Annual Review Template

Title: Low-carbon Agriculture for avoided deforestation and poverty reduction Phase II (Rural Sustentavel)		
Programme Value £ (full life): 37.42		**Review date: July 2024**
Programme Code: GB-GOV-7-ICF-PO013-LCP2	**Start date:** December 2016	**End date:** April 2026

Summary of Programme Performance

Year	2017	2018	2019	2020	2021	2022	2023
Overall Output Score	No annual review	No annual review	B	A	**A**	A	B
Risk Rating	Moderate	Moderate	Moderate	Major	**Major**	Major	Major

DevTracker Link to Business Case:	https://devtracker.fcdo.gov.uk/programme/GB-GOV-7-GB-GOV-7-ICF-PO013-LCP2/summary
DevTracker Link to results framework:	https://devtracker.fcdo.gov.uk/programme/GB-GOV-7-GB-GOV-7-ICF-PO013-LCP2/summary

A. SUMMARY AND OVERVIEW [1-1 ½ pages]

This is the fifth Annual Review (AR) of the £37.42 million Defra-funded International Climate Finance (ICF) programme **"Low-carbon Agriculture for avoided deforestation and poverty reduction Phase II"** *("LCA Phase II")* in Brazil**,** or "*Rural Sustentavel"* to use its Brazilian name. This is the second phase of UK investment into Rural Sustentavel, with Phase I (£24.9 million) running between 2013 and 2019. This AR was conducted by Defra's International Sustainable Agriculture team and covers activities carried out by the programme between 1 January 2023 and 31 December 2023.

A1. Description of programme [1-2 paragraphs]

Rural Sustentável aims to promote low-carbon agriculture (LCA) on small and medium-scale farms to reduce greenhouse gas (GHG) emissions through avoided deforestation, enhance producers' income and quality of life, increase the adoption of sustainable practices, and foster policy replications in Brazil and abroad.

To achieve these objectives, the programme delivers the following activities:

- *Training for Local Producers*: Capacity-building initiatives include online introductory and advanced courses, as well as funding for master's degrees, to equip producers with the skills needed to implement LCA technologies.
- *Technical Assistance for Local Producers*: Support is provided to help farmers transition to low-carbon production systems, ensuring a smooth and sustainable shift in their agricultural practices.
- *Technical Assistance for Farmer Organisations*: This assistance focuses on optimising collective benefits and strengthening LCA value chains, enhancing the overall effectiveness and sustainability of these practices.
- *Capacity Building for the General Public and Public Sector Professionals*: Awareness campaigns and training sessions to educate the public and government professionals about the critical role LCA plays in mitigating GHG emissions.
- *Policy Engagement:* Engagement with stakeholders and officials to stimulate the development of more policies that support sustainable and productive agriculture.

The programme operates through three distinct projects in separate Brazilian biomes: PRS Amazon, PRS Cerrado, and PRS Caatinga. Each project has its own budget, implementing agency, timelines,

and activities, as depicted in Figure 1. Despite their differences, all three projects share a common theory of change: by providing small- and medium-scale farmers and landowners with alternative methods of production and income generation, the rate of deforestation can be significantly reduced.

Figure 1: Description of the three biomes where programme activities occur.

Biome name	Project Completion	Description	Implementing agency	Key components
Cerrado (£17.8m)	2026	Tropical savanna	The Brazilian Institute of Development and Sustainability (IABS)	1. Strengthening local capacities in low-carbon agriculture 2. Promotion of low-carbon technologies and practices 3. Development of value chains and access to markets
Caatinga (£4m)	2024	Dry tropical forest	The Brazilian Foundation for Sustainable Development (FBDS)	1. Knowledge generation of the Caatinga biome 2. Promoting low-carbon sustainable productive arrangements 3. Creation of a sustainable legacy in the Caatinga
Amazon (£7.5m)	2026	Tropical rainforest	The Brazilian Institute of Development and Sustainability (IABS)	1. Developing sustainable business models 2. Market development 3. Knowledge sharing

A2. Summary supporting narrative for the overall score in this review [1-2 paragraphs]

The overall score for the 2023 annual review is a B. Whilst PRS Cerrado mostly exceeded or met expectations, PRS Amazon and PRS Caatinga have not reported data across several Output Indicators due to the postponement of activities and a delay in reporting, respectively. For PRS Amazon, activities have been moved to subsequent years following the replanning due to disruptions caused by Covid-19 in the project's initial year. PRS Caatinga on the other hand is due to report 2023 data in the final project report once closed in 2024. There are also several Output Indicators which have not been reported against because there is no formally agreed methodology for monitoring in place. Whilst these issues are being addressed in 2024 (replanned activities, data due in final project report, and monitoring methodologies established), without annual data in the reporting year 2023, we must conclude a major risk to the progress of implemented activities and the impacts these have on the programme's ability to achieve its objectives.

A3. Major lessons and recommendations for the year ahead [1/2 page]

The following lessons were identified during the reporting period:

- Log frame: Towards the end of 2023, Defra worked with the Inter-American Development Bank (IDB) to review several Output Indicators. During this process, several other issues have been highlighted within the log frame including: mixed reporting methods; undefined indicators; progress only being reported at the end of the project instead of annually; and outputs without formally agreed monitoring practices. We recommend that the review is fully concluded with updates implemented in a revised log frame by the end of 2024, including new Output Indicator definitions, descriptions and monitoring methodologies to address these issues. More details on individual Indicator recommendations are captured throughout this AR.

- Theory of Change: As part of the programme's due diligence and considering the reductions of PRS Cerrado targets in 2023, as fully detailed in the 2022 Annual Review, a review of the programme's Theory of Change is recommended to assess and redefine the transformational/long-term/short term objectives of Rural Sustentavel. This should be completed by the end of Q3 2024.

B: THEORY OF CHANGE AND PROGRESS TOWARDS OUTCOMES
[1-2 pages]

B1. Summarise the programme's theory of change, including any changes to outcome and impact indicators from the original business case. [1/2 page]

At the end of 2023, following the reduction of targets earlier in the year, recommendations from the 2022 AR, and a lack of evidence supporting the programme's ability to deliver certain long-term changes, we decided to commission a review of the Theory of Change (ToC) which would begin in 2024 and will be completed by Q3 2024 .

In the original design, as seen in Annex A, it was assumed that the long-term impact of the programme would lead to policy replications in Brazil and internationally. To support this, the programme conducts policy engagement and holds workshops to promote policy dialogue. Whilst these activities have increased awareness among participants, and in the case of domestic policy engagement been useful at unlocking support for programme implementation at a municipality level, there is a lack of evidence that activities can lead to the long-term change described.

Whilst there is evidence that programme activities can positively improve the lives of the beneficiaries involved i.e. multiplying units that have adopted LCA practices, there is less evidence at this stage to suggest that programme activities can deliver transformational change across the sector. The Caatinga project for example, which has now ended, has been transformational with the research and development conducted, as exampled by the Federal University of Vale do São Francisco announcing it will continue its master's course without the project support. However, for the farmers relying on activities such as technical assistance, whilst it is positive that there are more technical agents available through the project, many farmers cannot afford or access the quality assistance needed, with some relying on the help of people volunteering their time to sustain their LCA production.

The remaining elements of the ToC still hold true; through technical assistance and capacity building, Rural Sustentavel increases the number of farmers using LCA, contributes to climate and biodiversity objectives through avoided deforestation and improves economic resilience of small and medium farms by reducing the pressure to clear standing forest to expand agricultural or grazing activities. Overall, this provides a reduction in GHG emissions whilst improving the quality of life for farmers and farm businesses.

B2. Describe where the programme is on/off track to contribute to the expected outcomes and impact. What action is planned in the year ahead? [1/2 page]

The no-cost extension for PRS Cerrado, which was approved by Defra in September 2023, had not yet been approved by IDB by the end of the year and therefore could not be implemented. This was due to more information being requested to the executing agency by IDB. To progress this in 2024, Defra are working with all partners to ensure IDB can gain all the required information in a timely manner and submit the proposal to their approval board. There is a risk that delay will limit the chances of LCA adoption because the rainy season in the Cerrado biome begins in October/November, with the most optimal time to start the technical assistance activities being in August/September.

For most of the Outcomes, the programme has been designed to report data upon final completion. This presents a risk in our ability to monitor progress effectively and determine the final impact accurately. To address these issues in 2024 and as mentioned in B1 we are currently updating the theory of change, however we are also conducting a full log-frame and evaluation plan review. The purpose of this is to revise the log frame to ensure activities can be reported on an annual basis, provide accurate indication that outcomes can be achieved, and that the activities themselves are effective during implementation. Each of the three projects has its own evaluation plan, which will contribute to each project's final evaluation which will be in 2024 for PRS Caatinga and 2026 for both PRS Amazon and PRS Cerrado.

For example, Outcome 6 (policy replications domestically and internationally) which monitors evidence of programmes/policies using lessons from Rural Sustentavel does not have a sufficient plan in place to track success. This is not necessarily an indication of the programme being off track, as it is envisaged that policy replications will be based on programme lessons learned, which will

naturally occur towards the end. However, if we do not agree a strategic plan for programme activities to consider and deliver against these indicators, then there is a risk that issues are not identified in time to mitigation in place. We have agreed with IDB to hold a workshop in Q3 2024 along with the Ministry of Agriculture, Livestock and Food Supply (MAPA) to identify and design a strategic plan for delivery.

B3. Justify whether the programme should continue, based on its own merits and in the context of the wider portfolio [1 paragraph]

The programme is nearing completion in 2026 and because of the design, many of the implementation activities and monitoring to observe impacts are due to take place in this final stage. A large focus of the programme so far has been identifying beneficiaries, convincing them of the advantages of LCA, training them and developing an enabling environment for implementation (access to credit, TA, and markets). Now that this has been achieved it is important to support the implementation of LCA on-farm, which is limited to the rainy seasons, to deliver the objectives of the programme.

Despite the reductions in targets (both in 2022 and 2023) across the programme, MAPA have confirmed that the programme is still extremely important for the implementation of their ABC+ Plan (Brazilian Low Carbon Agriculture Plan). This is because PRS programme activities align to three strategic objectives of the ABC+ Plan: technical assistance, capacity building and research & development.

A revised cost-benefit analysis has been undertaken which indicates that even with reductions in the original targets, benefits are likely to significantly outweigh costs if delivered, with a benefit cost ratio (BCR) of 35, driven largely by the value of reduced greenhouse gas emissions. Even when applying the government's low carbon valuations, an estimated BCR of 18 is incurred. While these benefits are uncertain and dependent on the delivery of the programme and achievement of targets, the scale of the potential benefits and achievements to date adds confidence that Rural Sustentavel will deliver positive value-for-money. This is discussed further in Section E.

C. DETAILED OUTPUT SCORING [aim for 1 page per output]

Output Title	Strengthened capacity of farmers, technical agents and stakeholders in low carbon agriculture		
Output number:	1	Output Score:	**B**
Impact weighting (%):	25	Weighting revised since last AR?	No

Indicator(s)	Milestone(s) for this review	Progress
1.1a Number of farmers trained on low carbon agriculture	Cerrado: 2,000 Caatinga: 144 Amazon: 800 **Total: 2944**	Cerrado: 2,420 Caatinga: 149 Amazon: Postponed **Total: 2,569 – Under Target**
1.1b Number of indigenous people trained on low carbon agriculture	Amazon: 100	Postponed
1.2 Number of technical agents trained on low carbon agriculture	Cerrado: 500 Caatinga: 0 Amazon: 45 Total: 545	Cerrado: 278 Caatinga: 0 Amazon: 27 **Total: 305 – Under target**
1.3 Field days and workshops delivered on low carbon agriculture	Cerrado: 156 Caatinga: 0 Amazon: 85 Total: 241	Cerrado: 228 Caatinga: 148 Amazon: Postponed **Total: 376 - Exceeded**
1.4 Number of young people trained on low carbon agriculture	Cerrado: 2,500	Cerrado: 3,703 - Exceeded

C1. Briefly describe the output's activities and provide supporting narrative for the score. [max 1/2 page]

Across the three projects, 2569 farmers, 305 technical agents and 3703 young people were trained on low carbon agriculture practices in 2023. Whilst it is important to engage young people through the school field days (which was over target), the training of farmers and technical agents are the most crucial groups for delivering change as the direct implementors and beneficiaries of low carbon agriculture. The Cerrado and Caatinga projects both exceeded their targets for farmers trained, whilst the Amazon project has been delayed due to logistical difficulties in reaching communities, originally stemming from the pandemic. Instead of implementing activities in 2023, PRS Amazon began its engagement, with the execution of plan now expected to be implemented in 2024, a year later.

In August of 2023, questionnaires to evaluate the knowledge of LCA among project beneficiaries were distributed in person. This will provide qualitative information on how beneficiaries of the training activities have strengthened their capability in implementing LCA and therefore provide an insight into the effectiveness of the training. By November, 206 new Multiplication Units (MUs) had responded to the first questionnaire (94 percent of target) and 281 old MUs responded to the second (89 percent of target).

C2. Describe any changes to this output during the past year, and any planned changes as a result of this review. [1 paragraph]

After reviewing the log-frame, it was identified that the methodology for monitoring farmers trained involved counting the number of participants to each training activity, which led to some farmers being counted twice if they had attended multiple events. This has been corrected under the supervision of IDB and now only counts the identification number of the participant to ensure that only individuals are monitored.

C3. Progress on recommendations from the previous AR (if completed), lessons learned this year and recommendations for the year ahead [1-2 paragraphs]

In the 2022 Annual Review we recommended a review into the monitoring methods of Output 1 to understand the effectiveness of training activities. The monitoring methodology has been altered, as mentioned in the paragraph above, and we have held several workshops with IDB to discuss monitoring, evaluation and learning (MEL). The programme is currently set up to focus on end of project evaluation

where farmers will complete surveys and technical assistants will undertake knowledge tests. To enhance the monitoring during project implementation, we have discussed two improvements with IDB. Firstly, consider the use of knowledge tests for indirect verification of mid-term achievements prior to the end of the project. This would provide information during the mid-term evaluation, which can be used to learn lessons on the effectiveness of training. Secondly, the implementation of an updated evaluation with Rural Technical Assistance Institutions (ATERS) on the effectiveness of LCA adoption. This would highlight the impact of training on implementation activities. We recommend finalising monitoring and evaluation improvements for Output 1, which provide more regular information on the effectiveness of activities and allow us to create a feedback loop for improvements.

Output Title	Increased agricultural productivity and areas with sustainable land use, through LCA implementation, in already deforested and degraded areas		
Output number:	2	Output Score:	B
Impact weighting (%):	60%	Weighting revised since last AR?	No

Indicator(s)	Milestone(s) for this review	Progress
2.1 Hectares of land brought under sustainable management	Cerrado: N/A Caatinga: N/A	Cerrado: 45,323 Caatinga: 443
2.2 Number of farmers with improved access to rural credit	Caatinga: 80	Caatinga: Not measured yet
2.3 Number of studies assessing the impact of low carbon technology in the environment and supply chains	Caatinga: 1 Amazon: 3	Caatinga: 2 - Exceeded Amazon: 0 - Under

C1. Briefly describe the output's activities and provide supporting narrative for the score. [max 1/2 page]

In 2023, progress towards achieving Output 2 (increased agricultural productivity and expanded sustainable land use through LCA implementation in deforested and degraded areas) was measured by three key indicators.

Indicator 2.1: Neither PRS Cerrado nor PRS Caatinga projects had set targets for 2023, despite ongoing activities. This was due to a miscommunication between the executing agency and the delivery partner. The indicator relies on calculating the total hectares of Demonstration Units (DUs) and MUs involved in the project. However, since some participating farmers had not yet confirmed the extent of their land where LCA practices would be implemented, the executing agency planned to calculate progress for this indicator only in the final project year, after full implementation of LCA practices. To provide a report for 2023, the delivery partner requested the executing agency to calculate the total hectares of DUs and MUs involved in the project, resulting in a progress value being reported without a corresponding target.

Indicator 2.2: In 2023, the only project that was scheduled to be reported on was PRS Caatinga, with the project being in its final implementation year. However, data was unavailable as 2023 progress will be included in the final project evaluation, scheduled for completion by Q4 2024.

Indicator 2.3: PRS Caatinga exceeded its target in 2023, with two studies evaluating natural resources and vegetation cover, assessing the challenges faced by rural producers in adopting sustainable low-carbon technologies, and examined the capacity of local institutions to support farmers in adopting these practices. As PRS Amazon started in 2020, later than the other two projects, Covid-19 severely impacted the early activities which focus on reaching out to and engaging with potential beneficiaries. This necessitated a replan of face-to-face activities, which slowed progress. Nevertheless, in 2023, the initial steps included contracting consultancy services to carry out diagnoses and develop proposals to enhance the certification of sustainable practices and products.

C2. Describe any changes to this output during the past year, and any planned changes as a result of this review. [1 paragraph]

Originally it was planned that progress towards Indicator 2.2 in PRS Cerrado would also be assessed in 2023. However, all credit-related activities were postponed until 2024 as preference was given to emphasising LCA adoption in 2023. The target of 1,000 farmers with improved credit in PRS Cerrado has been re-assigned and added to 2024 targets.

C3. Progress on recommendations from the previous AR (if completed), lessons learned this year and recommendations for the year ahead

There were no recommendations from the previous AR for this output. For Output 2.1, we recommend a log frame review to better understand how we can monitor and evaluate progress towards the

objective of hectares brought under sustainable land management, as the current figure is only an estimation of the area of the DUs and MUs involved with the programme.

Output Title	Market barriers for farmers reduced, through the development of value chains and increased access to markets			
Output number:	3	Output Score:		B
Impact weighting (%):	10%	Weighting revised since last AR?		No

Indicator(s)	Milestone(s) for this review	Progress
3.1 Number of farmers' organisations strengthened through improved capacity and/or benefits	Cerrado: 0	Cerrado: 20 - Exceeded
3.2 Number of low-carbon based productive chains supported	Caatinga: 10	Caatinga: Not measured yet
3.3 Number of new markets accessed	Caatinga: 2 Amazon: 1	Caatinga: Not measured yet Amazon: Not measured yet

C1. Briefly describe the output's activities, and provide supporting narrative for the score. [max 1/2 page]

The activities for this Output seek to provide economic incentives and non-financial support to farmers' organisations to strengthen the development of low-carbon agriculture value chains and promote access to markets. Progress was made in the preparation and analysis of 37 business plans with the participation of the 40 active Socio-Productive Organisations (OSPs).

In 2023, the project completed the implementation of the 20 business plans started in previous years. The purchases of collective goods, deliveries, and transfers to the 20 OSPs were finalised. To strengthen the OSPs' capacities and improve market access, a Strategic Business Plan for Cooperatives and Associations was developed in partnership with the Sustainable Connections Institute (Conexsus). It includes the identification of key investments in the short term, focusing on bottlenecks or demands defined jointly with each of the organisations.

In the process of mobilising and engaging socio-productive organisations (between 2022 and 2023), there was a strong response from cooperatives and associations of small and medium-sized rural producers to the calls for proposals published by the project. This resulted in a higher-than-expected number of farmers organisations strengthened (e.g. increase in sales prices or increase in the number of products marketed through the organisation) in that year. For 3.2, number of low carbon-based productive chains supported (e.g. certification of products, revision of legislation) and 3.3 number of new markets accessed, no data was provided as both are currently designed to only report at the end of project evaluations. This is a risk to the management of the programme as progress cannot be properly monitored during implementation.

C2. Describe any changes to this output during the past year, and any planned changes as a result of this review. [1 paragraph]

Following the 2022 annual review, we have been working with IDB to update and revise the log frame, including the indicators for this Output. As a result of this review, we will be agreeing measurable definitions for the outputs, and new monitoring methodologies.

C3. Progress on recommendations from the previous AR (if completed), lessons learned this year and recommendations for the year ahead [1-2 paragraphs]

We recommend finalising the changes to the log frame indicators. For 3.2 this includes monitoring the activities undertaken (reporting progress on an annual basis to take corrective action if necessary). For 3.3, we recommend finalising a methodology that reports data annually such as measuring access to new commercial partnerships. This will also include a new and agreed definition for what 'new markets' stipulates.

Output Title	Improved partnerships between project stakeholders (e.g. executing agencies, government) and strengthened dialogue on LCA		
Output number:	4	Output Score:	B
Impact weighting (%):	5%	Weighting revised since last AR?	No

Indicator(s)	Milestone(s) for this review	Progress
4.1 Number of workshops organised by Rural Sustentavel to promote policy dialogue	10	15 - Exceeded
4.2 Number of international stakeholders aware of Rural Sustentavel	50	N/A

C1. Briefly describe the output's activities, and provide supporting narrative for the score. [max 1/2 page]

To achieve the output for improved partnerships and strengthened dialogue, activities are currently focussed on increasing awareness and engagement through the delivery of workshops. The number of workshops organised to promote policy dialogue exceeded its target of 10 but no data has been provided for the number of international stakeholders aware of LCA. This is due to the delivery partner being uncertain how to monitor effectively. Without a clear methodology for measuring progress and monitoring on an annual basis, there is a high risk that activities will not be properly targeted and/or we will not be able to review the effectiveness of these activities.

C2. Describe any changes to this output during the past year, and any planned changes as a result of this review. [1 paragraph]

Over the last year we have held meetings with IDB and MAPA to discuss improvements and ambition to the implementation and monitoring of programme activities for this output. Following this review, we will formally agree a new strategic plan, targets and monitoring methodology.

C3. Progress on recommendations from the previous AR (if completed), lessons learned this year and recommendations for the year ahead [1-2 paragraphs]

The primary lesson relates to the paragraphs above; without a clear set of objectives for workshops and engagement activities, and a formalised methodology for monitoring progress, it is difficult to assess whether they are effective at improving partnerships or strengthening dialogue on LCA. There is also no clear plan for how improved partnerships or strengthened dialogue can support the progress of the programme and deliver long-term changes such as policy replications. We recommend finalising a new strategic plan with IDB and MAPA to consider the improvements in previous meetings. This would include: identifying the key stakeholders who should be targeted to achieve policy replications and the most effective forums to engage them (e.g. COP 30), an enhanced monitoring methodology which captures quality assurance of workshops on an annual basis, and a new agreed methodology to understand how engagement activities are impacting programme LCA implementation.

D: RISK [½ to 1 page]

Overview of risk management [1/2 - 1 page]
At the conclusion of this Annual Review, the programme has been assessed with an overall risk rating of **Major**. There are two primary mechanisms in place for monitoring and managing programme risk. The first mechanism is regular reporting from IDB, which includes monthly checkpoint meetings, quarterly reports, and an annual overview report. These reports are essential for tracking project-level progress, identifying risks, and implementing mitigation strategies. The second mechanism is the risk register, which was developed in 2021 as response to a recommendation from the 2019 Annual Review. This comprehensive document provides detailed insights and serves as a critical tool for guiding and monitoring mitigation efforts, particularly in response to significant challenges such as delays caused by COVID-19.

Risks in 2023
The main risks facing the programme during the 2023 reporting period were as follows:
- Resourcing challenges at IDB: In Q3 2023, two of the three IDB staff members assigned to the programme left in quick succession. This severely impacted project delivery and was consequently categorised as a **High** in the risk register.
  - In response, the Defra team have requested IDB to ensure appropriate resource is allocated for managing the Rural Sustentavel programme. This should be completed by Q1 2024.

- Delays/Missed targets due to COVID-19: The identification of project beneficiaries for PRS Amazon was delayed due to the pandemic, causing a delay to the start of project activities. This delay affected the project's reporting figures for 2023, with many of its annual targets being not reported or deferred to future years. This has been categorised as **Very High** in the risk register due to its likelihood and impact.
  - In response, the Defra team have agreed that IDB will provide more information on the programme's operational risks at the regular monthly checkpoint sessions. This should be completed by Q1 2024.

- Log Frame discrepancies: The log frame had a significant number of missing milestones for all three projects in 2023. Part of this issue is caused using methodologies which are not scheduled to provide annual datasets making progress difficult to report in Annual reviews. This has been categorised as **Medium** in the risk register due to its likelihood and impact.
  - In response, the Defra team have requested a workshop with IDB to re-align the log frame to better represent project activities and ensure all outcome/outputs have an agreed methodology. This should be completed by Q2 2024.

- 2023 Revision of PRS Cerrado targets: A second revision of targets for PRS Cerrado in 2023 raised further questions as to whether the project and overall programme is still delivering VfM and to what extent it's likely to deliver the short-term and long-term changes set out in the Theory of Change. This has been categorised as **High** in the risk register due to its likelihood and impact.
  - In response, the Defra team have requested a VfM review to ensure the programme still represents good value for money. This should be completed by Q2 2024.

Gender Equality and Social Inclusion (GESI)
As part of an independent GESI audit in Q4 2023, the programme was assigned a baseline status of being "**GESI unaware**." Although each project included activities focused on gender and inclusion (see "Equity" section below for details), there was insufficient consideration of GESI within the overall implementation and reporting.
  - In response, the Defra team will work alongside colleagues from the ODA hub to develop a GESI Ambition Workplan which outlines the steps needed to achieve "**GESI sensitive**" (confidence that the programming will do no harm and will not exacerbate inequalities) status by 2024 and "**GESI empowering**" (confidence that the programming understands and addresses barriers and supports opportunities for increased equality) by 2025.

Sexual Exploitation, Abuse and Harassment (SEAH)

The IDB's Environmental and Social Policy Framework (ESPF) includes provisions for human rights, labour, community health, and safety. More explicit provisions are included for specific groups including people with disabilities, vulnerable groups, Indigenous Peoples, people of African descent, or other traditional groups, and considers potential risks to workers and communities, including risks associated with pandemics and epidemics. The ESPF is aligned with international best practices on biodiversity protection and conservation and reinforces standing commitments to gender equality, stakeholder engagement, disaster, climate change resilience, minimising GHG emissions, and protecting the region's natural capital. In 2023, there were 0 reported cases of sexual exploitation, abuse and harassment.

Mitigating Fraud

All IDB financed operations adhere to the organisations Environmental and Social Safeguards Policy. In addition, the bank has transparency and accountability mechanisms such as:

- Careful assessments of beneficiaries based on eligibility criteria (compliance with environmental standards and social safeguards).
- Free and informed decision-making based on the ILO 169 Convention on Indigenous and Tribal Peoples.
- IDB's Monitoring cycle (Baseline, Mid-term Evaluation, Final Evaluation) and monitoring through monthly meetings with the executing agency to request documentation and information on the beneficiaries.

In 2023, there were 0 reported cases of fraud.

E: PROGRAMME MANAGEMENT: DELIVERY, COMMERCIAL & FINANCIAL PERFORMANCE [1 ½ - 2 pages]

E2. Assess the VfM of this output compared to the proposition in the Business Case, based on performance over the past year

A VfM assessment identifies whether the costs of the programme are proportional to the benefits achieved in terms of reaching the programme's desired outcomes and objectives derived from the business case. The assessment uses the FCDO's recommended structure which consists of the 5Es approach. These are economy, efficiency, effectiveness, equity and cost-effectiveness and are described below.

> *Economy -* Are we (or our agents) buying inputs of the appropriate quality at the right price?
> *Efficiency -* How well are we (or our agents) converting inputs into outputs? ('Spending well')
> *Effectiveness -* How well are the outputs produced by an intervention having the intended effect? ('Spending wisely')
> *Equity -* How fairly are the benefits distributed? To what extent will we reach marginalised groups? ("spending fairly")
> *Cost-effectiveness -* What is the intervention's ultimate impact on the long-term transformational change, relative to the inputs that our agents or we invest in it?

Economy

In December 2016, Defra contributed four instalments of investments that totalled £30 million, equating to USD 38.57 million to support Rural Sustentavel Phase 2. This is in addition to the USD 9.69 million that was transferred from the Phase 1 operation, meaning that Defra's total investment has been USD 48.26 million over the course of the fund. These funds are disbursed across the Cerrado, Caatinga and Amazon biomes.

The delivery partner IDB are experts in providing financial and technical support to drive progress towards sustainable and inclusive development, with experience dating back to 1959. They have enhanced monitoring of the programme by attending frequent meetings with the two executing agencies and the Ministry of Agriculture.

Compared to 2022, there has been an increase in the amount of disbursed funding across the Caatinga, Cerrado and Amazon biome projects. Out of the USD 31.9 million that has been approved across the five projects, USD 21.4 million has been disbursed, meaning 55% of funds have now been disbursed and are being utilised by the programme to deliver on outputs. This is an increase of USD 8.1 million compared to 2022 and continues to be on track for disbursing the total investment by the end of the programme.

Table 1 - Project funding allocations and disbursement between 2017-2023 (USD)

Project	Total Approved Funding	Disbursed Funding	Percentage Disbursed
MATOPIBA Kick off project[1]	0.2m	0.2m	100%
Caatinga	5.0m	5.0m	100%
Cerrado	23.0m	14.2m	61%
Amazon	9.6m	1.6m	17%
Monitoring and evaluation[2]	1.2m	0.3 m	27%
Total Allocated Funding	**39.1m**	**21.4m**	**55%**

Efficiency

The Caatinga project has now fully disbursed all approved funding, compared to having only disbursed 66% in 2022. Whilst specific outcomes will be discussed below in the effectiveness section, the extra disbursed funding has allowed for further developments across Components 1 and 2 including data collection for monitoring KPIs, completing implementation of the 20 business plans and

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strengthening the marketing of production from Socio Productive Organisations (OSPs) and families. However, as planned in Component 3, the creation of a Caatinga Fund did not occur.

The Cerrado project disbursed $4.8m of investment between 2022 and 2023. This has led to developments across all three components including: 23 students joining the second edition of the master's programme, 512 field days taking place (compared to 272 in 2022 and 12 in 2021), 3159 UM's receiving technical assistance and 27 business plans being approved by the evaluation commission. The nature of both the Caatinga and Cerrado project meant significant delays occurred due to Covid-19, however this year, they have been able to operate as expected.

The Amazon project disbursed an additional USD 1.5 million in 2023, representing 17% of the total allocated funding. The funding for this year has mainly gone towards preparing the preliminary actions such as creating a Terms of Reference for the selection of beneficiaries. **As this project was only approved in late 2021, outputs are expected to arise in late 2024 and 2025.**

The outputs achieved across the three biomes suggest that progress is being made to achieve the programme's overall aims, however with fewer outcomes on track and less robust monitoring, it is difficult to assess efficiency of the programme at this stage.

In 2023, USD 1.5 million worth of income was generated from investment, meaning that the total amount of income generated is now USD 3.1 million, which can be seen in Table 2 below and is to be re-invested into the project. As there has been no administrative expenses in 2023, this means the total fund balance has increased from USD 8.78 million to USD 10.3 million.

Table 2 - LCA Available Resources (USD)

Fund	2017-2022	2023	Total
Total Contributions	48.27m	0m	48.27m
Income from Investment	1.6m	1.5m	3.1m
Administrative Expenses	(2.03m)	(0m)	(2.03m)
Approved Amount	(39.07m)	-	(39.07)
Total Fund Balance	**8.78m**	**10.3m**	**10.3m**

In 2023, it was agreed by DEFRA and the IDB that USD 5.5 million of unallocated funding could be used to increase scope of the Cerrado project, USD 2.6 million contribute to the Amazon project and USD 0.85 million go towards a new operation for Pará, using funds from uncommitted resources. These are expected to be approved in 2024.

Effectiveness

In order to assess the effectiveness of the Rural Sustentavel programme, in the absence of a wide range of outcome indicators, performance against the output indicators is also considered. The table below shows the number of indicators that either exceed or do not meet their 2023 targets.

Table 3- Summary table of programme performance against 2023 indicator targets

	Output Indicators	Outcomes[1]	Total
Number of indicators met or exceeded	3	0	3
Number of indicators not delivered	4	1	5
Total	**7**	**1**	**8**

Table 3 shows that c40% of output indicators met or exceed their 2023 targets. As discussed within the Section C, delays from the Covid-19 pandemic and the Amazon project only being approved in 2021 have slowed the delivery of some outputs. The outputs that exceeded their targets were Output 1.3 (by 56%), Output 1.4 (by 48%) and Output 2.14 (by 81%). All of these outputs indicators

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[1] Only Outcome indicator 2a is due to be reported against in 2023. Whilst other outcomes have targets in place for 2023, data will not be available until the final evaluation reports.

significantly exceed their targets and are mainly derived from the Cerrado project, suggesting that this project in particular utilises its investment in an effective way.

Looking at the indicators that do not meet their targets, they were Outcome 2.a, Output 1.1.a, Output 1.2, Output 2.3 and Output 4.1. Both Output 1.1.a (which looks at the number of farmers trained on low carbon agriculture) and Outcome 2.a (which is the number of people with livelihood benefits protected or improved) were around 10% below their targets and had both seen significant increases from 2021 to 2022. Whilst they did not make progress from 2022, they did make significant progress from 2021, and given they are both fundamental aims of the overall programme, a more accurate representation of these should be derived at the end of the programme. Currently, Output 1.2 (the number of technical agents trained on low carbon agriculture) is 44% below its target, and has decreased from both 2021 and 2022, therefore suggesting that emphasis should be placed across the programme on accelerating progress towards this outcome.

Overall, the indicator targets show mixed results when looking at effectiveness. Outcome indicator 2a (Number of people with livelihood benefits protected or improved) did not deliver on its 2023 target, however, is only 11% off track. Whilst three of the seven output indicators are significantly ahead of target, the rest are below, with several indicators having decreased from 2022. Due to the lack of outcome indicators reported against in 2023, it is not possible to robustly assess how well the outputs are having the intended effects and outcomes. Only the Caatinga project has fully disbursed its investment, further limiting the ability to appraise outcomes at this point. We are working with delivery partners to review indicators with a view to more frequent reporting.

Equity

Each project has a range of initiatives aimed at promoting low carbon agriculture practises by women and marginalised groups. The Cerrado project held 13 Gender and Youth Workshops (one per micro-region) that centred around female protagonism and action in rural areas, looking specifically at the key role women have in promoting sustainable rural development. These workshops had a total of 667 participants in attendance. This assessment recommends that metrics should be created to measure the ratio of women in employment to see how effective the workshops are and if any further steps need to be taken to promote women working in this industry.

Data looking at the number of sustainable livelihoods created or protected in 2023 showed 3,167 women and girls were positively impacted, representing 48% of the total number of people. In addition, looking at the number of farmers involved in the Caatinga project, 2511 were female, accounting for 50% of the total number of farmers. Looking at breakdown of people with improved tenure or access rights (land and sea), 3,704 women benefitted, representing 44% of the total number of people. Whilst this metric is slightly lower than 50%, the figures overall suggest there has been a focus on ensuring the programme supports women in an equitable way.

Supporting Indigenous People and Local Communities was a key part of PRS Amazon's activities in 2023. The project works with direct actions in three states of the Amazon biome. In each of them, it prioritized two value chains: in Amazonas managed pirarucu (a large fish) and brazil nut; In Pará, açaí and cocoa; and in Rondônia, coffee and "round fish", such as Tambaqui. For 2023, the project focused on strengthening working relationships with the 18 socio-productive organisations selected, totalling 873 beneficiary families. These beneficiaries include IPLCs, such as the Paiter Surui. The work centred around developing business plans, which agree how the project will support each socio-productive organisation.

In terms of promoting low carbon technologies across a range of age groups, 40 schools took part in Learning Days which provided opportunities for children to take part in activities such as seed preparation and harvesting. Furthermore, 19 people qualified from the professional master's degree in technologies and management, with a further 23 students enrolled in the second edition of the programme. The programme had over 500 pre-registrations for both editions, showing the programme is wide-reaching and promoted across rural communities.

Whilst improvements are still needed to establish methodologies for reporting and monitoring GESI data, steps taken by the fund including providing Gender and Youth programmes and providing opportunities for different generations of people to get involved in accessing low carbon technologies are encouraging.

Cost-Effectiveness

Targeted carbon savings and ecosystem service benefits linked to avoided deforestation, and carbon savings linked to sustainable agricultural practices have been monetised to estimate the social benefits of Rural Sustentavel. These social benefits have been assessed against the costs of ODA funding to estimate the value-for-money of the scheme.

Where deforestation has been avoided and sustainable agricultural practices have been implemented, it is assumed this is sustained for 4 years. This gives an appraisal period of 2016/17 to 2029/30. There is uncertainty on the additionality of the programme and therefore a conservative 50% additionality rate has been applied. Similarly, a 25% 'leakage rate' is assumed, as per ODA appraisal guidance, to account for displaced deforestation from the programme area, which reduces estimated social benefits of the programme.

Using central estimates of carbon values[2] and data on the value of avoided degradation of forests and grasslands and their associated ecosystem services value[3], cost-benefit analysis suggests that for every £1 of ODA funding spent on the programme, there are £34.50 of social benefits. Using the low and high carbon values, this produces a range of £17.90 to £51.20 of social benefits per £1 of ODA spend, suggesting very high value-for-money.

These estimates should be treated with caution, as they are principally based on target, rather than achieved impacts of the programme. Therefore, this analysis relies on the assumption that Rural Sustentavel will achieve its target impacts. Further, these impacts potentially exclude some achieved and expected carbon saving impacts, due to log frame reporting issues. Value-for-money will be re-assessed when data on achieved impacts is available.

Given uncertainties on the additionality of the programme, and current under delivery of output targets, break-even analysis has been undertaken on the additionality assumption. This explores the required level of additionality for the programme to deliver positive value-for-money (i.e. where discounted benefits are at least equal to discounted costs). Using central carbon values, Rural Sustentavel would require 1.45% additionality to deliver positive value-for-money. As it is unlikely that over 98% of the programme's benefits would have been achieved in the absence of intervention, and output indicators are broadly not more than 98% below targets, this adds confidence that Rural Sustentavel will deliver positive value-for-money.

These should also be considered **partial** benefit cost-ratios. They do not include a wide range of expected programme benefits that have not been possible to monetise, such as potential increased incomes of programme participants. They also do not include potential costs to programme participants.

VfM Summary

Overall, this assessment indicates that the programme currently demonstrates value for money, although may not be maximising its full potential value due to failing to meet output and outcome indicator targets so far.

Improvements can be made in meeting certain outcome and output indicators, in particular Output 1.2 as it was 44% below its target. Having a greater number of technical agents trained on low carbon agriculture is important to meet the overall objectives of the programme and realising the highest value economic benefits of reduced GHG emissions and preservation of valuable ecosystem services. Furthermore, it should be ensured that as projects get closer to completion, progress accelerates and is accurately measured so that the impact of the programme overall can be clearly assessed.

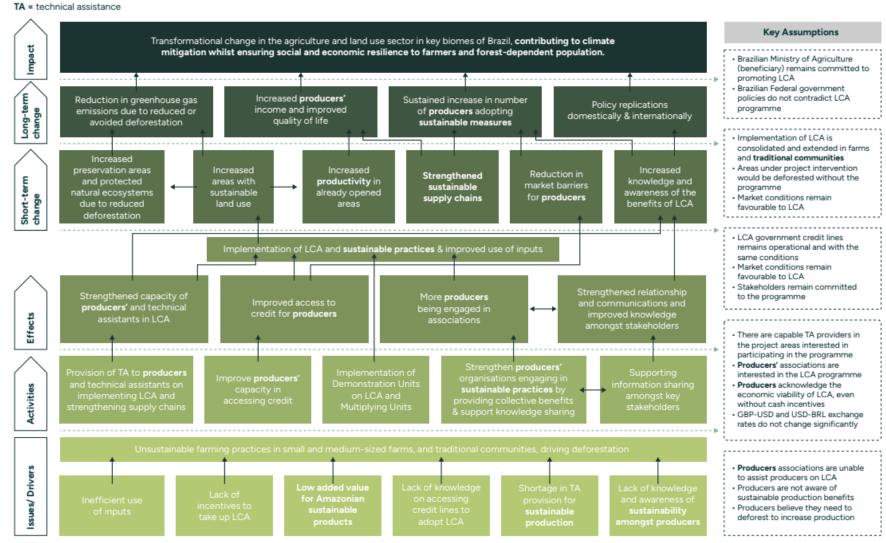| Date of last narrative financial report		Date of last audited annual statement	

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[2] Valuation of greenhouse gas emissions: for policy appraisal and evaluation (2021). Gov.UK.
[3] Ecosystem Services Valuation Database (ESVD). Brander, L.M, et al (2024). Ecosystem Services Valuation Database (ESVD). Foundation for Sustainable Development and Brander Environmental Economics.

Annex A – Theory of Change

Low-Carbon Agriculture (LCA phase II) Theory of Change

LCA = Low-Carbon Agriculture
Producers = Farmers and traditional communities
TA = technical assistance

Impact

Transformational change in the agriculture and land use sector in key biomes of Brazil, **contributing to climate mitigation whilst ensuring social and economic resilience to farmers and forest-dependent population.**

Long-term change

- Reduction in greenhouse gas emissions due to reduced or avoided deforestation
- Increased **producers'** income and improved quality of life
- Sustained increase in number of **producers** adopting **sustainable measures**
- Policy replications domestically & internationally

Short-term change

- Increased preservation areas and protected natural ecosystems due to reduced deforestation
- Increased areas with sustainable land use
- Increased **productivity** in already opened areas
- **Strengthened sustainable supply chains**
- Reduction in market barriers for **producers**
- Increased knowledge and awareness of the benefits of LCA

Implementation of LCA and **sustainable practices** & improved use of inputs

Effects

- Strengthened capacity of **producers'** and technical assistants in LCA
- Improved access to credit for **producers**
- More **producers** being engaged in associations
- Strengthened relationship and communications and improved knowledge amongst stakeholders

Activities

- Provision of TA to **producers** and technical assistants on implementing LCA and strengthening supply chains
- Improve **producers'** capacity in accessing credit
- Implementation of Demonstration Units on LCA and Multiplying Units
- Strengthen **producers'** organisations engaging in **sustainable practices** by providing collective benefits & support knowledge sharing
- Supporting information sharing amongst key stakeholders

Issues/ Drivers

Unsustainable farming practices in small and medium-sized farms, and traditional communities, driving deforestation

- Inefficient use of inputs
- Lack of incentives to take up LCA
- **Low added value for Amazonian sustainable products**
- Lack of knowledge on accessing credit lines to adopt LCA
- Shortage in TA provision for **sustainable production**
- Lack of knowledge and awareness of **sustainability** amongst producers

Key Assumptions

- Brazilian Ministry of Agriculture (beneficiary) remains committed to promoting LCA
- Brazilian Federal government policies do not contradict LCA programme

- Implementation of LCA is consolidated and extended in farms and **traditional communities**
- Areas under project intervention would be deforested without the programme
- Market conditions remain favourable to LCA

- LCA government credit lines remains operational and with the same conditions
- Market conditions remain favourable to LCA
- Stakeholders remain committed to the programme

- There are capable TA providers in the project areas interested in participating in the programme
- **Producers'** associations are interested in the LCA programme
- **Producers** acknowledge the economic viability of LCA, even without cash incentives
- GBP-USD and USD-BRL exchange rates do not change significantly

- **Producers** associations are unable to assist producers on LCA
- Producers are not aware of sustainable production benefits
- Producers believe they need to deforest to increase production

Annex B – Log Frame

Brazi: Low-Carbon Agriculture for Avoided Deforestation and Reduced Poverty Phase II: Cerrado, Caatinga & Amazon/ *Rural Sustentavel* (LCA Phase II) **LOGFRAME**

23/10/2023
* LCA Phase II is carried out in three biomes in Brazil: Cerrado, Caatinga and Amazon. * Delivery partner: Inter-American Development Bank; Executing agencies: IABS (Cerrado and Amazon) and FBDS (Caatinga) * Caatinga project is expected to finish by **2023**. Cerrado project is expected to complete by **February 2026**. Amazon project is expected to complete by **March 2026.** ****Uptaded plans are suggested by executing agencies (IABS and FBDS), aligned with project's current implementation status against what was originally planned.** * The term **"low carbon agriculture"** will be used to refer to the farming and land management practices relating to **crop-livestock-forest integration (ICLF) and restoration of degraded pasture (RDP or RPD in portuguese).** ICLF is a strategy aimed at maximizing positive environmental effects, combining productivity growth with natural resources conservation in the process of intensifying the use of deforested areas in Brazil. It is one of the six low-carbon technologies promoted under the Low-Carbon Agriculture Plan (Plano ABC) of Brazil. ICLF includes four different production systems (variations): (i) integrated crop-livestock or agro-pasture system, which integrates crop and livestock components in rotation, combination or succession in the same area and in a same crop year or for multiple years; (ii) integrated livestock-forest, forest-pasture, or silvopasture system, which integrates livestock and forest components in combination; (iii) integrated crop-forest or agroforestry system, which integrates crop and forest components through the combination of tree species and agricultural (annual or perennial) crops; and (iv) integrated crop-livestock-forest system, which integrates crop, livestock and forest components in rotation, combination or succession in the same area. ***Multiplying Units (MUs)** refers to rural properties that will adopt low-carbon agriculture technologies as a result of support through this programme. ***Demonstration Units (DUs)** refers to rural properties that have already adopted ICLF technology (see definition above) and will be used as a model to other producers to demonstrate the benefits of low-carbon agriculture through field days and training. *The term **"farmers"** will also include producers and extractivists from traditional communities in the Amazon project

Outcome Indicator 1	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
% increase in income for farmers participating in LCA Phase II	* **Measured by executing agencies <u>at the end of the project.</u>**	**Original Plan**	TOTAL									
			Cerrado Orig Plan					15%				15%
			Caatinga Orig Plan					25%				25%
			Amazon Orig Plan							15%		15%
		Executing Agency's Updated Plan	TOTAL									
			Cerrado							15%		15%
			Caatinga					25%				25%
			Amazon							15%		15%
		Achieved	TOTAL									
			Cerrado									
			Caatinga									
			Amazon									
			Source									
			IDB final report and evaluation report.									

Outcome Indicator 2.a	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025		End of Project
Number of people with livelihood benefits protected or improved	* Indicators per year are discrete. * Measured by executing agencies through questionnaires to beneficiaries. ** The achieved numbers reported for 2021 and 2022 does not include family members, as specific data on number of people per household was available by the end of reporting period. * This will include farmers, farmers' family members, technical agents, students and other people who benefit from the programme. This can inlude: improved farm management (financial and resources - water and energy), better market access and increased production and income. * It is estimated that 800 indigenous people out of a total of 2.960 people will have livelihood benefits protected or improved by the	Original Plan	TOTAL	0	0	10,410	12,048	2,708	550	1,895		27,611
			Cerrado Orig Plan			9,110	11,388	2,278				22,776
			Caatinga Orig Plan			1,300	575					1,875
			Amazon Orig Plan				85	430	550	1,895		2,960
		Executing Agency's Updated Plan	TOTAL	0	0	947	12,703	7,388	4,846	5,395		31,279
			Cerrado	0	0	947	8,703	5,500	4,126	3,500		22,776
			Caatinga	0	0	-	4,000	1,543	-	0		5,543
			Amazon					345	720	1,895		2,960
		Achieved	TOTAL			963	9,428	6,597	0	0		16,988
			Cerrado			382	7,921	6,401				14,704
			Caatinga			581	1,507	149				2,237
			Amazon				0	47				47
		Source										
		LCA annual report and impact evaluation report (IDB RM relationship: Cerrado = Output 1.1., 1.2 and 1.3; Caatinga = Output 3.2., Amazon = Output 1.3, 1.7 and 1.8)										

Outcome Indicator 2.b	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Number of indigenous people with livelihood benefits protected or improved	* Indicators per year are discrete * Measured by executing agencies. * Applicable to the Amazon project only. (In 2024 executing agency will introduce this control after DEFRA's GESI policy presentation in April 24).	Original Plan	Amazon Orig Plan					50	100	650		800
		Executing Agency's Updated Plan	Amazon		0	0	0	50	150	650		800
		Achieved	Amazon				0	NA				0
		Source										
		IDB progress reports										

Outcome Indicator 3a	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Greenhouse gas emissions reduced through avoided deforestation (KPI 8)	* Indicators per year are discrete. * Measured in unit tCO2e (tonnes of carbon dioxide equivalent). * Baseline report was prepared with EMBRAPA in October 2023 for the Caatinga Project (using 2020 data). and Cerrado's projects. The Amazon project will have a different timeline as it was approved latter. * Results for 2020 will not be measured as emission reductions cannot be accurately measured until a year after LCA technologies are implemented. * Cerrado: Design of the methodology was made by EMBRAPA and some estimates were made. * Caatinga: Baseline measured by EMBRAPA	Original Plan	TOTAL	0	0	0	0	300	5,711,200	400,000		6,111,500
			Cerrado ORIG Plan						5,711,200			5,711,200
			Caatinga Orig Plan					300				300
			Amazon Orig Plan							400,000		400,000
		Executing Agency's Updated Plan	TOTAL	0	0	0	0	300	0	1,835,461		1,835,761
			Cerrado							1,435,461		1,435,461
			Caatinga					300				300
			Amazon							400,000		400,000
		Achieved	TOTAL	22,462	-	-	-	-	-	-		-
			Cerrado									0
			Caatinga	22,462								
			Amazon									0
		Source										
		Embrapa studies presented baseline for the Caating Project and a methodology protocol for the Cerrado Project										

Outcome Indicator 3b				Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Greenhouse gas emissions reduced through adoption of sustainable agricultural practices	* Indicators per year are discrete. * Measured in unit tCO2e (tonnes of carbon dioxide equivalent). * Cerrado: Measured by EMBRAPA * Caatinga: Measured by EMBRAPA *Amazon: Will focus on strenghtening sustainable supply chains, adding value to it. The project will conduct a study to develop a methodoly to measure the amount of emissions reductions from avoiding producers to change commodities production and/or deforesting to increase production.	Original Plan	TOTAL	0	5000	5,000	10,000	-	6,000,000	0		6,020,000
			Cerrado ORIG Plan						6,000,000			6,000,000
			Caatinga Orig Plan		5000	5,000	10,000					20,000
		Executing Agency's Updated Plan	TOTAL	0	0	-	-	20,000	544,382	544,382		1,203,509
			Cerrado						544,382	544,382		1,088,764
			Caatinga					20,000				114,745
		Achieved	TOTAL	0	0	0	0	0	0	0		0
			Cerrado									0
			Caatinga									0
		Source										
		LCA annual report and detailed EMBRAPA Studies										

Outcome Indicator 4	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Number of hectares where deforestation has been avoided (KPI 8)	* Indicators per year are discrete. * Measured by EMBRAPA, using the method according to the official KPI 8 methodology, for Cerrado project * The current figure for Cerrado is a very rough estimate (see Embrapa KPI 8 estimation note on 17 March 2020). * Accurate estimates will be calculated once all MUs and DUs are selected. (which gives information on how much native or secondary forest there is in the project areas).	Original Plan	TOTAL	0	0	150	50	0	130,800	1,000		132,000
			Cerrado ORIG Plan						129,800			129,800
			Caatinga Orig Plan			150	50					200
			Amazon Orig Plan						1,000	1,000		2,000
		Executing Agency's Updated Plan	TOTAL	0	0	0	0	200	0	6,525		6,725
			Cerrado							6,525		6,525
			Caatinga					200				200
			Amazon								2,000	0
		Achieved	TOTAL		0		0		0	0		0
			Cerrado									0
			Caatinga		244							0
			Amazon									0
		Source										
		LCA annual report and detailed EMBRAPA studies										

Outcome Indicator 5	Notes			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Number of farms adopting low carbon agricultural technologies as a result of increased capacities and/or awareness	* Indicators per year are discrete. * Measured by executing agencies. * This refers to the number of MUs approved and selected by the programme. * IDB supervision missions will verify reported figures and quality of implementation. * In the Amazon project the indicator will be measured by families and not farms, as some beneficiaries might not own a farm since they are involved in extractivist value chains. * It is estimated that 20 of the 600 families will be indigenous families in the Amazon project. (each indigenous family have around 20 people)	Original Plan	TOTAL	0	500	1,100	1,300	500	0	600		4,000
			Cerrado Orig Plan		500	1,000	1,000	500				3,000
			Caatinga Orig Plan			100	300					400
			Amazon Orig Plan							600		600
		Executing Agency's Updated Plan	TOTAL	0	0	3,000	1,000	0	0	600		4,600
			Cerrado			3000						3,000
			Caatinga				1000					1,000
			Amazon							600		600
		Achieved	TOTAL			3,187	1,680	-128	0	0		4,739
			Cerrado			3,187	324	-277				3,234
			Caatinga				1,356	149				1,505
			Amazon				0	0				
		Source		Progress reports from executing agencies								

Outcome Indicator 6	Notes										

Evidence of programmes / policies within and beyond Brazil that are either (i) using lessons learned from LCA Phase II or (ii) applying LCA Phase II mechanism

Notes: * This will measure qualitatively the extent of influence the programme has over domestic policies in Brazil (most notably Plano ABC+ and the NDC) as well as those beyond.
* Methodology for measuring this will be established for the Caatinga and Cerrado's projects. (The Amazon project will have a different timeline as it has not been approved

	Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	0	TBD	TBD						TBD
Updated Plan			1						1
Achieved			1						1

Source

Minutes from meetings with the Ministry of Agriculture, which will be part of IDB reports, quarterly progress reports and annual reports

Outcome Indicator 7	Notes										

Participation % increase of farmers in rural organisations

Notes: * Indicators per year are cumulative.
* Measured by executing agencies at the end of the project and also by the firm procured to carry out the evaluation.
* A survey will be carried out in the second half of 2022 as a part of the baseline study, which will collect information about number of farmers participating in the selected rural organisations. (The Amazon project will have a different timeline as it has not been approved yet.)
* FBDS will make a survey to access the participation increase, however, they don't feel comfortable to provide a number as this was not discussed during project development.
*Amazon - A survey will be carried out by IABS to collect the number increase with the organizations.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	TOTAL									
	Cerrado Orig Plan				10%	20%				20%
	Amazon Orig Plan					2.5%	5%	5%		5%
Executing Agency's Updated Plan	TOTAL									
	Cerrado							20%		20%
	Amazon					2.5%	5%	5%		5%
Achieved	TOTAL									
	Cerrado									
	Amazon									
Source		IDB final report and evaluation report.								

Outcome Indicator 8	Notes										

% increase in productivity

Notes: *Indicator per year is cumulative and measured only in LCA Amazon.
*Cerrado and Caatinga will measure the increase in income.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	Amazon Orig Plan							10%		10%
Executing Agency's Updated Plan	Amazon							10%		10%
Achieved	Amazon									
Source		IDB final report and evaluation report.								

Output Indicator 1.1.a	Notes											
Number of farmers trained on low carbon agriculture	* Indicators per year are discrete. * Measured by executing agencies. * It is estimated that 300 out of 1.500 producers in the Amazon project will be indigenous (see output indicator 1.1.b). ** Farmers that participated on field days			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan	TOTAL	0	2,200	2,800	950	1,050	500	0		7,500
			Cerrado Orig Plan		1,500	2,000	750	250				4,500
			Caatinga Orig Plan		700	800						1,500
			Amazon Orig Plan				200	800	500			1,500
		Executing Agency's Updated Plan	TOTAL	-	-	443	2,707	2,944	2,500	759		12,000
			Cerrado			443	1,057	2,000	2,000	759		9,000
			Caatinga				1,450	144				1,500
			Amazon				200	800	500			1,500
		Achieved	TOTAL			274	5,323	2,569	0	0		8,166
			Cerrado			274	3,967	2,420				6,661
			Caatinga			-	1,356	149				1,505
			Amazon			-	-	-				0
		Source		IDB progress reports								

Output Indicator 1.1.b	Notes											
Number of indigenous people trained on low carbon Agriculture	* Indicators per year are discrete. * Measured by executing agencies. * Applicable to the Amazon project only.			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan	Amazon Orig Plan					100	200	300		600
		Executing Agency's	Amazon	-	-	-	-	100	200	300		600
		Achieved	Amazon									0
		Source		IDB progress reports								

Output Indicator 1.2	Notes											
Number of technical agents trained on low carbon agriculture	* Indicators per year are discrete. * Measured by executing agencies			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan	TOTAL	-	475	450	151	45	-	-		1,121
			Cerrado Orig Plan		400	400	76					876
			Caatinga Orig Plan		75	50						125
			Amazon Orig Plan				75	45				120
		Executing Agency's Updated Plan	TOTAL	-	-	575	1,500	545	400	104		2,470
			Cerrado			34	1,366	500	400	104		1,750
			Caatinga			541	59	0				600
			Amazon			-	75	45				120
		Achieved	TOTAL			607	831	305	0	0		1,743
			Cerrado			66	680	278				1,024
			Caatinga			541	151	0				692
			Amazon				0	27				27
		Source		IDB progress reports								

Output Indicator 1.3

Output Indicator 1.3	Notes
Field days and workshops delivered on low carbon agriculture	* Indicators per year are discrete. * Measured by executing agencies.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	TOTAL	0	0	462	327	126	28	0		943
	Cerrado Orig Plan			450	300	50	-			800
	Caatinga Orig Plan			12	12	6				30
	Amazon Orig Plan				15	70	28			113
Executing Agency's Updated Plan	TOTAL	-	-	35	284	241	186	52		796
	Cerrado			14	272	156	158	52		650
	Caatinga			21	12	-				33
	Amazon				0	85	28			113
Achieved	TOTAL			12	353	376	0	0		741
	Cerrado			12	272	228				512
	Caatinga			0	81	148				229
	Amazon									0
Source		IDB progress reports								

Output Indicator 1.4

Output Indicator 1.4	Notes
Number of young people trained on low carbon agriculture	* Indicators per year are discrete * Measured by executing agencies. * Applicable to the Cerrado project only.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	Cerrado Orig Plan			1,200	1,500	1,000	200			3,900
Executing Agency's Updated Plan	Cerrado	-	-	-	3,316	2,500	1,700	284		7,800
Achieved	Cerrado			42	3,274	3,703				7,019
Source		IDB progress reports								

Output Indicator 2.1

Output Indicator 2.1	Notes
Hectares of land brought under sustainable management	* Indicators per year are discrete * Measured by executing agencies. * Achieved results will show a breakdown of the variations of technologies implemented. *Amazon project - considers area of properties and collective areas

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	TOTAL	-	-	100,400	200,200	-	3,000	3,000		306,600
	Cerrado ORIG Plan			100,000	200,000		-			300,000
	Caatinga Orig Plan			400	200					600
	Amazon Orig Plan						3,000	3,000		6,000
Executing Agency's Updated Plan	TOTAL	-	-	-	1,000	-	25,341	36,514		62,855
	Cerrado						22,341	33,514		55,855
	Caatinga				1,000					1,000
	Amazon						3,000	3,000		6,000
Achieved	TOTAL	0	0	0	412	45,766	0	0		46,178
	Cerrado					45323				45,323
	Caatinga				412	443				855
	Amazon									0
Source		Progress reports from executing agencies								

Output Indicator 2.2.a

Number of farmers with improved access to rural credit

Notes:
* Indicators per year are discrete.
* Measured by executing agencies.
* An assessment report will be made at the beginning of the projects and at the end of the projects, thus collecting direct information from producers.
*Amazon project - The project will provide training on credit and financial access, including environmental compliance needed to request a bank loan. A survey will be done with the participants to check if they meet the banks' requirements and can access credit
* It is estimated that 20 of the 300 producers with improved access to rural credit will be indigenous in the Amazon project (see output 2.2.b).

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	TOTAL	-	250	290	1,040	-	200	100		1,880
	Cerrado Orig Plan		250	250	1,000					1,500
	Caatinga Orig Plan			40	40					80
	Amazon Orig Plan						200	100		300
Executing Agency's Updated Plan	TOTAL	-	-	-	-	80	700	1,100		1,880
	Cerrado						500	1,000		1,500
	Caatinga					80				80
	Amazon						200	100		300
Achieved	TOTAL					0	0	0	0	0
	Cerrado									0
	Caatinga									0
	Amazon									0
Source		IDB progress reports								

Output Indicator 2.2.b

Number of indigenous people with improved access to rural credit

Notes:
* Indicators per year are discrete
* Measured by executing agencies.
* Applicable to the Amazon project only.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	Amazon Orig Plan						5	15		20
Executing Agency's	Amazon	-	-	-	-	-	5	15		20
Achieved	Amazon									-
Source		IDB progress reports								

Output Indicator 2.3

Number of studies assessing the impact of low carbon technology in the environment and supply chains

Notes:
* Indicators per year are discrete.
* Measured by FBDS.
* In Caatinga the studies will be regarding the impact of low carbon technology in the environment, due to its unique socioeconomic context.
* In the Amazon, the studies will be regarding low carbon research, development and innovation
** In Cerrado, the studies are specific researches on low carbon agriculture led by EMBRAPA and universities from the participant states.

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	TOTAL	0	6	0	0	3	3	0		12
	Caatinga Orig Plan		6							6
	Cerrado					-				0
	Amazon			-	-	3	3	0		6
Executing Agency's Updated Plan	TOTAL	0	4	0	1	4	3	32		44
	Cerrado							32		32
	Caatinga		4		1	1				6
	Amazon					3	3	0		6
Achieved	TOTAL		5	2	1	2	0	0		10
	Cerrado			2						0
	Caatinga		5		1	2				8
	Amazon									0
Source		Progress reports from executing agencies								

Output Indicator 3.1	Notes
Number of farmer's organisations strengthened, though improved capacity and/or collected benefits	* Indicators per year are discrete. * Measured by executing agencies. *A strengthened organization will be measured by several indicators, including, but not limited to: - Increase in sales price - Increase in the number of products marketed through the organisation - Increase in the number of producers marketing through the organisation - Increase in institutional financial management (or increase in the organization profit margin) * It is estimated that 25% of the organizations (4 out of 15) in the Amazon project will be indigenous

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	**TOTAL**	-	15	-	13	7	-	15		50
	Cerrado Orig Plan				13	7				20
	Caatinga Orig Plan		15							15
	Amazon Orig Plan							15		15
Executing Agency's Updated Plan	**TOTAL**	-	-	-	10	-	-	57		67
	Cerrado		-	-	-	-		42		42
	Caatinga		-		10	-	-			10
	Amazon			-	-	-	-	15		15
Achieved	**TOTAL**				0	40	20	0	0	60
	Cerrado					20	20			40
	Caatinga					20				20
	Amazon									0
Source		Progress reports from executing agencies								

Output Indicator 3.2	Notes
Number of low-carbon based productive chains supported	* Indicators per year are discrete. * Measured by executing agencies. * This refers to various actions which will support productive chains, such as certification of products, revision of legislation, etc. These will either improve access to existing or new markets. *Strenghtened supply chains will be measured by the an increase in sales price and/or an increase in the number of by-products

		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
Original Plan	**TOTAL**	-	4	6	-	-	3	3		16
	Cerrado Orig Plan									0
	Caatinga Orig Plan		4	6						10
	Amazon Orig Plan						3	3		6
Executing Agency's Updated Plan	**TOTAL**	-	-	-	-	10	3	6		19
	Cerrado		-	-				3		3
	Caatinga		-	-	-	10				10
	Amazon				-		3	3		6
Achieved	**TOTAL**				0	0	0	0		0
	Cerrado									0
	Caatinga									0
	Amazon									0
Source		IDB final report and evaluation report.								

Output Indicator 3.3	Notes											

Number of new markets accessed	* Indicators per year are discrete. * Planned results for Cerrado will be determined by Mar 2022 * Measured by executing agencies.			Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan	TOTAL	-	-	-	-	1	1	-		2
			Cerrado Orig Plan									-
			Caatinga Orig Plan									-
			Amazon Orig Plan					1	1			2
		Executing Agency's Updated Plan	TOTAL		-	-	-	3	1	-		4
			Cerrado									-
			Caatinga				-	2				2
			Amazon					1	1			2
		Achieved	TOTAL					0	0	0	0	0
			Cerrado									0
			Caatinga									0
			Amazon									0
		Source		IDB final report and evaluation report.								

Output Indicator 4.1	Notes										

Number of workshops organised by LCA Phase II to promote policy dialogue	* Indicators per year are discrete. * Measured by the IDB. * This refers to the number of regional workshops to engage and share programme results with local stakeholders.		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan		2	2	2	2				8
		Executing Agency's Updated Plan		0	2	25	10	5	-		42
		Achieved		18	15	26	15				74
		Source	IDB progress reports								

Output Indicator 4.2	Notes										

Number of international stakeholders aware about LCA Phase II	* Indicators per year are discrete. * This indicator will be measured by the IDB. * This will also include international stakeholders involved in increasing awareness about sustainable value chains. *2022 figure is na estimation of stakeholders participating in the launch of Amazonia project at COP27		Baseline (2020)	2020	2021	2022	2023	2024	2025	2026	End of Project
		Original Plan	0	0	TBD	TBD		0			0
		Executing Agency's Updated Plan					50		50		100
		Achieved		-		50					50
		Source	IDB progress and final reports and evaluation report								