2 (c) of paragraph states that, "Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds."

Each unit of biogas digester has the capacity of not more than 1.86 kWth which is less than 5% of the small-scale CDM threshold, or 750 kW installed capacity. The PoA is thus additional and there is no need for further assessment and demonstration of additionality.

B.5.1. Prior Consideration

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NA

B.5.2. Ongoing Financial Need

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NA

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

SUSTAINABLE DEVELOPMENT
GOALS TARGETED

MOST RELEVANT
SDG TARGET

INDICATOR
(PROPOSED OR SDG
INDICATOR)

Amount of GHGs
emissions avoided
Reduction in GHGs
emissions

3 Good Health and Well Beings

3.9.1 Mortality rate attributed to household and ambient air pollution	Average annual consumption of woody biomass per household in the pre-project devices during the project activity	Reduction incidence of disease caused by air pollutants
3.9.1 Mortality rate attributed to household and ambient air pollution	Quantity of woody biomass that is substituted or displaced	Reduction incidence of disease caused by air pollutants
3.9.1 Mortality rate attributed to household and ambient air pollution	Net calorific value of the non-renewable biomass that is substituted	Reduction incidence of disease caused by air pollutants
3.9.1 Mortality rate attributed to household and ambient air pollution	Users' perception on reduction in indoor air pollution	Reduction incidence of disease caused by air pollutants
3.9.1 Mortality rate attributed to household and ambient air pollution	Users' perception on reduction in health problem	Reduction incidence of disease caused by air pollutants
3.9.1 Mortality rate attributed to household and ambient air pollution	User's perception in Time saving for the cooking (reduce exposure to indoor air pollution)	Reduction incidence of disease caused by air pollutants
3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Users' perception on connection of toilet to biogas	Substantially reduce the number of deaths and illness from hazardous chemicals and air water and soil pollution and contamination
3.9.3 Mortality rate attributed to unintentional poisoning	Users perception in reduction of chemical fertilizers (use of Farmyard manure, Bio- slurry, Urea, DAP and Potash)	Substantially reduce the number of deaths and illness from hazardous chemicals and air water and soil pollution and contamination
7. Affordable and Clean Energy		

^{7:} Affordable and Clean Energy

7.1.2 Proportion of population with primary reliance on clean fuels and technology	Users' perception on time saving due to project for firewood collection (For men, women and children)	Ensure universal access to affordable, reliable and modern energy services
7.1.2 Proportion of population with primary reliance on clean fuels and technology	Number of people trained to promote Biogas plants	Ensure universal access to affordable, reliable and modern energy services

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

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$$BE_{v} = B_{v} \times f_{NRB,v} \times NCV_{biomass} \times EF_{projected\ fossil\ fuel}$$

In which:

BE_v Baseline Emissions during the year y (tCO2e)

By Quantity of woody biomass that is substituted or displaced in tonnes

f_{NRB.y} Fraction of woody biomass used in the absence of the project activity in year y

that can be established as non renewable biomass

NCV_{biomass} Net calorific value of the non-renewable woody biomass that is substituted

(IPCC default for wood fuel: 0.0156 TJ/tonne. The value is according to the

methodology AMS I.E.

EF_{projected.fossilfuel} Emission factor for substitution of non renewable woody biomass by similar

consumers. Use a value of 63.7 tCO₂/TJ⁴

Following option a) of paragraph 21, B_V is "Calculated as the product of the number of households multiplied by the estimate of average annual consumption of woody biomass per household that is displaced by the project activity (tonnes/household/year)".

Thus, B_v will be calculated as follows:

⁴ This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. The value is calculated, based on the global average ratio of cooking fuels (the normalized ratio of kerosene and liquefied petroleum gas (LPG) excluding coal), i.e. 9 per cent for kerosene (71.5 t CO2/TJ) and 91 per cent for LPG (63.0 t CO2/TJ).

$$B_y = N_{HH} \times (BC_{BL,HH,y} - BC_{PJ,HH,y})$$
 Equation (2)

Where:

 N_{HH} = Number of households in the project activity, number

 $BC_{BL,HH,V}$ = Average annual consumption of woody biomass per household before

the start of the project activity, tonnes/household/year

If it is found that pre-project devices were not completely displaced but

 $BC_{PLHH,y}$ = continue to be used to some extent, average annual consumption of

woody biomass per household in the pre-project devices during the

project activity, tonnes/household/year

B_y will be calculated multiplying with the actual household of this CPA that have operational digester in year y identified through survey method. Calculations will be carried out based on Excel spread sheets using the database of CPA that are already included. The database provides e.g. commissioning date.

Project Emissions

The AMS I.E Version 9 requires calculation of project emission using "TOOL16: Project and leakage emissions from biomass". As the fuelwood are basically sourced from the nearby and natural forest, which does not require processing of the feedstock and also does not include the cultivation, the project emissions (PE_y) is not applicable to this CPA and is taken as zero.

Leakage

As per para 24 of the AMS I.E version 9, the default factor of 0.95 is used to account for any potential leakage (i.e. By is multiplied by a net to gross adjustment factor of 0.95 to account for leakages).

Thus the leakage emission under a CPA is calculated as the following:

$$LE_{y} = 0.05 \times B_{y}.f_{NRB.y}.NCV_{biomass}.EF_{projected_fossilfuel}$$
 3

Emission Reductions

As the methodology AMS IE version 09, para 27, the emission reductions are to be estimated based on the following equation:

$$ER_{y} = BE_{y} - PE_{y} - LE_{y}$$

Where:

 ER_{y} = Emission reductions in year y, tonnes CO₂eq

B.6.2. Data and parameters fixed ex ante

SDG13

Data/parameter B_y

Unit	tons/year
Description	Quantity of woody biomass that is substituted or displaced
Source of data	The quantity of woody biomass substituted or displaced per household is estimated from the survey method for similar biogas project activities
Value(s) applied	$\begin{array}{l} (BC_{BL,HH,y} \text{ - }BC_{PJ,HH,Y}) = 4.5 \text{ tons/household/year and will be calculated} \\ \text{for each CPA by multiplying with the actual number of household having} \\ \text{operational biogas for the year y.} \\ B_y = (19,999 \text{ X operational status in year y X 4.5) tons/year} \end{array}$
Choice of data or Measurement methods and procedures	The methodology allow to fix it ex-ante and calculate it as the product of the number of households multiplied by the estimate of average annual consumption of woody biomass per household displaced by the project activity (tonnes/household/year);
Purpose of data	Calculation of baseline emission
Additional comment	As the value 4.5 tons/household/year is calculated as conservative value from the Biogas User Survey of similar activities and will not be changed significantly, this parameter (4.5 tons/household/year) shall remain fixed for the crediting period and B_y will be calculated multiplying with the actual household of CPA that have operational digester in year y.

3.9.1 Mortality rate attributed to household and ambient air pollution

Data/parameter	$\mathbf{f}_{\mathrm{NRB,y}}$
Unit	%
Description	Fraction of woody biomass saved by the project activity during year y that can be established as non-renewable biomass
Source of data	Calculated as per "TOOL30: Calculation of the fraction of non-renewable biomass"
Value(s) applied	86.1%
Choice of data or Measurement methods and procedures	The value is calculated as 86.1% using the national statistics and also validated by the Ministry of Forest and Environment, Government of Nepal. This value is for the national level, so will not be monitored.
Purpose of data	Calculation of baseline emission

Additional comment

This parameter shall remain fixed for the crediting period.

13.1.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

Data/parameter	EFprojected_fossil fuel
Unit	tCO2/TJ
Description	Emission factor for the projected fossil fuel consumption in the baseline.
Source of data	Approved small scale methodology AMS.I.E (version 09)
Value(s) applied	63.7
Choice of data or Measurement methods and procedures	AMS-I.E. requires using this value.
Purpose of data	Emission Reduction calculation
Additional comment	NA

7.1.2 Proportion of population with primary reliance on clean fuels and technology

Data/parameter	$N_{ m HH}$
Unit	Numbers
Description	Number of households in each CPA in year y
Source of data	BSP database for the CPA
Value(s) applied	19,999 digesters
Choice of data or Measurement methods and procedures	The registration procedure of the BSP database avoids double counting of digesters and the registration of digesters that have not been commissioned.

Purpose of data	Calculation of baseline emission
Additional comment	During calculation of Emission Reduction, it will be based on actual number of households having the biogas operational

B.6.3. Ex ante estimation of SDG Impact

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The emission reduction calculation is based on data that is specified to digester size and region. This section provides explanation of calculation made.

Baseline Emission

According to AMS-I.E (version 09), the baseline emission under a CPA are calculated as the following:

$$BE_y = B_y \times f_{NRB,y} \times NCV_{biomass} \times EF_{projected_fossil_fuel}$$

In which:	
BE _y	Baseline Emissions during the year y (tCO2e)
B_{y}	Quantity of woody biomass that is substituted or displaced in tonnes
$f_{NRB.y}$	Fraction of woody biomass used in the absence of the project activity in year
	that can be established as non renewable biomass, Use 86.1% ⁵
$NCV_{biomass}$	Net calorific value of the non-renewable woody biomass that is substituted
	(IPCC default for wood fuel: 0.0156 TJ/tonne). The value is according to the
	methodology AMS I.E.
EF _{projected.fossilfuel}	Emission factor for substitution of non renewable woody biomass by similar

consumers. Use a value of 63.7 tCO₂/TJ⁶

Thus, B_y will be calculated as follows:

By is calculated as using the following values

⁵ The value is calculated using "TOOL 30: Calculation of the fraction of non-renewable biomass" as given in section I.6.1 of PoA-DD and the value is fixed ex-ante. Use 86.1%

⁶ This value represents the emission factor of the substitution fuels likely to be used by similar users, on a weighted average basis. The value is calculated, based on the global average ratio of cooking fuels (the normalized ratio of kerosene and liquefied petroleum gas (LPG) excluding coal), i.e. 9 per cent for kerosene (71.5 t CO2/TJ) and 91 per cent for LPG (63.0 t CO2/TJ).

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N _{HH}	19,999 in CPA-1
Displacement of Woody Biomass (BC _{BL,HH,y} - BC _{PJ,HH,y})	4.50 tonne/household/year ⁷
Operational status of Biogas	89% ⁸
Number of Household with operational digester	N _{нн} * Operational status of Biogas

By = 19,999*0.89*4.5 = 80,096 tonne/year

Substituting the values,

Baseline Emission (BE_y) = $80096*0.861*0.0156*63.7 = 68,529.57 \text{ tCO}_{2e}$

Project Emissions

 $PE_v = 0$

Leakage

The default factor of 0.95 is used to account for any potential leakage, as prescribed by the methodology.

Thus the leakage emission under a CPA is calculated as the following:

 $LE_y = 0.05*80096*0.861*0.0156*63.7 = 3426.48 tCO_{2e}$

Emission Reductions

As the methodology AMS IE version 09, para 27, the ex-ante emission reduction is estimated as below:

$$ER_{y} = BE_{y} - PE_{y} - LE_{y}$$

= 68529.57 - 0 - 3426.48
= 65103 tCO_{2e} (round down value).

Please refer ER calculation spreadsheet for further details of the calculation.

 7 Conservative value taken as stipulated in section I.6.1 of this PoA DD and is fixed ex-ante.

⁸ For ex ante, operational status of the CPA-1 in 2018 identified from biogas user survey has been used. The actual operational status will be arrived using sample survey for ex-post and may vary (higher or lower) for the CPA.

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

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
22/02/2019 - 22/021/2020	68,532	3,426	65,106
22/02/2020 - 22/021/2021	68,532	3,426	65,106
22/02/2021 - 22/021/2022	68,532	3,426	65,106
22/02/2022 - 22/021/2023	68,532	3,426	65,106
22/02/2023 - 22/021/2024	68,532	3,426	65,106
Year n (delete if N/A)			
Total	342,660	17,130	325,530
Total number of crediting years	5		
Annual average over the crediting period	68,532	3,426	65,106

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

SDG 7

7.1.2 Proportion of population with primary reliance on clean fuels and technology

Data / Parameter	Р
Unit	%
Description	The share of digesters operational
Source of data	User Survey Report
Value(s) applied	Calculated
Measurement methods and procedures	Ratio calculated as number of digesters found to be operating from the total number of digesters surveyed
Monitoring frequency	at least biennial (Recording)
QA/QC procedures	The Internal Quality Control system samples 5% of the digesters that are newly implemented, 2.5% of the digesters that are two year in operation and 2.5% of the digesters that have been operational for three years as part of the Internal Quality Control System. For the

	purpose of the current monitoring period, Biogas Users' Survey has been taken as the means to check the operational status of the biogas digester as the user survey gives the conservative value. The reliability check is done for each CPA in the BUS survey reports and the margin of error less than 10%.
Purpose of data	ER Calculation
Additional comment	Requirements as defined in the sampling plan was met.

7.1.2 Proportion of population with primary reliance on clean fuels and technology

Data / Parameter	Time saving (Fuel wood collection)	
Unit	Qualitative	
Description	Users' perception on time saving due to project for firewood collection	
Source of data	User Survey Report	
Value(s) applied	Percentage of Reduction in time for firewood collection	
	(perception)	
Measurement methods and procedures	Calculated as % of users perceived the reduction in cooking time for men, women and children after installation of biogas.	
Monitoring frequency	at least biennial (Recording)	
QA/QC procedures	The selection of households under the surveys ensured that the percentages of household in different strata are met for each individual CPA included in the PoA	
Purpose of data	Sustainable Development Assessment.	
Additional comment	Requirements as defined in the sampling plan was met.	

SDG 3 3.9.1 Mortality rate attributed to household and ambient air pollution

Data / Parameter	Users' perception on reduction in indoor air pollution
Unit	Qualitative
Description	Users' perception on reduction in indoor air pollution
Source of data	User Survey Report
Value(s) applied	Percent of perceived reduction in indoor air pollution

3.9.1 Mortality rate attributed to household and ambient air pollution

Mazsurement methods Data / Parameter	Reduction in health problem
Unit	Qualitative
Description	Users' perception on reduction in health problem
Source of data	User Survey Report
Value(s) applied	Percentage of HH perceived reduction in health problem
Measurement methods and procedures	Calculated as % of users perceived the reduction of different health problem caused by indoor air pollution after installation of biogas.
Monitoring frequency	at least biennial (Recording)
QA/QC procedures	The selection of households under the surveys ensures that the percentages of household in different strata are met for each individual CPA included in the PoA
Purpose of data	Sustainable Development Assessment.
Additional comment	Requirements as defined in the sampling plan was met.

3.9.1 Mortality rate attributed to household and ambient air pollution

Data / Parameter	User's perception in Time saving for the cooking (reduce exposure to indoor air pollution)
Unit	Qualitative
Description	Users' perception on time saving for cooking due to project.
Source of data	User Survey Report
Value(s) applied	Percentage of HH perceived reduction in cooking time
Measurement methods and procedures	Calculated as % of users perceived the reduction in cooking time
Monitoring frequency	at least biennial (Recording)
QA/QC procedures	The selection of households under the surveys ensured that the percentages of household in different strata are met for each individual CPA included in the PoA
Purpose of data	Sustainable Development Assessment.
Additional comment	Requirements as defined in the sampling was met.

3.9.3 Mortality rate attributed to unintentional poisoning

Data / Parameter	Users perception in reduction of chemical fertilizers
Unit	Qualitative

Description	Users' perception on reduction in use of chemical fertilizers and use of bio-slurry
Source of data	User Survey Report
Value(s) applied	Percentage in Reduction in chemical fertilizer used and
	use of bio-slurry (Perception)
Measurement methods and procedures	Calculated as % use of the Bio-slurry and chemical fertilizers before and after biogas installation which is perceived by biogas users.
Monitoring frequency	at least biennial (Recording)
QA/QC procedures	The selection of households under the surveys ensured that the percentages of household in different strata are met for each individual CPA included in the PoA
Purpose of data	Sustainable Development Assessment.
Additional comment	Requirements as defined in the sampling plan was met.

3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)

Data / Parameter	Improved access to sanitation services
Unit	Number
Description	Users' perception on connection of toilet to biogas
Source of data	User Survey Report
Value(s) applied	Percentage in connection of toilet with biogas
Measurement methods and procedures	Calculated as % of households connected the toilet to the biogas.
Monitoring frequency	at least biennial (Recording)
QA/QC procedures	The selection of households under the surveys ensured that the percentages of household in different strata are met for each individual CPA included in the PoA
Purpose of data	Sustainable Development Assessment.
Additional comment	Requirements as defined in the sampling plan was met.

7.1.2 Proportion of population with primary reliance on clean fuels and technology

Data / Parameter

Unit	Number of people trained to promote Biogas plants		
Description	Masons involved in constructing the biogas plants received training on the proper installation of biogas digesters.		
Source of data	Training Report		
Value(s) applied	Since, all the biogas digesters are already implemented		
	in all CPAs, the monitoring of the training to the masons		
	who constructed the digesters for these CPAs are not		
	applicable for monitoring of the CPAs.		
	But the training to the mason was provided by		
	AEPC/respective biogas companies etc to the biogas		
	technician as and when required.		
Measurement methods	number of masons trained during the monitoring period		
and procedures			
Monitoring frequency	at least biennial (Recording		
QA/QC procedures	N/A		
Purpose of data	Sustainable Development Assessment.		
Additional comment	Requirements as defined in the sampling plan was met.		

Safeguarding Principle 4.3.8

Data / Parameter	Impact on Crop Productivity	
Unit	Qualitative	
Description	Users' perception on Impact on crop productivity	
Source of data	User Survey Report	
Value(s) applied	Percentage of users perceived in increase in productivity	
	due to bio-slurry use from Biogas	
Measurement methods and procedures	Calculated as percentage of users perceived the increment in productivity by the use of bio-slurry from biogas	
Monitoring frequency	at least biennial (Recording)	
QA/QC procedures	The selection of households under the surveys ensured that the percentages of household in different strata are met for each individual CPA included in the PoA.	
Purpose of data	Sustainable Development Assessment.	
Additional comment	Requirements as defined in the sampling plan was met.	

B.7.2. Sampling plan

>>

Internal monitoring activities as part of the overarching BSP programme

AEPC carries out thorough quality control activities to ensure that the biogas digesters are built according to set quality standards following the subsidy delivery mechanism and other set standard. This includes setting up random sampling, field visits, on the spot advice to biogas companies and biogas owners, collecting and analyzing data obtained through questionnaire during visits, adopting "rewards or punishment" system to biogas companies etc. Note that this quality control is carried out to ensure quality of the digesters but not necessarily to calculate the emission reductions.

Monitoring

1) Digester performance and average annual consumption of woody biomass The performance of the bio-digesters and average annual consumption of woody biomass by project devices will be assessed based on the performance reports (Biogas User Survey). The corresponding survey may be conducted as part of the quality control procedures of AEPC.

A statistically representative sample will be surveyed individually for each CPA of the PoA. The Annual Biogas User Survey will be conducted following the Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities Ver. 4.0 (EB 86, Annex 4). As part of the survey, statistically representative sample of biogas users will be surveyed and in order to achieve 90% confidence interval and a 10% margin of error requirement for the sampled parameters. Stratified random sampling will be applied in conducting survey. The sample to be surveyed will be drawn randomly from the population of biogas digester distributed in each stratum (i.e. remote hill, hill and terai) spread within the project boundary of the PoA. To make it more representatives, different development regions and the size of the plants will also be considered while drawing the sample. In order to have an unbiased and independent assessment, the survey will be carried out through an independent agency to check the operation/functioning of the biogas units installed as part of each CPA.

Thus, the at least biennial performance reports (Biogas User Survey) will be used for the identification of the proportion of biogas digesters included in the CPAs that are operational. The proportion of biogas digesters that are operational will be counted towards the emission reduction for the CPAs while the proportion of the non-operational plants will not be considered towards ER calculation.

2) Displacement of NRB

The fraction of the Non-renewable biomass displaced by the PoA has been determined ex-ante in the PoA-DD and has been fixed for the second crediting period. The following indicators will be monitored through Biogas User Survey to confirm the displacement of NRB by households and perceptions of the biogas users on these indicators would be captured through survey and analysed. These indicators include:

- Trends in distance travelled for firewood gathering or trends in time needed for firewood gathering indicating depletion of resources available
- Trends in price of firewood indicating demand and scarcity
- Trends in type of cooking fuel collected that could indicate scarcity of fire wood

At least two of the above indicators should confirm the displacement of non-renewable biomass. The survey will seek to collect the data pertaining to the indicators for monitoring year.

3) Monitoring of other Sustainable Development Parameters

The monitoring of other sustainable development parameters will be done through the Biogas User Survey as mentioned above. The same sampled household will be used to assess those parameters along with the digesters performance and monitoring of continued displacement of NRB.

B.7.3. Other elements of monitoring plan

>>

The various aspects to be monitored according to the methodology are presented in the table below:

Aspects to be monitored according to Methodology	Applicability to the Project	Parameter to be Monitored (YES/NO/NA)
Monitoring shall consist of checking of all appliances or a representative sample thereof, at least once every two years (biennial) to ensure that they are still operating or are replaced by an equivalent in service appliance.	Emission reductions is directly proportional to the number of appliances (digesters in case of the project) still performing. So this needs to be monitored.	Yes (based on operation reports carried out at least biennial)
In order to assess the leakages, monitoring shall include data on the amount of woody biomass saved under the project activity that is used by non project households/users (who previously used renewable energy sources). Other data on nonrenewable woody biomass use required for leakage assessment shall also be collected	The methodology allows the use of a default factor of 0.95 to account for leakage. So this will not be monitored in the project.	No (Instead a default factor of 0.95 shall be used)
Monitoring should confirm the displacement or substitution of the non-renewable woody biomass at each location.	This shall be ensured by monitoring the number of appliances (digesters in case of the project) still performing	Yes (based on the performance reports carried out at least biennial, e.g. BUS, and in addition to eligibility criteria that also confirm use of NRB)

TEMPLATE- V2.2 VPA Design Document

•	,	Yes (Biogas User Survey
parameters and	different parameters listed	Report conducted at least
safeguarding principles to	in B.7.2 above	Biannual following the
be assessed as per PoA		applicable sampling
DD		guideline for PoA)

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1. Start date of VPA

>>

22/06/2007

The CPA started with the construction of the first digester listed which is 22/06/2007.

C.1.2. Expected operational lifetime of VPA

>>

The operational lifetime of each digester is 20 years.

C.2. Crediting period of project

C.2.1. Start date of crediting period

>>

C.2.2. Total length of crediting period

>>

This pertains to the crediting period start date for second crediting period as first crediting period of the CPA ends on 22/02/2024.

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1. Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in <u>Appendix 1</u>, ongoing monitoring is summarised below.

PRINCIPLES MITIGATION MEASURES ADDED TO THE MONITORING PLAN

Principle x.y

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?

Question 2 - Explain how the project aligns with existing country policies, strategies and best practices

Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?

Question 4 - Is an Expert required to assist with Gender issues at the 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

>>

Please refer to the section D.14 of the CDM-SSC-PoA-DD for the stakeholder consultation as per CDM requirement. The LSC for GS was conducted on PoA level. The detail of it is given in section E of the PoA Passport.

For the crediting period renewal of PoA, stakeholder feedback round was started on 6th May 2019. A public notice was published in AEPC's website to provide the feedback on PoA DD, Similarly, the notice and the related documents were also published in atmosfair gGmbH's website as well. For follow-up, an e-mail was also sent to the related stakeholders to provide the feedback on the documents.

During the stakeholder feedback round which was started on 6th May 2019 for two months, no comments/feedbacks were received for CPA-9.

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 Registration and continuous input: Grievance section: www.aepc.gov.np
Grievance Expression Process Book (mandatory)	Alternative Energy Promotion Centre (AEPC) Phone +9771-4498013, 4498014 Fax: +9771-5542397, 5539392
GS Contact (mandatory)	help@goldstandard.org

Nepal biogas promoters association Central Office

Kathmandu: Phone: 01- 5535116

Nepal biogas promoters association regional offices:

Pokhara: Phone: 061-526785
 Butwal: Phone: 071-551514
 Itahari: Phone: 025-5817745
 Nepalgunj: Phone: 081-528066

5. Dhangadi: Phone: 091- 5273796. Chitwan: Phone: 056- 521749

Other

SECTION F. Eligibility and inclusion criteria for VPAs inclusion >>

Please refer section B.3 Eligibility for VPA inclusion as per PoA requirements

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

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

SOCIAL SAFEGUARDING PRINCIPLES				
Reference requireme nt	Question	Response		
P.1 HUMAN	N RIGHTS			
P.1.1.1	Does the project developer, its representatives and	□ YES		
	the Project disrespect internationally proclaimed human rights?	⊠ NO		
P.1.1.1	Is the project involved or complicit in violence or	□ YES		
	human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	⊠ NO		
P.1.1.2	Have local communities or individuals raised human	□ YES		
	rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance	⊠NO		
	processes, public statements)?			
P.1.1.3	Is there a risk that rights-holders (e.g., Project-	□ YES		
	affected stakeholders) do not have the capacity to claim their rights?	⊠ NO		
P.1.1.3	Does this project undermine national or regional	□ YES		
	measures for the realization of the right to development?	⊠ NO		
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.				
now the project will ensure compliance with applicable requirements.				
Would the p	roject potentially involve or lead to:			
P.1.1.1	adverse impacts on enjoyment of the human rights	□ YES		
	(civil, political, economic, social or cultural) of the affected population and particularly of marginalised			
	groups?	POTENTIALLY		
		⊠ NO		
P.1.1.2	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	□ YES		

		POTENTIALLY
		⊠ NO
P.1.1.3	restrictions in availability, quality of and/or access to	□ YES
r	resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	
		POTENTIALLY
		⊠ NO
P.1.1.3	exacerbation of conflicts among and/or the risk of	□ YES
	violence to project-affected communities and individuals?	
		POTENTIALLY
		⊠ NO

Briefly describe below how the project incorporates a human rights-based approach.

For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.
- a. The project doesn't involve any activity that affects human right but promotes the human rights to have access to clean energy and environment. Conclusion: the parameter will not be monitored.
- b. The project shall not discriminate any people to have biogas plants rather it enhances the participation and inclusion.

Conclusion: the parameter will not be monitored.

P.2 GENDER EQUALITY AND WOMEN'S EMPOWERMENT				
P.2.1.1	Have women's groups/leaders raised gender equality	□ YES		
	concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	⊠ NO		
P.2.1.2	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	□ YES ⋈ NO		

P.2.1.2	Does the project prevent men and women from	□ YES
	having equal opportunities to participate in identified	⊠ NO
	tasks and activities, whether through paid work,	
	volunteer work, or community contributions, as appropriate?	
P.2.1.2	Does the project limit the participation of women or	□ YES
	men based on pregnancy, maternity/paternity leave,	⊠ NO
	or marital status?	NO NO
P.2.1.2	Is information about project objectives being	□ YES
	communicated in a way that is inappropriate for the	⊠ NO
	local context and not tailored to the methods of	
	understanding of both women and men, which could hinder their participation?	
P.2.1.3	Has the project assessed gender risks without	□ YES
	referencing the country's gender strategy or	
	equivalent national commitment?	⊠ NO
P.2.1.4	Has expert stakeholder(s) been involved, and has	□ YES
	their input been requested for the project design on	⊠ NO
TC II	gender equality and women's empowerment?	
	er to any of the questions above is "yes," please explain ject will ensure compliance with applicable requirements	
now the pro	ject will ensure compliance with applicable requirements).
·		
Would the p	roject potentially involve or lead to:	
·	roject potentially involve or lead to: adverse impacts on gender equality and/or the	□ YES
Would the p	roject potentially involve or lead to:	
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the	□ YES
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the	□ YES □ POTENTIALLY
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls?	□ YES □ POTENTIALLY ⋈ NO
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For	□ YES □ POTENTIALLY
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls?	□ YES □ POTENTIALLY ⋈ NO
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public	□ YES □ POTENTIALLY ⋈ NO □ YES
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household	□ YES □ POTENTIALLY ⋈ NO □ YES □
Would the p	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY
Would the p P.2.1.1	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on gender, especially regarding participation in design	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO □ YES
Would the p P.2.1.1	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO □ YES □
Would the p P.2.1.1	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on gender, especially regarding participation in design	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO □ YES
P.2.1.1 P.2.1.2	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO □ YES □
Would the p P.2.1.1	roject potentially involve or lead to: adverse impacts on gender equality and/or the situation of women and girls? exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and	□ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY

different roles and positions of women and men in accessing environmental goods and services?

For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

- a) The project enhances the women's access and entitlement of benefits. Since the women will be direct user of the Biogas stoves, it will benefit women by reducing their exposure to the indoor air pollution thereby improving their health. In addition, the replacement of firewood after the installation of Biogas will reduce workload of women for the collection of firewood. Reduced workload for firewood collection results in time saving that the women can use for other productive activities.
 - Conclusion: the parameter will not be monitored
- b) The project will not adversely affect men and women in marginalized or vulnerable communities. Implementation of the project will contribute towards preservation of common resources in form of "firewood". Households duties related to firewood collection, cooking and cleaning utensils remain with women. The project therefore tends to decrease burden on women and won't result in social isolation of men.
 - Conclusion: the parameter will not be monitored
- c) The project duly accounts the gender roles. Time saving is one of the key benefits from the project which the beneficiary can utilize to fulfill their gender roles. With the saved time, one can perform the respective gender role more effectively. Conclusion: the parameter will not be monitored
- d) The project shall make every effort to include landless people in its design. Benefits from the project is expected to culminate in form of creation of entrepreneurial opportunities. While the focus is on capacitating women to take advantage of the entrepreneurial opportunity, the project shall not deprive men from the families of minority groups or the landless people to take advantage of the capacity building activities.
 - Conclusion: the parameter will not be monitored as the VPAs are implemented already
- e) No, the project is not designed such that it increased workload of women and their care responsibilities. By introducing Biogas, the overall performance of women in kitchen will be more efficient. This will enable them engage in other activities.
 - Conclusion: the parameter will not be monitored
- f) The project will enhance social participation and decision making role of women. Moreover, the women are expected to develop entrepreneurial skills which will enable them economically to deal with the household problems. The potential of the project to enable women economically will help reduce discrimination against women rather than deepening it.
 - Conclusion: The parameter will not be monitored

P.3 COMMU	JNITY HEALTH AND SAFETY	
P.3.1.1	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	□ YES ☑ NO
P.3.1.2	Does the project involve any potential risks to the workers' safety and health?	□ YES ☑ NO
	er to any of the questions above is "yes," please explain ject will ensure compliance with applicable requirements	
Please add t	text here	
Would the p	roject potentially involve or lead to:	
P.3.1.1	construction and/or infrastructure development (e.g., roads, buildings, dams)?	□ YES ⋈ NO
P.3.1.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	□ YES
	Turion, crosion, sumedion:	POTENTIALLY ⋈ NO
P.3.1.2	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	□ YES
		POTENTIALLY ⋈ NO
P.3.1.2	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	□ YES □ POTENTIALLY ⋈ NO
P.3.1.2	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES ☐ POTENTIALLY ☑ NO
P.3.1.2	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	□ YES □ POTENTIALLY ⋈ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

The Project shall make every effort to avoid health risks of worker during construction of biogas. Emission reduction and reduction on indoor air pollution is one of the key benefits of the project for community that will improve the health of those communities.

Conclusion: Since the VPA is included already in CDM and all the biogas are constructed already, health risk of the worker will not be monitored but the emission reduction and improve in health condition will be monitored.

P.4 CULTURAL HERITAGE, INDIGENOUS PEOPLE, DISPLACEMENT AND RESETTLEMENT			
P.4.1 Sites of Cultural and Historical Heritage			
P.4.1.1	Does the project involve altering, damaging, or	□ YES	
	removing sites, objects, or structures of significant cultural heritage?	⊠ NO	
	er to question above is "yes," please explain the reason	and how the	
	ensure compliance with applicable requirements.		
Please add t	text here		
	roject potentially involve or lead to:		
P.4.1.1	activities adjacent to or within a cultural heritage	□ YES	
	site?		
		DOTENITIALLY	
		POTENTIALLY	
		⊠ NO	
P.4.1.1	significant excavations, demolitions, movement of	□ YES	
	earth, flooding or other environmental changes?		
		POTENTIALLY	
		⊠ NO	
P.4.1.1	alterations to landscapes and natural features with	□ YES	
	cultural significance?		
		POTENTIALLY	
		⊠ NO	
P.4.1.1	adverse impacts to sites, structures, or objects with	□ YES	
	historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g.,		
	knowledge, innovations, practices)? (Note: projects	POTENTIALLY	

 \boxtimes NO

	intended to protect and conserve Cultural Heritage		
	may also have inadvertent adverse impacts)		
P.4.1.2	utilisation of tangible and/or intangible forms (e.g.,	□ YES	
	practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?		
		POTENTIALLY	
		⊠ NO	
P.4.1.2	If answer to question above is "YES" or	□ YES	
	"POTENTIALLY" - are the communities made aware of	□ NO	
	their right under the law, scope and nature of	⊠ NA	
	proposed development and its potential consequences?		
P.4.1.3	If answer to question above is "YES" - does the	□ YES	
	project provide equitable sharing of benefits from		
	commercialisation of such knowledge, innovation, or	□ NO	
	practice, consistent with their customs and	⊠ NA	
D 4 1 4 1	traditions?		
P.4.1.4	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s)	☐ YES	
	not sought and demonstrated as being included in	□ NO	
	the project design?	⊠ NA	
P.4.1.4	If answer to question above is "YES", has project	□ YES	
	design been changed, modified, updated considering	□ NO	
	opinions and recommendations of an Expert	□ NO □ NA	
If the answer	Stakeholder?		
	er is "yes" or "potentially" to any of the above questions, rief description of the project situation below. Also, provi		
	ence as necessary to demonstrate compliance with appli		
requirement	ts.		
The project	units are simple and small in dimension. This will not in	volve anything	
related to re	emoval of sites, objects or structures of cultural significa	nce. Therefore	
the safegua	rding principle under discussion will not be triggered by	the project.	
Conclusion: the parameter will not be monitored			
P.4.2 Force	ed Eviction and Displacement		
P.4.2.1	Does the project involve any risks related to	□ YES	
	involuntary relocation of people?	☑ NO	
If the answer to question above is "yes," please explain the reason and how the			
project will ensure compliance with applicable requirements.			
Please add text here			
Would the p	roject potentially involve or lead to:		

P.4.2.1	risk of forced evictions or involuntary relocation of	□ YES	
	people?		
		POTENTIALLY	
		⊠ NO	
P.4.2.2	temporary or permanent and full or partial physical	□ YES	
	displacement (including people without legally recognisable claims to land)?		
	,	POTENTIALLY	
		⊠ NO	
P.4.2.2	economic displacement (e.g., loss of assets or access	□ YES	
	to resources due to land acquisition or access restrictions – even in the absence of physical		
	relocation)?	POTENTIALLY	
		⊠ NO	
P.4.2.2	If answer to question above is "YES" or	□ YES	
	"POTENTIALLY", - has the project developed Resettlement Action	□ NO	
	Plan or Livelihood Action Plan in consultation	⊠ NA	
	and agreement with affected individual, group		
	or community?		
	 has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project 		
	design?		
P.4.2.3	If answer to question above is "YES" - are opinions	□ YES	
	and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in	□ NO	
	the project design?	⊠ NA	
P.4.2.3	If answer to question above is "YES", have project	□ YES	
	design been changed, modified, updated considering opinions and recommendations of an Expert	□ NO	
	Stakeholder?	⊠ NA	
	er is "yes" or "potentially" to any of the above questions,		
1 1	rief description of the project situation below. Also, provi ence as necessary to demonstrate compliance with appli	_	
requirement		Cable	
	units are simple and small in dimension. This will not inv	volve anything	
related to re	related to removal of sites, objects or structures of cultural significance. Therefore		
the safegua	rding principle under discussion will not be triggered by	the project.	
Conclusion:	the parameter will not be monitored.		
P.4.3 LAND	TENURE AND OTHER RIGHTS		

P.4.3.1	Does the project involve any risks related to	□ YES
	identifying and managing legitimate tenure rights that may be affected by the project?	⊠ NO
	er to question above is "yes," please explain the reason ensure compliance with applicable requirements.	and how the
Please add t		
Would the p	roject potentially involve or lead to:	
P.4.3.1	impacts on or changes to land tenure arrangements	□ YES
	and/or community-based property rights/customary rights to land, territories and/or resources?	
		POTENTIALLY
		⊠ NO
P.4.3.1	uncertainties with regards to land tenure, access rights, usage rights or land ownership?	□ YES
	Examples include, but are not limited to water access	
	rights, community-based property rights and	POTENTIALLY
	customary rights.	⊠ NO
P.4.3.2	Changes in legal arrangements, if yes, are the	□ YES
	changes done in line with relevant laws and regulations?	□ NO
	regulations.	⊠ NA
P.4.3.2	Changes in legal arrangements, if yes, are these	□ YES
	changes agree with free, prior and informed consent of the involved stakeholders?	□ NO
		⊠ NA
P.4.3.3	Does some other entity (other than the project	□ YES
	developer) hold uncontested land title for the entire	□ NO
	Project Boundary?	⊠ NA
P.4.3.4	Are opinions and recommendations of an Expert	□ YES
	Stakeholder(s) not sought and demonstrated as	□ NO
	being included in the project design?	⊠ NA
P.4.3.4	If answer to question above is "YES", have project	□ YES
	design been changed, modified, updated considering	□ NO
	opinions and recommendations of an Expert	⊠ NA
	Stakeholder?	
P.4.3.5	Have project developer in consultation with	□ YES
	stakeholders established a functioning mechanism to	□ NO
		⊠ NΔ

	receive, process, resolve, communicate and record	
	grievances?	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project	units are simple and small in dimension. This will not inv	olve anything
related to re	emoval of sites, objects or structures of cultural significa	nce. Therefore
the safeguar	rding principle under discussion will not be triggered by	the project.
Conclusion:	the parameter will not be monitored	
P.4.4 INDIG	ENOUS PEOPLES	
P.4.4.1	Does the project involve Indigenous People within the	□ YES
	Project area of influence who may be affected directly	⋈ NO
	or indirectly by the Project?	
the project v	er to question above is "yes," please explain project situa will ensure compliance with applicable requirements.	ation and how
Please add t	rext here	
Would the p	roject potentially involve or lead to:	
P.4.4.1	affect areas where indigenous peoples are present	□ YES
	(including project area of influence)	
		POTENTIALLY
		⊠ NO
P.4.4.1	affect areas, land and territory claimed by indigenous	□ YES
	peoples?	
		POTENTIALLY
		⊠ NO
P.4.4.1	impacts (positive or negative) to the human rights,	□ YES
	lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	
		POTENTIALLY
		⊠ NO
P.4.4.7	If answer to above questions is "YES" or	□ YES
	"POTENTIALLY", - Is it determined that the proposed project may	□ NO
	affect the rights, lands, resources, or territories	⊠ NA
	of indigenous people?	

	 Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines? 	
P.4.4.3	risk of forcibly removing indigenous people from their	= V/50
1.4.4.5	lands and territories?	□ YES
	lands and territories?	
		POTENTIALLY
		⊠ NO
P.4.4.4	utilisation and/or commercial development of natural	□ YES
	resources on lands and territories claimed by	
	indigenous peoples?	
	Consider, and where appropriate ensure, consistency	POTENTIALLY
	with the answers under Principle 4.1 above	⊠NO
P.4.4.5	If answer to question above is "YES" or	□ YES
	"POTENTIALLY"	□ NO
P.4.4.6	 Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? 	⊠ NA
	- Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ?	
	 Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? 	
	 Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing? 	

P.4.4.8	Does the project lack appropriate feedback and	□ YES
	grievance channels for Indigenous Peoples and their	□ NO
	representatives?	⊠ NA
P.4.4.8	Has a grievance mechanism not been established at	□ YES
	the beginning of programme or project	□ NO
	implementation with due consideration given to	⊠ NA
	customary dispute settlement mechanisms among	
	the Indigenous Peoples concerned and will it remain	
	operational throughout the project cycle?	
P.4.4.9	Are opinions and recommendations of an Expert	□ YES
	Stakeholder(s) not sought and demonstrated as	□ NO
	being included in the project design?	⊠ NA
P.4.4.9	If answer to question above is "YES", have project	□ YES
	design been changed, modified, updated considering	□ NO
	opinions and recommendations of an Expert	⊠ NA
	Stakeholder?	
provide a br	er is "yes" or "potentially" to any of the above questions, rief description of the project situation below. Also, provience as necessary to demonstrate compliance with appliance	de justification
•	implementation is guided by the government's subsidy (policy and
dually follow	ved the set quality standard. Quality assurance and qual	ity control is
an integral p	part of the project implementation ensuring the quality t	hroughout the
project cycle		J
	The parameter will not be monitored.	
P.5 CORRU	PTION	
P.5.1.1	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	□ YES ⊠ NO
P.5.1.1	Does the project have a risk of encouraging bribery,	□ YES
	kickbacks, or other unethical behavior?	⊠ NO
	er to any of the questions above is "yes," please explain d how the project will ensure compliance with applicable	
	implementation is guided by the government's subsidy i	-
dually followed the set quality standard. Quality assurance and quality control is		

an integral part of the project implementation ensuring the quality throughout the

project cycle.		
Conclusion: The parameter will not be monitored.		
	ECONOMIC SAFEGUARDING PRINCIPLES	
P.6 Econo	MIC IMPACTS	
P.6.1 LABOU	JR RIGHTS AND WORKING CONDITIONS	
P.6.1.1	Does the project involve, facilitate, or condone forced	□ YES
	labor, or pose a potential risk of forced labor?	⊠ NO
P.6.1.1	Does the project violate any labor or health and	□ YES
	safety laws, international obligations, or ILO conventions?	☑ NO
P.6.1.2	Does the project violate the principles of equal	□ YES
	opportunity and fair treatment in its employment decisions?	⊠ NO
P.6.1.3	Does the project violate national laws, if available	□ YES
	regarding non-discrimination in employment?	⊠ NO
P.6.1.4	Does the project allow child labor?	□ YES
P.6.1.5		⊠ NO
P.6.1.7	Does the project have insufficient processes and	□ YES
P.6.1.8	measures in place to ensure the safety and health of project workers?	⊠ NO
P.6.1.9	Does the project have insufficient measures to	□ YES
	safeguard and support vulnerable project workers, such as women, people with disabilities, migrant	⊠ NO
	workers, and young workers, and to prevent any kind	
	of harassment, abuse, bullying, or exploitation,	
	including gender-based violence (GBV)?	
P.6.1.10	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is	□ YES
	information about this mechanism not provided to	⊠ NO
	workers at the time of recruitment, or is it not easily	
	accessible?	
	er to any of the questions above is "yes," please explain	
Please add t	d how the project will ensure compliance with applicable	requirements.
riease aud text liele		
Would the project potentially involve or lead to:		
(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)		
P.6.1.1	use of forced labour?	□ YES
		POTENTIALLY

		⊠ NO
P.6.1.1	working conditions that do not meet national labour	□ YES
	laws and international commitments?	
		POTENTIALLY
		⊠ NO
P.6.1.1	working conditions that may deny freedom of	□ YES
	association and collective bargaining?	
		POTENTIALLY
		⊠ NO
P.6.1.1	absence of documented working agreements with all	□ YES
	individual workers	
	if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.	POTENTIALLY ⊠ NO
P.6.1.1	use of migrant workers?	□ YES
	if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	□ POTENTIALLY ⊠ NO
P.6.1.1	having no arrangements for basic services ⁹ for workers?	□ YES
	the project developer shall put in place and implement policies on the quality and management of	POTENTIALLY ⊠ NO

⁹ Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

	the accommodation and provision of basic services in	
	a manner consistent with the principles of non-	
	discrimination and equal opportunity. Workers'	
	accommodation arrangements should not restrict	
	workers' freedom of movement or of association	
P.6.1.2	any form of discrimination or harassment based on	□ YES
	factors unrelated to job requirements, such as	
	gender, race, nationality, ethnicity, social or	POTENTIALLY
	indigenous origin, religion or belief, disability, age, or	NO NO
	sexual orientation?	⊠ NO
P.6.1.2	any form of discrimination in any aspect of	□ YES
	employment, such as recruitment, compensation,	
	working conditions, training, job assignment,	POTENTIALLY
	promotion, termination, or discipline?	⊠ NO
P.6.1.2	harassment, intimidation, and/or exploitation,	□ YES
	especially in regard to women?	
		_
		POTENTIALLY
P.6.1.3	discriminatory working conditions and/or lack of	⊠ NO
P.0.1.3	equal opportunity where national law provides	□ YES
	provision to address non-discrimination in	
		POTENTIALLY
	employment?	⊠ NO
P.6.1.4	use of child labour? (including third-party engaged	□ YES
	workers)	
		POTENTIALLY
		⊠ NO
P.6.1.4	inadequate and verifiable mechanisms for age	□ YES
	verification?	□ 1L3
P.6.1.7	no processes and measures in place for the safety	
1.0.1./	and health of project workers?	□ YES
D C 1 T 1		⊠NO
P.6.1.7	No provision of safety and health training provisions,	□ YES
	including on the proper use and maintenance of	⊠ NO
	I .	

	personal protective equipment conducted by	
	competent persons and the maintenance of training	
	records?	
P.6.1.7	No provision to record and document accidents,	□YES
	diseases, incidents, and any resulting injuries,	⊠NO
	illnesses, or deaths?	
P.6.1.8	occupational health and safety risks due to physical,	□ YES
	chemical, biological and psychosocial hazards	⊠ NO
	(including violence and harassment) throughout the	
	project life-cycle?	
P.6.1.9	No measures to protect vulnerable project workers	□YES
	from harassment, exploitation, and gender-based	⊠NO
	violence (GBV)? This includes women, people with	A NO
	disabilities, migrant workers, and young workers.	
P.6.1.10	No grievance mechanism available for workers to	□YES
	voice workplace concerns.	⊠NO
P.6.1.11	No measures for due diligence and the establishment	
11011111	of policies and procedures to manage and monitor	□ YES
		⊠ NO
	the performance of third-party employees in the	
	project?	
	er is "yes" or "potentially" to any of the above questions, ief description of the project situation below. Also, provi	•
· •	ence as necessary to demonstrate compliance with appli-	
requirement		
Please add t	ext here	
P.6.2 NEGAT	TIVE ECONOMIC CONSEQUENCES	
P.6.2.1	Is there a risk of project failure during	□ YES
	implementation or after project certification due to a	_
	lack of financial resources?	NO
P.6.2.2	Does the project have potential negative impacts or	□YES
	pose a risk to the local economy?	
	1	⊠ NO

P.6.2.2	Are there any potential risks or negative impacts this	□YES
	project may have on vulnerable or marginalised	⊠NO
	social groups, despite the benefits it may bring?	
	er to any of the questions above is "yes," please explain	· -
	d how the project will ensure compliance with applicable	·
	units are simple and have less moving parts. So, it requnance. Hence the operational cost is less in comparison t	•
	the additional benefits that it offers. So, the project impl	<u> </u>
	financially and has positive economic impacts by offering	
saving, ease	e in cleaning the utensils, reducing health risk and indoo	r air pollution
	s no any negative economic impacts.	
	the parameter will not be monitored	
Would the	project involve or lead to:	
P.6.2.2	economic impacts (negative/detrimental) to the local	□ YES
	economy?	
		POTENTIALLY
		⊠ NO
P.6.2.2	negative economic consequences during and after	□ YES
	project implementation, e.g., for vulnerable and	
	marginalised social groups in targeted communities?	POTENTIALLY
		× NO
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification		
· 1	ence as necessary to demonstrate compliance with appli-	_
requirement		
Please add t	rext here	
P.7 CLIMAT	E AND ENERGY	
P.7.1 GHG	EMISSIONS	
P.7.1.1	Does the project have a risk of increasing greenhouse	□ YES
	gas emissions over the Baseline Scenario?	NO
	er to question above is "yes," please explain project situa	ation and how
the project will ensure compliance with applicable requirements.		
Please add text here		

Would the project involve or lead to:			
P.7.1.1	increase greenhouse gas emissions over the Baseline	□ YES	
	Scenario?		
		POTENTIALLY	
		⊠ NO	
description of evidence as r	r is "yes" or "potentially" to the above question, please of the project situation below. Also, provide justification necessary to demonstrate compliance with applicable results and the use of paperson weble biomass. The base	and/or equirements.	
	vill replace the use of non-renewable biomass. The base		
· ·	use of firewood for cooking. So, this project will reduce.	e the GHG over	
the baseline s			
	The parameters will be calculated based on the operation	nal status of	
the project u	nits		
P.7.2 ENERGY	<u> </u>		
P.7.2.1	Does the project pose a risk to the availability and	□ YES	
	reliability of energy supply to other users?	⊠ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
Please add te	ext here		
Would the pro	oject involve or lead to:		
P.7.2.1	negative impact on the availability and reliability of	□ YES	
	energy supply to other users?		
		POTENTIALLY	
		⊠ NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
The project will not use any fuel resources that provides for other local users. It			
	uses the animal dung. Therefore the safeguarding principle under discussion will		
uses the anin		scussion will	
uses the anin	red by the project.	scussion will	
uses the anin		scussion will	

P.8.1.1	Does the project increase water usage to a level that	☐ YES
	will not allow for the maintenance of environmental	☑ NO
	flows?	
P.8.1.1	Does the project result in the discharge of	□ YES
	wastewater that does not meet the required standard	⊠ NO
	for beneficial reuse and could therefore negatively	
	impact the environmental flow?	
P.8.1.1	Does the project have the potential risk to exceed the	□ YES
	rate of recharge for the groundwater source?	☑ NO
P.8.1.1	Does the project involve any processes or activities	□ YES
	that could contaminate the groundwater and render it	⊠ NO
	unsuitable for use?	
	er to any of the questions above is "yes," please explain	
Please add t	d how the project will ensure compliance with applicable rext here	requirements.
770050 000 0	ext riere	
Would the p	roject involve or lead to:	
•	200	
P.8.1.1	affect the natural or pre-existing pattern of	□ YES
·		□ YES
·	affect the natural or pre-existing pattern of	
·	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s)	□ POTENTIALLY
·	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding	
·	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water	□ POTENTIALLY
P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	□ POTENTIALLY ⋈ NO
P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet	□ POTENTIALLY ⋈ NO □ YES
P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet	□ POTENTIALLY ⋈ NO □ YES □
P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet	□ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY
P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	□ POTENTIALLY ⋈ NO □ YES □ POTENTIALLY ⋈ NO
P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse? significant extraction, diversion of ground water? For	□ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ 1
P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse? significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin	□ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ POTENTIALLY POTENTIALLY □ POTENTIALLY
P.8.1.1 P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse? significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	□ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ 1
P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse? significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	□ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ POTENTIALLY X NO □ YES
P.8.1.1 P.8.1.1 P.8.1.1	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity? Wastewater discharge of quality that does not meet the required standard for beneficial reuse? significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	□ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ POTENTIALLY □ NO □ YES □ POTENTIALLY

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project requires very less water to make the slurry that can be fetched at household level itself. Therefore the safeguarding principle under discussion will not be triggered by the project.

Conclusion: the parameter will not be monitored

P.8.2 | EROSION AND/OR WATER BODY INSTABILITY

P.8.2.1 | Does the project have a risk of negatively impacting | \(\subseteq \text{YES} \)

P.8.2.1 □ Does the project have a risk of negatively impacting □ YES the catchment and has it been assessed and addressed? □ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Please add text here....

Would the project involve or lead to:

P.8.2.2	negatively impact on the catchment area?	□ YES	
P.8.2.5	If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.	□ POTENTIALLY ⋈ NO	
P.8.2.6	Are opinions and recommendations of an Expert	☐ YES	
	Stakeholder(s) not sought and demonstrated as	□ NO	
	being included in the project design?	⊠ NA	

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project units are installed at household level which will not directly or indirectly cause additional erosion or disrupt the water body. Therefore the safeguarding principle under discussion will not be triggered by the project. Conclusion: the parameter will not be monitored

P.9 ENVIRONMENT, ECOLOGY AND LAND USE			
P.9.1 LANDSCAPE MODIFICATION AND SOIL			
P.9.1.1	Is there any risk of soil resource degradation or loss	☐ YES	
-	of ecosystem services provided by soils in the	☑ NO	
P.9.1.3	project?		
	If yes, the project shall maintain healthy soils by		
	minimising negative impacts on soil health,		
	productivity, structure, and water retention. Steps to		
	minimise soil degradation include crop rotation,		
	composting, using N-fixing plants, and reducing		
	tillage and ecologically harmful substances.		
If the answe	er to question above is "yes," please explain project situa	ation and how	
the project	will ensure compliance with applicable requirements.		
Please add t	ext here		
Would the project involve or lead to:			
Trodia ciro p	roject involve or lead to:		
P.9.1.4	production, harvesting, and/or management of living	□ YES	
•	-	□ YES	
•	production, harvesting, and/or management of living		
	production, harvesting, and/or management of living natural resources by small-scale landholders and/or		
	production, harvesting, and/or management of living natural resources by small-scale landholders and/or	POTENTIALLY	
P.9.1.4	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	□ POTENTIALLY ⋈ NO	
P.9.1.4	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially",	□ POTENTIALLY ⋈ NO □ YES □ NO	
P.9.1.4	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally	□ POTENTIALLY ⋈ NO □ YES	
P.9.1.4 P.9.1.4	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management	□ POTENTIALLY ⋈ NO □ YES □ NO ⋈ NA	
P.9.1.4 P.9.1.4 If the answer provide a br	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions rief description of the project situation below. Also, provided	□ POTENTIALLY ⋈ NO □ YES □ NO ⋈ NA , please ide justification	
P.9.1.4 P.9.1.4 If the answer provide a brand/or evide	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions rief description of the project situation below. Also, provience as necessary to demonstrate compliance with applications.	□ POTENTIALLY ⋈ NO □ YES □ NO ⋈ NA , please ide justification	
P.9.1.4 P.9.1.4 If the answer provide a brand/or evide requirement	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions rief description of the project situation below. Also, provience as necessary to demonstrate compliance with applications.	□ POTENTIALLY ⋈ NO □ YES □ NO ⋈ NA , please ide justification cable	
P.9.1.4 P.9.1.4 If the answer provide a brand/or evide requirement The project	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions rief description of the project situation below. Also, provience as necessary to demonstrate compliance with applices.	POTENTIALLY NO YES NO NA NA please ide justification cable pps or other	
P.9.1.4 If the answer provide a broand/or evide requirement The project products. The	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions rief description of the project situation below. Also, provience as necessary to demonstrate compliance with applices. doesn't involve use of land and soil for production or cro	POTENTIALLY NO YES NO NA NA please ide justification cable pps or other	
P.9.1.4 If the answer provide a broand/or evide requirement The project products. The triggered by	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities? if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices? er is "yes" or "potentially" to any of the above questions itef description of the project situation below. Also, provience as necessary to demonstrate compliance with applices. doesn't involve use of land and soil for production or createrefore the safeguarding principle under consideration in the safeguarding princi	POTENTIALLY NO YES NO NA NA please ide justification cable pps or other	

P.9.2.1	Does the project have any risks associated with	□ YES
	natural or man-made hazards that could result from	⊠ NO
	land use changes due to the project?	
If the answe	er to question above is "yes," please explain project situa	ation and how
the project v	will ensure compliance with applicable requirements.	
Please add t	ext here	
	roject involve or lead to:	
P.9.2.2	any potential risks that require emergency	□ YES
	preparedness and response planning?	
		POTENTIALLY
$D \cap D \cap D$	if anguer to above question "vee" or "notortially" did	⊠ NO
P.9.2.2	if answer to above question "yes" or "potentially", did	□ YES
	the project developer disclose appropriate	□ NO
	information about emergency preparedness and	⊠ NA
	response to affected communities?	
	er is "yes" or "potentially" to any of the above questions,	•
-	ief description of the project situation below. Also, provi	_
and/or evide	ence as necessary to demonstrate compliance with appli	cable
requirement	S.	
	units are household based units and are less susceptible	
	nerefore the safeguarding principle under consideration with project	will not be
	the project. the parameter will not be monitored.	
	FETY AND GENETIC RESOURCES	
P.9.3.1	Does the project involve the transfer, handling, and	□ YES
	use of genetically modified organisms/living modified	
	organisms that may result in adverse effects on	⊠ NO
	biological diversity?	
If the answe		ation and how
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here		
Would the p	roject involve or lead to:	

P.9.3.1	the transfer, handling and use of genetically modified	□ YES
	organisms/living modified organisms (GMOs/LMOs)	
	that result from modern biotechnology	POTENTIALLY
		⊠ NO
P.9.3.1	If answer to above question is "yes" has a risk	□ YES
	assessment by a competent Expert stakeholder been	□NO
	carried out in accordance with Annex iii of the	⊠ NA
	Cartagena protocol on biosafety to the convention on	I IVA
	biological diversity?	
P.9.3.2	If answer to above question is "yes" has any risks	□ YES
	identified in the risk assessment?	□NO
		⊠ NA
P.9.3.3	Forestry (for example Afforestation/Reforestation)	□ YES
	involving GMO planting?	□NO
		⊠ NA
	Note - Forestry projects (for example Afforestation/	
	Reforestation) involving GMO planting are not eligible	
	for Certification under Gold Standard for the Global	
	Goals.	
provide a br	er is "yes" or "potentially" to any of the above questions, rief description of the project situation below. Also, provience as necessary to demonstrate compliance with applics.	de justification
The project	doesn't involve any activity related to GMOs. Therefore	the
safeguardin	g principle under consideration will not be triggered by t	he project.
Conclusion:	the parameter will not be monitored.	
P.9.4 RELEA	SE OF POLLUTANTS	
P.9.4.1	Does the project have a risk of releasing pollutants to	□ YES
	air, water, and land in routine, non-routine, or	⊠ NO
	accidental circumstances?	
If the answe	er to question above is "yes," please explain project situ	ation and how
the project will ensure compliance with applicable requirements.		
Please add t	text here	

Would the project involve or lead to:		
P.9.4.1	any potential risk of pollutant release that cannot be	□ YES
	avoided?	
		POTENTIALLY
		⊠ NO
P.9.4.3	If answer to above question is "Yes" or "potentially",	□ YES
	has the project identified all potential pollution	□NO
	sources that may degrade the quality of soil, air,	NA.
	surface, and groundwater in the project area?	⊠ NA
P.9.4.2	If answer to above question is "Yes" or "potentially",	□ YES
	do the pollution prevention and control technologies	□NO
	and practices applied during the project life cycle	NA.
	align with national regulations or international best	⊠ NA
	practices?	
P.9.4.3	If answer to above question is "Yes", is there a	□ YES
	monitoring plan to ensure that mitigation measures	□NO
	are implemented, and resources are protected?	⊠ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
The project units generally yields the Biogas and Bio-slurry. The biogas is used for the cooking purposes whereas the bioslurry is used as nutrients (manure) in the agriculture field. Therefore the safeguarding principle under consideration will not be triggered by the project. Conclusion: the parameter will not be monitored.		
P.9.5 HAZAI	RDOUS AND NON-HAZARDOUS WASTE	
P.9.5.1	Does the project involve the generation of waste	□ YES
	materials (both hazardous and non-hazardous)?	⊠ NO
P.9.5.3	Does the project involve risk of release of hazardous	□ YES
	materials resulting from their production, transportation, handling, storage, or use?	⊠ NO
P.9.5.5	Does the project involve the use of any chemicals or	□ YES
	materials subject to international bans or phase- outs?	⊠ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		

Please add text here			
Would the p	roject involve or lead to:		
P.9.5.1	the generation and management of waste materials?	□ YES	
		POTENTIALLY	
		⊠ NO	
P.9.5.1	treatment, destruction, or disposal of waste material?	□ YES	
		□ NO	
		⊠ NA	
P.9.5.1	If answer to above question is "Yes", does the project	□ YES	
	involve an environmentally friendly method that	□ NO	
	includes appropriate control of emissions and	⊠ NA	
	residues resulting from the handling and processing of waste material?		
DOFAL			
P.9.5.3	risk of release of hazardous materials resulting from	□ YES	
	their production, transportation, handling, storage, or use?	□ NO	
	use:	⊠ NA	
P.9.5.3	If answer to above question is "yes", does project has	□ YES	
	measures in place to address health risks?	□NO	
		⊠ NA	
P.9.5.4	Involve manufacture, trade, and use of chemicals and	□ YES	
	hazardous materials subject to international bans or		
	phase-outs due to their high toxicity to living	POTENTIALLY	
	organisms, environmental persistence, potential for	⊠ NO	
	bioaccumulation, or potential for depletion of the	_	
	ozone layer		
If the answe	er is "yes" or "potentially" to any of the above questions,	please	

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project unit does not require or releases any hazardous and non-hazardous chemicals. Therefore the safeguarding principle under consideration will not be triggered by the project.

Conclusion:	the parameter will not be monitored.	
P.9.6 PESTI	CIDES & FERTILISERS	
P.9.6.1	Does the project involve the use of chemical	□ YES
	pesticides?	⊠ NO
P.9.6.5	Does the project involve purchase, store,	□ YES
	manufacture, trade or use products that fall in	⊠ NO
	Classes IA (extremely hazardous) and IB (highly	NO NO
	hazardous)	
P.9.6.6	Does the project use fertilisers, and if so, are	□ YES
	measures being taken to minimise their use and	NO.
	nutrient losses to the environment?	⊠ NO
If the answe	er to any of the questions above is "yes," please explain	project
situation an	d how the project will ensure compliance with applicable	requirements.
Please add	text here	
Would the p	project involve or lead to:	
P.9.6.1	chemical pesticides use for pest management?	□ YES
		POTENTIALLY
		⊠ NO
P.9.6.4	If answer to question above is "yes" or "potentially",	□ YES
	does project has documented Chemical Pesticides	□NO
	Policy in place?	
D O C E I		⊠ NA
<u>P.9.6.5</u>	purchase, store, use, manufacture, or trade in Class	□ YES
	II (moderately hazardous) pesticides?	
		POTENTIALLY
		⊠ NO
P.9.6.5	If answer to question above is "yes" or "potentially",	□ YES
	does project has appropriate controls on	□NO
	manufacture, procurement, or distribution and/or use	
	of these chemicals?	⊠ NA
If the answe	er is "yes" or "potentially" to any of the above questions	, please
provide a bi	rief description of the project situation below. Also, provi	de justification

and/or evidence as necessary to demonstrate compliance with applicable requirements.			
•	units produces the bioslurry that potentially displaces th	e chemical	
	asically due to good content of nitrogen in the fertilizer t		
	replacer of the Urea.	,	
•	the parameter will be monitored through the perception	survey with	
the users			
P.9.7 HARVE	ESTING OF FORESTS		
P.9.7.1	Does the project have a risk of unsustainable forest	□ YES	
	management, including timber harvesting?	⊠ NO	
P.9.7.1	Does the project pose a risk of depleting biodiversity	□ YES	
	and ecosystem functionality in areas where improved	⊠ NO	
	forest management is undertaken?		
P.9.7.1	Does the project risk not meeting requirements for	□ YES	
	environment-friendly, socially beneficial, and	⊠ NO	
	economically viable plantations using native species		
	whenever possible?		
If the answer to any of the questions above is "yes," please explain project			
situation and	d how the project will ensure compliance with applicable	requirements.	
The project doesn't involve any activity that requires harvesting of forest products.			
Therefore the safeguarding principle under consideration will not be triggered by			
the project.			
Conclusion:	the parameter will not be monitored.		
P.9.8 FOOD	SECURITY		
P.9.8.1	Does the project involve the risk of negatively	□ YES	
	influencing access to and availability of food for	⊠ NO	
	people affected?	110	
If the answer to the question above is "yes," please explain project situation and			
how the project will ensure compliance with applicable requirements.			
Please add text here			

Would the project involve or lead to:

P.9.8.1	modification of the quantity or nutritional quality of	□ YES	
	food available such as through crop regime alteration		
	or export or economic incentives?	POTENTIALLY	
		⊠ NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
The project	units produces the bioslurry that potentially increases the	ne productivity	
of crop as it	has good content of nitrogen.		
Conclusion:	the parameter will be monitored through the perception	survey with	
the users.			
P.9.9 ANIM	AL WELFARE		
P.9.9.1	Does the project involve any risks to animal welfare?	□ YES	
	Animal welfare shall be ensured by providing access	⊠ NO	
	to water and food, appropriate environment, humane		
	treatment, and staff training. Evidence of		
	mistreatment will be treated as an immediate non-		
	conformity.		
P.9.9.2	Does the project involve any potential risk of	□ YES	
	excessive or inadequate use of veterinary medicines?	⊠ NO	
P.9.9.4	Does the project involve the risk of administering	□ YES	
	synthetic growth promoters, including hormones?	⊠ NO	
If the answer to any of the questions above is "yes," please explain project			
situation and how the project will ensure compliance with applicable requirements.			
Please add text here			
Would the project involve or lead to:			

		,
P.9.9.1	animal husbandry or harvesting of fish populations or	□ YES
	other aquatic species? ¹⁰	□ NO
		⊠ NA
P.9.9.1	limiting access for animals to basic needs like	□ YES
	drinking water, adequate food, daylight, appropriate shelter etc.?	
	Sheller etc.:	POTENTIALLY
		⊠ NO
P.9.9.3	inadequate measures to isolate sick animals and	□ YES
	control the spread of disease, especially zoonotic	□ NO
	diseases?	⊠ NA
P.9.9.5	inadequate low-stress methods, equipment, and	□ YES
	facilities that facilitate calm animal movement.	□ NO
		⊠ NA
P.9.9.6	inadequate measures to ensure that animals are	□ YES
	exposed to the least stress possible during	□ NO
	transportation and slaughtering?	⊠ NA
P.9.9.7	inappropriate spacing per animal and stocking rates	□ YES
	per land unit?	□ NO
		⊠ NA
P.9.9.8	inadequate measures to address the specific needs of	□ YES
	aquatic animals?	□ NO
		⊠ NA
P.9.9.9	primary production of living natural resources such as	□ YES
P.9.9.10	animal husbandry, aquaculture, and fisheries?	□ NO
	If the answer is yes, implement industry-standard	⊠ NA
	sustainable management practices in line with to one	

 $^{^{10}}$ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

	or more relevant and credible standards and utilise	
	available technologies.	
a brief desci	er is "yes" or "potentially" to any of the above question, ription of the project situation below. Also, provide justif necessary to demonstrate compliance with applicable re	ication and/or
The project	doesn't involve any activity that requires animal husban	dry. Therefore
the safegua	rding principle under consideration will not be triggered	by the project.
Conclusion:	the parameter will not be monitored	
P.9.10 HIGH	H CONSERVATION VALUE AREAS AND CRITICAL HABITATS	
P.9.10.1	Does the project have the risk of negatively	□ YES
	impacting HCV areas and/or critical habitats?	⊠ NO
P.9.10.2	Does the project in the project area or area of	□ YES
	downstream impacts have risks to the following:	⊠ NO
	native tree patches, individual native trees,	
	freshwater resources (including rivers, lakes,	
	swamps, temporary water bodies, and wells),	
	habitats of rare, threatened, and endangered species,	
	and biodiversity-enhancing areas?	
	er to any of the questions above is "yes," please explain	· -
	d how the project will ensure compliance with applicable	requirements.
Please add t	ext Here	
Would the p	roject involve or lead to:	
P.9.10.1	identified habitats as HCV areas and or Critical	□ YES
	habitats?	
		POTENTIALLY
D 0 10 1 I	If proving to above question is "vee" do so the project	⊠ NO
P.9.10.1	If answer to above question is "yes", does the project	□ YES
	have any risks that could negatively impact the	□ NO
	catchment, project success, and surrounding HCV	⊠ NA
	and ecological assets, as well as any measurable	
	adverse impacts on the criteria or biodiversity values	
	for which the critical habitat was designated, and on	
	the ecological processes supporting that biodiversity?	

P.9.10.1	If answer to above question is "yes", is a robust,	□ YES
	appropriately designed, and long-term Habitats and	□ NO
	Biodiversity Action Plan absent which will make the	⊠ N/A
	project unable to achieve net gains of those	
	biodiversity values for which the critical habitat was	
	designated?	
P.9.10.2	Does the project area or area of downstream impacts	□ YES
	have native tree patches, individual native trees,	
	freshwater resources (including rivers, lakes,	POTENTIALLY
	swamps, temporary water bodies, and wells),	
	habitats of rare, threatened, and endangered species,	⊠ NO
	and biodiversity-enhancing areas?	
P.9.10.2	If the answer to the above question is "yes", will the	□ YES
	project have any adverse effects on these areas?	□ No
		⊠ NA
P.9.10.3	If the answer to above question is "yes", does the	□ YES
	project has opportunities to minimise unwarranted	□ No
	conversion or degradation of the habitat and to	N NA
	enhance the habitat as part of its development?	⊠ NA
P.9.10.4	Is the project applying Land Use & Forest Activity	□ YES
	Requirements and managing a minimum 10% of the	□ No
	project area to protect or enhance the biological	⊠ NA
	diversity of native ecosystems following HCV	□ INA
	approach as per the given requirements?	
P.9.10.5	Are opinions and recommendations of an Expert	□ YES
	Stakeholder(s) not sought and demonstrated as	□ NO
	being included in the project design?	⊠ NA
	er is "yes" or "potentially" to any of the above question,	
a brief description of the project situation below. Also, provide justification and/or		
evidence as necessary to demonstrate compliance with applicable requirements. The project technologies are household technologies and will not have any impacts		
on identified habitat and have no adverse impact on bio-diversity. Therefore the		
safeguarding principle under consideration will not be triggered by the project.		
Conclusion: the parameter will not be monitored.		
P.9.11 ENDANGERED SPECIES		

P.9.11.1	Does the project lead to the reduction or negative	□ YES
	impact on any recognised Endangered, Vulnerable or	⋈ NO
	Critically Endangered species?	
If the answe	er to question above is "yes," please explain project situa	ation and how
	will ensure compliance with applicable requirements.	
Please add t	rext here	
Would the p	roject involve or lead to:	
P.9.11.2 distortion of habitats of endangered species?		
		POTENTIALLY
		⊠ NA
P.9.11.2	If answer to the above question is "yes", does the	□ YES
	project plan to protect and enhance them?	
		POTENTIALLY
		□ NO
		⊠ N/A
P.9.11.2	Are opinions and recommendations of an Expert	□ YES
	Stakeholder(s) not sought and demonstrated as	□ NO
	being included in the project design?	⊠ NA
If the answer is "yes" or "potentially" to any of the above question, please provide		
a brief description of the project situation below. Also, provide justification and/or		
evidence as necessary to demonstrate compliance with applicable requirements.		
The project technologies are household technologies and do not lead to the		
adverse impact on endangered, vulnerable or critically endangered species.		
Therefore the safeguarding principle under consideration will not be triggered by		
the project.		
Conclusion: the parameter will not be monitored.		
P.9.12 INVASIVE ALIEN SPECIES D.0.13.1 Door project introduce any alien species (not		
P.9.12.1	Does project introduce any alien species (not	□ YES
	currently established in the country or region of the	⊠ NO
	project) into new environments?	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
Please add text here		
וופמשב מעע נפאנ ווכו כ		

Would the project involve or lead to:		
		ı
P.9.12.1	risk of introducing any alien species with a high risk	□ YES
	of invasive behaviour regardless of whether such	
	introductions are permitted under the existing	DOTENITALLY
	regulatory framework?	POTENTIALLY
		⊠ NO
P.9.12.1	risk of potential accidental or unintended	□ YES
	introductions including the transportation of	
	substrates and vectors (such as soil, ballast, and	DOTENITALLY
	plant materials) that may harbour alien species.	POTENTIALLY
		⊠ NO
P.9.12.2	risk of spreading alien species into areas in which	□ YES
	they have not already been established?	
		POTENTIALLY
		⊠ NO
If the answer is "yes" or "potentially" to any of the above question, please provide		
a brief description of the project situation below. Also, provide justification and/or		
evidence as necessary to demonstrate compliance with applicable requirements.		
Please add text here		

APPENDIX 2- CONTACT INFORMATION OF VPA IMPLEMENTER

Organisation name	Alternative Energy Promotion Centre (AEPC)
Registration number	
with relevant	NA
authority	
Street/P.O. Box	Mid Baneshwor, Kathmandu
Building	
City	
State/Region	Bagmati
Postcode	
Country	Nepal
Telephone	+977-1-4598013
E-mail	nawa.dhakal@aepc.gov.np
Website	www.aepc.gov.np
Contact person	Nawa Raj Dhakal
Title	Executive Director
Salutation	Mr.
Last name	Dhakal
Middle name	Raj
First name	Nawa
Department	Alternative Energy Promotion Centre
Mobile	
Direct tel.	+977-1-4598013
Personal e-mail	nawa.dhakal@aepc.gov.np

APPENDIX 3-LUF ADDITIONAL INFORMATION

NA

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change
>>
NA
A4.2. Describe the Impacts of Design Change on the following
a. Additionality
>>
NA
b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified
>>
NA
c. Compliance with the monitoring plan of the applied methodology
>>
NA
d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring
plan
>>
NA
e. Scale of the project activity
>>
NA
f. Stakeholder consultation
>>
NA
g. Sustainable development criteria
>>

NA

h. Safeguarding Assessment

>>

NA

i. Compliance with applicable legislation

>>

NA

Revision History

Version	Date	Remarks
2.3	Dd/mm/yyyy	Editorial changes in line with V2.1 of the Safeguarding Principles and Requirements
2.2	21 June 2023	Editorial changes in line with V2.0 of the Safeguarding Principles and Requirements
2.1	14 April 2023	Integrated the design change memo as annex of the document.
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