

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.

Project ID	3144
Project Name	Bangladesh Apon Chula Improved Cookstove Program I
Review Type	Registration
Program(s)	VCS Program
Verification Period	NA
Project Proponent	Guangzhou Iceberg Environmental Consulting Services Co. Ltd.
Methodology	VMR0006: Methodology for Installation of High Efficiency Firewood Cookstoves version 1.1
VVB	Earthood Services Private Limited
Assessment Criteria	<i>VCS Standard Version 4.4</i>
Date of First Issue	25 February 2025
Review Conclusion	Approved
Date of Final Issue	21 August 2025

FINDINGS

#	Finding Description	VVB Response	Status
1	<p>Incorrect information used in fNRB Calculation</p> <p><u>Issue</u></p> <ol style="list-style-type: none"> The PP incorrectly calculated total woody biomass consumption (H) using annual firewood and charcoal <u>production</u> instead of <u>actual consumption</u>. The VVB stated that the value was based on FAO Data, but this approach is incorrect. Page 32 of the FRA Bangladesh 2020 report indicates that Primary Forest Data is unavailable. However, the VVB has not justified why naturally regenerating forests were considered primary forests, which is incorrect. Per Table 5 of Tool 30, Version 4, the PP must use a simple average of the two age categories of secondary forests rather than incorrectly classifying them as primary forests. <p><u>Action Required</u></p> <ol style="list-style-type: none"> The VVB must ensure that the PP provides detailed and correct calculations (which can be replicated by a third party) of the total consumption of woody biomass (H) per section 14 (Equation 3) of CDM Tool 30, version 4. The VVB shall cross-check the evidence and provide a detailed assessment in relevant section of VR. The VVB must justify that how naturally regenerating forests can be classified as 	<p>Round 1</p> <p><u>VVB Response</u></p> <p>Based on the revision made on the calculations in the fNRB sheet provided by the PP, VVB has assessed the following:</p> <ol style="list-style-type: none"> VVB confirms that the calculations for fNRB have been updated to reflect a more accurate estimate of the total woody biomass consumption (H). Previously, the fNRB calculations were based solely on production data. However, it has been revised to incorporate the actual consumption, which is calculated using the formula: $\text{Actual Consumption} = \text{Production} + \text{Imports} - \text{Exports}.$ This update ensures a more comprehensive and accurate calculation of total woody biomass consumption. For the year 2023, the data used for the updated calculations, including production, imports, and exports, were sourced from the FAO website. These revisions aligns with the guidance provided in Section 14 of CDM Tool 30, version 4. The detailed assessment of this update has been incorporated into the verification report, ensuring transparency and compliance with all applicable guidelines. The approach used to calculate the primary forest cover has been revised by the PP. VVB confirms that the primary forest cover values were derived using Global Forest Change (GFC) spatial data for 2000 and 2023. This data was used to determine the total woody cover as well as the primary forest cover for both accessible and non-accessible areas. A detailed assessment of this approach has been provided in the fNRB sheet, which was submitted by the PP. VVB confirms that the calculation of the age-weighted growth rate has been updated as per Table 5 of Tool 30. In the table 5, four options for data sources for this parameter were provided. PP has considered the option(b), which 	Closed

<p>Primary Forests. Assessment on the same shall be included in the VR</p> <p>3. The VVB must ensure that the PP revises the calculation methodology to align with Table 5 of Tool 30, Version 4, using a simple average of secondary forest age categories where applicable.</p> <p><u>Program Rule(s)</u> VCS Project Description Template, v4.2, Section 4.4 VCS Validation Report template, v4.2, Section 3.3.8 CDM Tool 30, version 4</p>	<p>states <i>2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories for “Above-ground biomass growth rates for different ecological zones” (Chapter 4, Table 4.9). Use a weighted average based on the forest area of three categories (i.e. primary forests, above and below 20 years secondary forests), if such data is available. Otherwise, use a simple average of the two age categories of secondary forests or a simple average of the three categories if primary forests exist.</i></p> <p>The Aboveground biomass growth data of primary forests, above and below 20 years secondary forest were sourced from the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the weighted average was calculated for each Global Ecological Zones from these three categories. Therefore, VVB confirms that the method applied is consistent with Tool 30, version 4.</p>	
	<p><u>Verra Response</u></p> <p>1. The PP has revised the calculation of total woody biomass consumption (H). However, in the population statistics worksheet of the ERR calculation sheet, the PP used population data from 2023, while the project start date is 24 June 2022. The VVB must ensure that the PP uses data that reflects conditions at the time of decision-making, aligned with the project start date.</p> <p>2. The PP revised the calculation of primary forest cover using Global Forest Change (GFC) spatial data for 2000 and 2023. Since the project start date is 24 June 2022, the PP must use data reflecting the conditions prior to the start of the project activity. Additionally, the PP has cited data sources from Hansen, UMD, Google, USGS, and NASA. The referenced dataset—Hansen Global Forest Change v1.11 (2000–2023)—is available via the Google Earth Engine Data Catalog at the following link: https://developers.google.com/earth-engine/datasets/catalog/UMD_hansen_global_forest_change_2023_v1_11</p> <p>The PP must ensure that the reference is accessible and correctly cited. The VVB must cross-verify the dataset and ensure that all details are included in</p>	

		<p>the fNRB assessment.</p> <p>3. The PP has revised the MAI calculation in line with Table 5 of Tool 30. This is acceptable. The issue is closed.</p> <p>4. The weblinks referenced as Ref #4 and Ref #5 on page 42 of the Validation Report, as well as Ref #50 in Appendix 3, are not currently associated with any specific data points. The VVB must thoroughly review all references and weblinks cited in both the Validation Report and Appendix 3 and ensure that each weblink is functional and directly links to the specific data point referenced, not a general homepage of the website.</p> <p>The above issues (1,3, and 4) remain open.</p>	
		<p>Round 2</p> <p><u>VVB Response</u></p> <p>1. VVB has reviewed the population statistics worksheet of the fNRB sheet and confirms that PP has derived the population data from the year 2021 considering that the project start date is 26 July 2022. As the population data of the year 2021 is now considered, it takes into account the scenario before the start of the project. Since the project was set to begin on July 26, 2022, and the decision-making and planning took place at the beginning of that year, it was deemed appropriate to use data from 2021 for estimation purposes. Furthermore, the value of parameter “H” has been revised based on the 2021 dataset, in accordance with Paragraph 10 of TOOL30, Version 4.0. The VVB notes that the use of the most recent historical data available at the time of the project start date representing the correct & Same vintage has now been incorporated. On this basis, the population data used now is more appropriate to the project scenario and is found to be acceptable by the VVB.</p> <p>2. VVB has reviewed the updated fNRB sheet and confirms that PP has revised the calculation of primary forest cover to consider Global Forest Change (GFC) spatial data for 2000 and 2021, as this aligns with the project start date 26 July 2022. It is also important to note that even though the data of the year 2022 was available in the FAO site, the Forestry Production and Trade data on the FAO site was updated at the end of the year 2022 after an update done in</p>	

year 2021 (please refer to the figure below). Therefore, the data from the year 2021 is considered acceptable by the VVB.

Date Update	Update Type	Note
2023-12-21	full	
2023-09-06	partial	
2023-01-19	revision	Run item aggregates 2017-2021
2022-12-16	full	
2021-12-16	full	
2021-08-12	full	
2021-03-01	revision	geographical aggregates recalculated
2021-01-27	revision	revision to Slovakia and Slovenia; 2015-2019
2020-12-17	full	

Furthermore, this updated calculation leads to reduction in fNRB value, and hence reducing the estimated emission reductions.

VVB has assessed all the datasets in the fNRB sheet, and the assessment of the same is included in the validation report

4. The weblinks referenced as Ref #4 and Ref #5 have been updated to include links to the associated specific data. VVB confirms that all references and links included in the validation report and Appendix 3 are consistent. VVB has ensured that the cited web links are functional and direct to the specific data points rather than just the general homepage.

Verra Response

1. The PP has revised the calculation of total woody biomass consumption (H), considering the population data from the year 2021.
2. The PP revised the calculation of primary forest cover using Global Forest Change (GFC) spatial data for 2000 and 2021, which aligns with the start. Also, the weblink is updated.
4. VVB has updated the weblinks in the revised validation Report. All the issues are closed now.

2 Error in VCS Project Eligibility Criteria		
<p><u>Issue</u></p> <p>Section 1.3 of the project description states that the project complies with all relevant local, regional and national laws, statutes and regulatory frameworks in the Philippines, which is irrelevant to the project activity under applicability condition of 3.1.4 of the VCS Standard v4.4</p> <p><u>Action Required</u></p> <p>The VVB must ensure that PP applies the correct eligibility criteria for applicability condition 3.1.4 of the VCS standard v 4.4 in sections 1 and 3 of the project description. The PP and the VVB must properly assess the relevant section of VR and PD.</p> <p><u>Program Rule(s)</u></p> <p>VCS Project Description Template, v4.2, Section 1.3 VCS Standard, v4.4, Section 3.1.4</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>VVB has reviewed the updated Project Description and confirms that Section 1.3 has been revised to align with the applicability condition 3.1.4 of the VCS Standard v4.4, which states that the project must comply with all relevant local, regional, and national laws, statutes, and regulatory frameworks of the host country, Bangladesh. The corresponding section of the Validation Report has also been updated to reflect this assessment</p>	Closed.
	<p><u>Verra Response</u></p> <p>Section 1.3 of the PD is corrected. The issue is closed now.</p>	
3 Project Start Date vs Baseline Survey Date		
<p><u>Issue</u></p> <p>Section 3.4 of the PD states that PP conducted the baseline survey on multiple dates between 21/07/2022 to 23/07/2022 and from 03/01/2023 to 09/01/2023. Additionally, section 1.8 of the PD indicates that cookstove distribution began on 26/07/2022, raising concerns about how the project could have started before establishing the baseline scenario.</p> <p><u>Action Required</u></p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>A baseline survey was conducted in six villages across two divisions: Sylhet and Mymensingh. In the Sylhet division, the baseline survey took place from 21/07/2022 to 23/07/2022 and on 27/10/2022 with the distribution of the ICS starting from 26/07/2022. And for the households where the baseline survey was conducted on 27/10/2022, no ICS have been distributed in the first phase. In the Mymensingh division, the baseline survey was conducted from 03/01/2023 to 09/01/2023, and the distribution of ICS began on 05/01/2023. It is important to note that in villages where the</p>	Closed

	<p>The VVB must justify how the baseline scenario was established and explain why the project start date was set even before completing the baseline survey and establishing the baseline scenario.</p> <p><u>Program Rule(s)</u> VCS Project Description Template, v4.2, Section 1.8, 1.12,3.4 VCS Validation Report template, v4.2, Section 3.1</p>	<p>baseline survey was conducted after 05/01/2023, no ICS was distributed during the first phase. Therefore, VVB confirms that the baseline survey was completed prior to the distribution of the ICS in all villages where the ICS was distributed in the first phase.</p> <p><u>Verra Response</u></p> <p>1. VVB has confirmed in the response that baseline surveys were completed prior to the distribution of the ICS in all villages where the ICS was distributed in the first phase. The issue is closed now.</p>	
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<p>4 Monitoring Plan for Sustainable Development Contributions.</p>			
	<p><u>Issue</u></p> <p>In section 1.17 of the Project Description, PP has provided details of SDGs. However, the the SD Contribution monitoring plan is missing, and there is no explanation of how each SDG indicator and its impact will be monitored. Please refer to the background.</p> <p><u>Action Required</u></p> <p>VVB must ensure that PP provides details of the SD Contribution monitoring plan, including how the contribution of each SDG will be monitored during the subsequent monitoring period.</p> <p><u>Background:</u></p> <p>PP must provide a detailed SDG monitoring plan to track and monitor the contribution each SDG during the monitoring period and throughout the crediting period. This should include the specific SDG indicators used to assess the impact of each SDG.</p>	<p style="background-color: #2c4e64; color: white; padding: 2px;">Round 1</p> <p><u>VVB Response</u></p> <p>VVB has reviewed Section 1.17 of the Project Description, which has now been updated to include SDG Contribution Monitoring Plan. The updated section provides a clear explanation of how each SDG indicator and its respective impact will be monitored throughout the crediting period. The revised Project Description aligns with the guidance provided in the Monitoring Report Template v4.4, specifically referring to Table 1 of the template. VVB confirms that the updated PD includes all necessary details for monitoring the contribution of each SDG during the subsequent monitoring period, and that the SDG monitoring plan is now fully in compliance with the required standards.</p> <p><u>Verra Response</u></p> <p>PP has provided an SDG monitoring plan for each SDG contribution in section 1.17 of the revised PD. The Validation Report is updated accordingly. The issue is closed now.</p>	<p>Closed</p>

<p>Please refer to the guidance in the Monitoring Report Template v 4.4 for describing the SD contributions. Specifically, Table 1 of the template provides instructions and examples, including project-level indicators, SDG number, Net Impact (Increase or decrease), and quantifiable contributions. This example can be used to design the SD contribution monitoring plan for registration.</p> <p><u>Program Rule(s)</u> VCS Project Description Template, v4.2, Section 1.3 VCS Standard, v4.4, Section 3.17</p>		
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<p>5 An incomplete list of Document Review in VR.</p>					
<p><u>Issue</u></p> <p>Appendix III of the document review sheet does not include the most recent versions of the PD, ERR calculation sheet, and fNRB sheet. Additionally, the document list does not include the FAO 2020 and FRA Bangladesh reports.</p> <p><u>Action Required</u></p> <p>The VVB must ensure that all the relevant documents are included in the document review table in Appendix III.</p> <p><u>Program Rule(s)</u> VCS Validation Report template, v4.2, Appendix III</p>	<table border="1"> <tr> <td data-bbox="1003 665 1774 706"> <p>Round 1</p> </td> </tr> <tr> <td data-bbox="1003 706 1774 982"> <p><u>VVB Response</u></p> <p>Appendix III of the validation report has been revised to include the most up-to-date versions of the PD, the ERR Calculation Sheet, and the fNRB Sheet. Furthermore, the FAO 2020 report and the FRA Bangladesh report have now been added to the document list, ensuring that all relevant and required documents are included.</p> </td> </tr> <tr> <td data-bbox="1003 982 1774 1396"> <p><u>Verra Response</u></p> <p>Appendix III of the validation report has been revised. However, as noted in finding #1, the VVB must thoroughly review all references and weblinks cited in both the Validation Report and Appendix 3. The VVB must ensure that each weblink is functional and directly links to the specific data point referenced, rather than to a general homepage of the website.</p> <p>The issue remains open.</p> </td> </tr> </table>	<p>Round 1</p>	<p><u>VVB Response</u></p> <p>Appendix III of the validation report has been revised to include the most up-to-date versions of the PD, the ERR Calculation Sheet, and the fNRB Sheet. Furthermore, the FAO 2020 report and the FRA Bangladesh report have now been added to the document list, ensuring that all relevant and required documents are included.</p>	<p><u>Verra Response</u></p> <p>Appendix III of the validation report has been revised. However, as noted in finding #1, the VVB must thoroughly review all references and weblinks cited in both the Validation Report and Appendix 3. The VVB must ensure that each weblink is functional and directly links to the specific data point referenced, rather than to a general homepage of the website.</p> <p>The issue remains open.</p>	<p>Closed</p>
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<p><u>Verra Response</u></p> <p>Appendix III of the validation report has been revised. However, as noted in finding #1, the VVB must thoroughly review all references and weblinks cited in both the Validation Report and Appendix 3. The VVB must ensure that each weblink is functional and directly links to the specific data point referenced, rather than to a general homepage of the website.</p> <p>The issue remains open.</p>					

		<p>Round 2</p>	
		<p><u>VVB Response</u> VVB confirms that all references and links included in the validation report and Appendix 3 are consistent. VVB has ensured that the cited web links are functional and direct to the specific data points rather than just the general homepage.</p>	
		<p><u>Verra Response</u> VVB has updated the references and weblinks in the revised Validation Report. The issue is closed now.</p>	