

**Gold Standard for the Global Goals**  
**Stakeholder Consultation Report**



**Version 1 – July 2017**

**SECTION A. PROJECT DESCRIPTION****A. 1. Title of the project**

Title: Jabalpur biogas project

Date: 06-09-2018

Version no.: 2

**A. 2. Project description and current status**

The proposed project activity aims to provide biogas units (clean and sustainable source of energy for cooking) to rural households in state of Madhya Pradesh, India. The target areas in the project are the following districts of Madhya Pradesh - Jabalpur, Narsimhapur, Seoni, Mandala, Balaghat and Chindwada. The proposed biogas project is initiated by MYPLANET (France) and its partner SKG Sanhga (India).

The project activity aims to provide around 25 000 households with the biogas units. The size of the biogas unit to be provided to each household will be of the capacity - 2m<sup>3</sup> or 3m<sup>3</sup> biogas generation per day, depending on the size of the family. The construction of the biogas units will be initiated in February 2018. The biogas units are expected to be completely functional after 45 days of its installation. A project database will be maintained to keep a track of the date of commissioning of each biogas unit constructed in the project.

In the project areas, most of the population use firewood for cooking, which has adverse impacts on the health of women and children due to continuous exposure to smoke while cooking. The use of biogas for cooking will not only replace the use of biomass but will also reduce indoor air pollution resulting in a smoke free kitchen. The increasing demand for firewood had led to higher rate of deforestation in the project areas, therefore it can be envisioned that a regular use of biogas for cooking can play a role to decrease the rate of deforestation in the project area.

The use of chemical fertilisers for agriculture has gradually increased in the past few decades and due to which, the soil fertility has decreased resulting in low yield of crops. Therefore to promote the use of organic compost, the project activity also aims to train the beneficiaries on the benefits of the application of biogas slurry as an organic compost for agriculture. Various studies<sup>1</sup> have shown that the use of biogas slurry along with other agricultural wastes as an organic compost can increase/retain the soil fertility. The use of biogas slurry can also decrease the households expenses on chemical fertilisers. The beneficiaries will be initially provided trainings on the benefits of biogas slurry either in groups or individually during the annual monitoring surveys of the project activity.

**In the context of the above mentioned project, a local stakeholder meeting (LSC) was organized on the 8<sup>th</sup> January 2018, at Jabalpur, Madhya Pradesh, India. The details of the LSC meetings are provided in the following sections of the document.**

---

<sup>1</sup> <http://mnre.gov.in/biogas>

**SECTION B. DESIGN OF STAKEHOLDER CONSULTATION PROCESS**

**B. 1. Design of physical meeting(s)**

**i. Agenda**

Agenda of the meeting:

- 12.00 hours - Welcome address by Mr Kiran Kumar, Secretary, SKG Sangha
- 12.05 hours - Biogas project presentation, Ms Manjari Chandra, SKG Sangh
- 12.20 hours - Project benefits presentation, Secretary, SKG Sangha
- 12.40 hours - Share of contribution in bio gas project, Secretary, SKG Sangha
- 13.00 hours - Questions, Clarification and answers, lead by Mr Kiran & Mr Shailendra
- 13.20 hours - Participants comments, lead by Mr Kiran
- 13.25 hours - Blind sustainable development exercise by Mr Kiran
- 13.45 hours - Discussion on monitoring sustainable development and Filling of evaluation forms / Discussion of continuous input / grievance mechanism by Mr Kiran
- 14.10 hours - End of meeting

Agenda in the local language sent along with the LSC invitations is provided below –

जबलपुर बायोगैस परियोजना के लिए स्थानीय स्तर पर परामर्श बैठक	
बैठक का स्थान :	जे.के. सेल्सिडेशन हॉल, शिवाजी मैदान के बाजू में, सदर, जबलपुर।
बैठक की तारीख :	08.01.2018
बैठक की कार्यसूची	
11:00 – 11:05 :	स्वागत अभिवादन – सचिव, एस.के.जी.संघ द्वारा
11:05 – 11:10 :	बायोगैस परियोजनाएं और उनके प्रभाव – यु. मंजरी संदा द्वारा
11:10 – 11:20 :	परियोजना का स्पष्टीकरण – यु. मंजरी संदा द्वारा
11:20 – 11:50 :	प्रश्नोत्तर और उनके स्पष्टीकरण
11:50 – 12:10 :	प्रशिक्षणियों की टिप्पणियाँ
12:10 – 12:25 :	चाय ब्रेक
12:25 – 12:50 :	छद्म सतत विकास का अभ्यास
12:50 – 01:30 :	सतत विकास और मूल्यांकन पर चर्चा एवं मूल्यांकन प्रपत्र भरना
01:30 – 01:30 :	समाप्ति

**ii. Key project information**

A copy of the key project information has been provided in the Annexe 3 of the document.

**iii. Invitation tracking table**


Category code	Organisation (if relevant)	Name of invitee	Way of invitation	Date of invitation	Confirmation received? Y/N
A	Local people	Mango bhai	Personal	20/12/2017	Y
A	Local people	Asha bhai	Personal	20/12/2017	Y
A	Local people	Maneesha	Personal	20/12/2017	Y
A	Local people	Angadh	Personal	20/12/2017	Y
A	Local people	Sunitha Bhahiya	Personal	20/12/2017	Y
A	Local people	Mohini Tagore	Personal	20/12/2017	Y
A	Local people	Jyoti bhai	Personal	20/12/2017	Y
A	Local people	Sangeeta bhai	Personal	20/12/2017	Y
A	Local people	Malathi bhai	Personal	20/12/2017	Y
A	Local people	Seema bhai	Personal	20/12/2017	Y
A	Local people	Sakira bhai	Personal	20/12/2017	Y
D	Dr Reddy's Foundation	Sathendra Jhariya	Post	20/12/2017	Y
D	Dr Reddy's Foundation	Ashima singh baghel	Post	20/12/2017	Y
D	Jagathy Yuva Sansthan	Secretary	post	22/12/2017	Y
D	Dharti Putra Seva siksha sanstha	Secretary	post	22/12/2017	Y
D	Nirman	Secretary	post	22/12/2017	Y
D	Wainganga samudayak vikas kendra	Secretary	post	22/12/2017	Y
D	Hariyali samaj vikas samiti	Secretary	post	22/12/2017	Y
D	Anchalik krishak samaj samiti	Secretary	post	22/12/2017	Y
D	manas sarvthram sewa sanstha	Secretary	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
D	Pragathy Sanstha	Chief executive officer	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
C	Departmetn of Forests	Divisional forest Officer	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
D	Jan mangal sansthan	Chief executive officer	post	21/12/2017	Y
D	Gram Vigyan Paryavar	Chief executive officer	post	21/12/2017	Y
D	Samarpan Mahila Vikas Sanstha	Chief executive officer	post	21/12/2017	Y
D	Samridhi Foundation	Chief executive officer	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
D	Bhagath singh vansanrakshan	Collector & DM	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
D	Deep Jyothy Samaj kalyan sanstha	Collector & DM	post	21/12/2017	Y
C	Departmetn of Forests	Divisional forest Officer	post	21/12/2017	Y

D	Jan Sakriya Yuva Manch	Divisional forest Officer	post	21/12/2017	Y
D	Om Astha Foundation	Divisional forest Officer	post	21/12/2017	Y
D	Gram Mangalam Sewa Sanstha	Divisional forest Officer	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
C	Department of Forests	Divisional forest Officer	post	21/12/2017	Y
D	Swawalamban Kalyan Sanstha	Divisional forest Officer	post	21/12/2017	Y
C	Women and Child development Dept.,	District Programme Officer	post	21/12/2017	Y
C	Department of Forests	Divisional forest Officer	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
D	Samarthan Prashikshan sanstha	Collector & DM	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
D	Base Public welfare association	Collector & DM	post	21/12/2017	Y
C	Collectorate	Collector & DM	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
C	Dept. of Agriculture	Joint Director	post	21/12/2017	Y
D	Dorli Jankalyan smaj	Joint Director	post	21/12/2017	Y
D	Gram Vikas Sanstha	Joint Director	post	21/12/2017	Y
D	Mathra Seva Sangha	Joint Director	post	21/12/2017	Y
D	Grama Chikitsa Paryojana	Joint Director	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
C	Zilla Panchayth	Chief executive officer	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
B	Zilla Panchayth	Zilla Parishad	post	21/12/2017	Y
E	Gold Standard	Annyta Luo	Email	24/12/2017	N
F	Gold Standard NGO Supporters	Representatives of the organisation	Email	24/12/2017	Y

As per the GS requirements, a broad range of stakeholder lists was generated. To promote equal participation of both genders, personal invitations were sent to the local womens (potential project beneficiaries). A local transport was arranged for them come and participate in the LSC meeting.

Various local organisations (both non-for-profit and private) were sent invitations either by post or were contacted by telephone by the SKG team. The LSC meeting resulted in active participation of the stakeholders from different background irrespective of age, gender, religion and other background.

## iv. Text of individual invitations


**Jabalpur Biogas Project** <jabalpurbiogasproject@gmail.com>

12/24/17

to michael, contact, director.esws, cdmabteilung, mozaharul.alam, daniel.magallon, deepak.mawandla, kvaughan, office, chinansifounda., amarkhar

**INVITATION TO GS NGOs**

Dear Sir/Madam,

We invite you for a local stakeholder consultation for a new biogas project for rural households to be implemented by SKG Sangha. The proposed new biogas project for rural households will be implemented in Jabalpur, Narasingpur, Seoni, Balaghat, Mandala and Chhindawada districts of the Madhya Pradesh State, India.

SKG Sangha is a NGO working in the lines of sustainable agriculture, sustainable energy, waste management, rural employment and climate change. For its exemplary work the SKG Sangha has been awarded with international Ashden award for Sustainable energy, The Tech museum award and EI award during the year 2007 and 2008.

The project is going to be registered with the Gold Standard foundation and as a part of the GS certification process, a Local Stakeholder Consultation meeting will be held on the 08/01/2018 at JK Celebration hall, Opposite Shivaji Ground, Sadar, Jabalpur to document stake holder responses on the project.

We request you to accept our invitation, attend meeting and guide us.



We further invite you to contact us if you would like to get any other information regarding the proposed project activity. Looking forward for your participation during the local consultation meeting.


Contact details:

1. Phone: 0761-2600415 (Between 10 AM and 5 PM)
2. SKG Sangha, C2, Rajul Township, Tilhari, Mandala Road, Jabalpur (Between 10 AM and 5 PM)
3. [Email-Jabalpurbiogasproject@gmail.com](mailto:Email-Jabalpurbiogasproject@gmail.com)


President  
SKG Sangha

**2 Attachments**



Key project infor...



JBP-LSC- Agend...

## v. Text of public invitations

Scan copy of the public invitations in local language is provided below -



दिनांक : 16 / 12 / 2017  
जबलपुर

**स्थानीय हितधारकों के लिए आमंत्रण**

प्रिय महोदय/महोदया,

एस.के.जी. संघ द्वारा ग्रामीण परिवारों के लिये कार्यान्वित किए जाने वाले एक नए बायोगैस परियोजना के लिए स्थानीय हितधारकों को परामर्श के लिए आमंत्रित किया जाता है। प्रस्तावित नए बायोगैस परियोजना को मध्य प्रदेश, भारत के जबलपुर, नरसिंहपुर, सियनी, बालाघाट, भंडाला और छिंदवाड़ा जिलों में लागू किया जाएगा।

एस.के.जी. संघ एक एनजीओ है जो सतत कृषि, सतत ऊर्जा, कचरा प्रबंधन, ग्रामीण रोजगार और जलवायु परिवर्तन के क्षेत्र में काम कर रहा है। अपने अनुकरणीय कार्य के लिए एस.के.जी. संघ को वर्ष 2007 और 2008 के दौरान अंतराष्ट्रीय एस्केन पुरस्कार सतत ऊर्जा के क्षेत्र में टैंक संग्रहालय पुरस्कार और ई.आई. पुरस्कार से सम्मानित किया गया है।

यह परियोजना गोल्ड स्टैंडर्ड फाउंडेशन के साथ संजीवित होने जा रही है और जीएस प्रमाणन प्रक्रिया के एक भाग के रूप में 08.01.2018 को स्थानीय हितधारक परामर्श बैठक जे.के. सेलीब्रेशन हॉल, शिवाजी मैदान के सामने, सदर जबलपुर में आयोजित की जाएगी। परियोजना पर हितधारक के जवाबों का दस्तावेजीकरण किया जाएगा।

हम चाहेंगे कि आप हमारा निमंत्रण स्वीकार कर बैठक में शामिल हो और हमारा मार्गदर्शन करें।

यदि आप भविष्य में प्रस्तावित परियोजना गतिविधि के बारे में कोई अन्य जानकारी प्राप्त करना चाहते हैं, तो आप संपर्क करने के लिए आमंत्रित हैं। स्थानीय परामर्श मीटिंग के दौरान आपकी उपस्थिति की आशा करते हैं।

संपर्क व्यक्ति :

1. फोन : 0761-2600415 (समय: 10:00 से सायं 05:00)
2. एस.के.जी. संघ, सी 2 राजुल टाउनशिप, तिलहरी, मंडला रोड, जबलपुर (समय: 10:00 से सायं 05:00)
3. ई-मेल : [Jabalpurbiogasproject@gmail.com](mailto:Jabalpurbiogasproject@gmail.com)

सचिव  
एस.के.जी. संघ



## B. 2. Description of other consultation methods used

In cases, where individuals and/or entities were unable to attend the above mentioned physical meeting, the SKG team members visited the villages and conducted meeting in small groups to take the feedback. For other local government and other non government organisations who were unable to attend the meeting, they were contacted by phone calls, but no comments/feedbacks were received so far. Some of the photos of the small group meetings are provided below -





## SECTION C. CONSULTATION PROCESS

### C. 1. Participants' in physical meeting(s)

#### i. List of participants

*The original participants' list is provided in the Annex 1.*

Participants list					
Date and time: The 8th January 2017 from 12 noon to 2pm					
Location: JK Celebration hall, Jabalpur					
Category Code	Name of participant, job/ position in the community	Male/ Female	Signature	Organisation (if relevant)	Contact details (Village)
A	Pavan Patel	M	yes		Gotegaon
A	Rajesh Patel	M	yes		khapa
A	Narendra Patel	M	yes		pipariya
A	Rajesh Patel	M	yes		Khapa
A	Sonu viswakarma	M	yes		pipariya
A	Kasiram patel	M	yes		Manakwara
A	Gajala anjum	M	yes	Grow center	Jabalpur
D	Sapna shrivas	F	yes	Grow center	Jabalpur
D	Sakshi patel	F	yes	Grow center	Jabalpur
D	Priyanka kachhi	F	yes	Grow center	Jabalpur
D	Sadika Hayat	F	yes	Grow center	Jabalpur
D	Rizwana parveen	F	yes	Grow center	Jabalpur
D	Zeenat amaan	F	yes	Grow center	Jabalpur
D	Swati gotiya	F	yes	Grow center	Jabalpur
D	Poonam patel	F	yes	Grow center	Jabalpur
D	Chandini pandy	F	yes	Grow center	Jabalpur
D	Afsana bano	F	yes	Grow center	Jabalpur
D	Muskhan ansari	F	yes	Grow center	Jabalpur
D	Rajnish vishwakarma		yes	Grow center	Bhakarawara
D	Sultan rain		yes	Grow center	Jabalpur
D	Owais ansari	M	yes	Grow center	Jabalpur
D	Sandeep mehra	M	yes	Grow center	Majoli
D	Rangi lal tagore	M	yes	Grow center	Baghuala
D	Shubham dahayad	M	yes	Grow center	Khamariya
D	Niranjan jhariya	M	yes	Grow center	Shahpura
D	Sanju jhariya	M	yes	Grow center	Shahpura
D	Durgesh kumar	M	yes	Grow center	Shahpura

D	Shoaib ansari	M	yes	Grow center	Gholapur
D	Akash Viswakarma	M	yes	Grow center	Gamapur
D	Rakesh Jhariya	M	yes	Grow center	Marwari
D	Anand Prajapati	M	yes	Grow center	Gour parswara
A	Shamim ahmed	M	yes		Gohalpur
A	Afsar hussain ansari	M	yes		Gohalpur
A	Anand kachhi	M	yes		Gohalpur
A	Ravendra kumar Kachhi	M	yes		Umariya
D	Sathendra Jhariya	M	yes	Dr.Reddys foundation	pipariya
D	Ashima singh baghel	F	yes	Dr.Reddys foundation	Annupur
A	Mukesh patel	M	yes		Parpati
A	Sushma patel	F	yes		Harai
A	Govind	M	yes		Ganji kamariya
A	Rahul	M	yes		Ganji kamariya
A	Tararu	M	yes		Ghanji kamariya
A	Mango bhai	F	yes		Bhankhedi
A	Asha bhai	F	yes		Sihora
A	Maneesha	F	yes		Ghar padariya
A	Angadh	F	yes		Ghanji kamariya
A	Sunitha Bhahiya	F	yes		Majoli
A	Mohini Tagore	F	yes		silodi
A	Jyoti bhai	F	yes		Ganji kamariya
A	Sangeeta bhai	F	yes		Ghanji kamariya
A	Malathi bhai	F	yes		Narila
A	Seema bhai	F	yes		chargava
A	Sakira bhai	F	yes		Ghanji kamariya
A	Lalitha bhai	F	yes		Dhuhati
A	Halki bhai	F	yes		Ghanji kamariya
A	Sumata bhai	F	yes		Ghanji kamariya
A	Janak nandini	F	yes		kakari
A	Yashodha bai	F	yes		Dola
A	Chedh ram	F	yes		Ghanji kamariya
A	Birendra	F	yes		Ghanji kamariya
A	Dhana bai	F	yes		Ghanji

					kamariya
A	Rashmi	F	yes		Bhahoribandh
A	Saritha	F	yes		Ghanji kamariya
A	Siya bhai	F	yes		Bhavadha
A	Badhaki bai	F	yes		Ghanji kamariya
A	Munni bai	F	yes		Ghanji kamariya
A	Siya rani	F	yes		Chanti
A	Santhi bai	F	yes		Ghanji kamariya
A	Preeti	F	yes		samhori
A	Munni bai	F	yes		amarpur
A	Sarita	F	yes		Ghanji kamariya
A	Chandini	F	yes		Ghanji kamariya
A	Saraswati	F	yes		Nargaon
A	Gurmoth singh	M	yes		Adarthai
A	Aniketh sen	M	yes		Boriya
A	Sathendra	M	yes		Boriya
A	Shahana	F	yes		Ranital
A	Chandini	F	yes		charkhambha
A	Pradeep	M	yes		Bargi
A	Nilesh Rajput	M	yes		Barela
D	Anil kumar	M	yes	SKG Sangha	Hussainnagar
D	Shailendra	M	yes	SKG Sangha	Suhagi

## ii. Evaluation forms

>>Scan copies of the original evaluation forms are provided in the Annex 2.

<b>Name</b>	<b>Chandhini</b>
What is your impression of the meeting?	This project is good for environment
What do you like about the project?	We will get free biogas
What do you not like about the project?	We cannot get sand
Signature	Yes

<b>Name</b>	<b>Shamim ahmed</b>
What is your impression of the meeting?	Financial condition will improve of the villages
What do you like about the project?	It will help us achieve the Swach Bharat Mission <sup>2</sup> goals and women will get rid off smoke and firewood
What do you not like about the project?	It is only for Rural areas
Signature	Yes

<b>Name</b>	<b>Mahmed afser hussain</b>
What is your impression of the meeting?	It will help to reduce global warming and help empower the women
What do you like about the project?	SKG is helping everyone
What do you not like about the project?	Daily requirement of cowdung is high
Signature	Yes

<b>Name</b>	<b>Apsana bano</b>
What is your impression of the meeting?	Due to this project, the women will get plenty of time with their children, and which they can utilise for their study and personal development.
What do you like about the project?	idea of financial contribution from the organisation

<sup>2</sup> <https://global.gotowebinar.com/join/7959192439411219203/745569492>

What do you not like about the project?	This project should be provided to households without cows also
Signature	Yes

<b>Name</b>	<b>Shoyab ansari</b>
What is your impression of the meeting?	The required space should be less
What do you like about the project?	It reduces deforestation and maintain a clean environment
What do you not like about the project?	More use of cowdung
Signature	Yes

<b>Name</b>	<b>Durgesh jariya</b>
What is your impression of the meeting?	This project is with benefits
What do you like about the project?	It will help the women
What do you not like about the project?	The waste slurry is not good
Signature	Yes

<b>Name</b>	<b>Rangi lal Tagore</b>
What is your impression of the meeting?	Very nice
What do you like about the project?	This is renewable energy which reduce the pollution
What do you not like about the project?	Cowdung
Signature	Yes

<b>Name</b>	<b>sapna</b>
What is your impression of the meeting?	This is perfect and best project for helping the women
What do you like about the project?	This will save time and women will not be required to collect firewood
What do you not like about the project?	In cases, if the unit is built outside, it will require more pipe
Signature	Yes

<b>Name</b>	<b>Chandini pande</b>
What is your impression of the meeting?	This is better project will help women in cooking
What do you like about the project?	This will reduce time to collect fire wood and proper cooking
What do you not like about the project?	More use of pipe required if we build outside
Signature	Yes

<b>Name</b>	<b>sultan</b>
What is your impression of the meeting?	This is very good project and will save our time and health
What do you like about the project?	Use of cowdung in the plant will led to cleanness it will reduce air pollution
What do you not like about the project?	There will be little problem to purchase sand
Signature	Yes

## C. 2. Pictures from physical meeting(s)





## C. 3. Outcome of consultation process

### i. Minutes of physical meeting(s)

To record the minutes of the meeting, one of the LSC participant was requested to note down the minutes .

The minutes of the local stakeholder meeting were documented by a member of Dr. Reddy's Foundation (local non profit organisation). The detailed minutes are provided as a separate document.

The minutes of the meeting includes details like i) the questions raised by the stakeholders and the responses provided by the SKG team, ii) benefits of the bioags programme for rural households, iii) blind sustainable exercise etc.

Please refer the document "Minutes of the meeting".

### ii. Minutes of other consultations

Though other consultations were conducted in small groups, the minutes of these meetings were not recorded but the feedbacks during these meeting were clarified by the SKG team.

### iii. Assessment of all comments

Stakeholder comment	Was comment taken into account (Yes/ No)?	Explanation (Why? How?)
How many connections can be done from the project unit?	YES	If there is a need of two connections you need to pay the extra charge to set up a new connection.
How much cow dung is required to start the process of the plant?	YES	Reply quoted:" 2 tons of cow dung is needed to start the plant initially.
What is the quantity of cow dung is required to run the bio gas plant?	YES	" 50 kg of cow dung required on daily basis to run a small plant. "75 kg of cow dung required to run a big plant.
Will project give the sand in free for the project?	YES	As stated in the contribution of the beneficiary, the project beneficiary has to invest 15 - 20% for the installation of the biogas plant.

What are the other benefits the installer can get from this project?	YES	Installer can start working as a supervisor and can earn money and can bear the expenses of all the raw materials which is required for the set up.
Who can set up the plant?	YES	The households who are having animals and have a proper space and willing to have unit.
what should be the type of area required to set up a plant?	YES	The plant area should be near should be near by the area of cow dung.
Sandeep Mehra –Asked many questions regarding the plant setup and commented that this project would be the great help for the local people who are unemployed.	YES	Most of the questions related to the technical aspect of the construction of the plant were replied by the SKGS team.
Afsar Khan: Commented on the topic which discussed to increase the fertility of the land.	YES	Details on the benefits of the use of the biogas slurry as a organic compost for agriculture were further discussed by the SKG team.

## iv. Revisit sustainability assessment

Are you going to revisit the SDG and safeguards assessment?	Yes	No
Please note that this is necessary when there are differences between your own assessment and feedback collected during stakeholder consultation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## v. Summary of alterations based on comments

The comments and clarifications requested during the LSC meeting were taken into account and accordingly explained by the SKG team members. There were no comments that led to a requirement to modify the project activity.

**SECTION D. SUSTAINABLE DEVELOPMENT ASSESSMENT**

**D. 1. Own sustainable development assessment**

**i. Safeguard assessment**

Safeguarding principles	Assessment questions	Assessment of relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)
<b>SOCIAL &amp; ECONOMIC SAFEGUARDING PRINCIPLES</b>				
1. Human rights	<p>a. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights.</p> <p>b. The Project shall not discriminate with regards to participation and inclusion</p>	No	<p>a; India has signed international conventions<sup>3</sup> on elimination of all forms of racial discrimination/ economic, social and cultural rights/ elimination of forms of discrimination against women etc.. The project respects internationally proclaimed human rights and does not discriminate people participation in the project activity. The proposed project activity does not complicit in violence or human rights abuses of any kind.</p> <p>b The project actively promotes participation of both the local population regardless of the sex, religion, age, disability etc.</p>	None
2. Gender Equality and Women's Rights	<p>a. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?</p> <p>b. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women</p>	No	<p>a. Women will be considered at the same level as men. They will be trained on the maintenance and to the use of biogas units.</p> <p>b. The project does not adversely affect marginalised or vulnerable communities but in fact decrease the women's burden of collecting firewood by providing a renewable and clean of energy</p>	None

<sup>3</sup> [http://tbinternet.ohchr.org/\\_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN](http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=79&Lang=EN)

	<p>or social isolation of men)?</p> <p>c. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?</p> <p>d. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?</p> <p>e. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?</p>		<p>to meet their daily cooking needs. The target beneficiaries in the project activity are also part of vulnerable communities who do not have access to clean energy for cooking.</p> <p>c. The project activity has taken into account the gender roles, and therefore had invited equally both men and women to actively participate in the stakeholder consultation meeting. Moreover, both the women and men will be equally considered in the participation of the project. Without any gender discrimination, both will be equally trained on the maintenance and to the use of biogas units for daily cooking needs.</p> <p>d. The project activity has taken into account the roles and the abilities of women and men to benefit from the project. The biogas plants are provided to beneficiaries who meet the conditions of owning minimum number of animals (3 to 4) and enough land space near their house to construct the biogas unit. Potential beneficiaries, irrespective of minority, who meet these basic requirements are selected in the project activity.</p> <p>e. The installation of biogas units helps reduce the wood collection time for women, allowing them to better organise their day and even allowing time for other activities and/or other income-generating activities.</p>	
--	---	--	---	--

	<p>f. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?</p> <p>g. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services?</p> <p>h. Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?</p>		<p>f. The project does not reproduce or deepen any kind of discrimination against women. The project activity has provided an opportunity to actively participate in the implementation of project activity. The women will also benefit from training programs on the use and maintenance of the biogas units during the crediting period.</p> <p>g. The Project does not limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing the biogas plants. Both genders were equally explained and will be trained on the use of biogas for cooking and the use of biogas slurry for agriculture</p> <p>h. Women will be less submitted to hazards and risks since the wood collecting time is reduced. Indeed, spending less time on unsecured roads lead to fewer acts of aggression against women and young girls.</p>	
3. Community Health, Safety and Working Conditions	The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community.	No	The use firewood for cooking is one of the main reason for the indoor air pollution. And, according to the world health organisation (WHO), indoor air pollution in homes is responsible for the premature death of over 4 million people through respiratory or eye infections. The use of biogas for cooking will	None

			avoid indoor air pollution by providing a clean environment for cooking.	
<b>4. Cultural Heritage, Indigenous Peoples, Displacement and Resettlement</b>				
4.1. Sites of Cultural and Historical Heritage	Does the project area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations or practices)?	NA	The project activity is not implemented in areas where there are cultural sites or any other historical heritage. The nearest historical site (Bhimbetka) from the project area is about 300 km.	N/A
4.2. Forced Eviction and Displacement	Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	NA	The biogas units are constructed near the beneficiary household premises, therefore does not involve any forced eviction or displacement of the project population.	NA
4.3. Land Tenure and Other Rights	Does the Project require any change to land tenure arrangements and/or other rights?	No	The biodigesters are build on the beneficiaries land and there will not be any change in land tenure. Before construction of the biogas units, SKGS team will ensure there is sufficient place to install the biogas units.	None
4.4. Indigenous Peoples	Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	NA	The biogas units are provided to each rural household's dependent on subsistence agriculture and does not involve any Indigenous people.	NA
5. Corruption	The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects.	No	The project do not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt practices.	None
<b>6. Economic Impacts</b>				
6.1. Labour Rights	1. The Project Developer shall ensure that there is no forced labour and that all employment is in compliance with national labour and occupational health and safety laws,		1. The project does not imply forced labour. Sustainable long, middle and short term jobs will be created. All workers will follow specific trainings on the use, management and monitoring of biogas units. Thus, living conditions of the local	None

	<p>with obligations under international law, and consistency with the principles and standards embodied in the International Labour Organization (ILO) fundamental conventions.?</p> <p>2. Workers shall be able to establish and join labour organisations.</p> <p>3. Working agreements with all individual workers shall be documented and implemented.</p> <p>4. The Project Developer shall justify that the employment model applied is locally and culturally appropriate.</p> <p>5. Child labour, as defined by the ILO Minimum Age Convention is not allowed. The Project Developer shall use adequate and verifiable mechanisms for age verification in recruitment procedures. Exceptions are children for work on their families' property as long as:</p> <p>(a) Their compulsory schooling (minimum of 6 schooling years) is not hindered, AND</p> <p>(b) The tasks they perform do not harm their physical and mental development, AND</p>		<p>population will be improved by job creation, stabilising rural families and generating new income.</p> <p>2. Not applicable. The project activity provides short term employment to the trained masons and the employment model respects the local regulations.</p> <p>3. Working agreements with all individual workers will be documented and implemented. Signed contracts between SKGS and all workers will be established and verified.</p> <p>4. The local masons are trained on the new biogas model and are employed by the organisation for future work. The contracts signed with workers respect the local employment model.</p> <p>5. The Project does not promote child labour. Even more, the installation of these units helps reduce the wood collection time for children, allowing them to regularly attend the school. This should increase their education and scholar results.</p>	
--	---	--	--	--



	<p>(c) The opinions and recommendations of an Expert Stakeholder shall be sought and demonstrated as being included in the Project design.</p> <p>6. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures</p>		<p>6. The masons are first provided training to construct the new model of the biodigester. The training is for a period of 3-4 days. During these training program, each mason is also handed safety equipment's (helmets, boots, gloves etc.) for future construction work to avoid any accidents at the construction area.</p>	
6.2. Negative Economic Consequences	<p>1. The Project Developer shall demonstrate the financial sustainability of the Projects implemented, also including those that will occur beyond the Project Certification period.</p> <p>2. The Projects shall consider economic impacts and demonstrate a consideration of potential risks to the local economy and how these have been taken into account in Project design, implementation, operation and after the Project. Particular focus shall be given to vulnerable and marginalised social groups in targeted communities and that benefits are socially-inclusive and sustainable.</p>	NA	<p>The project activity will provide access to free and renewable form of energy for daily cooking needs. The access to free energy will lead to income savings for the project beneficiaries. And secondly, the use of biogas slurry for agriculture will reduce their expenses on chemical fertilisers. Therefore the project activity does not have any negative economic consequences.</p>	None
<b>ENVIRONMENTAL &amp; ECOLOGICAL SAFEGUARDING PRINCIPLES</b>				
<b>1. Climate and Energy</b>				
1.1 Emissions	Will the Project increase	No	Project does not increase emissions	None

	greenhouse gas emissions over the Baseline Scenario?		over the Baseline Scenario, firstly, as it reduces the methane emissions that would have occurred if the cow-dung was left to decay in the traditional compost pits. And secondly, the regular use of biogas for daily cooking will avoid the use of firewood thereby reducing potential CO <sub>2</sub> emissions. SKGS will monitor the project annually to make sure that beneficiaries are continuously using the biogas and thus greenhouse gas emissions do not increase. Through these monitoring, SKGS will also assess the part of reduced emissions induced by the project.	
1.2. Energy Supply	Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	No	The project do not affect the availability and reliability of energy supply to other users. Biogas replaces the use of wood-stoves or other fossil based cooking-stoves, and beneficiaries will be autonomous in energy supply. Indeed, the construction and use of renewable energy like biogas, helps reduce households' dependency on other expensive fuels (Kerosene or LPG), thus producing significant financial savings.	None
<b>2. Water</b>				
2.1. Impact on Natural Water Patterns/Flows	Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	NA	The project does not has any kind of impact on the natural water patterns/flows.	NA
2.2. Erosion and/or Water Body Instability	Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural	No	The project is not linked to any other kind of activity other than implementation fo the biogas units which might lead to erosion and/or	None

	<p>pattern of erosion? If 'Yes' or 'Potentially' proceed to question 2.</p> <p>2. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?</p>		water body instability.	
<b>3. Environment, ecology and land use</b>				
<b>3.1 Landscape Modification and Soil</b>	Does the Project involve the use of land and soil for production of crops or other products?	No	Biogas plant are independent of any cropping system. Nevertheless, the animal dung put into a biodigester turns into slurry that can be utilised to partially or fully substitute the use of chemical fertilisers. Thus, the Project does not alter soil quality, but the use of the biogas slurry will eventually reduce soil degradation and pollution in the long term.	None
<b>3.2 Vulnerability to Natural Disaster</b>	Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	NA	The project activity is implemented in rural areas of Madhya Pradesh, where so far no natural disasters have been recorded.	NA
<b>3.3 Genetic Resources</b>	Could the Project be negatively impacted by the use of genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development)?	NA	The project activity involved construction and monitoring of biogas plants for rural households and therefore, is not linked to any activity related to genetic resources.	NA
<b>3.4 Release of pollutants</b>	Could the Project potentially result in the release of pollutants to the environment?	No	The Project will avoid the release of pollutants that might have been caused due to the use of firewood for daily cooking needs of the beneficiaries. Moreover, foul smell of the cow-dung is also reduced leading to an environment more hygienic for the beneficiaries in the project area. Indoor and outdoor air quality will thus be improved by the	None

			<p>implementation of the Project.</p> <p>SKGS will provide a permanent monitoring through regular visits on all biogas plants (at list once a month). They will be aware of any technical problems and will solve them as soon as they will be notified.</p>	
3.5 Hazardous and Non-hazardous Waste	Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	No	Project does not involve in hazardous materil production, trade or release.	None
3.6 Pesticides & Fertilisers	Will the Project involve the application of pesticides and/or fertilisers?	No	The manure put into a biodigester turns into slurry that can be utilised along with other agricultural wastes as an 'organic compost', to partially or fully substitute the use of chemical fertilisers for agriculture.	None
3.7 Harvesting of Forests	Will the Project involve the harvesting of forests?	No	The project does not directly relate to forest management, but implementing biogas plants will reduce the human pressure on the forest. Beneficiaries will stop collecting wood, and SKGS will monitor the project annually to make sure that beneficiaries are continuously using the biogas and do not switch back to firewood. In the long-term the project will help to restore the forest.	None
3.8 Food	Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	NA	The manure put into a biodigester turns into slurry that can be utilised along with other agricultural wastes as an 'organic compost', to improve the soil fertility and in the long-term increasing the crop yields.	NA
3.9 Animal husbandry	Will the Project involve animal husbandry?	NA	The project activity involved construction and monitorin of biogas plants for rural households and therefore, is not linked to any acitvitiy related to animal	NA

			husbandary.	
3.10 High Conservation Value Areas and Critical Habitats	Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	Within the Project the area that is managed by the Project Developer and the area of impact downstream, the tiger ( <i>Panthera tigris tigris</i> ) habitat is enhanced. Indeed, the Project will help to combat deforestation and consequently to preserve surrounding nature reserves where tigers are living.	None
3.11 Endangered Species	<p>1. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)?</p> <p>2. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?</p>	No	<p>Endangered species are not in competition with humans in the project zone and the project does not lead to the reduction or negative impact of any recognised Endangered, Vulnerable or Critically Endangered species.</p> <p>Moreover, in the long-term the project will help to restore the forest that can sustain various species of both plant and animals depending on this forest area.</p>	None

**ii. Sustainable Development Goals (SDG) outcome**

- **SDG 1 – End poverty in all its forms everywhere**
  - By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
  - By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- **SDG 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture**
  - By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- **SDG 3 – Ensure healthy lives and promote well-being for all at all ages**
  - By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- **SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all**
  - By 2030, ensure universal access to affordable, reliable and modern energy services
  - By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
  - By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support
- **SDG 13 – Goal 13: Take urgent action to combat climate change and its impacts**
  - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- **SDG 15 – Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss**
  - By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

**D. 2. Stakeholders' Blind sustainable development assessment**

**i. Safeguard assessment**

Safeguarding principles	Assessment questions	Assessment of relevance to the project (Yes/potentially/no)	Justification	Mitigation measure (if required)
<b>SOCIAL &amp; ECONOMIC SAFEGUARDING PRINCIPLES</b>				
1. Human rights	<p>a. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights.</p> <p>b. The Project shall not discriminate with regards to participation and inclusion.</p>	No	<p>a. The project respects human rights and does not complicit in violence or human rights abuse. The project does not discriminate people participation.</p> <p>b. Secondly, the project actively promotes participation regardless of the sex, religion, age, disability etc.</p>	None
2. Gender Equality and Women's Rights	<p>a. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements and benefits?</p> <p>b. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)?</p>	No	<p>a. The biogas are aimed to increase the overall well-being of the women, who will use it everyday, therefore there is no risks for women to access to or control the installed biogas units. They will be trained on the maintenance and to the use of biogas units.</p> <p>b. The project does not adversely affect marginalised or vulnerable communities but in fact decrease the women's burden of collecting firewood by providing a renewable and clean of energy to meet their daily cooking needs. The target beneficiaries in the project activity are also part of vulnerable communities who do</p>	None



	<p>c. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, child care duties, low literacy or educational levels, or societal discrimination)?</p> <p>d. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)?</p> <p>e. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities?</p> <p>f. Would the Project potentially reproduce or further deepen</p>		<p>not have access to clean energy for cooking.</p> <p>c. The project activity has taken into account the gender roles, and therefore had invited equally both men and women to actively participate in the stakeholder consultation meeting. Moreover, both the women and men will be equally considered in the participation of the project. Without any gender discrimination, both will be equally trained on the maintenance and to the use of biogas units for daily cooking needs.</p> <p>d. The project activity has taken into account the roles and the abilities of women and men to benefit from the project. The biogas plants are provided to beneficiaries who meet the conditions of owning minimum number of animals (3 to 4) and enough land space near their house to construct the biogas unit. Potential beneficiaries, irrespective of minority, who meet these basic requirements are selected in the project activity.</p> <p>e. The installation of biogas units helps reduce the wood collection time for women, allowing them to better organise their day and even allowing time for other activities and/or other income-generating activities.</p> <p>f. The project does not reproduce or deepen any kind of</p>	
--	---	--	---	--

	discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits?		discrimination against women. The project activity has provided an opportunity to actively participate in the implementation of project activity. The women will also benefit from training programs on the use and maintenance of the biogas units during the crediting period.	
	<p>g. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services?</p> <p>h. Is there a likelihood that the proposed Project would expose women and girls to further risks or hazards?</p>		<p>g. The project encourages women and men according to their ability in protection of natural resources. Project activity reduces use of fire wood in turn reduces abuse of natural resources.</p> <p>h. There is no likelihood that the project would expose women and girls to risks and hazards. The project reduces the hazards in fire wood collection from forests.</p>	
3. Community Health, Safety and Working Conditions	The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community.	No	The project activity avoids indoor air pollution and provides organic fertilizers ( biogas slurry) to soils to produce more healthy foods reducing exposure to chemical and pesticides risk.	None
4. Cultural Heritage, Indigenous Peoples, Displacement and Resettlement				
4.1. Sites of Cultural and Historical Heritage	Does the project area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations or practices)? <sup>4</sup>	NA	The biogas units will be implemented in close vicinity of each household. The project activity is not implemented in areas where there are cultural sites or any other historical heritage. The nearest historical site (Bhimbetka) from the project area is about 300 km.	N/A
4.2. Forced	Does the Project require or	NA	The biogas units are constructed	NA

<sup>4</sup> NA -Not applicable

Eviction and Displacement	cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?		near the beneficiary household premises, therefore does not involve any forced eviction or displacement of the project population.	
4.3. Land Tenure and Other Rights	Does the Project require any change to land tenure arrangements and/or other rights?	No	The project does not require any change in land tenure or any other rights. The biogas units are built on the beneficiaries' land and there will not be any change in land tenure.	None
4.4. Indigenous Peoples	Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	NA	The biogas units are provided to each rural household, who are dependent on subsistence agriculture and does not involve any Indigenous people.	NA
5. Corruption	The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Practices.	No	The Project does not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt practices.	None
<b>6. Economic Impacts</b>				
6.1. Labour Rights	1. The Project Developer shall ensure that there is no forced labour and that all employment is in compliance with national labour and occupational health and safety laws, with obligations under international law, and consistency with the principles and standards embodied in the International Labour Organization (ILO) fundamental conventions.?		1. India has been a permanent member of the ILO Governing Body since 1922 <sup>5</sup> . The project activity is initiated in the Madhya Pradesh state of India, and is in accordance with principles of International Labour Organisation (ILO) fundamental conventions. The proposed project activity does not imply forced labour. Sustainable long, middle and short term jobs will be created. All workers will follow specific trainings on the use, management and monitoring of biogas units. Thus, living conditions of the local population will be improved by job creation, stabilising rural families and generating new income.	None

<sup>5</sup> [http://www.ilo.org/newdelhi/aboutus/WCMS\\_166809/lang-en/index.htm](http://www.ilo.org/newdelhi/aboutus/WCMS_166809/lang-en/index.htm)

	<p>2. Workers shall be able to establish and join labour organisations.</p> <p>3. Working agreements with all individual workers shall be documented and implemented.</p> <p>4. The Project Developer shall justify that the employment model applied is locally and culturally appropriate.</p> <p>5. Child labour, as defined by the ILO Minimum Age Convention is not allowed. The Project Developer shall use adequate and verifiable mechanisms for age verification in recruitment procedures. Exceptions are children for work on their families' property as long as:</p> <p>(a) Their compulsory schooling (minimum of 6 schooling years) is not hindered, AND</p> <p>(b) The tasks they perform do not harm their physical and mental development, AND</p> <p>(c) The opinions and recommendations of an Expert Stakeholder shall be sought and</p>		<p>2. Not applicable. The project activity provides short term employment to the trained masons and the employment model respects the local regulations.</p> <p>3. Most of the required work force is recruited from the local areas. Working agreements with all individual workers will be documented and implemented. Signed contracts between SKGS and all workers will be established and verified.</p> <p>4. The local masons are trained on the new biogas model and are employed by the organisation for future work. The contracts signed with workers respect the local employment model.</p> <p>5. The Project does not promote child labour. Even more, the installation of these units helps reduce the wood collection time for children, allowing them to regularly attend the school.</p>	
--	---	--	---	--

	<p>demonstrated as being included in the Project design</p> <p>6. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures.</p>		<p>6. The workers are provided safety equipment's (helmets, boots, gloves etc.) during the construction work to avoid any</p>	
6.2. Negative Economic Consequences	<p>1. The Project Developer shall demonstrate the financial sustainability of the Projects implemented, also including those that will occur beyond the Project Certification period.</p> <p>2. The Projects shall consider economic impacts and demonstrate a consideration of potential risks to the local economy and how these have been taken into account in Project design, implementation, operation and after the Project. Particular focus shall be given to vulnerable and marginalised social groups in targeted communities and that benefits are socially-inclusive and sustainable.</p>	NA	<p>The project activity will provide access to free and renewable form of energy for daily cooking needs. The access to free energy will lead to income savings for the project beneficiaries. And secondly, the use of biogas slurry for agriculture will reduce their expenses on chemical fertilisers. Therefore the project activity does not have any negative economic consequences.</p> <p>More over most part of unit cost and maintenance costs are taken care of by the project reducing stake holder economic burden.</p>	None
<b>ENVIRONMENTAL &amp; ECOLOGICAL SAFEGUARDING PRINCIPLES</b>				
<b>1. Climate and Energy</b>				
1.1 Emissions	<p>Will the Project increase greenhouse gas emissions over the Baseline Scenario?</p>	No	<p>Projects does not increase emissions over the Baseline Scenario. The project activity will reduce CO<sub>2</sub> emissions from firewood use for cooking and the CH<sub>4</sub> emissions that would have occurred if the cow-dung was left to decay in the traditional compost pits.</p>	None

			SKGS will monitor the project annually to make sure that beneficiaries are continuously using the biogas. Through these monitoring, SKGS will also assess the part of reduced emissions induced by the project.	
1.2. Energy Supply	Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	No	The Project do not affect the availability and reliability of energy supply to other users. Biogas replaces the use of wood-stoves or other fossil based cooking-stoves, and beneficiaries will be autonomous in energy supply. Indeed, the construction and use of renewable energy like biogas, helps reduce households' dependency on other expensive fuels (Kerosene or LPG), thus producing significant financial savings.	None
2. Water				
2.1. Impact on Natural Water Patterns/Flows	Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	NA	The project does not have any kind of impact on the natural water patterns/flows.	NA
2.2. Erosion and/or Water Body Instability	Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion? If 'Yes' or 'Potentially' proceed to question 2. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?	No	The project is not linked to any other kind of activity other than implementation of the biogas units which might lead to erosion and/or water body instability.	None
3. Environment, ecology and land use				
3.1 Landscape Modification and Soil	Does the Project involve the use of land and soil for production of crops or other	No	Biogas plant is independent of any cropping system. Nevertheless, the animal dung put into a biodigester	None

	products?		turns into slurry that can be utilised to partially or fully substitute the use of chemical fertilisers. Thus, the Project does not alter soil quality, but will eventually reduce soil degradation and pollution due to the the use of the biogas slurry.	
3.2 Vulnerability to Natural Disaster	Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	NA	The project activity is not vulnerable to natural disasters.	NA
3.3 Genetic Resources	Could the Project be negatively impacted by the use of genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development)?	NA	The project activity involves construction and monitoring of biogas plants for rural households and therefore, is not linked to any acitvitiy related to genetic resources.	NA
3.4 Release of pollutants	Could the Project potentially result in the release of pollutants to the environment?	No	<p>The Project will avoid the release of pollutants that might have been caused due to the use of firewood for daily cooking needs of the beneficiaries. Moreover, foul smell of the cow-dung is also reduced leading to an environment more hygienic for the beneficiaries in the project area.</p> <p>Indoor and outdoor air quality will thus be improved by the implementation of the Project.</p> <p>SKGS will provide a permanent monitoring through regular visits on all biogas plants (at list once a month). They will be aware of any technical problems and will solve them as soon as they will be notified.</p>	None
3.5 Hazardous and Non-	Will the Project involve the manufacture, trade, release,	No	Project does not involve in hazardous material production,	None



hazardous Waste	and/ or use of hazardous and non-hazardous chemicals and/or materials?		trade or release.	
3.6 Pesticides & Fertilisers	Will the Project involve the application of pesticides and/or fertilisers?	No	The animal dung put into a biodigester turns into slurry that can be utilised along with other agricultural wastes as an 'organic compost', to partially or fully substitute the use of chemical fertilisers for agriculture.	None
3.7 Harvesting of Forests	Will the Project involve the harvesting of forests?	No	The project does not directly relate to forest management, but implementing biogas plants will reduce the human pressure on the forest. Beneficiaries will stop collecting wood, and SKGS will monitor the project annually to make sure that beneficiaries are continuously using the biogas and do not switch back to firewood. In the long-term the project will help to restore the forest.	None
3.8 Food	Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	NA	The manure put into a biodigester turns into slurry that can be utilised along with other agricultural wastes as an 'organic compost', to improve the soil fertility and in the long-term increasing the crop yields.	NA
3.9 Animal husbandry	Will the Project involve animal husbandry?	NA	The project activity involved construction and monitorin of biogas plants for rural households and therefore, is not linked to any acitvitiy related to animal husbandary.	NA
3.10 High Conservation Value Areas and Critical Habitats	Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	The project does not negatively alter or affect the ecosystems. Project activity positively affects the biodiversity by reduction of stress on forests.  Within the Project the area that is managed by the Project Developer and the area of impact downstream, the tiger ( <i>Panthera tigris tigris</i> )	None

			habitat is enhanced. Indeed, the Project will help to combat deforestation and consequently to preserve surrounding nature reserves where tigers are living.	
3.11 Endangered Species	<p>1. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)?</p> <p>2. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?</p>	No	<p>The project is located in the area where there are tiger reserves. The project unit boundary is within the household limit.</p> <p>Moreover, in the long-term the project will help to restore the forest that can sustain various species of both plant and animals depending on this forest area.</p>	None

**ii. Sustainable Development Goals (SDG) outcome**

>> (Specify the relevant SDG target for each of three SDGs addressed by the project. Refer most recent version of targets [here](#).)

- **SDG 1 – End poverty in all its forms everywhere**
  - By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
  - By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- **SDG 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture**
  - By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- **SDG 3 – Ensure healthy lives and promote well-being for all at all ages**
  - By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

- **SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all**
  - By 2030, ensure universal access to affordable, reliable and modern energy services
  - By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
  - By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support
  
- **SDG 13 – Goal 13: Take urgent action to combat climate change and its impacts**
  - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
  
- **SDG 15 – Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss**
  - By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

**The results from the blind sustainable development assessment were similar to the table in section D.1.**

During the LSC meeting, the present participants were requested to provide their opinion on each the indicators. In cases, where the participants did not understand the relevance of the indicator, it was further elaborated by the SKG team and explained for their understanding.

<b>SECTION E. SUSTAINABILITY MONITORING PLAN</b>
--

**E. 1. Discussion on Sustainability monitoring Plan**

During the LSC meeting, a discussion session on the monitoring plan of the project activity was carried out by Mr Kiran of SKGS. During this session, the importance of regular monitoring of the installed biogas units was explained to the participants. He also highlighted that the SKGS team members would visit the beneficiaries to carry out the monitoring at regular intervals to assure the functioning of the biogas units and if required provide training on the maintenance of the unit to the concerned beneficiary.

The stakeholders present during the meeting have shown a high interest and have assured complete co-operation to provide relevant information during the monitoring surveys of this biogas programme.

## E. 2. Discussion on continuous input / grievance mechanism

>> Discuss the Continuous input / grievance mechanism expression method and details, as discussed with local stakeholders.

	Method Chosen (include all known details e.g. location of book, phone, number, identity of mediator)	Justification
Continuous Input / Grievance Expression Process Book	SKG Sangha Head office House No. C2, Rajul Township, Tilhari Madnala Road, JABALPUR. Madhya Pradesh - 482021	A Greivance book has been made available at the SKG Sangha head office in Jabalpur. The SKG project co-ordinator is present in the project area to assure a regular follow-up with the beneficiaries during the year.  Beneficiaries can directly contact the project coordinators in person or via mobile.
Telephone access	Jabalpur Office phone +91 – 07612600415	In absence of the field coordinator, any other SKGS coordinators can be contacted on this number.
Internet/email access	<a href="mailto:skgsangha@gmail.com">skgsangha@gmail.com</a>	In absence of the field coordinator, any other SKGS coordinators or project Managers can be contacted on the provided contact detials.
Nominated Independent Mediator (optional)	None	
Other	<b>The Gold Standard Foundation -</b> Chemin de Balxert 7-9 1219 Châtelaine International Environment House 2 Geneva, Switzerland Email: <a href="mailto:help@goldstandard.org">help@goldstandard.org</a> Tel : +41 (0) 22 788 7080	

<b>SECTION F.</b>	<b>DESCRIPTION OF THE DESIGN OF THE STAKEHOLDER FEEDBACK ROUND</b>
-------------------	--

SKG Sangha distributed the stakeholder feedback questionnaires among participants present at the meeting. The feedback documents were collected during the meeting and any clarifications raised in the feedback form were discussed and clarified for the participants.

The feedbacks during the meeting were received in the local language, and the scanned copies are provided in the Annexe 2 for further references.

The stakeholder feedback round for invitees who could not attend the meeting will be organised by sending the project documents by email.

## ANNEX 1.

## ORIGINAL PARTICIPANTS LIST

>> (Scanned copy of participants list)

1	<del>महिला कृषि मनीषा बर्मन</del>	
2	Udita Patel	
3	Udita Patel	
4	Udita Patel	
5	Udita Patel	
6	Udita Patel	
7	Udita Patel	
8	Geetika Arjun	Grow center
9	Sapna Shrivastava	Grow Center
10	Bakshi Patel	Grow Center
11	Priyanka Kachhi	Grow Center
12	Swadika Hayat	Grow center
13	Rizwana Parveen	Grow center
14	Zeenat Amiah	Grow center
15	Swati Gadeya	Grow center
16	Poonam Patel	Grow Center
17	Chandis Pandey	Grow Center
18	Afsana Bano	Grow Center
19	Muskan Ansari	Grow center
20	Rajnish Vishwakarma	Grow Center
21	Sultan Rani	Grow Center
22	Owais Ansari	Grow center
23	Sandeep Mehra	Grow Center
24	Shubham Dahyad	Grow Center
25	Ranjit Lal Thakur	Grow Center
26	Nizaman Thariya	Grow Center
27	Sanjay Thariya	Grow Center
28	Durgesh Kumar	Grow Center
29	Muab Ansari	Grow Center
30	Rakesh Vishwakarma	Grow Center
31	Rakesh Thariya	Grow Center
32	Anand Prajapati	Grow Center
33	Shameem Ahmed	Grow Center
34	Mr. AFSAN HUSSAIN ANSARI	Grow Center
35	Anand Kachhi	



[illegible]



गंजशकरिया	पालन		
खोरी कंद	खोरी कंद	कली	राशे
गंजशकरिया	पालन	अबलपुर	राशे
मकरदा	पालन	अबलपुर	
गंजशकरिया	पालन		
गंजशकरिया	पालन		मुन्नी बाई
चौरी	पनागर		
गंजशकरिया	पालन		
खोरी	पालन		
अमरपुर	पालन		
गंजशकरिया	पालन		राशे
गंजशकरिया	पालन		राशे
नरगावा	पनागर	अबलपुर	
अप्यार बाल			
अबलपुर	अबलपुर	अबलपुर	
नोहिया	पालन	अबलपुर	Winklet Set
राजीव	अबलपुर	अबलपुर	Shakti
अबलपुर	अबलपुर	अबलपुर	Shakti
Barji	Jabalpur	Jabalpur	Chakri
अबलपुर	अबलपुर	अबलपुर	
अबलपुर	अबलपुर	अबलपुर	
Suhagi	Jabalpur	Jabalpur	
Hussainnagar	redakurapadu	Gumkur	T-Add
Kol	Kol	Kol	

ANNEX 2.

ORIGINAL EVALUATION FORMS

>> (Scanned copy of evaluation forms)

**मूल्यांकन प्रपत्र**

लिखित प्रतिक्रिया :

नाम :	Zeeshan Amaan	
लिंग :	<input checked="" type="checkbox"/> महिला	<input type="checkbox"/> पुरुष
परियोजना के बारे में आपकी क्या धारणा है ?	बहुत बड़ी ज़ाहमी पाइएंगे	
आप परियोजना के बारे में क्या पसंद करते हैं ?	इस प्वांट को बनाने पर प्रशंसा नहीं होगी	
आप परियोजना के बारे में क्या पसंद नहीं करते हैं ?	-	
हस्ताक्षर	Zeeshan Amaan	

५

**मूल्यांकन प्रपत्र**

लिखित प्रतिक्रिया :

नाम :	Rajesh Patel Khapra Marsinghpur 944635287	
लिंग :	<input type="checkbox"/> महिला	<input checked="" type="checkbox"/> पुरुष
परियोजना के बारे में आपकी क्या धारणा है ?	बहुत अच्छी जगह	
आप परियोजना के बारे में क्या पसंद करते हैं ?	जो आपको सेवा है उससे हर किसी की समस्या की निराकरण है	
आप परियोजना के बारे में क्या पसंद नहीं करते हैं ?	कुछ नहीं	
हस्ताक्षर	Rajesh Patel	

<b>ANNEX 3.</b>	<b>Key Project Information</b>
-----------------	--------------------------------

### **GOLD STANDARD PROJECT: JABALPUR BIOGAS PROJECT**

The proposed Gold Standard project will be implemented by SKG Sanhga and GoodPlanet Foundation in Jabalpur, Narsimhapur, Seoni, Mandala, Balaghat and Chindwada districts of Madhya Pradesh state, India. SKG Sangha is an NGO founded in 1992. Since its creation, the association has built over 100,000 biogas units in the states of Karnataka, Andra Pradesh, Tamil Nadu, Kerala, West Bengal, Meghalaya and Manipur. The GoodPlanet Foundation has worked alongside SKG Sangha since 2008 to construct Biodigester for rural households in India.

The aim of the project is to provide a clean and sustainable source of energy for cooking by constructing biogas units for each household participating in the project. Most of women in the project area use biomass for cooking, which has adverse impacts on health of women and children due to continuous exposure to smoke while cooking. The use of biogas for cooking will not only replace the use of biomass but will also reduce indoor air pollution resulting in a smoke free kitchen. The size of the biogas unit to be provided to each household will be either 2m<sup>3</sup> or 3m<sup>3</sup> biogas generation per day.

The biogas units will be built for around 14,000 rural households in the project area and the construction of the units will be initiated in December 2017.

The biogas project benefits and positive impacts are mentioned below: -

#### ⇒ **Social benefits and impacts**

- Women empowerment: -  
The project will have a direct positive impact for the women as the use of biogas will eliminate the work burden of collecting firewood, and also avoid health problems (eyes irritation and respiratory infections) while cooking.
- Promoting active and equal participation of both the genders in the project: -  
The project activity will promote an active participation both of men and women. The project beneficiaries will be trained on – i) the proper management of the biodigester, and ii) the method on the application of the biogas slurry for agriculture to reduce the chemical fertiliser use.
- Improvement of sanitary conditions around the households: -  
Most of the households have a backyard pit where, all the dung is stacked creates unhealthy conditions around the house. It nests many insects and flies, and often emits odours. Thanks to the biogas plant, the animal and other wastes will be properly managed, and assuring a good sanitary conditions around the house.
- Use of biogas - reduction of time and money spent collecting firewood: -

The women and children often have to collect firewood every week. By reducing firewood consumption, the families will not only have spare time but the children can utilize this time for studying and/or other recreational activities.

## ⇒ **Economic benefits and impacts**

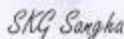
- Free and clean source of renewable energy for cooking: -  
Each household in the project activity owns cattle, therefore has enough amount of animal dung which can be further used in the biodigester to produce the biogas. The biogas produced is freely available for cooking which results in direct savings for the rural households in the coming years.
- Use of biogas slurry - reduction of expenses on chemical fertilizers: -  
The use of chemical fertilizer for agriculture is not only expensive but also one of the cause of reducing the soil fertility which eventually leads to decreased crop yields. Therefore, farmers have to use more and more chemical fertilizers to maintain their crop yield. The use of biogas slurry along with other agriculture waste as an organic compost can reduce the dependence on chemical fertilisers and in a long-term lead to income saving for each household in the project activity.
- Provision of skills enhancement and employment in the project areas  
In the initial stages of the project, the women will be provided training on the use of the biodigester to avoid non-functioning of the units. The project activity will also generate employment opportunities during the construction of the biodigesters.

## ⇒ **Environmental benefits and impacts**

- Reduction in GHG's emissions: -  
The use of biogas lead to reduction of GHG's emissions which, otherwise would have occurred due to firewood use for cooking and the dumping of the animal dung in traditional pits.
- Reduction in the rate of deforestation in the project area  
Using biogas for their daily cooking needs will reduce the reliability of the families on the forest wood. In the absence of the biogas plants, they have to go further, and cut wood from the protected forest areas managed by the forest department, which becomes an illegal activity to collect wood. Therefore, the use the biogas will not only replace the firewood but will also reduce the rate of deforestation in the project area.
- Restoration of the soil fertility with the use of biogas slurry for agriculture  
Chemical fertilizers harden soil and reduces its water retention capacity and decreases soil fertility.. Various studies have shown than the biogas slurry is rich in nutrients (major and micro). . Using the biogas slurry with other organic waste will improve the soil fertility resulting in income savings due to reduced chemical fertiliser use.
- Restoration of eco systems  
By avoiding deforestation, the biodigester saves eco-systems for flora and fauna. Therefore, the project activity participates to the preservation of biodiversity.



## Key Project information in local language (in HINDI)



**महत्वपूर्ण परियोजना सूचना**

**गोल्ड स्टैंडर्ड परियोजना : जबलपुर बायोगैस परियोजना**

**GOODPLANET  
FOUNDATION**

प्रस्तावित गोल्ड स्टैंडर्ड परियोजना एस.के.जी. संघा और गुडप्लेनेट फाउंडेशन द्वारा जबलपुर, नरसिंहपुर, सिओनी, मंडला, बालाघाट और छिंदवाड़ा जिले में कार्यान्वित की जाएगी। संघा एक एन.जी.ओ है जिसकी स्थापना 1992 में हुई। जबसे संस्था शुरू हुई है इसने कर्नाटक, आंध्र, तामिलनाडु, केरल, पश्चिम बंगाल, मेघालय और मणिपुर के राज्यों में करीब 100,000 बायोगैस इकाइयों से ज्यादा निर्माण किया है। गुडप्लेनेट फाउंडेशन ने एस.के.जी.संघा के साथ मिलकर 2008 से भारत में ग्रामीण परिवारों के लिए गोबर गैस निर्मित किया है।

परियोजना का लक्ष्य है बायोगैस इकाइयों द्वारा निर्मित स्वच्छ और सतत खाना पकाने की उर्जा का स्रोत उन प्रत्येक घरों के लिए उपलब्ध कराना जो इस परियोजना में भाग लेंगे। इस योजना क्षेत्र में खाना पकाने के लिए महिलाएं लकड़ी इस्तेमाल करती हैं, जिससे खाना पकाने के दौरान धुएँ के लगातार संपर्क के कारण महिलाओं और बच्चों के स्वास्थ्य पर प्रतिकूल प्रभाव पड़ता है। खाना पकाने के लिए बायोगैस का उपयोग न केवल लकड़ी के उपयोग की जगह लेगा, बल्कि घरेलू वायु प्रदूषण को भी कम करेगा, जिसके परिणामस्वरूप धुआँ मुक्त रसोईघर होगा। हर घर में दिया जाने वाला बायोगैस यूनिट का आकार या तो 2m<sup>3</sup> या 3m<sup>3</sup> बायोगैस उत्पत्ति प्रतिदिन होगा जो कि परिवार के आकार एवं जानवरों की संख्या पर निर्भर करेगा। योजना क्षेत्र में 14,000 बायोगैस इकाइयाँ ग्रामीण परिवार के लिए बनाई जायेगी जिसका आरंभ जनवरी 2018 से होगा।

**बायोगैस परियोजना लाभ और सकारात्मक प्रभाव**

- **सामाजिक लाभ और प्रभाव**
  - **महिला सशक्तिकरण:-**  
इस परियोजना का महिलाओं के लिए सीधा सकारात्मक प्रभाव पड़ेगा क्योंकि बायोगैस के इस्तेमाल से लकड़ी एकत्र करने के काम का बोझ खत्म हो जाएगा और स्वास्थ्य समस्याओं से बचेंगी (आँखें जलना, श्वसन संक्रमण) खाना पकाने समय।
  - **परियोजना में दोनों लिंगों की सक्रिय और समान भागीदारी को बढ़ावा देना:-**  
परियोजना गतिविधि पुरुषों और महिलाओं की सक्रिय सहभागिता को बढ़ाएगी। परियोजना लाभार्थियों को 1. बायोгаइजेस्टर के उचित प्रबंधन पर प्रशिक्षित किया जाएगा और 2. बायोगैस घोल का उपयोग खेती में रासायनिक उर्वरक पर निर्भरता कम करेगा।
  - **घरों के आसपास स्वच्छता की स्थिति में सुधार:-**  
अधिकांश घरों के पिछले हिस्से में एक गड्ढा होता है, जहाँ सारा गोबर एकत्र किया जाता है, जिससे घर के आस पास अस्वास्थ्यकारक स्थितियाँ पैदा होती हैं। यहाँ कई तरह के कीड़े और मक्खियाँ पनपती हैं, और अक्सर गंध का उत्सर्जन रहता है।

बायोगैस संयंत्र, पशु और अन्य अपशिष्टों के लिए एक बेहतर विकल्प है जिसकी वजह से घर के चारों ओर एक स्वस्थ वातावरण एवं स्वच्छता की स्थिति का निर्माण होता है।

- **बायोगैस का उपयोग—लकड़ी इकट्ठा करने में होने वाले समय और धन की बचत :-**

प्रत्येक सप्ताह परिवार की महिलाओं और बच्चों द्वारा लकड़ियाँ एकत्रित करने में काफी समय बर्बाद होता है। बायोगैस में लकड़ी की कम खपत की वजह से जो समय बचता है वह न सिर्फ परिवार के सदस्यों अपितु बच्चों के मनोरंजन एवं अध्ययन संबंधी विषयों पर उपयोग किया जा सकता है।

## ➤ आर्थिक लाभ और प्रभाव

- **खाना पकाने के लिए अक्षय ऊर्जा का मुफ्त और स्वच्छ स्रोत**

परियोजना गतिविधि में प्रत्येक घर में मवेशियों की प्रचुर मात्रा होती है, इसलिए पर्याप्त मात्रा में पशुओं के गोबर का उपयोग किया जा सकता है जो कि बायोडाइजेस्टर में बायोगैस के उत्पादन का मुख्य स्रोत है। उत्पादित बायोगैस से खाना पकाने पर आने वाले वर्षों में ईंधन में होने वाले खर्च की बचत होगी।

- **बायोगैस घोल का प्रयोग – रासायनिक उर्वरकों पर खर्च में कमी**

कृषि के लिए रासायनिक उर्वरक का उपयोग ना केवल महंगा बल्कि मिट्टी की उर्वरता के लिए नुकसानदेह है। जो कि फसल उत्पादन में कमी का कारण है। किसानों को अपनी फसल उपज को बनाए रखने के लिए अधिक से अधिक रासायनिक उर्वरकों का उपयोग करना होता है। जैविक खाद के रूप में अन्य कृषि अपशिष्ट के साथ बायोगैस घोल का उपयोग रासायनिक उर्वरक पर निर्भरता को कम कर सकता है और परियोजना गतिविधि में प्रत्येक घर के लिए आय बचत का दीर्घकालिक उपाय है।

- **परियोजना क्षेत्रों में कौशल बढ़ाने और रोजगार की व्यवस्था**

शुरुआत में बायोगैस को सक्षम रखने के लिए महिलाओं को बायोडाइजेस्टर के उपयोग पर प्रशिक्षण दिया जाएगा। परियोजना गतिविधि बायोडाइजेस्टर के निर्माण के दौरान रोजगार के अवसर भी पैदा करेगी।

## ➤ पर्यावरण लाभ और प्रभाव

- **ग्रीन हाउस गैसों में कमी**

बायोगैस का उपयोग ग्रीन हाउस गैसों का उत्सर्जन कम करेगा जो कि लकड़ी के उपयोग के कारण और परंपरागत गड्ढों में जानवरों के गोबर के डंपिंग के कारण होता है।

- परियोजना क्षेत्र में वनों की कटाई की दर में कमी

अपने दैनिक खाना पकाने के लिए बायोगैस का इस्तेमाल करने से जंगल की लकड़ी पर परिवारों की निर्भरता कम हो जाएगी। बायोगैस संयंत्रों की अनुपस्थिति में, उन्हें आगे जाना होगा, और जंगल विभाग द्वारा प्रतिबंधित वन क्षेत्रों से लकड़ी काटनी होगी, जो लकड़ी एकत्र करने के लिए एक अवैध गतिविधि बन जाता है। इसलिए, बायोगैस का इस्तेमाल ना केवल जलाऊ लकड़ी की जगह लेगा बल्कि परियोजना क्षेत्र में वनों की कटाई की दर भी कम कर देगा।

- कृषि के लिए बायोगैस घोल के उपयोग के साथ मिट्टी की उर्वरता की बहाली

रासायनिक उर्वरकों के उपयोग से मिट्टी और इसकी पानी की अवधारण क्षमता कम हो जाती है, और मिट्टी की उर्वरता कम हो जाती है। विभिन्न अध्ययनों से पता चला है कि बायोगैस घोल पोषक तत्वों (प्रमुख और सूक्ष्म) में समृद्ध है। अन्य जैविक कचरे के साथ बायोगैस घोल का प्रयोग मिट्टी की उर्वरता में सुधार लाएगा जिसके परिणामस्वरूप कम रासायनिक उर्वरक उपयोग के कारण आय बचत होगी।

- पर्यावरण प्रणालियों की बहाली

वनों की कटाई न करके, वनस्पतियों और जीवों के लिए बायोडाईजेस्टर पर्यावरण प्रणालियों को बचाता है। इसलिए, परियोजना गतिविधि जैव विविधता के संरक्षण में भाग लेती है।