

PROJECT REVIEW REPORT

Project ID	2082
Project Name	<i>Qianbei Afforestation Project</i>
Program(s)	VCS + CCB
Monitoring Period	<i>01-January-2020 ~ 31-December-2020</i>
Project Proponent	Guizhou Xinzhanxin Agricultural Technology Co.
Methodology	<i>ACM0003, Afforestation of land except wetlands, v2.0</i>
Sectoral Scope(s)	<i>14. AFOLU (Agriculture, Forestry, and Other Land-use)</i>
Validation/Verification Body (VVB)	<i>Shenzhen CTI International Certification Co., Ltd</i>
Assessment Criteria	<i>VCS Standard, v4.1</i>
Date of First Issue	13 September 2021
Date of Final Issue	22 December 2021

Summary:

An accuracy review of the Qianbei Afforestation Project registration request has been conducted by Verra in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised eight assessment findings and two minor findings, detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The five assessment findings must be addressed to the satisfaction of Verra. The VVB need not address the minor findings during this review.

This project review report will be made publicly available. Confidential information may be provided as separate attachments.

1. ASSESSMENT FINDINGS

Finding 1

Section 4.1.14 of the *VCS Standard, v4.1* states that “the validation/verification body shall use the VCS Verification Report Template... and adhere to all instructional text within the template”.

Section 2.2 of the *Verification Report Template* instructs the VVB to describe the sampling approach, important assumptions and justification of the chosen approach if a sampling plan is used.

Section 2.2 of the verification report does not clarify how stakeholders were randomly selected for interviews and visits during the site visit using the Standard for Sampling Surveys for CDM Project Activities and Programme of Activities. Section 2.4 of the verification report states the VVB only selected 25 stakeholders, and only 15 of those were community members.

Considering that the project affects over 16,000 stakeholders, the VVB is requested to clarify why the so few stakeholders were interviewed, what the sampling approach was, and how the VVB accounted for all stakeholders during the verification assessment.

VVB Response:

Via checking the MR, it is confirmed that the project affects 16,449 stakeholders including 16,339 temporary planting workers and 110 long-term technicians. So when the VVB conducted the site audit to interview with the local stakeholder representatives, due to the number of stakeholders involved was too large and scattered to carry out a census, hence based on the principle of cost-effectiveness and the impact of COVID-19 which request to avoid large group people gathering, based on experience of local survey of the VVB, the sampling method was used for VVB to conduct the interview.

Based on the “Sampling and Surveys for CDM Project Activities and Programme of Activities” version 08.0 and “Guideline of Sampling and surveys for CDM project activities and programmes of activities” version 04.0. it confirmed that the Sample size calculation by Simple Random Sampling can be done using following formulae:

$$n \geq \frac{1.645^2 N \times p(1-p)}{(N-1) \times 0.1^2 \times p^2 + 1.645^2 p(1-p)}$$

Where

n	Sample size
N	Total number of people
P	Expected proportion, which is defined as 0.95 based on the experience of survey of VVB
1.645	Represents the 90% confidence required
0.1	Represents the 10% relative precision

N is 16,449 as determined of total impacted stakeholders, P is determined as 95% (due to the expected proportion of participation is 95%), as per the level of confidence, VVB expects that 90% of the samples taken shall comply with the project requirements.

Hence the n is calculated as

$$1.645^2 \times 16,449 \times 0.95 \times (1-0.95) / ((16,449-1) \times 0.1^2 \times 0.95^2 + 1.645^2 \times 0.95 \times (1-0.95)) = 14.$$

Hence, during the site interview, VVB only selected 25 stakeholders including 15 of those were community members from impacted 16,449 and others are local officers which is verified as reasonable

based on the “Sampling and Surveys for CDM Project Activities and Programme of Activities” version 08.0 and “Guideline of Sampling and surveys for CDM project activities and programmes of activities” version 04.0.

Verra Response:

The VVB has provided a sufficient justification for the number of stakeholders interviewed, and the updates to the verification report are sufficient. This finding is closed.

Finding 2

Section 2.1.5 of the monitoring report states that the start date is 30 April 2015. Section 2.1.6 of the monitoring report states that the crediting period start date is 01 January 2016.

The project proponent is requested to update Section 2.1.6 to clarify why the crediting period start date is after the start date of project activities.

The VVB is requested to evaluate the difference in start date and crediting period and confirm that it is conservative.

VVB Response:

The updated MR is checked, it is confirmed that the clarification has been added into the section 2.1.6.

Via checking the validation report and PD, it is confirmed that the start date of project is defined as 30 April 2015 and the crediting period start date is determined as 01 January 2016 which is later than the start date. Via checking the VCS standard 4.1 and Program_Definitions_v4.1, it is confirmed that the crediting period is the time period for which GHG emission reductions or removals generated by the project are eligible for issuance as VCUs, hence it is reasonable that the crediting period start date is later than the start date and this reason is clarified by PP as the business consideration.

Furthermore, via checking the corresponding ER sheet for 1st and 2nd monitoring period, it is verified that the emission reduction generated from 30-April-2015 to 31-December-2015 has been reduced from the total emission reduction generated during the 1st and 2nd monitoring period which is verified as correct.

And Via checking the ER sheet for period 30-April-2015 to 31-December-2015, it is verified that the value of 32,100 tCO₂e is correct and has been deducted from the accumulated value of the carbon sink which is verified as correct and conservative.

The section 4.3.1 of FVR has been updated with related assessment.

Verra Response:

The clarification provided by the project proponent is sufficient, and the updates in the monitoring report and verification report are appropriate. This finding is closed.

Finding 3

Section G3.4 of the *Climate, Community, & Biodiversity Standards, v3.1* states the project proponent shall “describe how communities including all the community groups and other stakeholders have influenced project design and implementation through effective consultation.”

Section 2.3.3 of the monitoring report describes the original stakeholder meeting, but does not describe any meetings that have taken place since then.

The project proponent is requested to update Section 2.3.3 of the monitoring report to include information on stakeholder meetings that have taken place since the start of the project, including this monitoring period, demonstrating that project proponents have influenced project implementation through effective consultation.

The VVB is requested to update the relevant Sections of the verification report.

VVB Response:

The updated MR is checked. It is confirmed that the related information has been added in section 2.3.3. Via checking the 1st periodical MR and verification report, it is confirmed that the information of stakeholder meetings that have taken place since the start of the project is correct and actual.

And the stakeholder meeting done during this monitoring period has already been described in the MR, combined with the previous meeting, it is verified that project proponents have influenced project implementation through effective consultation.

Section 4.3.4 of the verification report is updated with related assessment.

Verra Response:

Section 2.3.3 of the monitoring report has been updated to include information on stakeholder meetings that have taken place since the start of the project. This finding is closed.

Finding 4

Section 3.2.1 of the monitoring report states that "the project is on the barren lands suitable for afforestation."

The satellite images of the project area show that some areas were covered by forests at the project start date.

The project proponent is requested to update the monitoring report to reflect that forested areas were also included as project areas.

PP Response:

According to the Project Design for Afforestation Operation, before the project, there are indeed some poor growth and sparse forests in the project area. However, this situation does not deviate from the description of the registered project documents. The main reason is that the local forestry bureau refers to the forest land with a small number of poor growth and low survival rate trees as barren land suitable for afforestation¹, so this statement is also used in the description of PD.

The designed planting density of the project is 3,100 plant/ha (1 tree per 3.2 square meters). This density is determined considering the original trees in the project site, because according to the provisions of the appendix "afforestation density table of main tree species, afforestation zoning and table of main afforestation tree species" in the National Standard Afforestation Technical Regulations of the People's Republic of China², the afforestation density of China fir, Masson pine, Cypress and Pinus yunnanensis is usually 4,350-6,000 plant/ha in barren lands. Therefore, considering original trees in

¹ According to the "Chinese terms in resource and technology" issued by the China Science Publishing & Media Ltd. the definition of land suitable for forest refers to the land type with suitable site conditions for forest growth programmed by People's governments at or above the county level. In this project, land suitable for forest is programmed by the Government of Zunyi City, and a small number of trees have been planted in some project area before the project started but the coverage by planting trees is low, so the Government of Zunyi City defines the project area as suitable land for forest.

² <https://wenku.baidu.com/view/2d4989c9daef5ef7bb0d3c10.html>

the project site, the design value 3,100 plant/ha of afforestation density of the project is lower than the general density. The 3,100 plant/ha is adopted in Afforestation Project Design Report drafted by Guizhou Forestry Survey and Design Co., Ltd.³ who surveyed the actual situation of the project site, and the afforestation project design has been approved by Zunyi Forestry Bureau. The final project is completed and accepted with the planting, in the verification phase, the density of actually planting in monitoring is 2,790 plant/ha⁴. In addition, the tree species planted in the project are consistent with the original tree species before the project, so the division of carbon layer is reasonable.

The project is actually a planting activity without removing or destroying these original trees. In the process of project monitoring, only the height and DBH of the trees actually planted in the project will be monitored and recorded. All trees planted in the project have been marked by hanging tree number signs, and original trees before the project do not hanging signs. Those original trees before the project will not participate in the monitoring, so they will not be included in the calculation of emission reduction. Therefore, only the actually planted trees of the project are monitored in this monitoring period, excluding the original trees in the project area.

The project has been monitored according to the above monitoring methods since the first monitoring period, so the calculation of emission reduction has always been conservative.

VVB Response:

The related parts in the MR have been checked, VVB confirmed that the MR was updated by considering the above explanation and verified as reasonable as below assessment from VVB.

Through checking the KML file, VVB confirmed that some of the lands in project area were not totally barren lands prior to the start of the project, but via on-site inspection and checking the Project Design for Afforestation Operation and baseline survey report, it is confirmed that the project areas in baseline scenario were barren hills with some poor growth and sparse forests which has been defined by local forest bureau as "barren land suitable for afforestation" based on the "Chinese terms in resource and technology" issued by China Science Publishing & Media Ltd. who is confirmed as authorised to define the terms of forest land type based on the local expertise of the verification team.

By consideration of more accurate description, the MR was updated with the change from land as barren or degraded lands to the barren hill which are suitable for forest.

The project areas were confirmed as barren hills suitable for forest with small number of trees planted prior to the project start which has been assessed as below justification carried out by VVB:

- i. Through checking the KML file, VVB confirmed that there were some areas within project areas not barren but with trees shown in the map. VVB has interviewed with Guizhou Forestry Survey and Design Co., Ltd. who conducted project design to confirm the baseline and project design and checking the Project Design for Afforestation Operation, through these measures, VVB verified that the original project design had not define some project areas with small number of trees planted as the non-barren areas. But the actual situation of some project areas with small number of trees planted has already been considered during the validation process and 1st verification process as confirmed by PP.
- ii. The provisions of the Appendix "afforestation density table of main tree species, afforestation zoning and table of main afforestation tree species" in the National Standard Afforestation Technical Regulations of the People's Republic of China is checked, it is confirmed that the afforestation density of China fir, Masson pine, Cypressess and Pinus yunnanensis is normally

³ Guizhou forestry survey and Design Co., Ltd. is an independent third party with Afforestation Design Qualification issued by Department of Forestry.

⁴ Because the location and survival rate of trees, and the monitoring marks of some trees (tree number signs) cannot be identified, these trees that cannot be determined to be planted in the project are excluded during the verification. The density of trees verified in the final project is 2,790 plant/ha.

- designed as 4,350-6,000 plant/ha in barren lands. While through checking the Project Design for Afforestation Operation and related description in the PD, it is confirmed that the designed planting density of the project is 3,100 plant/ha which is lower than the general density in the National Standard, via interviewed with the Guizhou Forestry Survey and Design Co., Ltd., it is confirmed that they have considered the original trees in the project area prior to project start date for the project design.
- iii. Furthermore, it is confirmed that the actual afforestation density is 2,790 plant/ha by considering the project area and survival rate of trees as provided in the MR for 1st and 2nd monitoring period, and the monitoring marks of the planted trees (tree number signs) can be confirmed, which is defined based on the actual monitoring after the planting finished, and the original trees in the project area prior to the project start date are not considered. Thus it is reasonable that the actual density of project planted treed is much lower than the general density in the National Standard. Hence, VVB confirmed that original trees in the project area prior to the project start date is not accounted into the actual tree numbers of the project, thus it is verified that since the 1st monitoring period, the project carbon stock calculation is not over estimated.
 - iv. Via checking the PP sampling plots inventory/SPI/, it is verified that only the trees actually planted in the project were monitored. The trees planted in baseline scenario are excluded for monitoring and thus not used for calculate the project carbon stock.
 - i. Furthermore, via site inspection, it is confirmed that for each sample plot, the trees planted in the baseline scenario have not been marked, and planted trees in the project hanging signs which can be clearly distinguished from the original trees, which means that those no sign trees do not counted in the monitoring of the project. Therefore, it is verified that the monitoring results of parameter of $N_{i,j}$ did not contain the trees in the baseline scenario which is confirmed as reasonable. VVB confirmed that obvious signs have been attached to the original trees and trees actually planted in the project by site visit, which can ensure the distinguish of baseline and project scenario and then only the trees actually planted in the project was counted for monitoring. Based on above assessment, the afforestation density is 2,790 plant/ha is confirmed as reasonable by considering that the original trees are not included for project carbon stock calculation.

Therefore, based on the principle of cost-effectiveness, it is confirmed that the calculation of the baseline stocks and GHG removals of these original trees were not considered since the 1st monitoring period.

In conclusion, as above assessment, VVB verified that the difference is that the definition of “barren land suitable for afforestation” is not same in the PD and MR for this monitoring period. However, this situation does not deviate from the description of the registered project documents and does not impact the project carbon stock calculation in the MR.

Verra Response:

The clarification from the project proponent and the VVB are sufficient. This finding is closed.

Finding 5

Section CM2.1 of the *Climate, Community, and Biodiversity Standards*, v3.1 states “use appropriate methodologies to assess the impacts, including predicted and actual, direct and indirect benefits, costs and risks, on each of the identified community groups (identified in G1.5) resulting from project activities under the with-project scenario.”

Section 4.1.1 of the monitoring report identify impacts such as “Improve the living environment”,

“achieve goals in afforestation and increase forest cover”, “improve the local ecological environment.” It is not clear how those impacts represent a positive change in well-being or are related to the community impacts to be monitored. The impacts should be measurable, such as “number of community members participating in forest management”. Further, these impacts should be linked to the community goals of the project.

The project proponent is requested to update Section 4.1.1 of the monitoring report to include measurable impacts on community groups or justify how the included impacts represent a positive change in well-being or are related to the community impacts to be monitored.

VVB Response:

The updated MR is checked. It is confirmed that the section 4.1.1 of the MR has been revised accordingly. For all impacts, measurable methods have been added into the description of “Change in Well-being”, and it is confirmed that impacts linked to the community goals of the project as defined in PD. And all figures of these impact variables achieved in this monitoring period have been provided in section 4.3.1 of the MR.

Verra Response:

Section 4.1.1 of the monitoring report has been updated appropriately. This finding is closed.

Finding 6

Section 3.5.3 of the *CCB Program Rules, v3.1* and Section 3.4.3 of the *VCS Standard, v4.1* state that the project proponent shall use the relevant *Monitoring Report Template* and adhere to the instructional text within the template.

The table in Section 4.1.1 of the *Monitoring Report Template* requires to the project proponent to “describe whether the impact is predicted or actual, direct or indirect, and whether it is a benefit, cost or risk.”

Several of the tables in Section 4.1.1 describe impacts but do not describe whether the impact is predicted, actual, direct, indirect, or whether it is a benefit, cost or risk.

The project proponent is requested to update Section 4.1.1 to ensure all the tables identify the type of risk.

VVB Response:

The updated MR has been checked. It is confirmed that the section 4.4.1 of the MR has been revised accordingly.

All impacts have been defined in line with the requirements and based on the actual situation of the project.

Verra Response:

Section 4.1.1 of the monitoring report has been updated to identify whether the impact is a benefit, cost, or risk. This finding is closed.

Finding 7

Section 3.5.3 of the *CCB Program Rules, v3.1* and Section 3.4.3 of the *VCS Standard, v4.1* state that the project proponent shall use the relevant *Monitoring Report Template* and adhere to the instructional text

within the template.

Section 5.3.1 of the *Monitoring Report Template* requires the project proponent to “present the results of the biodiversity impact monitoring,”

Section 5.3.1 of the monitoring report describes the monitoring plan but doesn’t present the results of the biodiversity impact monitoring.

The project proponent is requested to update Section 5.3.1 of the monitoring report to provide the results of the biodiversity impact monitoring.

The VVB is requested to update the relevant Sections of the verification report accordingly.

VVB Response:

The section 5.3.1 of the MR is checked, it is confirmed that the monitoring results of the biodiversity impacts have been listed in this section. This is in line with the biodiversity monitoring plan.

How the monitoring survey has been conducted and how each indicator determined for this monitoring period have been described and related monitoring results have been listed in the table 6 related to the biodiversity change which has been verified by VVB as in line with the PD.

Furthermore, there is a summary of the results of the biodiversity impact monitoring have been added into this section which is verified based on the actual monitoring results of each indicator. It is confirmed that based on the survey results, the forest cover has been created since the 1st monitoring period and the area size was keeping in this monitoring period, the population density of wild animals fluctuated within a certain extent and the number of vegetation populations is on the rise. And there is no fires and insects and disease risks occurred during this monitoring period and the area size of the forest under prevention control from fires and insects and diseases is not changed since 1st monitoring period. Hence, it is confirmed that no risks impact the biodiversity in the project area and no situation of forest area recovered and trees re-planted occurred during this monitoring period, thus it is verified that the biodiversity impacts are positive from the project and ecological conditions of the entire region have been improved.

The assessment in section 4.6.11 of the verification report has been updated.

Verra Response:

Section 5.3.1 of the monitoring report has been updated to provide the results of the biodiversity impact monitoring. This finding is closed.

Finding 8

Section 4.3.15 of the *CCB Program Rules, v3.1* and Section 4.1.14 of the *VCS Standard, v4.1* state that the VVB shall use the relevant *Verification Report Template* and adhere to the instructional text within the template.

Section 5 of the *Verification Report Template* requires the VVB to use the table in the template.

Section 5 of the verification report does not use the correct template.

The VVB is requested to update Section 5 of the verification report to include the correct template.

VVB Response:

The table in section 5 has been revised according to the *Verification Report Template*.

Verra Response:

2. MINOR FINDINGS

No minor findings were raised.

3. ASSESSMENT CONCLUSION

On 13 September 2021 Verra concluded an accuracy review of the verification approval request from project 2082, Qianbei Afforestation Project.

On 13 September 2021 Verra raised the eight assessment findings detailed above, and submitted the review report to the VVB Tuv Nord and the project proponent Guizhou Xinzhanxin Agricultural Technology Co.

On 22 November 2021 the project proponent and VVB responded to the findings detailed above.

On 22 December 2021 Verra determined the responses to the findings were sufficient to close the review.