

# PROJECT REVIEW REPORT

This project review report includes findings raised during Verra’s review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

<b>Project ID</b>	2342
<b>Project Name</b>	Installation of high-efficiency wood burning cookstoves in Malawi
<b>Review Type</b>	Validation Approval
<b>Program(s)</b>	VCS Program
<b>Verification Period</b>	16 Sept 2022 – 28 Feb 2023
<b>Project Proponent</b>	C-Quest Capital Stoves Asia Limited
<b>Methodology</b>	VMR0006 ver. 1.1 “Methodology for Installation of High Efficiency Firewood Cookstoves”.
<b>VVB</b>	Carbon Check (India) Private Ltd.
<b>Assessment Criteria</b>	VCS Standard, version 4.5
<b>Date of First Issue</b>	28 November 2023
<b>Review Conclusion</b>	Approve
<b>Date of Final Issue</b>	29 January 2024

## FINDINGS

#	Finding Description	VVB Response	Status
1	<p><b>Unclear applicability of parameter <i>By=1,new, survey</i> to the new project instances added during the monitoring period</b></p> <p><u>Issue</u>                      The parameter <i>By=1,new, survey</i> was determined during the first monitoring period for a sample of the improved cookstoves distributed during the first period. However, it is not clear if the value sourced from that survey is applicable to the geographical and cultural conditions for those instances distributed during the current monitoring period.                      The monitoring report section 1.7 states that the Republic of Malawi was separated into 3 regions – Northern, Central, and Southern, between others, to facilitate sampling. However, it is not clear how these regional separation was considered in the determination of the parameter <i>By=1,new, survey</i>.</p> <p><u>Action Required</u>                      1.The VVB is required to provide an explanation on why it considers that the parameter <i>By=1,new, survey</i>, as determined during the first monitoring period, is also applicable to the other regions of the country, including the southern and central region in which the new instances were distributed.                      2. The VVB shall further explain how sampling has been facilitated considering the 3 identified regions of the Republic of Malawi, as mentioned in section 1.7 of the monitoring report.</p> <p><u>Program Rule(s)</u>                      CDM Standard: Sampling and surveys for CDM project activities and programmes of activities, version 9.0, paragraph 22.</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <p>1. As per paragraph “Sampling Plan” under section 5.3 of the registered PD the geographical locations of the project activity do not have influence on parameter <i>By=1,new,i,survey</i> as this parameter shall be considered homogenous (Kindly refer response to “Finding 3” of this document below for elaborate description) within the project boundary which is republic of Malawi.</p> <p>It is also stated in section 1.12 of the registered PD that project boundary has been divided into 3 regions just to facilitate the management, implementation, monitoring, and sampling stages of the project only. Further, as per section 9.2 of the applied methodology VMRO006 V1.1 the said parameter shall be determined in the first year of project implementation through survey. PP has adopted the methodological approach and finalise the <i>By=1,new,i,survey</i> in the first year of implementation of the project activity.</p> <p>Hence, VVB found that <i>By=1,new,i,survey</i> determined in 1<sup>st</sup> MP is applicable to all PAls added during current monitoring period.</p> <p>2. VVB has cross checked the section 1.7 of the MR and found that the referred statement is not included in the section 1.7 of MR.</p> <p>As mentioned in the registered PD, the geographical region does not influence the parameter <i>By=1,new,i,survey</i> (Kindly refer response to “Finding 3” of this document below for elaborate description). Therefore, the PP has opted random sampling approach in the current monitoring period (16 September 2022 – 28 February 2023) and may be considerable.</p>	Closed

		<p><u>Verra Response</u>          The VVB clarified that the geographical locations do not influence the parameter <math>B_{y=1,new,i,survey}</math>, and thus, the value achieved during the first monitoring period can be applied to other regions of the country.          Further, the VVB confirmed that the three regions do not affect sampling procedures.          The finding is closed.</p> <p><b>Round 2</b></p> <p><u>VVB Response</u> (Pending)</p> <p><u>Verra Response</u> (Pending)</p> <p><b>Round 3</b></p> <p><u>VVB Response</u> (Pending)</p> <p><u>Verra Response</u> (Pending)</p>	
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<p><b>2</b></p>	<p><b>Missing details to ensure improved cookstove maintenance</b></p> <p><u>Issue</u>          The monitoring report, under section 4.2 states that “PP conducted periodic audits and surveillance of the stoves distributed under the project activity to ensure their proper functioning throughout the project lifetime. This along with spot audits and after installation maintenance services, ensure that the project stoves continue to work at efficiencies as specified by the manufacturer.”          However, there is no further information of the surveys performed to ensure the proper functioning of the improved cookstoves.</p> <p><u>Action Required</u>          1. The PP is required to provide further information in</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>1. PP has revised the section 2.2 of the MR and included details of spot audit along with findings observed during spot audit.</li> </ol> <p>PP considered 100 number of HH samples for the spot audit in the region of Ntcheu and Ntchisi region of Malawi for the current monitoring .          The audit was conducted by the trained staff of PP to ensure the consistency and correctness of recording of information and responses.          During the audit PP has identified few findings related to operational procedure / usages of the stoves by the HH.          PP has successfully closed all the findings to ensure the</p>	<p>Closed</p>
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<p>the monitoring report on the surveys and periodic audits performed to ensure the proper functioning of the improved cookstoves.</p> <p>2. The VVB is required to provide a detailed description of the assessment performed of the audits and surveillance of the stoves distributed to ensure proper functioning.</p> <p><u>Program Rule(s)</u> VMR0006 section 9.3</p>	<p>proper functioning of the stoves. PP has submitted spot audit report /16/ for the current monitoring period to VVB and accordingly modified the relevant section of MR. subsequently VVB has also revised the relevant section 4.2.2 of FVR.</p>	
	<p><u>Verra Response</u> Details of the spot audit were included in section 2.2 of the revised MR. The finding is closed.</p>	
	<p><b>Round 2</b></p>	
	<p><u>VVB Response</u> (Pending)</p>	
	<p><u>Verra Response</u> (Pending)</p>	
	<p><b>Round 3</b></p>	
	<p><u>VVB Response</u> (Pending)</p> <p><u>Verra Response</u> (Pending)</p>	

<p><b>3 Unclear determination of the sample size calculation</b></p>		
<p><u>Issue</u> In order to determine the parameter <math>N_y</math>, the Number of project devices operating during the year <math>y</math>, the monitoring report states that it considered a sample size based on the total number of ICS distributed, that is, 438,579. However, it is not clear why it is considered adequate to apply a simple random sampling approach considering that the cookstoves were distributed in different regions within the country, and that they belong to different vintages (as it would be expected that a larger percentage of newer cookstoves are operational than the older ones).</p>	<p><b>Round 1</b></p>	<p>Closed</p>
	<p><u>VVB Response</u></p> <ol style="list-style-type: none"> <li>1. The section 4.3 of the VCS MR is revised, and PP has included the reason for consideration of simple random sampling.</li> <li>2. It has been observed by reviewing the paragraph “Sampling Plan” under section 5.3 of the registered PD, geographical location does not have influence on the parameter of interest <math>N_y</math> and can be considered homogeneous regardless of how the end user group and distribution / installation is defined since the end user shall always be households within the project boundary i.e. republic of Malawi. Therefore, PP has selected the simple random sampling to determine the sample size for the parameter of interest.</li> </ol> <p>Moreover, under section 4,4 of the registered PD, PP has chosen equation 4 of the applied methodology (i.e. VMR0006 v1.1) to calculate the quantity of woody biomass that is saved in tonnes per ICS during a year. To calculate the saving of woody biomass, PP has referred equation 5 of the applied</p>	

<p><u>Action Required</u></p> <ol style="list-style-type: none"> <li>1. The PP is required to provide an explanation on why a simple random sampling is considered appropriate given the geographical distribution of the cookstoves, as well as the different vintages.</li> <li>2. The VVB is required to provide its own expert opinion on the sampling approach followed by the PP in the determination of the parameter <math>N_y</math>, Number of project devices operating during the year <math>y</math>.</li> <li>3. The VVB is required to revised the verification report including the assessment of the sampling procedure applied by the PP.</li> </ol> <p><u>Program Rule(s)</u> CDM Standard: Sampling and surveys for CDM project activities and programmes of activities, version 9.0, paragraph 22.</p>	<p>methodology for the efficiency of the project ICS i.e. <math>\eta_{new,y,i,j}</math>.</p> <p>In section 5.2 of the registered PD, the efficiency of the ICS i.e. <math>\eta_{new,y,i,j}</math> is determined and fixed as ex-ante parameter for the entire crediting period and an fixed efficiency drop of ~ 1% (approx.) has been considered throughout the project ICS irrespective of geographical location, vintage etc.). Therefore, the sampling approach selected by PP may be considered appropriate.</p> <p>Further, to cross check the vintage wise distribution of ICS, VVB has analysed the sampling frame for the current monitoring period and summarised the result in the table below:</p> <table border="1" data-bbox="840 592 1764 958"> <thead> <tr> <th>Vintage</th> <th>No. of Population</th> <th>Share</th> <th>No of sample selected for Monitoring Survey</th> <th>Share in Population</th> </tr> </thead> <tbody> <tr> <td>Vintage 1</td> <td>170816</td> <td>38.9%</td> <td>21</td> <td>43.75%</td> </tr> <tr> <td>Vintage 2</td> <td>226935</td> <td>51.7%</td> <td>25</td> <td>52.08%</td> </tr> <tr> <td>Vintage 3</td> <td>40828</td> <td>9.3%</td> <td>2</td> <td>4.17%</td> </tr> <tr> <td><b>Total</b></td> <td><b>438579</b></td> <td><b>100%</b></td> <td><b>48</b></td> <td><b>100%</b></td> </tr> </tbody> </table> <p>It is seen from the above table that the share of vintage 3 in entire population is much less than the share of vintage 1 &amp; 2. This is due to the less distribution of vintage 3 ICS during that period. Therefore, it is most likely to get less share of vintage 3 in the monitoring survey.</p> <p>3. VVB has revised the section 4.4 of the FVR and included assessment of sampling procedure.</p> <p><u>Verra Response</u> The VVB explained that the geographic distribution has no influence in the sampling approach. Further, the VVB clarified that the sample included mostly vintages from the older cookstoves, which would yield a more conservative</p>	Vintage	No. of Population	Share	No of sample selected for Monitoring Survey	Share in Population	Vintage 1	170816	38.9%	21	43.75%	Vintage 2	226935	51.7%	25	52.08%	Vintage 3	40828	9.3%	2	4.17%	<b>Total</b>	<b>438579</b>	<b>100%</b>	<b>48</b>	<b>100%</b>	
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	estimate of the N parameter (cookstoves still in operation). The finding is closed.	
	<b>Round 2</b>	
	<u>VVB Response</u> (Pending)	
	<u>Verra Response</u> (Pending)	
	<b>Round 3</b>	
	<u>VVB Response</u> (Pending)	
	<u>Verra Response</u> (Pending)	

<b>4</b>	<b>Unclear determination of the number of operational cookstoves</b>		
	<p><u>Issue</u> The VVB opened CL04 stating that when randomly checking additional households outside the usage survey, the VVB found that one of those 4 was not operational. However, based on the survey performed by the PP, 100% of the cookstoves were operational.</p> <p><u>Action Required</u> 1. The VVB is required to explain how it could ensure that the PP selected a random sample of households to verify the parameter Ny, Number of project devices operating during the year y. 2. The VVB is required to provide a detailed explanation of the assessment performed to ensure that the sampling was done following the requirements of the CDM Standard: Sampling and surveys for CDM project activities and programs of activities, version 9.0, paragraph 24.</p> <p><u>Program Rule(s)</u> CDM Standard: Sampling and surveys for CDM project activities and programmes of activities, version 9.0, paragraph 24.</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u> 1. The monitoring survey conducted by PP was done on the simple random sampling approach on the total population of ICS i.e. 438,579 and obtain a sample size of 48 by applying equation 1 of Guidelines to Sampling and Survey for CDM Project Activities and Programmes of Activities V.04.0.</p> <p>The monitoring survey samples along with the result was submitted to VVB for conducting acceptance sampling and accordingly VVB has selected 11 samples with c = 0 applying AQL / UQL = 0.5% / 20% and Producer / Consumer Risk = 10% / 10%.</p> <p>During on-site audit VVB was found all selected samples well in operation.</p> <p>However, to enhance the confidence, VVB has selected 4 additional samples (which does not fall under monitoring survey) and found 1 out 4 non-operational. VVB raised a clarification request to PP to establish the QA / QC procedure to evade such kind of situation. PP has satisfactorily responded and closed the finding and removed the sample from the ER calculation.</p> <p>2. PP has conducted the sampling and determined the size of the</p>	Closed

		<p>sample as per equation 1 of Guidelines to Sampling and Survey for CDM Project Activities and Programmes of Activities V.04.0. in the sample size and precision level calculation /10/.</p> <p>On reviewing the registered PD and MR VVB found that a random sampling approach has been used to determine the sample size. Also, from the section 5.3 of the registered PD and section 4.3 of MR, it is stated that the population is homogeneous across the project boundary (Kindly refer response to “Finding 3” of this document below for elaborate description) and PP has considered 90 /10 confidence and precision to estimate the sample size /10/ as per equation 1 of Guidelines to Sampling and Survey for CDM Project Activities and Programmes of Activities V.04.0. Hence, the sample size is well representative of the population and confirms the with paragraph 24 of CDM Standard: Sampling and surveys for CDM project activities and programs of activities, version 9.0.</p>	
		<p><u>Verra Response</u> The VVB states that the sampling approach followed the CDM guidance as required by the methodology. The finding is closed.</p>	
		<p><b>Round 2</b></p>	
		<p><u>VVB Response</u> (Pending)</p>	
		<p><u>Verra Response</u> (Pending)</p>	
		<p><b>Round 3</b></p>	
		<p><u>VVB Response</u> (Pending)</p>	
		<p><u>Verra Response</u> (Pending)</p>	

<b>5</b>	<b>Double counting and distance limits</b>		
	<p><u>Issue</u></p> <p>1. From the monitoring and verification reports, it is unclear how the project meets VCS Standard v4.5, section 3.23 on double counting given the similarity</p>	<p><b>Round 1</b></p> <p><u>VVB Response</u></p> <p>1. VVB and PP has applied VCS standard v4.4 and used version 4.2 of MR and verification report. PP has explained</p>	Closed

<p>of registered VCS projects by the same project proponent in Malawi.</p> <ol style="list-style-type: none"> <li>From the monitoring and verification reports, it is unclear how the project meets VCS Standard v4.5, 3.6.8 ensuring that all projects that are within ten kilometres of another instance of the same project activity and with the same project proponent are included in a singular project.</li> </ol> <p><u>Action Required</u></p> <ol style="list-style-type: none"> <li>The VVB must provide its detailed assessment of whether the project meets the VCS Standard requirements on double counting.</li> <li>The VVB must provide its detailed assessment of whether the new project activity instances are within ten kilometres of another instance of the same project activity.</li> </ol> <p><u>Program Rule(s)</u> VCS Standard v4.5, sections 3.6.8 and 3.23.1</p>	<p>requirements of section 3.23 of VCS standard v4.4 in the MR. PP has also provided declaration /17/ to VVB in which PP has clearly mentioned that the project is not creating any other form of environmental credit under any specific program. And the project has not or shall not claim carbon credits under any other scheme after Registration of the project under VCS to avoid double counting. Hence, VVB observed that project meets the VCS requirement on double counting.</p> <ol style="list-style-type: none"> <li>VVB observed that the PP has considered this grouped project as a separate project based on different investment regime. Therefore, the project activity instances under this grouped project are totally separate from the other similar projects in the same region via combination of this unique serial number of each ICS along with geographical address of the stove owner, which confirms the unique identity of each project device. Also, the PP for the project activity (C-Quest Capital SG Stoves Private Ltd) in the same regions are not the same and this has been checked and verified by VVB from the Verra's webpage.</li> </ol> <p><u>Verra Response</u> The VVB clarified that:</p> <ol style="list-style-type: none"> <li>There is no double counting with other similar projects</li> <li>There is no other project with the same PP and same activity within the 10 km range.</li> </ol> <p>The finding is closed.</p> <p><b>Round 2</b></p> <p><u>VVB Response</u> (Pending)</p> <p><u>Verra Response</u> (Pending)</p> <p><b>Round 3</b></p> <p><u>VVB Response</u> (Pending)</p> <p><u>Verra Response</u> (Pending)</p>	
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