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Carbon Forestry Project Audit
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Verification Assessment Report for:

Taking Root Nicaragua in Somoto and Limay, Nicaragua

Report Finalized:	11 March 2016
Audit Dates:	16 – 19 November 2015
Lead Auditor:	Klaus Geiger
Audit Team Member(s):	Freddy Ramirez Castillo
Audit Standard:	<i>Plan Vivo Standards 2008</i>
Verification Code(s):	RA-VER-PV-021183
Project Latitude/Longitude:	13.80900, -86.97583
PD Version:	TR_PDD_V2014, August- 19
Project Proponent Contact:	Taking Root Nicaragua Kahlil Baker, Executive Director 305, rue de Bellechasse #200
Project Proponent Address:	Montreal, QC H2S 1W9 Canada

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1 Introduction

The Rainforest Alliance's auditing program was founded in 1989 to certify forestry practices conforming to Forest Stewardship Council (FSC) standards and now focuses on providing a variety of forest auditing services. In addition to being an ANSI ISO 14065:2007 accredited validation and verification body, Rainforest Alliance RA-Cert program is also a member of the Climate, Community, and Biodiversity Alliance (CCBA) standards, and an approved verification body with a number of other forest carbon project standards. For a complete list of the services provided by Rainforest Alliance see http://www.rainforest-alliance.org/climate.cfm?id=international_standards.

Dispute resolution: If Rainforest Alliance clients encounter organizations or individuals having concerns or comments about Rainforest Alliance / RA-Cert and our services, these parties are strongly encouraged to contact the RA-Cert program headquarters directly.

1.1 Objective

The purpose of this report is to document the conformance of the CommuniTree Carbon Program with the requirements of the Plan Vivo Standard 2008 edition. The project was developed by Taking Root Nicaragua, hereafter referred to as "Project Proponent". The report presents the findings of qualified Rainforest Alliance auditors who have evaluated the Project Proponent's systems and performance against the applicable standard(s).

1.2 Scope and Criteria

Scope: The scope of the audit is to assess the conformance of Taking Root's CommuniTree Reforestation project in Somoto and San Juan de Limay, Nicaragua against the Plan Vivo Standard 2008 edition. The objectives of this audit included an assessment of the project's conformance with the standard criteria. In addition, the audit assessed the project with respect to the baseline scenarios presented in the project design document. The project covers an area of 866ha. The land is privately owned. Each instance of the project – the plan vivo (land management plan) of a participating farmer is implemented and modelled over a total period of 50 years.

Carbon sequestration has been modeled for these dynamic systems using a conservative average carbon accounting approach, which is achieved for a particular farmer 17 years after the associated trees are planted. The group of participating farmers covered by this verification audit are estimated to remove and/or reduce 301,887 tCO₂e over the course of 50-year rotations on the 866 planted hectare equivalents, of which 15% (42,283 tCO₂e) shall be allocated to the Plan Vivo pooled buffer account. The project began in 2010 and has calculated a GHG reduction and/or removal of 10,956 tCO₂e during the 01 May 2010 – 31 December 2014 monitoring period, outperforming the original projected sequestration of 2,931 tCO₂e for the same period, and positioning the project well on track to remove the estimated 301,887 tCO₂e. From this, the project has allocated 15% of the GHG emission reductions and/or removals over the monitoring period (1,643 tCO₂e) to the Plan Vivo pooled buffer account, resulting in a total of 9,313 tCO₂e of non-buffer credits being verified.

Standard criteria: Criteria from the following documents were used to assess this project:

- Plan Vivo Standard 2008

Materiality: All GHG sinks, sources and/or reservoirs (SSRs) and GHG emissions equal to or greater than 5% of the total GHG assertion unless otherwise defined by the standard criteria.

1.3 Project Description

The CommuniTree Carbon Project is a community reforestation project that officially began January 2010. The first project area was in the Municipality of San Juan de Limay; the Municipality of Somoto became the second project area in 2014. The baseline assessments were conducted in 2011 and 2014, respectively. The baseline scenario of the project is the continuation of deforestation and forest degradation (i.e. land use conversion) to the agricultural field – pasture – fallow cycle that began to dominate this region of the country since the so called 'Green [agricultural] Revolution' in the 1950s. Since that time, large swathes of dry tropical forest have been cleared for agricultural purposes. With increasing population density and decreasing soil fertility, crop rotations have shortened, and the fallow period—during which bushy vegetation grew—with it. The result is the context today: low crop yield, erosion, and abysmal levels of biodiversity. The project aims to combat these trends by engaging local producers to reforest portions of their farms and in return receive payments for ecosystem services generated by the

planted trees. There are three technical specifications: mixed species forest plantation, silvopasture, and barrier plantings. The vast majority of smallholders are implementing the mixed species forest plantation, and some producers have trees old enough and large enough such that they began a pruning regime. The project currently covers approximately 866 hectares across 500 sites (some smallholders have multiple planting locations), and has a project lifetime of 50 years. The project was previously validated in 2011, and is currently undergoing its verification audit.

1.4 Level of assurance

The assessment was conducted to provide a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a positive evaluation statement reasonably assures that the project GHG assertion is materially correct and is a fair representation of the GHG data and information.

2 Audit Overview

Based on Project's conformance with audit criteria, the auditor makes the following recommendation:		
Final Report Conclusions		
<input checked="" type="checkbox"/>	Verification approved: <i>NCR(s) closed</i>	
<input type="checkbox"/>	Verification not approved: <i>Conformance with NCR(s) required</i>	
Draft Final Report Conclusions		
<input checked="" type="checkbox"/>	Verification approved: <i>NCR(s) closed</i>	The Project Proponent has 7 days from the date of this report to submit any comments related to the factual accuracy of the report or the correctness of decisions reached. The auditors will not review any new material submitted at this time.
<input type="checkbox"/>	Verification not approved: <i>Conformance with NCR(s) required</i>	
Draft Report Conclusions		
<input type="checkbox"/>	Verification approved: <i>No NCRs issued</i>	The Project Proponent has 30 days from the date of this report to revise documentation and provide any additional evidence necessary to close the open non-conformances (NCRs). If new material is submitted the auditor will review the material and add updated findings to this report and close NCRs appropriately. If no new material is received before the 30-day deadline, or the new material was insufficient to close all open NCRs the report will be finalised with the NCRs open, and validation and/or verification will not be achieved. If all NCRs are successfully addressed, the report will be finalised and proceed towards issuance of a assessment statement.
<input checked="" type="checkbox"/>	Verification not approved: <i>Conformance with NCR(s) required</i>	

2.1 Audit Conclusions

Summary of conformance with Plan Vivo Standard Principles:

Plan Vivo Principles	Draft Report Conformance		Final Report Conformance	
1 Effective and transparent project governance	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2 Carbon benefits	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3 Ecosystem benefits	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
4 Livelihood benefits	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Rainforest Alliance has reached a positive verification conclusion on the project's conformance to the Plan Vivo 2008 Standard based on the project's Project Design Document Version 2014, dated 19 August 2014, Mixed Species Forest Plantation (2014-08-14), Barrier Planting (2014-11-13), and Silvopastoral Technical Specifications (2014-11-13), carbon quantification spreadsheets for each of the technical specifications, Plan Vivo Annual Reports, and field observations. The 866 hectares of project lands planted to date are on track to remove 256,604 tCO₂e after the 15% Plan Vivo pooled buffer contributions, in-line with the carbon modeling from the project's Technical Specifications. Each Plan Vivo implemented under the project is expected to achieve its net average carbon benefit in year 17 after their corresponding planting date. While the project employs ex-ante crediting, when considered with ex-post crediting, the project has generated a total net GHG emission reduction and/or removal of 10,956 tCO₂e over the course of the 01 May 2010 – 31 December 2014 monitoring period.

2.2 Nonconformance evaluation

Note: A non-conformance is defined in this report as a deficiency, discrepancy or misrepresentation that in all probability materially affects carbon credit claims. Non-conformance Request (NCR) language uses "shall" to suggest its necessity but is not prescriptive in terms of mechanisms to mitigate the NCR. Each NCR is brief and refers to a more detailed finding in the appendices.

NCRs identified in the Draft Report must be closed through submission of additional evidence by the Project Proponents before Rainforest Alliance can submit an unqualified statement of conformance to the GHG program. Findings from additional evidence reviewed after the issuance of the draft report are presented in the NCR tables below.

NCR#:	01/15
Standard & Requirement:	Plan Vivo Standard 2008 Edition; Effective and Transparent Governance; Administrative point 4.
Report Section:	Appendix A Indicator 1.1.3
Description of Non-conformance and Related Evidence:	
The Professional Association for Nicaragua's Integral Development (Asociacion de Profesionales para el Desarrollo Integral de Nicaragua, APRODEIN) is a legal Nicaraguan entity, as pronounced by the Nicaraguan Ministry of the Interior and published in La Gaceta – Diario Oficial. APRODEIN's board of directors has been certified by the Department of Registration and Control of Associations of the Nicaraguan Ministry of the Interior. However, APRODEIN's registration as a Registered taxpayer, as well as the organization's taxpayer ID card—which were submitted as evidence of legal compliance to the auditors—have both expired as of July 3rd, 2015.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to verification
Evidence Provided by Organization:	TR has requested the new documents from the DGI, which are now used as evidence that APRODEIN is indeed a registered taxpayer.
Findings for Evaluation of Evidence:	The proponent has provided copies of official documentation demonstrating that APRODEIN is registered as a legal taxpayer; the new registration is valid through January 12 th , 2018.
NCR Status:	CLOSED
Comments (optional):	None

NCR#:	02/15
Standard & Requirement:	Plan Vivo Standard 2008 Edition; Livelihood Benefits Section, Point 2 sub-point 2.
Report Section:	Appendix A Indicator 4.1.4
Description of Non-conformance and Related Evidence:	
APRODEIN has not implemented a system to back up their data and documents. Much information could potentially be lost were the APRODEIN project offices to suffer a theft, fire, or other mishap. As per Plan Vivo 2008 Standard, Livelihood Benefits Section, Point 2 sub-point 2, the project must have evidence of data management and back-up systems.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to verification
Evidence Provided by	TR has provided a few screenshots of the folders within Dropbox to the auditors as

Organization:	evidence of this additional backup to be used by APRODEIN employees.
Findings for Evaluation of Evidence:	In order to sufficiently backup the files in Nicaragua, Taking Root has installed the business version of Dropbox on each relevant computer. These computers include the main office computer in Limay and Somoto, plus the computers of the head of operations, accounting, IT, and the office managers in all sites. Each user of these computers has been backing up their business files in a specific folder with their name. Each named folder will only be accessible to the computer of its user as to avoid mistakes that lead to the mass deletion of all files. The cloud storage backup space selected by the proponent is commonly used and has sufficient controls in place to avoid accidental deletions of project data.
NCR Status:	CLOSED
Comments (optional):	None

NCR#:	03/15
Standard & Requirement:	Plan Vivo Standard 2008 Edition; Carbon Benefits; Permanence.
Report Section:	Appendix A Indicator 2.1.3
Description of Non-conformance and Related Evidence:	
In 2014 The CommuniTree Carbon Program and Nicaragua as a whole suffered an uncharacteristically extreme drought. Subsequently, a delayed and irregular rainy season demanded supplemental activities to protect seedlings in nurseries and those that had been recently planted. Nevertheless, that year's seasonal unpredictability resulted in high tree mortality in the more recently planted cohorts. As per project SOP, the project areas that experienced tree mortality in 2014 were re-planted during the 2015 planting year, only to undergo a second, similarly severe drought. In sum, the two years of drought impacted 37.09 hectare equivalents of land enrolled in the CommuniTree Carbon Program Project such that the landowners decided not to replant.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to verification
Evidence Provided by Organization:	The Project Proponent has referenced the 2014 and 2015 annual reports to the Plan Vivo Foundation, which discuss the impact of the drought on the project. The PP will be relying on the Plan Vivo buffer pool that the Plan Vivo Foundation manages in order to compensate for the losses in sequestered carbon for the trees that will not be replanted. Auditor conversations with the Plan Vivo Foundation confirm that the buffer pool will be relied upon and that the Plan Vivo Foundation has approved this course of action.
Findings for Evaluation of Evidence:	To address the issue of stakeholders dropping out of the project, the Project Proponent will be drawing from the project's risk buffer rather than compensating for the losses by replanting a third time. The risk buffer that the Project Proponent has established through the Plan Vivo Foundation that deducts 15% of saleable offsets to enter a pool with all other Plan Vivo projects across the world to insure against potential "force majeure" events such as severe drought. To date, Taking Root had not needed to utilize the risk buffer as the PP was able to replace its losses by replanting. Thus, in 2015 Taking Root had to draw from the risk buffer for 37.09 hectares of land or 10,991 tCO ₂ e worth of carbon credits. This is discussed at length in the 2015 CommuniTree Carbon Program Annual Report to Plan Vivo, and the Plan Vivo Foundation has approved this course of action.
NCR Status:	CLOSED

Comments (optional):	None
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2.3 Observations

Note: Observations are issued for areas that the auditor sees the potential for improvement in implementing standard requirements or in the quality system; observations may lead to direct non-conformances if not addressed. Unlike NCRs, observations are not formally closed. Findings from the field audit related to observations are discussed in Appendix A below.

OBS	01/15	Reference Standard & Requirement:	Plan Vivo Standard 2008 Edition; Effective and Transparent Governance; Administrative point 5.
Description of findings leading to observation:	The Project Proponent described to auditors that their work with the participants is largely on an individual/family basis, and that beyond the initial community consultations, orientation meetings, and trainings there are no regularly-scheduled group meetings. The PP asserted that continuing consultations are likewise done with individual participants informally with APRODEIN field technicians as initiated by the participant. During the 2015 verification field audit, the auditors met with community members who were given the opportunity to voice their opinion about the project as well as ask questions of the auditors. Participants were generally satisfied with the project, yet some producers proceeded to make requests that were outside of the scope of the project's activities. It appeared that these requests were born out of a confusion of APRODEIN's purpose and capabilities within the context of the project.		
Observation:	There are a few informal mechanisms in place for participants to discuss issues associated with the running of the project. The Project Proponent should exercise caution and be more proactive in seeking feedback from project participants in order to avoid confusion and potential dissatisfaction with project management.		

OBS	02/15	Reference Standard & Requirement:	Plan Vivo Standard 2008 Edition; Carbon Benefits
Description of findings leading to observation:	Some parcels visited were less well-maintained, with early seral vegetation beginning to crowd the planted trees.		
Observation:	The Project Proponent should consider an additional means to instill in participating producers an awareness of weeding's importance for young trees' establishment and survival. Further, the rows of planted trees under the silvopastoral technical specification are not cleared as they are under the mixed species specification—a two-meter diameter circle is cleared of weedy vegetation around individual trees twice per year during the rainy season. The circle size appeared to vary some in practice, and the PP and the auditors observed that this may be a small clearing for the individual trees. The Project Proponent may improve tree survival and growth by increasing the area cleared around trees planted under the silvopastoral technical specification.		

OBS	03/15	Reference Standard & Requirement:	Plan Vivo Standard 2008 Edition; Carbon Benefits; Permanence point 1
Description of findings leading to observation:	The Project Proponent is aware of a pest that has caused limited damage to planted trees. The auditors were shown a tree in a one-year-old silvopastoral parcel whose roots had been burrowed, possibly by a wood-boring beetle, damaging the individual such that it died. The Project Proponent stated that they had not researched this pest much, and supposed that such incidences would be recorded for tracking purposes.		

Observation:	As the project uses polycultures of native species it is unlikely that this insect—which has thus far only been identified in isolated incidents—has a profound impact on carbon stocks, but it currently remains a contributing factor to tree mortality in the context of the project. The Project Proponent should develop a more intimate knowledge of the pests affecting the permanence of project's carbon stocks and adapting the project's management to address the pest. It is also possible that the effect of such pests is marginal and not worth the investment in time and effort to combat them; this remains to be determined.
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2.4 Actions taken by the Project Proponent address NCRs (including any resolution of material discrepancy)

Action Taken by Project Proponent following the issuance of the Draft Report		Date
Additional documents submitted to audit team (additional documents listed below)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1/14/2016
Additional stakeholder consultation conducted (evidence described below)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Additional clarification provided	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1/16/2016
Documents revised (document revision description noted below)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
GHG calculation revised (evidence described below)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

The project proponent took actions to address the NCRs raised during the field audit and in the draft report. The original Nicaraguan tax registration document the proponent had submitted to evidence APRODEIN being a legal entity and in compliance with relevant laws had in fact expired. The project proponent has since updated APRODEIN's Nicaraguan tax registration documentation, which the proponent subsequently submitted to the auditors (files 1a. and 2a. below). Further, the proponent previously was not storing digital backups of all project documentation, particularly that of APRODEIN in Nicaragua. To remedy this the proponent installed the cloud storage software "Dropbox" on all of the computers that did not already have it, ensuring that files are stored in a secure location outside of the main project offices.

Included in the actions taken by the Project Proponent to address NCRs was the submission of the following revised files:

Ref	Title, Author(s), Version, Date	Electronic Filename
1a.	Certificado de Inscripción en el Registro Único del Contribuyente – Régimen General, Douglas Ant. Prado Mija, January 12, 2016	"Image 1" in NCR Response Form
2a.	Persona Jurídica, Director General DGI Nicaragua, January 12, 2016	"Image 2" in NCR Response Form
3a.	APRODEIN Datos, David Baumann, January 14, 2016	"Images 3 – 5" in NCR Response Form

3 Audit Methodology

3.1 Audit Team

Overview of roles and responsibilities:

Auditor(s)	Responsibilities							
	Lead	Desk Review	On-site visit	Climate Specialist	Biodiversity Specialist	Social Specialist	Report	Senior Internal Review
Klaus Geiger	X	X	X	X	X	X	X	
Freddy Ramirez Castillo			X	X	X	X		
Lawson Henderson								X

Auditor qualifications:

Auditor(s)	Qualifications
Klaus Geiger	Klaus Geiger is a forester with professional experience in Latin America. As Carbon Services Staff Auditor with Rainforest Alliance Klaus conducts and leads carbon field audits for AFOLU projects under six different carbon standards. Prior to working with Rainforest Alliance, Klaus researched Sri Lankan non-timber forest products by documenting species composition and mapping spatial distribution in traditional agroforestry gardens, co-managed the 8,000 acre FSC-Certified Yale School Forest, promoted sustainable agriculture techniques for 3.3 years with the Peace Corps in Panama, and, among other experiences, cruised timber with the U.S. Forest Service in Tahoe National Park. Klaus received his Masters of Forestry from the Yale University School of Forestry and Environmental Studies, and holds a Bachelors of Forestry from University of Missouri-Columbia. Klaus is fluent in Spanish and conversational in Sinhala.
Freddy Ramirez Castillo	Nicaragüense, ingeniero forestal con una diversa formación y experiencia profesional de 17 años en el ámbito forestal; experto en manejo de recursos naturales renovables, especialista en planificación, ejecución, seguimiento y evaluación de estrategias, programas y proyectos empresariales para el desarrollo humano sostenible con énfasis en el fortalecimiento de capacidades locales para el manejo de los recursos naturales, seguridad alimentaria y comercialización de productos para contribuir al manejo de paisajes de forma sostenible; amplio conocimiento y experiencia en certificación de buen manejo de bosques naturales y plantaciones forestales; comercialización de productos forestales; formación, desarrollo y consolidación de empresas forestales comunitarias y cooperativas, así como organizaciones de asistencia técnica; profunda experiencia y conocimientos de la realidad forestal en especial de las Regiones Autónomas y Río San Juan de Nicaragua; y de otros países de Latinoamérica, conocimientos y experiencia en cambio climático; alta capacidad de gestión de recursos financieros, con excelentes relaciones y coordinaciones interinstitucionales en el sector forestal y ambiental de Nicaragua.
Lawson Henderson, Carbon Coordinator, Rainforest Alliance, Independent Technical Reviewer.	Carbon Coordinator with Rainforest Alliance (2012 – current). Education: B.S.F. in forest management from University of New Hampshire, 2005. Experience, Forest Management Associate with Rainforest Alliance, US Region (2008 to 2012). Chain of Custody Associate with Rainforest Alliance, US Region (2007-2008). Forest Land Surveyor for a private forest/civil engineering firm in Western Oregon for two years. Auditor on more than 20 FSC forest management and chain of custody audits and assessments. Lead auditor or auditor on 18 forest carbon projects, including 14 IFM projects. Performed VCS audits of ARR, IFM, & REDD forest carbon projects. Project manager on over 250 FSC forest management and chain-of-custody projects. Completed Rainforest Alliance CoC

	Auditor Training in April 2008, Rainforest Alliance Carbon Verification and Validation Audit Training in March 2009, and Rainforest Alliance Lead Forest Management Auditor Training in June 2009. Successfully completed the Climate Action Reserve Lead Verifier Training for the Forest Project, and Urban Forest Project Protocol in September 2010, CAR Lead Verifier credentials renewed in June 2014. Successfully completed the ISO Quality Management Systems Lead Auditor Training Course (ISO 9001) in December 2010. ARB Lead Verifier credentials obtained in October 2012. Member of the Society of American Foresters and the Forest Guild.
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3.2 Description of the Audit Process

Location/Facility	Date(s)	Length of Audit	Auditor(s)
FONADEFO Headquarters; Managua, Nicaragua	Nov 16, 2015	2 hours	Klaus Geiger, Freddy Ramirez Castillo
APRODEIN Headquarters; Somoto, Nicaragua	Nov 16, 2015	2 hours	Klaus Geiger, Freddy Ramirez Castillo
Ikalupe Community and Plan Vivo Visits, Somoto, Nicaragua	Nov 17, 2015	3.5 hours	Klaus Geiger, Freddy Ramirez Castillo
Meeting with INAFOR; Somoto, Nicaragua	Nov 17, 2015	1.5 hours	Klaus Geiger, Freddy Ramirez Castillo
APRODEIN Headquarters; Somoto, Nicaragua	Nov 17 & 18, 2015	3 hours	Klaus Geiger, Freddy Ramirez Castillo
Taking Root/APRODEIN offices; San Juan de Limay, Nicaragua	Nov 18, 2015	2 hours	Klaus Geiger, Freddy Ramirez Castillo
Plan Vivo Visits, San Juan de Limay, Nicaragua	Nov 18, 2015	2 hours	Klaus Geiger, Freddy Ramirez Castillo
El Palmar Community and Plan Vivo Visits, San Juan de Limay, Nicaragua	Nov 19, 2015	3.5 hours	Klaus Geiger, Freddy Ramirez Castillo
Meeting with INAFOR; San Juan de Limay	Nov 19, 2015	1.25 hours	Klaus Geiger, Freddy Ramirez Castillo
Taking Root/APRODEIN offices; San Juan de Limay, Nicaragua	Nov 19, 2015	3 hours	Klaus Geiger, Freddy Ramirez Castillo

3.3 Review of Documents

The following documents were viewed as a part of the field audit:

Ref	Title, Author(s), Version, Date	Electronic Filename
1	Plan Vivo Project Design Document (PDD) – CommuniTree Carbon Program (formerly Limay Community Carbon Program); Kahlil Baker, David Baumann, Samuel Gervais and Brooke van Mossel-Forrester; TR_PDD V2014, August 19	CommuniTree-PDD-2014.pdf
2	Technical Specification Mixed Species Forest Plantation – Registered Plan Vivo Project: The CommuniTree Carbon Program; Kahlil Baker, David Baumann, J. Michaud and Brooke van Mossel-Forrester; Version: 2014-08-14	2014_revision_TS_MSFP_final.pdf
3	Technical Specification Boundary Planting – Registered Plan Vivo Project: The CommuniTree Carbon Program; Kahlil Baker, David Baumann, J. Michaud and Brooke van Mossel-Forrester; Version: 2014-11-13	2014_revisionTS_B_20141113.pdf
4	Technical Specification Silvopastoral Planting –	2014_revision_SP_TS_20141113.pdf

	Registered Plan Vivo Project: The CommuniTree Carbon Program; Kahlil Baker, David Baumann, J. Michaud and Brooke van Mossel-Forrester; Version: 2014-11-13	
5	Mixed Species Carbon Benefit; Kahlil Baker; 2014.	MS_C_benefit.xls
6	Boundary Planting Carbon Benefit; Kahlil Baker; 2014	Boundary Planting_v5 with Stand Management.xls
7	Silvopastoral Carbon Benefit; Kahlil Baker; 2014	Silvo_carbon_v4.xls
8	Cedula-RUC; Nicaraguan Ministerio de Hacienda y Crédito Público; 2013-07-03.	Cedula_ruc.pdf
9	Certificación de Junta Directiva; Nicaraguan Ministry of the Interior, Department of Associations; 2015-4-8.	Certificado.jpeg
10	Constancia de Inscripción; Nicaraguan Ministry of the Interior, Department of Associations; 2010-10-18	Constancia de inscripcion.pdf
11	Constancia de Cumplimiento; Nicaraguan Ministry of the Interior, Department of Associations; 2015-4-8	Constancia.jpeg
12	Certificado de Inscripción; Nicaraguan Ministerio de Hacienda y Crédito Público; 2014-6-4	Certificado de inscripción.pdf
13	Decree of Legality; La Gaceta – Diario Oficial of Nicaragua; 2010-9-10.	Decreto parte 1 (and 2).pdf
14	APRODEIN Statutes; La Gaceta – Diario Oficial of Nicaragua; 2011-1-24.	Estatutos 1 (through 5).pdf
15	Consolidated financial Statements; Ernst and Young Global Limited; 2014-12-31.	b-TR_FS_14.pdf
16	Registraire des entreprises Québec – Déclaration d'immatriculation; Kahlil Baker; 2007-11-21.	QC_inc.PDF
17	Industry Canada – Corporations Canada Registration; Kahlil Baker; 2007-10-16.	TR_IndustryCanada_CorpCanada_2007_10.pdf
18	Industry Canada – Canada Corporations Act – Lettres Patentes; Minister of Industry; 2007-10-22.	Lettres patentes_Can.pdf
19	Consulta Pública – Los Platanares; Kahlil Baker; January 2010.	Consulta_Publica.pdf
20	Producer Training Meeting; Kahlil Baker; 17 Aug 2010.	AttendanceSheet_17_08_10

3.4 Interviews

The following is a list of the people interviewed as part of the audit. The interviewees included those people directly, and in some cases indirectly, involved and/or affected by the project activities.

Audit Date	Name	Title
11/16 – 11/19, 2015	Kahlil Baker	Executive Director, Co-Founder Taking Root
11/16 – 11/19, 2015	Elvin Castellon	Executive Director and Operations Coordinator – APRODEIN
11/16/2015	Noel Antonio Castrillo Rodriguez	Responsable de áreas de proyectos FONADEFO
11/16/2015	Luviam Mercedes Zelaya Antúnez	Executive Director - FONADEFO
11/16/2015	Marvin Sentero	Technical Specialist – FONADEFO
11/16 – 11/19, 2015	David Baumann	Technical and Financial Director - Taking Root
11/16 – 11/19, 2015	Celio Lenin Montoya Valladares	Administrator and Finance – APRODEIN
11/17/2015	Ikalupe, Somoto Community Project Participants (~20 present)	Community Stakeholders
11/17/2015	Harry Quintanilla C.	Regional INAFOR Coordinator - Municipalidad de Somoto
11/18/2015	Juan Baraona	Field Technician - APRODEIN
11/18/2015	Juan Mendes	Field Technician – APRODEIN
11/18/2015	Norman	Monitoring Specialist - APRODEIN

11/18/2015	Eduardo	Monitoring Specialist - APRODEIN
11/18/2015	Marcel	Field Technician – APRODEIN
11/19/2015	El Palmar, San Juan de Limay Community Project Participants (~20 present)	Community Stakeholders
11/19/2015	Randolph	Biodiversity Monitoring Coordinator – APRODEIN
11/19/2015	Eysin Morasan	Delegado Municipal San Juan de Limay OF INAFOR

APPENDIX A: Field Audit Findings

Note: Findings presented in this section are specific to the findings resulting from the field audit as presented in the Draft Audit Report. Any non-conformances or observations identified during the field audit are noted in this section, and specific NCR and OBS tables are included in section 2 of this report for each identified non-conformance and observations. All findings related to audit team review of additional evidence submitted by the Project Proponent following the issuance of the Draft Audit Report by Rainforest Alliance, is included within section 2 of this report.

Principle: **Effective and Transparent Project Governance**

Criteria: Project has established an effective governance structure. Roles and lines of accountability are clear. The project coordinator has necessary core capabilities.

Indicator 1.1.1 **Producers**

Must be small-scale farmers and land-users in developing countries with recognized land tenure or user rights.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

Participants in Taking Root's (TR, a.k.a. Enracine) CommuniTree Carbon Program in western Nicaragua are unanimously small-scale subsistence farmers and cattle ranchers. According to the CIA World Factbook, which the Project Proponent cites in the ComuniTree PD, Nicaragua is the poorest country in Central America. Further, the PP notes that the Municipalities of Somoto and San Juan de Limay (where the project is located) are known to be among the poorest regions of Nicaragua; conversations with FONADEFO in Managua confirmed the Project Proponent's assertion.

The CommuniTree PDD requires that participants must have long-term tenure rights, and in practice Taking Root demands that project participants actually own the land they register with the project. The small, rural, farming communities Ikalupe and El Palmar were visited for the 2015 verification audit. The auditors consulted project participants who each confirmed that not only did they have either a title or "juridica" (document) to their property, but also corroborated TR's assertion that ownership or secure long-term land tenure were requirements for eligibility to participate in the CommuniTree Plan Vivo project.

Taking Root has developed the Smallholder Carbon Project Information Management System (SCPIMS) to track all project participants' profiles, store, monitor, and analyze participants' Plan Vivo data including tree growth and yield, generate certificate sales receipts, and more. The SCPIMS program is an effective tool against double-counting; as a further protective measure it generate records with unique IDs so as to ensure no double-counting occurs. SCPIMS also stores electronic copies of land tenure documents, and examples of these were submitted to the auditors for their review.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 1.1.2 **Producers**

Must have a registered Plan Vivo for their own piece of land or be part of a group with a Plan Vivo for a piece of community-owned or managed land. Producers should not be structurally dependent on permanent hired labor, and should manage their land mainly with their own and their family's labor force.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

As described in Indicator 1.1.1 above, project participants are required (and are cognizant of this requirement) to own the tract of land they register in the CommuniTree Plan Vivo reforestation project. The Project Proponent also acknowledged the alternative arrangement, whereby a participant may enter in to a contractual agreement with the owners of the property (e.g. the participant's parents), allowing them to implement project activities on said land. Project participants are expected to supply their own labor for project related activities, though it is not uncommon for a producer to hire field hands (some of whom are part of the project) to complete tasks—such as weeding or planting—more quickly. APRODEIN field technicians assist producers estimating the cost in man-hours and funds are allocated to each producer to accomplish these tasks. The tasks for which APRODEIN allocates funds are: site cleaning, digging earth, filling up nursery bags, purchasing barbed wire for fencing, putting up fencing; contracts are signed with project participants after the barbed wire is delivered.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
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NCR/OBS	None
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Indicator 1.1.3

Administrative:

Legal and organizational framework with the ability and capacity to aggregate carbon from multiple land-owners and transact to purchasers, and monitor progress across all project operations. This must include:

- A legal entity (project coordinator) able to enter into sale agreements with multiple producers or producer groups for carbon services;
- Standard sale agreement templates for the provision of carbon services;
- Transparent and audited financial accounts able to the secure receipt, holding and disbursement of payments to producers;
- All necessary legal permissions to carry out the intended activities;
- Mechanisms for participants to discuss issues associated with the design and running of the project.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

The Project Proponent has, in the ComuniTree PD 2014 Section 10, provided a figure diagramming the project’s organizational framework. The principal actors in the project are Taking Root, APRODEIN, project participants, the local Ministry of the Environment (MARENA), Community Environmental Commissions (CPCs?), and the municipal governments of Limay and Somoto. The same figure broadly recognizes each actor’s main responsibilities.

Taking Root is a registered Canadian not for profit corporation. The PP has provided evidence in support of this by submitting three documents (items 5, 6, & 7 in section 3.3 of this report). Additionally, the project has previously been validated, and auditor conversations with government officials in Nicaragua confirmed their belief that the Project Proponent has met all required Nicaraguan laws and regulations in order to carry out the project (this also holds true for APRODEIN).

The Professional Association for Nicaragua’s Integral Development (Asociacion de Profesionales para el Desarrollo Integral de Nicaragua, APRODEIN) is a legal Nicaraguan entity, as pronounced by the Nicaraguan Ministry of the Interior and published in La Gaceta – Diario Oficial. APRODEIN’s board of directors has been certified by the Department of Registration and Control of Associations of the Nicaraguan Ministry of the Interior. APRODEIN’s registration as a Registered taxpayer, as well as the organization’s taxpayer ID card—which were submitted as evidence of legal compliance to the auditors—are valid through 2018.

The Project Proponent has provided the auditors with the standard sale agreement templates and a sample of active agreements. The sale agreement provides identifying information of the participant, the type of PV technical specification implemented by the participant, the land area, and a breakdown of all expected payments by year.

Transparent and audited financial accounts – The multinational accounting and financial consulting firm Ernst and Young audits Taking Root on an annual basis, as evidenced by a December 31st, 2014 report submitted by the project proponent. The PP has also provided an APRODEIN expense report for Trimester 3, 2015.

Mechanisms for participants to discuss issues – The Project Proponent has submitted documentation such as attendance sheets and meeting minutes showing that community consultations have taken place during the design phase of the project. In San Juan de Limay, where the project has been running longest, the most recent ‘consultations’ occurred more than three years ago. There have been trainings in Limay since those last consultations, where participants were presumably able to discuss project-related questions or make comments they had with field technicians and other APRODEIN staff in attendance.

The Project Proponent described to auditors that their work with the participants is largely on an individual/family basis, and that beyond the initial community consultations, orientation meetings, and trainings there are no regularly-scheduled group meetings. The PP asserted that continuing consultations are likewise done with individual participants informally with APRODEIN field technicians as initiated by the participant. During the 2015 verification field audit, the auditors met with community members who were given the opportunity to voice their opinion about the project as well as ask questions of the auditors. Participants were generally satisfied with the project, yet some producers proceeded to make requests that were outside of the scope of the project’s activities. It appeared that these requests were born out of a confusion of APRODEIN’s purpose and capabilities within the context of the project. OBS 01/15

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
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NCR/OBS	OBS 01/15
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Indicator 1.1.4 Technical:
 Able to assist producers in planning and implementing productive, sustainable and economically viable forestry and agroforestry systems, and provide support for silvicultural and other management operations.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

Taking Root is headed by Kahlil Baker who has more than a decade of professional forestry experience. APRODEIN employees responsible for project design and field implementation each have a background in natural resources, and in some cases, come from participating communities. Community members reported to the 2015 verification auditors that they received regular visits by APRODEIN technicians. The field technicians were described as knowledgeable by project participants. The auditors met with a group of APRODEIN field technicians and monitoring specialists who were able to describe in detail the technical specifications, steps to implement each tech spec, and generally outline their roles and responsibilities.

Communities have been trained by APRODEIN staff, principally by the APRODEIN field technicians. The auditors visited a sample of more than ten Plan Vivos, where they observed each type of technical specification: mixed species forest plantation (MSFP—the predominate technical specification in the CommuniTree project), silvopastoral, and barrier plantings (e.g. live fences). The auditors witnessed these Plan Vivos in various stages of implementation, from the recently planted trees in participating Somoto communities to the sapling-pole stage trees found in participating Limay communities.

The Project Proponent made it known to the auditors during the 2015 verification audit that it is actively considering hiring a professional forester to carry out trainings and oversee project participants' plantation management and silvicultural activities as the trees mature. The Project Proponent has demonstrated its ability to assist communities in planning and implementing the forestry and agroforestry systems as described in the project's technical specifications.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
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NCR/OBS	None
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Indicator 1.1.5 Social:
 Able to select appropriate target groups, inform groups about the Plan Vivo System and the nature of carbon and ecosystem services and establish effective participatory relationships with producers

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

The ComuniTree PD characterizes target project participants as having “long-term tenure rights to economically underutilized land that is in need of reforestation,” have reasonable access to infrastructure, and the ability to implement the project without incurring conflict with their subsistence activities. The communities and individuals participating in the project that the auditors visited during the 2015 verification audit met these criteria.

Participating community members were able to describe the technical specifications through which they received scheduled payments. Project participants also demonstrated a basic understanding of ecosystem services, and how Payments for Ecosystem Services function.

As described in the CommuniTree PD, the APRODEIN modus operandi is “campesino a campesino” (farmer to farmer), where activities are demonstrated by qualified field technicians on a given participant's Plan Vivo, and then the participating farmers share their experiences performing the given activity.

The Project Proponent conforms to the standard.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
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NCR/OBS	None
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Indicator 1.1.6 Social:
 Able to establish land-tenure rights through engaging with producers and other relevant organizations

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

As discussed in Indicator 1.1.1 of this report, the Project Proponent utilizes the SCPIMS program database to document each project participant's land tenure, which is established by an officially notarized statement, all of which had been demonstrated to

the auditors during the visit.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 1.1.7 Social:
Able to consult producers effectively on a sustained basis

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
As noted under Indicator 1.1.3 above, the Project Proponent executes initial consultations with potential participants, then orients and trains the newly-integrated smallholders. There are also periodic trainings for participants, such as pruning trees at various stages of their growth. APRODEIN field technicians also regularly visit project participants to monitor progress, assist in tasks, troubleshoot issues, and consult with project participants. See also OBS 01/15.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	OBS 01/15		

Indicator 1.1.8 Reporting:
Projects must on an annual basis, according to the reporting schedule agreed with the Plan Vivo Foundation:

- Accurately report progress, achievements and problems experienced;
- Transparently report sales figures and demonstrate resource allocation in the interest of target groups.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The Project Proponent has submitted annual reports detailing progress, achievements, challenges, and sales figures to the Plan Vivo Foundation since 2010. These reports are available on the PVF website.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Principle: Carbon Benefits

Criteria: Carbon benefits are calculated using recognized carbon accounting methodologies and conservative estimates of carbon uptake/storage that take into account risks of leakage and reversibility.

Indicator 2.1.1 Carbon benefits are measured against a clear and credible carbon baseline.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The project's baseline scenario is the continuation of the agricultural-pasture-fallow cycle currently in place. Fallow periods have grown shorter owing to increasing populations, shorter crop rotations, and decreasing soil fertility.			
The Project Proponent estimated baseline carbon stocks for the CommuniTree Carbon Program in 2011 for San Juan de Limay, and 2014 for Somoto. As site selection does not differ for implementing any of the technical specifications, the methodologies used to estimate baseline carbon stocks and results are the same for all three specifications. A combination of remote sensing, field work (the biomass survey), and data processing were performed to estimate baseline carbon stocks. The project accounts for aboveground woody biomass and belowground woody biomass; coarse woody debris is excluded from baseline estimations, as the project expects it is likely to be negligible. The result is that there is close to zero woody biomass in agricultural and pasture lands, and between 5.34 and 7.46 tCO ₂ e per hectare under the 'bushy vegetation' (fallow) cover class in Somoto and San Juan de Limay, respectively.			
Tree growth and yield is quantified by species, using allometric equations developed in peer reviewed studies (as well as IPCC data) for some species and research conducted by the Project Proponent to develop site specific formulas for lesser-researched studies. The proper assortment of species is then input in to excel models for each technical specification. Each model accounts for mortality and clearly models the growth and yield of a hectare of the species in question for the technical specification it is modelling. The Project Proponent described the excel carbon modelling to the auditors at length and detail during the 2015 verification audit. The three models, one for each technical specification, are clear, and logically estimate tons of CO ₂ equivalents for the duration of the project lifetime. The project began in 2010 and has calculated a GHG removal of 10,956 tCO ₂ e over the course of the 2010-2014 monitoring period. The project has a lifetime of 50 years, and estimates it will remove 301,887 tCO ₂ e over the course of the project lifetime on the 866 planted hectare equivalents. Though the net per-			

hectare average carbon benefit varies depending on the given technical specification, each land use system under the project expects to reach the net reduction/removal between the 15th and 16th growing years after planting.

The auditors visited more than ten Plan Vivos during the 2015 verification audit and took samples. The auditors observed that the correct species were used in the relevant technical specification, spacing between trees was both adequate and as planned, and that steps had been taken to protect the planted trees—barbed wire had been given by the PP to the producers to keep out livestock and other potentially damaging agents, and the PP stipulated to producers (who later confirmed) that they were strongly advised against allowing livestock to enter reforested parcels before trees were of a size where trampling and animal browsing posed threats to their survival. Some plots visited in San Juan de Limay (the older of the two project areas) have begun their pruning regime. Parcels in both project areas also evidenced weeding by project participants. The Project Proponent has a clear schedule of activities, assigning tasks such as weeding to project participants on given years and specific times of the year. However, some parcels visited were less well-maintained, with early seral vegetation beginning to crowd the planted trees. OBS 02/15

The Project Proponent has demonstrated conformance to the standard.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	OBS 02/15		

- Indicator 2.1.2 Carbon benefits are **additional**, i.e. the project and activities supported by the project could not have happened were it not for the availability of carbon finance. Specifically, this means demonstrating, as a minimum:
- The project does not owe its existence to legislative decrees or to commercial land-use initiatives likely to have been economically viable in their own right without payments for ecosystem services; and
 - In the absence of project development funding and carbon finance, financial, social, cultural, technical, ecological or institutional barriers would have prevented the project activity.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

Additionality is tested in each of the project's technical specification documents. The PP conducts a barrier analysis that adequately demonstrates an inherent lack of technical expertise, funding, similar programs in the region off which to model itself, institutional support, nor are any of the tech specs common practice.

Auditor conversations with the government agencies visited during the 2015 verification audit confirmed that Taking Root/APRODEIN's reforestation project is unique in Nicaragua. Government officials confirmed that neither the project proponent nor its participants are obliged by law to undertake the CommuniTree activities. The 2015 verification audit also revealed that project participants were actively learning throughout the project implementation process, as there was insufficient local expertise to design and run such a project in absence of Taking Root and APRODEIN. Community members also confirmed lack of internal funding for these activities, nor did they have ample enough institutional support from government agencies.

Further, the Project Proponent is both implementing and exploring the possible inclusion of a host of other activities, such as a small saw mill, a wood shop specializing in small diameter wood products, and 'green charcoal'.

The project demonstrates conformance; project activities are additional.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

- Indicator 2.1.3 **Permanence:** Potential risks to permanence of carbon stocks are identified in project technical specifications and effective mitigation measures implemented into project design, management and reporting procedures.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

Risks to permanence and their associated mitigation strategies are mainly identified in the PD. Risks include land claim disputes, project inviable in the long term due to lack of resources/skills/expertise, and pests and diseases. Mitigation strategies include collaboration with the municipality to ensure clear land tenure, careful selection of program staff and training, and careful selection of tree species. The auditors are able to confirm that the Project Proponent has developed and maintained relationships with local government officials, staff appear to have received sufficient training to guide project activities as needed, and that the species selection has resulted in native, robust tree species. Also, the remainder of identified risks have been adequately mitigated. Lastly, Plan Vivo requires a minimum 10% risk buffer; the CommuniTree Carbon Program has established a 15% risk buffer.

The Project Proponent is aware of a pest that has caused limited damage to planted trees. The auditors were shown a tree in a one-year-old silvopastoral parcel whose roots had been burrowed, possibly by a wood-boring beetle, damaging the individual such that it died. The Project Proponent stated that they had not researched this pest much, and supposed that such incidences would be recorded for tracking purposes. OBS 03/15

In 2014 The CommuniTree Carbon Program and Nicaragua as a whole suffered an uncharacteristically extreme drought. Subsequently, a delayed and irregular rainy season demanded supplemental activities to protect seedlings in nurseries and those that had been recently planted. Nevertheless, that year's seasonal unpredictability resulted in high tree mortality in the more recently planted cohorts. As per project SOP, the project areas that experienced tree mortality in 2014 were re-planted during the 2015 planting year, only to undergo a second, similarly severe drought. In sum, the two years of drought impacted 37.09 hectare equivalents of land enrolled in the CommuniTree Carbon Program Project such that the landowners decided not to replant.

To address the issue of stakeholders dropping out of the project, the Project Proponent will be drawing from the project's risk buffer rather than compensating for the losses by replanting a third time. The risk buffer that the Project Proponent has established through the Plan Vivo Foundation that deducts 15% of saleable offsets to enter a pool with all other Plan Vivo projects across the world to insure against potential "force majeure" events such as severe drought. To date, Taking Root had not needed to utilize the risk buffer as the PP was able to replace its losses by replanting. Thus, in 2015 Taking Root had to draw from the risk buffer for 37.09 hectares of land or 10,991 tCO2e worth of carbon credits. This is discussed at length in the 2015 CommuniTree Carbon Program Annual Report to Plan Vivo, and the Plan Vivo Foundation has approved this course of action.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	OBS 03/15		

Indicator 2.1.4

Permanence:

Producers enter into legal sale agreements with the project coordinator agreeing to maintain activities, comply with the monitoring, implement management requirements and re-plant trees felled or lost.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

As discussed under Indicator 1.1.3 of this report, the Project Proponent has provided the auditors with the standard sale agreement templates and a sample of active agreements. The sale agreement provides identifying information of the participant, the type of PV technical specification implemented by the participant and the entailing agreed-upon activities to implement the technical specifications, the land area, and a breakdown of all expected payments by year.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 2.1.5

Permanence:

As a minimum, a 10% risk buffer is deducted from the saleable carbon of each producer, where the level of buffer is recommended in the technical specifications according to the level of risk identified, and subsequently reviewed annually following annual reporting.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015

The project implements a 15% risk buffer, which is automatically calculated and deducted in SCPIMS for each Plan Vivo prior to generating PP sale agreements with project participants.

Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 2.1.6 Potential sources of **leakage** have been identified and effective mitigation measures implemented.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The principal potential sources of leakage identified by the Project Proponent are displacement of agricultural activity/pastureland, increased harvesting to meet demand for timber/posts, and increased fuelwood collection. The auditors observed, as described in the PD and technical specifications, that the PP mitigates these potential sources of leakage by providing technical support for the development of each Plan Vivo, monitoring with occasional remote sensing, incorporation of species with leaves that contain high nutritional value, and implementing plantations that over time provide a sustainable source of timber and posts.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 2.1.7 Carbon sales are **traceable** and recorded in the database.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The Project Proponent utilizes the SCPIMS program it developed to record carbon sales in its database. Please see Indicator 1.1.1 of this report for more on SCPIMS.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 2.1.8 Project has an effective process for **monitoring** the continued delivery of the ecosystem services, where:

- Monitoring is carried out against **targets** specified in technical specifications;
- Monitoring is carried out accurately using **indicators** specified in technical specifications;
- Monitoring is accurately documented and **reported** to the entity responsible for disbursing payments to producers;
- **Corrective actions** are prescribed and recorded where targets are not met, and followed up in subsequent monitoring.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The CommuniTree PD Section E.1 has a table showing indicators and measurements to be made when conducting monitoring activities. Each project participant's Plan Vivo has systematically distributed 7m radius permanent sampling plots that are used for monitoring purposes. During the 2015 verification audit field technicians were able to demonstrate the monitoring procedure. Variables measured are height, DBH, point of measurement, # of trees, species, location of tree, condition dead/alive, requires clearing, requires pruning, and the crown diameter. These metrics serve as the basis for the distribution of payments. Data is entered in to the SCPIMS database which, given a desired operation, may automatically generate reports based on monitoring data as well as calculate payments and generate receipts for smallholders. For each indicator there is a target and a threshold to meet. Producers that meet the threshold will earn 50% of the specified payment; producers that meet the target will earn 100% of the specified payment. Producers that do not meet the target are informed of what they need to do in order to comply with the project and, once compliance is demonstrated, receive the remainder of the specified payment on the following annual payment date.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 2.1.9 Producers **draw up Plan Vivos** as part of a voluntary and participatory process that ensures proposed land-use activities:

- Are clear, appropriate and consistent with approved technical specifications for the project;
- Will not cause producers' overall agricultural production or revenue potential to become unsustainable or unviable.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
Taking Root submitted a sample of Plan Vivo maps drawn by project participants. Each of the PV maps had identifying information about the producer, and illustrated basic characteristics about the participants' properties, including the location and type of their chosen PV technical specification. The PDD and each of the technical specifications (Documents 1-4) contain a brief section outlining how producers' overall agricultural production will not become unsustainable as a result of project			

activities.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS			

Principle: **Ecosystem benefits**

Indicator 3.1.1 Planting activities are restricted to **native and naturalised species**.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The project uses a selection of <i>Caesalpinia velutina</i> , <i>Swietenia humilis</i> , <i>Bombacopsis quinata</i> , <i>Gliricidia sepium</i> , <i>Albizia saman</i> tree species for the technical specifications. Based on internet research, the auditors confirmed that these species are indeed native to Nicaragua.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

- Indicator 3.1.2 Naturalized (i.e. non-invasive) species are eligible only where they can be shown to have compelling livelihood benefits and:
- Producers have clearly expressed a wish to use this species;
 - The areas involve are not in immediate proximity to conservation areas or likely to have any significant negative effect on biodiversity;
 - The activity is still additional i.e. the producers in the area are not doing this activity or able to do this activity without the intervention and support of the project;
 - The activity will have no harmful effects on the water-table.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
Not applicable, as the project utilizes only native species.			
Conformance	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
NCR/OBS	None		

Indicator 3.1.3 Wider **ecological impacts** have been identified and considered expressly including impacts on local and regional biodiversity and impacts on watersheds.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The PP has considered the ecological impacts associated with the project activities. In general, by increasing native tree species forest cover the PP expects to increase existing habitat, improve groundwater retention, reduce soil erosion and improve soil fertility, and improve air quality. The project has a dedicated biodiversity monitoring specialist who has created laminated sheets of common and rare species for the dry tropical forests of western Nicaragua. The specialist has developed a tracking spreadsheet to take note of the location and quantity of fauna sightings.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Principle: **Livelihood Benefits**

Indicator 4.1.1 Project has undergone a **producer/community-led planning process** aimed at identifying and defining sustainable land-use activities that serve the community's needs and priorities.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
At the project's inception community members and APRODEIN conducted a participatory threat analysis to determine the root causes of deforestation and forest degradation in the region. Together they identified suitable land-use practices to address the causes of deforestation and improve their livelihoods. The Project Proponent has submitted meeting minutes from this participatory exercise from 2009, as well as documents from other early consultations and trainings. In addition, project participants confirmed to the auditors that they were asked what they wanted from the project during the initial planning phases. The end result are the three technical specifications implemented in the CommuniTree Carbon Program.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 4.1.2 Mechanisms are in place for continued training of producers and participation by producers in project development.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
There are periodic trainings for participants, such as pruning trees at various stages of their growth. The Project Proponent submitted electronic documents containing training minutes and attendance lists of producer trainings. The auditors confirmed with project participants in San Juan de Limay that they had recently been trained how to prune their trees. In Somoto, where the project is younger, participants are receiving initial trainings such as planting and tree maintenance, and how to construct and care for tree nurseries. The project participant informed the auditors that they are actively seeking to hire a professional forester and that this person would likely participate in and lead producer trainings, especially as the project approaches its first harvests.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

Indicator 4.1.3 Project has procedures for entering into **sale agreements** with producers based on saleable carbon from Plan Vivos, where:

- Producers have recognized carbon ownership via tenure or land-use rights;
- Agreements specify quantity, price, buyer, payment conditions, risk buffer, and monitoring milestones;
- An equitable system is in place to determine the share of the total price which is allocated to the producer;
- Producers enter into sale agreements voluntarily.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
As discussed under Indicator 1.1.3 above, the Project Proponent has provided the auditors with the standard sale agreement templates and a sample of active agreements. The sale agreement provides identifying information of the participant, the type of PV technical specification implemented by the participant, the land area, and a breakdown of all expected payments by year. SCPIMS maintains copies of each project participant's notarized land tenure statements. The sale agreement also specifies quantity of land generating certificates, price per credit, as well as other specifications as mandated by the Plan Vivo Foundation. Producers told the auditors that they were not coerced in any way to enter in to sale agreements.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS			

Indicator 4.1.4 Project has an effective and transparent process for the timely administration and recording of **payments to producers**, where:

- Payments are delivered in full when monitoring is successfully completed against milestones in sale agreements;
- Payments are recorded in the project database to ensure traceability of sales.

Findings from Review on NOVEMBER 16 THROUGH NOVEMBER 19, 2015			
The project's payment structure is simple and clearly laid out in each technical specification under Section 11.3 <i>Basis of Payments</i> . Payments are distributed to producers annually pending their compliance with the thresholds and targets.			
Taking Root has developed the Smallholder Carbon Project Information Management System (SCPIMS) to track all project participants' profiles, store, monitor, and analyze participants' Plan Vivo data including tree growth and yield, generate certificate sales receipts, and more. The SCPIMS program is an effective tool against double-counting; as a further protective measure it generate records with unique IDs so as to ensure no double-counting occurs.			
APRODEIN has implemented a system to back up their data and documents. Much information that could otherwise potentially be lost were the APRODEIN project offices to suffer a theft, fire, or other mishap are now safely stored digitally in a location other than the main project offices.			
Conformance	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
NCR/OBS	None		

APPENDIX B: Organization Details

Contacts

Primary Contact for Coordination with Rainforest Alliance

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