REQUEST FOR PROPOSALS

Development of Jurisdictional Activity Data and Forest-Cover Benchmark Maps for VCS Avoiding Unplanned Deforestation Projects

November 8, 2023

1   INTRODUCTION

Verra is a global leader helping to tackle the world's most intractable environmental and social challenges. As a mission-driven non-profit organization, Verra is committed to helping reduce greenhouse gas emissions, improve livelihoods, and protect natural resources across the private and public sectors. We support climate action and sustainable development with standards, tools, and programs that credibly, transparently, and robustly assess environmental and social impacts. We also enable funding for sustaining and scaling projects that verifiably deliver these benefits. We work in any arena where we need clear standards, a role for market-based mechanisms, and an opportunity to generate significant environmental and social value.

Verra is issuing this request for proposals (RFP) for the production of jurisdictional activity data (AD) and forest-cover benchmark maps (FCBMs) to be used for developing Verified Carbon Standard (VCS) Avoiding Unplanned Deforestation projects.

Respondents can be firms, governments, civil society organizations, or other stakeholders, but not project proponents.

2   PROJECT BACKGROUND AND OBJECTIVE

Verra will publish the consolidated REDD methodology in late 2023. This methodology will support project baseline construction by allocating jurisdictional deforestation AD to projects in proportion to the relative risk of deforestation in project areas. This work is intended to provide allocated baselines to VCS projects, and does not replace or question government Forest Reference Emission Levels (FRELs). Verra will work to engage with governments, use official data where possible, and share all final data with relevant government agencies.

In this RFP, AD refers to the area deforested (measured in hectares) over a given time. The latest versions of the following documents, available on the Verra website, should be used during proposal development:

- *VM0048 Reducing Emissions from Deforestation and Forest Degradation*

- *VMD0055 Estimation of Emission Reductions from Avoiding Unplanned Deforestation*

As a complement to the consolidated REDD methodology, Verra will release an updated version of *VM0033 Methodology for Tidal Wetland and Seagrass Restoration and Conservation* in 2024. The revised methodology will include procedures for mangrove conservation project activities, which will also use jurisdictional activity data to construct project baselines. As such, several of the jurisdictions covered by this RFP will require mangrove activity data (see Table 1). While this data is beyond the scope of this RFP, data service providers (DSPs) selected for mangrove-containing jurisdictions could be offered additional opportunities for producing mangrove activity data at a later date.

Figure 1 below sets out the key steps to developing jurisdictional deforestation AD and allocating it to project areas (PAs) and leakage belts (LBs). Your proposal must cover all the steps except for Steps 2 and 3 under "Allocate jurisdictional baseline AD for unplanned deforestation to PA and LB." These steps will be addressed later in a separate RFP.

Figure 1: Allocation of jurisdictional deforestation activity data to unplanned deforestation project areas and unplanned deforestation leakage belts.

Estimate areas of unplanned deforestation that took place in the jurisdiction during the HRP

- Step 1: Develop a historical land cover/land cover change dataset for each included activity data category
- Step 2: Calculate the total historical area of each change category
- Step 3: Calculate the uncertainty of estimated historical areas of each change category
- Step 4: Conservatively discount the estimated area of historical unplanned deforestation

Determine the jurisdictional AD for unplanned deforestation

- Calculate start and end dates of the HRP
- Calculate the average annual rate of deforestation over the HRP
- Include discounting factors into the average annual rate of deforestation based on the uncertainty of the estimates of historical deforestation areas

Allocate jurisdictional baseline AD for unplanned deforestation to PA and LB

- Step 1: Construct jurisdictional forest cover benchmark map
- Step 2: Develop a jurisdictional deforestation risk map
- Step 3: Allocate projected AD to risk classes within UDef PA and UDef LB

You can submit proposals for one or more jurisdictions listed in Submissions for additional jurisdictions not included in Table 1 are welcome and will be duly considered. The date of the historical reference period can be +/- one year of the date in the table to allow for imagery availability. The time periods listed in the table below are provisional and are subject to minor changes.

Table 1 below. Submissions for additional jurisdictions not included in Table 1 are welcome and will be duly considered. The date of the historical reference period can be +/- one year of the date in the table to allow for imagery availability. The time periods listed in the table below are provisional and are subject to minor changes.

Table 1: Jurisdictions that require AD and FCBM.

Country	Jurisdiction	Baseline Validity Period	Historical Reference Period
Afghanistan	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Argentina	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Belize*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Benin*	National	Jan 1, 2021 – Dec 31, 2026	Jan 1, 2011 – Dec 31, 2020
Bolivia	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Brazil*	All states except Acre, Amapá, Amazonas, Mato Grosso, Pará, and Rondônia	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Cameroon*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Cote d'Ivoire*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Central African Republic	National	Jan 1, 2021 – Dec 31, 2026	Jan 1, 2011 – Dec 31, 2020
Democratic Republic of Congo*	Rest of the country except Mai Ndombe Province	Jan 1, 2019 – Dec 31, 2024	Jan 1, 2009 – Dec 31, 2018
Dominican Republic*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Ecuador*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023

Country	Jurisdiction	Baseline Validity Period	Historical Reference Period
Ethiopia	National	Jan 1, 2022 – Dec 31, 2027	Jan 1, 2012 – Dec 31, 2021
Gambia*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Ghana*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Guinea*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Guinea Bissau*	National	Jan 1, 2021 – Dec 31, 2026	Jan 1, 2011 – Dec 31, 2020
Guyana*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Honduras*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
India*	Maharashtra, Uttarakhand, Uttar Pradesh, Kerala, Sundarbans, West Bengal, Northeast India	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Indonesia*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Jamaica*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Lao PDR	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Liberia*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Madagascar*	National	Jan 1, 2017 – Dec 31, 2022	Jan 1, 2007 – Dec 31, 2016
Malaysia*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023

Country	Jurisdiction	Baseline Validity Period	Historical Reference Period
Malawi*	National	Jan 1, 2019 – Dec 31, 2024	Jan 1, 2009 – Dec 31, 2018
Mexico*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Mozambique*	National	Jan 1, 2022 – Dec 31, 2027	Jan 1, 2012 – Dec 31, 2021
Myanmar*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Nepal	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Nicaragua*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Nigeria*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Panama*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Papua New Guinea*	National	Jan 1, 2019 – Dec 31, 2024	Jan 1, 2009 – Dec 31, 2018
Paraguay	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Philippines*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Republic of the Congo	Cuvette, Likouala, and Sangha Departments	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Romania	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Senegal*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023

Country	Jurisdiction	Baseline Validity Period	Historical Reference Period
Sierra Leone*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
South Africa*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Timor Leste*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Uganda	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Union of Comoros*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Vietnam*	National	Jan 1, 2024 – Dec 31, 2029	Jan 1, 2014 – Dec 31, 2023
Zimbabwe	National	Jan 1, 2021 – Dec 31, 2026	Jan 1, 2011 – Dec 31, 2020

*Indicates the jurisdiction includes mangroves

3 SCOPE OF WORK

This section outlines steps the successful bidder would complete to develop the necessary data; details on completing the tasks are provided in *VMD0055* Appendices 1 and 2. Task 1 shall be completed prior to the remaining tasks; however, the remaining tasks may be completed in whichever order is most efficient.

TASK 1. Document review and development of standard operating procedures

The DSP shall review Verra's *VM0048* and *VMD0055* in detail to fully understand how the data products will be used. Based on this document review, the DSP shall draft standard operating procedures (SOPs) for area sampling and mapping.

- For developing SOPs, see the FCPF-FAO SOP templates as examples for area estimation (http://www.openmrv.org/home).

- The SOPs that were developed for the first phase of AD collection are to be provided by Verra at the time of contract signing.

- Guidance on sample-based activity data development and remote sensing-based best practices can be found in _Integration of remote-sensing and ground-based observations for estimation of emissions and removals of greenhouse gases in forests: Methods and Guidance Document from the Global Forest Observation Initiative_.

Similarly, the DSP shall review and evaluate supplementary materials received from stakeholders. In consultation with Verra, the DSP must determine how (or if) all or parts of the submitted data will be used in the subsequent analysis. Please refer to _VMD0055_ Section A1.4.3 and Table 18 for guidance on deciding whether the data can be used.

TASK 2. Forest-cover benchmark map

Follow the steps described in _VMD0055_ Section A1.4.3 to develop a jurisdictional FCBM (FCBMj) covering the jurisdictional area, plus a buffer of at least 10 km outside the jurisdiction's boundary (excluding areas outside the national borders and areas mapped as identified exclusions). This will be used for applying the _VT0007 Unplanned Deforestation Allocation Tool (UDef-AT)._

Also consider:

- The FCBM applies a binary classification (forest and non-forest at different points) at three different points in time over the historical reference period. The jurisdictional forest-cover benchmark map has eight transition classes, each representing a unique series of forest and non-forest transitions over two periods.

- There should not be any systematic gaps in the maps (for example, areas with no data).

- For the accuracy assessment, using the data collected for jurisdictional-area sampling could be efficient.

- As stated in _VMD0055_, the FCBMs must meet the following accuracy levels:

  o **Deforestation between the start and end of HRP**: the user's and producer's accuracies must each be 70 percent or greater.

  o **Forest at the end of the HRP:** user's and producer's accuracies must each be greater than 90 percent.

  o Where it is demonstrated that 50 percent or more of the forest area of the jurisdiction has a canopy cover of less than 50 percent, the following accuracy standards may be applied:

- **Deforestation between the start and end of HRP:** the user's and producer's accuracies must each be 60 percent or greater.

- **Forest at the end of the HRP:** user's and producer's accuracies must each be greater than 80 percent.

- For the primary imagery dataset, a spatial resolution of 30 m or finer must be used for all periods.

Follow the steps listed in *VMD0055* Appendix 1 Section A1.4.3 to evaluate the accuracy of a project-scale FCBM (FCBMp). Relate the accuracy evaluation to the end of the historical reference period. As stated in *VMD0055* Appendix 1 Section A1.4.3

TASK 3. Development of Deforestation Activity Data

Follow the steps described in *VMD0055* Appendix 1 Sections A1.4.1 and A1.4.2 to develop Deforestation Activity Data. Also consider:

- Sampling designs may be any design supported by current best practices in sampling-based area estimation: systematic, random, stratified random sampling. Do not include "identified exclusions" areas in the sampling frame. These are defined in Section A1.4.1 of *VMD0055* Appendix 1.

- Use country expertise and local knowledge and leverage ancillary data sources (for example, VHR images, LiDAR) wherever possible.

- Set up the response design in publicly available data collection software, such as the Collect Earth software package (https://openforis.org/tools/collect-earth/).

- The sampling design must anticipate the requirement that the final estimate of the "deforestation" class should have an uncertainty (half-width the 90 percent confidence interval of the estimate of the mean) of no more than ± 10%.

- For the primary imagery dataset, a spatial resolution of 10 m or finer must be used for all periods.

TASK 4. Delineate the areas available and estimate the emission factor for activity shifting areas outside of the leakage belt

Follow Step 1 in *VMD0055* Appendix 2 Section A2.1 to delineate the forest and non-forest land area within the jurisdictional boundaries available for leakage due to geographically mobile actors.

Follow Step 2 in *VMD0055* Appendix 2 Section A2.2 to develop a spatially weighted emission factor for areas outside the leakage belt subject to conversion from activity shifting by migrants. Use area-weighted carbon stocks of all lands in the jurisdiction to approximate this emission factor.

Source a carbon stratification map from peer-reviewed global forest carbon stock maps to conduct a spatial overlay to identify the area of each jurisdictional carbon stratum that falls within the available category. For simplicity, the emission factor will represent the area-weighted carbon stock of available forests in the aboveground and belowground pools.

TASK 5. Third-party expert review of deliverables

Prior to submitting the required deliverables to Verra, the DSP shall engage with a third-party expert, to be designated by Verra, to ensure compliance with agreed-upon standards and specifications. The DSP shall provide the third-party expert with access to all relevant documentation, data, and resources for verification and validation. The DSP shall cooperate fully and provide any requested information during the validation process.

4   DELIVERABLES

DELIVERABLE 1

An inception report documenting the following:

- Materials submitted by stakeholders

- Names of submitting organizations/persons

- Procedure used to evaluate such materials

- Explanations on how the submitted materials are going to be used during FCBM and AD development

DELIVERABLE 2

A report on the Jurisdictional Activity Data and Forest-Cover Benchmark Map together with the following materials:

- Forest-cover benchmark map and supporting materials:

    o a vector file of the jurisdictional boundary and its buffer

    o accuracy assessments results

- o input data layers used to generate the map or platform access, if online tools were used

- Activity data and supporting materials:

    - o SOPs for forest-cover mapping, response design, sampling design, data collection, and data analysis

    - o excluded identified areas (e.g., planned deforestation, planned infrastructure, large-scale natural disturbances)

    - o description of the sampling design

    - o data collected (including stratification layers) and processed — both the raw sample-unit level assessments and any processed results, or calculation sheet used to derive the results

    - o response design implementation (e.g., in Collect Earth or a similar platform)

DELIVERABLE 3

- Map of available land for activity shifting

- Emission factor for leakage from migrant agents

Additional technical requirements, such as preferred formats, metadata standards, data types, map class codes, and submission standards, shall be determined in conjunction with the DSP at contract signing.

Verra's final acceptance of the above-described deliverables is contingent upon a satisfactory third-party expert review indicating that the deliverables have been validated and found to be in good order, meeting the expected standards.

5   CRITERIA FOR EVALUATION

A successful proposal will:

- Demonstrate involvement of the relevant technical and political government ministries (e.g., the REDD+ focal point or the department responsible for the REDD+ national forest monitoring system and/or MRV and/or endorsement by jurisdictional/national REDD office)

- Have a firm work plan, competitive timeline, and budget

- Feature expert staff with prior experience and expertise in:

- o   jurisdictional-level forest-cover mapping

- o   analysis of remote sensing data

- o   sample-based area estimation

- o   local knowledge

- o   familiarity with REDD and the VCS Program

- Involve additional local experts from the jurisdiction in the sampling design, sample plots interpretation, and mapping elements of the proposal

- Describe how you will mitigate potential conflicts of interest from direct or indirect financial interests in the jurisdiction (stakes in or relationships to any project)

- Collaborate with relevant jurisdiction stakeholders (especially jurisdictional governments and authorities) during proposal development and implementation.

6   RESPONSES TO THE RFP

Please ensure you include all of the following in your proposal. You can submit 10 pages per jurisdiction (except experts' CVs).

1) **Your experience** (maximum two pages)

Include the following:

- Brief introduction, experience, and in-house capacity

- Whether you are the sole submitter or would work with other firms

- Conflict of interest disclosure if you (or a member of your association) is affiliated with any project proponents working in the jurisdiction

- Key experts' names, responsibilities, affiliations, and qualifications for the assignment — CVs should be appendices to the proposal

2) **Technical approach** (maximum five pages)

This section must:

- Show that you understand the objectives of the assignment

- Outline your technical approach to the tasks

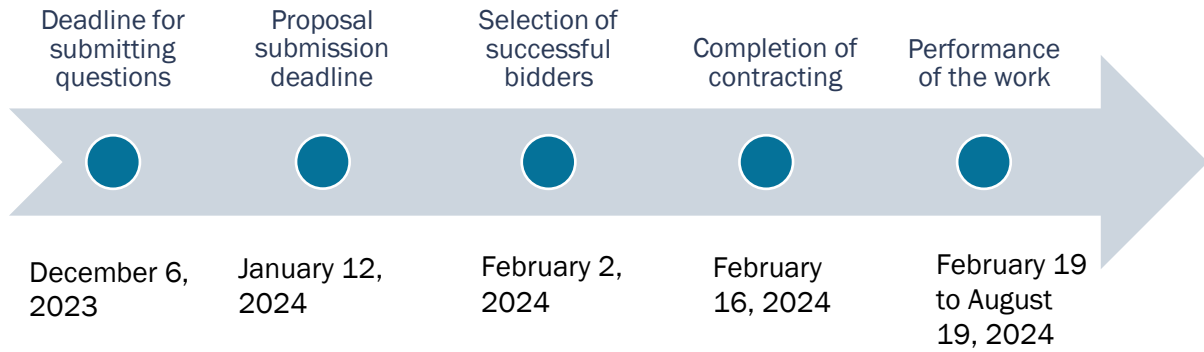- Set out plans for using remote sensing and other ancillary data sources

- Show your team's ability to support the government's plans for REDD+ NFMS/MRV for jurisdictional REDD+ and leverage local expertise

- Outline your access to additional data from the jurisdiction (if any)

3) **Work plan** (maximum two pages)

- Outline a plan to complete the main tasks within the timeframe

- Financial proposal, with rationale for the main budget items

4) **Expectations of Verra** (maximum one page)

Optionally, you are encouraged to submit recommendations for third-party expert reviewers along with your response to the RFP. Note that this is for the purpose of discovery only and is not a required component of the response to the RFP. Additionally, Verra is under no obligation to engage submitted reviewers.

Verra will keep proposals and documents confidential. Should you have any additional questions or require clarifications, we invite you to submit them by December 6, 2023. Please note that all questions received by this specified deadline will be duly considered. The responses to these inquiries will be prepared and shared with all interested parties by December 13, 2023. **Proposals must be submitted by January 12, 2024.** Please submit all questions and proposals to forestcarbon@verra.org.

Selected providers may be asked clarifying questions or invited for further discussions. Terms in this RFP are flexible, subject to mutual agreement between the service provider and Verra. Consultant selection will be finalized by February 2, 2024, with work slated between February 19 and August 19, 2024.

Please see Verra's timeline for the next steps below:

Deadline for submitting questions	Proposal submission deadline	Selection of successful bidders	Completion of contracting	Performance of the work
December 6, 2023	January 12, 2024	February 2, 2024	February 16, 2024	February 19 to August 19, 2024

Legal Nature of RFP

This RFP is an invitation for proposals, and Verra is under no legal obligation to accept any proposal or proceed with the RFP. Verra reserves the right to amend the requirements at any time.