

INTERNAL VERIFICATION FORM: GS VER MICRO-SCALE PROJECTS

Title: Biogas Tanks in Guizhou Province in China
GS ID: GS614
Submitted by: GoodPlanet Foundation
Submitted on: 16/09/2011 (date of fee payment)
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Monitoring period: 01/04/2009 to 31/03/2010

Amount of GS VERs being verified: 1,644 tCO_{2eq}

Year 2009	01/04/2009 to 31/12/2009	1,259 tCO _{2eq}
Year 2010	01/01/2010 to 31/03/2010	385 tCO _{2eq}
Total		1,644 tCO _{2eq}

Previous GS VERs issuance: 738 tCO_{2eq} from the period 01/04/2008 to 31/03/2009

Summary:

The project activity reduces GHG emissions associated with the use of coal and non-renewable biomass for cooking by promoting biogas utilization in Guizhou's countryside. Beneficiaries save money by reducing the purchase of traditional fuels or save considerable time currently spent on collecting firewood. The project also improves their living conditions (reduction of indoor pollution, enhanced hygiene) and contributes to the mitigation of local deforestation. The proposed project activity does not generate any income for the project coordinator other than revenues from the VER credits.

Implementation started on September 1st, 2007. The start date of the first crediting period is defined as April 1st, 2008. The chosen crediting period is a fixed period of 10 years. With annual average emission reductions of 4,441 tCO₂e, the estimated total reductions would be 44,411 t CO₂e over the whole crediting period.

The project was registered on 6th January 2010. This is the second monitoring period, from 1st April 2009 to 31st March 2010. At the beginning of this monitoring period, there were 320 bio-digesters installed in Weining and 520 installed in Danzhai. Project proponent claims emission reductions of 1,644 tCO₂e over this period. In Weining, farmers saved an average of RMB 710 on their yearly fuel expenses and biogas contributes to 34% of their energy needs. In Danzhai villagers saved RMB 52 in average and biogas contributes to 48% of the energy needs. Livelihood of the beneficiaries and their access to clean energy were improved by the project.

General comments:

The Gold Standard has identified clarification and corrective action requests as outlined in the table below. These issues must be resolved before the project may be submitted for issuance of Gold Standard VERs. Please provide your responses in the table below along with the revised project documentation and any other supporting documents that may be required to resolve the issues.

Documents reviewed:

Monitoring report (28 December 2011, version 3)

Internal Verification
Biogas Tanks in Guizhou Province in China
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Emission reduction calculations: DZMT_Year2_calc_V3_28122011.xls
Emission reduction calculations: WNMT_Year2_calc_V3_28122011.xls

Decision:

Rejected	<input type="checkbox"/>
Request for clarifications and /or corrective action	<input type="checkbox"/>
To be submitted for external verification	<input type="checkbox"/>
Verified	<input checked="" type="checkbox"/>

Requests for clarifications and/or corrective actions:

Sections	Clarifications and/or corrective action needed	Reasons for clarification and/or corrective action	Suggestions on how to proceed	Response by Project Proponent
Monitoring report				
Monitoring Questionnaires and Spreadsheets				
	<p>The PP is requested to provide the questionnaires from following surveys:</p> <p>DZ area:</p> <ul style="list-style-type: none"> - id_survey no.6 - id_survey no.8 - id_survey no.13 <p>WN area:</p> <ul style="list-style-type: none"> - id_survey no.9 - id_survey no.10 - id_survey no.14 		<p>PP can provide ten samples for each of the surveys in case scanning or photocopying all the questionnaires is too time-consuming.</p>	<p>10 questionnaires of the corresponding survey have been scanned and sent to GS office in Beijing on a DVD.</p> <p>GS's Comment: Questionnaire samples from each survey have been provided and verified against the spreadsheets. Questionnaires are consistent with the spreadsheets¹. The Comment/Request is closed.</p>

¹ Only minor discrepancy or error is found, for instance the respondent's name (08DZ243 and 08DZ251) and the Chinese translation of 'stove' in questionnaire template used in survey no.6.

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	<p>25 questionnaires from survey no.5 are used in DZ_Summer_BL and DZ_Winter_BL. The PP is requested to clarify how the questionnaires are selected from the 90 questionnaires yielded from survey no.5 in a representative manner.</p>			<p>The number of survey per village is calculated in order to keep the ratio between the number of household and the number of survey as close as possible for each village. Then the appropriate numbers of surveys are randomly selected with the excel “Rand” function.</p> <p><u>GS’s Comment:</u> PP has provided clarification on this regard. This Comment/Request is closed.</p>

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	<p>Some questionnaires listed in the spreadsheets don't have tank id numbers. PP is requested to provide the tank id numbers.</p>			<p>We revised the spreadsheets in order to provide the maximum tank ID numbers we can. However few tank ID numbers are still missing. Actually the tank built in 2007 were not given an ID number at once, we did this work in late 2008. Especially for the first baseline survey (done in early 2008), as the family had not the ID number yet, we only recorded their name.</p> <p>While each household is well identified we face problems because we don't have the same name in the beneficiary list and in the baseline/monitoring survey. Indeed, it is not always the same person from the household that answer. This explains the hardness to connect some household to their ID number.</p> <p>For the baseline survey 14, non beneficiary households were targeted in order to assess the fuel consumption without any biogas tank. That is why they don't have any biogas tank number. This was discussed in the first monitoring report.</p> <p><u>GS's Comment:</u> PP has provided clarification on this regard. This Comment/Request is closed.</p>

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	<p>The baseline emission level in the second monitoring year is significantly different from the level in first year in DZ area. The PP is requested to discuss the factors that account for the difference.</p>	<p>DZ_Summer_BL: Y1: 6.63 Y2: 4.07</p> <p>DZ_Winter_BL: Y1: 4.07 Y2: 4.87</p>		<p>Data from biodigesters built in 2008 have been integrated in the baseline calculation for this second monitoring report. That explains the difference between the year 1 and year 2.</p> <p>Also see explanation provided in MT report of year 1 for the difference of fuel consumptions between summer and winter :</p> <p><i>“For the baseline survey of Danzhai, the fuel consumptions taken into account were the averages for the whole year instead of the average for one monitoring period, this is not consistent with the methodology. That explains why the summer GHG emission is greater in summer than in winter for Danzhai (the summer last 7.5 months and the winter 4.5). Even if it overestimates the ER for summer and underestimates the ER for winter, it shall not change the total ER at the scale of one year.”</i></p> <p>This problem was not encountered for the baseline survey done for the biogdesters built in 2008 (the summer and winter consumption were surveyed).</p> <p>GS’s Comment: PP has provided clarification on this regard. This Comment/Request is closed.</p>

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WN Summer MT	The fraction of manure put into the bio-digesters shall not be applied in column Z since the fraction has already been compounded into the EF of the animals.			The spreadsheet and the report had been modified accordingly. GS's Comment: The ER spreadsheet has been revised. This Comment/Request is closed.
Section 3. Number of Bio-digesters and Survey Done				
Table I and II (MR p.5 and p.6)	In addition to the information provided in the table I and II, the PP is requested to provide information concerning the surveys done till date. In addition, PP shall also provide project database with details of each bio-digester installed till date.		<ul style="list-style-type: none"> - Survey ID numbers - Time of the surveys - Purpose of the surveys (for example, to acquire data of project emission in year XXXX in DZ/ or WN) - Defects or improvement in a survey or the method, if any 	The table has been added in section III.iii GS's Comment: The Monitoring Report has been revised (page 8). This Comment/Request is closed.
Section 4. Emission Reductions Calculation				

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Table I (MR p.8)	The summer ERs in DZ area is 834.3 in the table, whereas the figure is 830.1 in the spreadsheet.			The report had been modified accordingly. GS's Comment: The Monitoring Report has been revised (page 9). This Comment/Request is closed.
Table I and II (MR p.9)	PP shall clarify how 13% rate was arrived at for DZ in summer. The MR states that the failure rate and its consequences are integrated into the calculation. The PP is requested to clarify whether it means that only the working digesters are counted.		The PP is requested to clarify when and how the working digesters were monitored.	For DZ in summer, only the working biodigester were surveyed for the carbon monitoring (if the initially selected household were not working, the surveyor chose another random household). It is then necessary to multiply the ER/tank by the working rate of the tank in order to have the actual ER taking into account the tanks that are not working. The working status of the tanks has been surveyed between March and May 2009. 505 tanks have been surveyed out of the 520 present in this area at that time, 13% of the tanks surveyed were not producing any biogas. GS's Comment: Failure rate of bio-digesters are considered in version 3 of the MR and spreadsheets. This Comment/Request is closed.
Section 5. Sustainable Development Indicators				

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	<p>The GS MR indicates that 55% of the manure in DZ and 40% in WN were put into the digesters in the second monitoring year. The PP is requested to discuss how the rest manure was handled so that the positive impacts won't be eroded.</p>		<p>GS has noticed that in the first monitoring year, it was assumed that 100% of the manure was handled with the bio-digesters.</p>	<p>The rest of the manure is handled the same way as in the baseline: it is stacked nearby the house (MCF= 2%). The % share of manure put in the biodigester is applied to both the baseline and the project animal manure EF calculation: i.e. the ER are claimed for only the 55% of the manure that is put into the biodigester for the remaining 45% the situation before and after the project is unchanged.</p> <p>In the first year MR, 100% of the manure was put into the biodigester, this is conservative since we actually loose ER on the manure management part: the 10% leak we have to consider from the biodigester release a little more methane than the manure management in the baseline situation (solid storage with rather cold temperatures).</p> <p>GS's Comment: PP has provided clarification on this regard. This Comment/Request is closed.</p>